

Supportive Care in Cancer

Volume 34 · Supplement 1 · June 2026

ABSTRACTS

S586 Abstracts for MASCC/ISOO Annual Meeting 2026

Abstracted/Indexed in *Science Citation Index*, *Science Citation Index Expanded (SciSearch)*, *Journal Citation Reports/Science Edition*, *Medline*, *SCOPUS*, *EMBASE*, *Google Scholar*, *CAB International*, *Academic OneFile*, *Allied and Complementary Medicine Database (AMED)*, *CAB Abstracts*, *CNKI*, *Current Abstracts*, *Current Contents/Clinical Medicine*, *EBSCO Academic Search*, *EBSCO Biomedical Reference Collection*, *EBSCO CINAHL*, *EBSCO Family & Society Studies Worldwide*, *EBSCO STM Source*, *EBSCO TOC Premier*, *EMCare*, *Gale*, *Global Health*, *Index to Scientific & Technical Proceedings*, *OCLC*, *ProQuest Central*, *ProQuest Health & Medical Collection*, *ProQuest Health Research Premium Collection*, *ProQuest Medical Database*, *ProQuest Nursing & Allied Health Database*, *ProQuest Pharma Collection*, *ProQuest Social Science Collection*, *ProQuest Sociological Abstracts*, *SCImago*, *SPOLIT*, *Summon by ProQuest*

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Supportive Care in Cancer

Aims and scope

Supportive Care in Cancer provides members of the Multinational Association of Supportive Care in Cancer (MASCC) and all other interested individuals, groups and institutions with the most recent scientific and social information on all aspects of supportive care in cancer patients.

It covers primarily medical, technical and surgical topics concerning supportive therapy and care which may supplement or substitute basic cancer treatment at all stages of the disease.

Nursing, rehabilitative, psychosocial and spiritual issues of support are also included,

Papers focusing on aspects of specific antineoplastic treatments are not normally accepted.

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Vi.S.d.P. Fred D. Ashbury

Journal Website

www.springer.com/520

Electronic edition: link.springer.com/journal/520

For the actual version of record please always check the online version of the publication

Subscription Information

Supportive Care in Cancer is published 12 times a year. Volume 34 (12) issues will be published in 2026.

ISSN print edition 0941-4355

ISSN electronic edition 1433-7339

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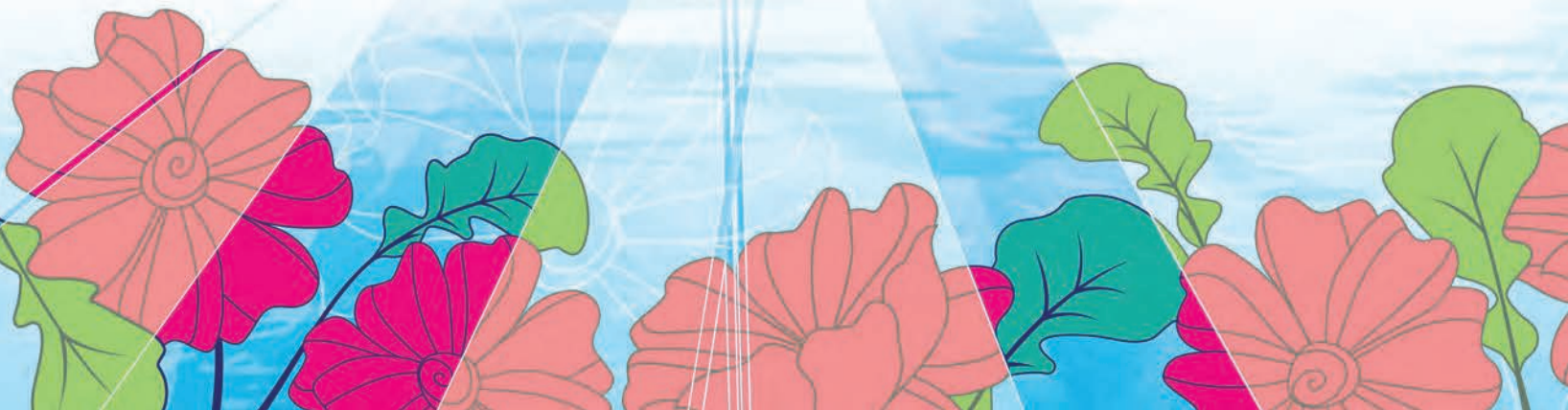
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SUPPORTIVE CARE IN CANCER

The **MASCC/ISOO** Annual Meeting is the foremost international and interdisciplinary conference on supportive cancer care. The meeting covers the entire spectrum of problems experienced by patients as a result of their cancer and cancer treatment. Rapid advances in cancer treatment have led to numerous innovations in supportive care.

At the Annual Meeting, you'll discover what's new and what's on the horizon in the diverse and exciting field of supportive care. Join us from June 24-26, 2027 in Rotterdam, the Netherlands, and be inspired!

MEETING THEMES

OVERARCHING THEME:

Optimizing Cancer Care Through Supportive Care for All: From Conceptualization to Implementation

- Digital Innovation and the Future Workforce in Patient-Centered Supportive Oncology
- Reframing Supportive Care to Reduce Disparities: Emerging Challenges and Opportunities
- Integrating Research and Practice in Supportive Care: From Bench to Bedside
- Precision Supportive Care: Biomarkers and Toxicity Prediction

MEETING VENUE

De Doelen Convention Centre | Rotterdam, the Netherlands | June 24-26, 2027

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Abstracts for MASCC/ISOO Annual Meeting 2026

Published online: 28 May 2026

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Supportive Care in Cancer

MASCC/ISOO

ANNUAL MEETING ON
SUPPORTIVE CARE IN CANCER

25-27 June 2026



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This supplement was not sponsored by outside commercial interests. It was funded entirely by the publisher and the Societies

CODE	TOPIC	ABSTRACT NUMBERS
ANTIE	Antiemetics	ANTIE-002 - ANTIE-028
CANCE	Cancer Pain	CANCE-004 - CANCE-033
DIGIT	Digital Health & New Technologies	DIGIT-001 - DIGIT-070
EDUCA	Education	EDUCA-001 - EDUCA-041
EMERG	Emerging Toxicities	EMERG-002 - EMERG-045
EXERC	Exercise Oncology	EXERC-001 - EXERC-051
FATIG	Fatigue	FATIG-002 - FATIG-025
GERIA	Geriatrics	GERIA-002 - GERIA-025
HEMAT	Hematological Toxicities	HEMAT-001 - HEMAT-031
LIFES	Lifestyle & Integrative Medicine	LIFES-002 - LIFES-036
MUCOS	Mucositis	MUCOS-002 - MUCOS-028
NEURO	Neurological Complications	NEURO-001 - NEURO-031
NUTRI	Nutrition & Cachexia	NUTRI-001 - NUTRI-052
ONCOD	Oncodermatology	ONCOD-001 - ONCOD-022
ORAL	Oral Care	ORAL-001 - ORAL-029
OTHER	Other	OTHER-002 - OTHER-062
PALLI	Palliative Care	PALLI-001 - PALLI-069
PEDIA	Pediatrics	PEDIA-001 - PEDIA-030
PRECL	Pre-Clinical	PRECL-001 - PRECL-007
PSYCH	Psychosocial	PSYCH-005 - PSYCH-106
PERSO	Personalized and/or Coordinated Care	PERSO-003 - PERSO-047
SUPPO	Supportive Care Access and/or Equity	SUPPO-002 - SUPPO-120
SURVI	Survivorship	SURVI-003 - SURVI-121

ANTIE-002**PHARMACOKINETIC/PHARMACODYNAMIC MODELING SUPPORTS FLEXIBLE TIMING OF NEPA ORAL SUSPENSION FOR CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING PREVENTION**

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Introduction

NEPA, a fixed combination of netupitant (NK₁ receptor antagonist, NETU) and palonosetron (5-HT₃ receptor antagonist, PALO), prevents acute and delayed CINV. It is now available as an oral suspension, alongside capsule and IV formulations. NEPA is typically given as a single dose approximately one hour before chemotherapy, which aligns with on-site administration but is less practical for at home dosing. This study used receptor occupancy (RO) modeling as a proxy for clinical efficacy to assess whether NEPA suspension can be taken earlier (e.g., 2–3 hours pre-chemotherapy) without compromising efficacy.

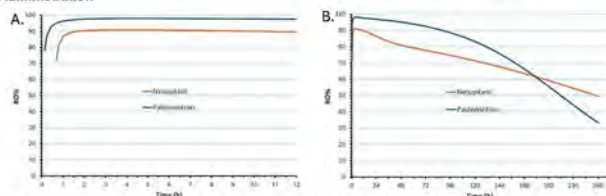
Methods

Compartmental pharmacokinetic (PK) models were fitted to the mean plasma concentration-time curves of NETU and PALO from a bio-equivalence study of NEPA (300mg NETU+0.5mg PALO) administered as an oral capsule vs oral suspension in healthy subjects. E_{max} pharmacodynamic (PD) models were applied to predict the % NK₁ RO and the % 5-HT₃ RO after NETU and PALO administration, respectively, as a function of PK model predicted plasma concentrations up to 240 h.

Results

NK₁ RO and 5-HT₃ RO are predicted to reach/exceed 90% as early as 1 hour after NETU and PALO (NEPA suspension) administration, respectively. RO ≥90% is predicted at 2–3 hours post-administration and maintained through at least 12 h (Fig. 1A). Although gradually declining, NEPA's RO remains high through day 10, consistent with sustained efficacy beyond the delayed phase (beyond day 5, Fig. 1B).

Figure 1. Predicted Receptor Occupancy Over Time Following NEPA Oral Suspension Administration



Predicted % RO for NK₁ and 5-HT₃ receptors (A) up to 12 hours and (B) over an extended period (up to 10 days) after a single dose of NEPA oral suspension

Conclusions

This PK/PD study showed that NK₁ RO and 5-HT₃ RO close to / higher than 90% are achieved for NETU and PALO, respectively, 1 hour after NEPA administration, and RO is sustained for an extended duration. This suggests that NEPA administration at home (~2–3 hours prior to chemotherapy administration) is unlikely to adversely affect its efficacy. This flexibility in dosing with the suspension formulation may further enhance the convenience of NEPA.

ANTIE-003**A PHASE III RANDOMIZED TRIAL TO EVALUATE THE EFFICACY AND TOLERABILITY OF OLANZAPINE IN PATIENTS RECEIVING MULTI-DAY HIGHLY EMETOGENIC CHEMOTHERAPY**

Prabhat Bhargava, **Vikas Ostwal**, Vanita Noronha, Kumar Prabhaskar, Amit Joshi, Nandini Menon, Sudeep Gupta, Anant Ramaswamy, Jaya Ghosh, Sushmita Rath, Navin Khattri, Manju Sengar, Anant Gokhran, Sachin Punatar, Anbarasan Sekar, Minit Shah, Anuradha Mehta, George John, Aditya Dhanawat, Sumeet Mirgh
Tata Memorial Centre

Introduction

Chemotherapy-induced nausea and vomiting (CINV) is a common and distressing side effect that severely impairs patient quality of life (QoL). While the addition of Olanzapine to the triplet regimen (NK1 RA, 5HT3 RA, Dexamethasone) is the established standard for single-day Highly Emetogenic Chemotherapy (HEC), there is a critical lack of evidence for its use in **multi-day** HEC regimens. Such multi-day protocols are associated with a prolonged and challenging risk of CINV, and definitive antiemetic strategies are needed for this setting. This randomized, phase III trial aims to definitively establish the role of Olanzapine in optimizing CINV prophylaxis for patients receiving multi-day HEC.

Methods

Open-label, randomized superiority trial enrolling a planned 148 patients. Patients will be randomized 1:1 to one of two antiemetic regimens:

Arm A (Experimental): NK1 RA + 5HT3 RA + Dexamethasone + Olanzapine (2.5 mg)

Arm B (Control): NK1 RA + 5HT3 RA + Dexamethasone.

Primary objective is to compare the Complete Response (CR) rate—defined as no emetic episode, no rescue medication use, and no significant nausea (Visual Analog Scale < 5/100) between the two arms over the overall study period (0–120 hours).

Patients with confirmed malignant disease, scheduled to receive multi-day HEC regimen, age more than equal to 18 years, ECOG Performance Status 0–2, adequate organ and marrow function, and no nausea or vomiting 24 hours prior to participation.

Results

Statistical analysis uses nonparametric tests and the log-rank test to compare efficacy outcomes and safety events, with calculations based on 80% power, a 5% two-sided alpha, and 10% attrition.

Conclusions

Secondary objectives include comparing the CR rates in the acute (0–24h) and delayed (24–120h) phases assessing comparative toxicity, and evaluating patient QoL using the Functional Living-Index Emesis (FLIE) questionnaire. This study is expected to establish a global evidence-based standard for CINV prophylaxis in multi-day HEC, leading to immediate clinical benefits

ANTIE-004**WORLDWIDE INSIGHTS ON HANDLING TRASTUZUMAB DERUXTECAN (T-DXD) TOXICITIES IN MBC PATIENTS: KEY FINDINGS FROM HERMIONE EDU**

Marina Elena Cazzaniga¹, Matti Aapro², Manuel Alva Bianchi³, Andreas Charalambous⁴, Laura Cortesi⁵, Luis Costa⁶, Peter Fasching⁷, Gilles Freyer⁸, Bryan Hennessy⁹, Hiroto Iihara¹⁰, Maria Lapuente¹¹, Fei Ma¹², Kelly Mc Cann¹³, Yeon Hee Park¹⁴, Ana Belen Rodriguez¹⁵, Irati Rodriguez Garcia¹⁶, Irati Rodriguez¹⁷, Hope Rugo¹⁸, Hitomi Sakai¹⁹, Florian Strasser²⁰, Benjamin Vicente Walbaum²¹, Sushen Wang²²

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Introduction

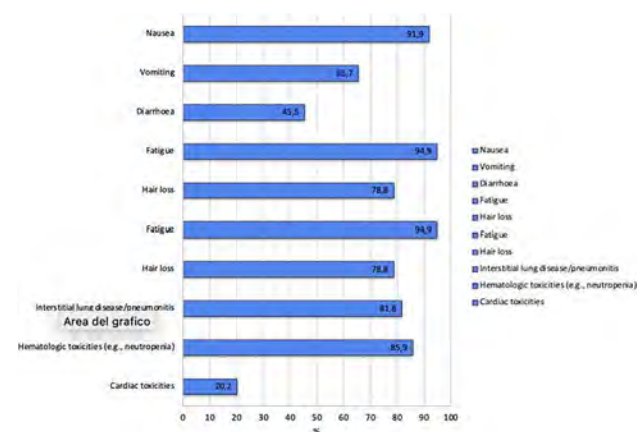
T-DXd is a standard treatment for HER2-positive and HER2-low unresectable breast cancer, accounting for up to 70% of metastatic cases. Clinical trials from the DESTINY program demonstrated significant efficacy with a manageable safety profile, though adverse events such as nausea, fatigue, and interstitial lung disease (ILD) require careful monitoring. Real-world data confirm these findings, emphasizing the need for proactive AE management to optimize outcomes. To address these challenges, the HERMIONE-EDUCational project was launched to collect global clinical insights on T-DXd use and AE management in practice.

Methods

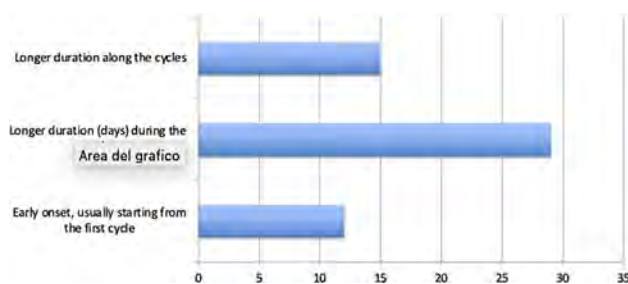
A survey was conducted across oncologists in 13 countries worldwide to describe clinicians' attitudes and perceptions in managing T-DXd-related adverse events in women with metastatic breast cancer. We collected 99 out of 127 invitations (77.9%)

Results

Around 80% of respondents indicated that patients with ILD/pneumonitis history, lung disease, renal impairment, or cancer-related dyspnea should not receive T-DXd. Over 80% observed adverse events including nausea, fatigue and ILD; vomiting and diarrhea were less frequent. Nausea and fatigue were commonly reported, while other AEs occurred occasionally (Figure 1).



Sixty-four percent considered nausea/vomiting comparable to standard chemotherapy, though 36% noted longer symptom duration starting from the first cycle (Figure 2).



Nausea and vomiting during T-DXd therapy were mainly controlled with medications. Prophylaxis commonly included 5-HT3 receptor antagonists, NK1 receptor antagonists, and corticosteroids, often combined. Use of dopamine antagonists, olanzapine, and second-generation 5-HT3 agents varied. Rescue therapy typically involved steroids and/or metoclopramide. Four-drug regimens were prescribed for high-risk patients or those with grade ≥ 1 symptoms after cycle one. Most antiemetic costs were reimbursed, and 58% of centers reported active nurse monitoring.

Conclusions

The survey provided a comprehensive picture of the use of trastuzumab deruxtecan across countries. Although some discrepancies emerged among clinicians' attitudes and perceptions, overall, guidelines to manage nausea and ILD were followed in clinical practice.

ANTIE-006

PREVALENCE OF ANTIBODY DRUG CONJUGATED-INDUCED NAUSEA AND VOMITING (ADCINV) IN PATIENTS WITH CANCER

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Introduction

Antibody-drug conjugates (ADC) have emerged as an important part of systemic treatment across disease sites. To date, there is no robust pooled prevalence estimate of nausea and vomiting induced by ADCs. Establishing such estimates is essential to determine if ADC-induced nausea and vomiting (ADCINV) represents a clinically significant problem warranting further research into antiemetic prophylaxis. Our aim is to report the prevalence of reported ADCINV across literature.

Methods

A systematic search of Medline, Embase, Cochrane CENTRAL and Web of Science was conducted from database inception until September 24, 2025. Articles were included if they reported nausea and/or vomiting due to ADCs used in cancer treatment, in the abstract. Pooled prevalence was reported. Subgroup analysis was conducted by ADC. Meta-regression was conducted by age and sex. Quality assessment was conducted. Type I error was set at 0.05.

Results

209 studies with 15,493 patients were included. 39% (95%CI: 36–42%) of patients experience any nausea, and 26% (95%CI: 23–29%) experience any vomiting. Younger patients are more likely to experience nausea; each 10-year increase in age is associated with a 12% decrease in nausea rates. Higher emetogenic ADCs include trastuzumab deruxtecan, sacituzumab govitecan, brentuximab vedotin, and patritumab deruxtecan. Lower emetogenic agents include disitamab vedotin, telisotuzumab vedotin, and rovalpituzumab tesirine.

Conclusions

This is the first study to report prevalence of ADCINV across ADCs. It is a prevalent adverse effect akin to chemotherapy-induced nausea and vomiting, that should be viewed as clinically relevant and further investigated to help develop optimal strategies related to antiemetics.

ANTIE-007

ANTIEMETIC PROPHYLAXIS WITH NEPA IN CHEMO-NAÏVE ENDOMETRIAL CANCER PATIENTS RECEIVING TAXANE-PLATINUM CHEMOTHERAPY +/- IMMUNOTHERAPY OR TRASTUZUMAB

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Introduction

NEPA (netupitant 300 mg + palonosetron 0.50 mg) has never been prospectively evaluated in endometrial cancer (EC) treated with taxane-platinum combination. We report the primary endpoint result of the NOEME study investigating the effectiveness of NEPA in chemotherapy-naïve women with histologically or cytologically confirmed EC receiving paclitaxel-carboplatin combination with or without immunotherapy/trastuzumab

Methods

NOEME (NCT06726291) is a multicenter, phase IV, single-arm study, conducted at 6 sites in Italy. Eligible patients received oral NEPA plus dexamethasone 12 mg on day 1 of each cycle. The primary endpoint was defined as complete response (CR: no emesis, no rescue medication) in the overall phase (0–120h) of cycle 1. The Wilson method has been used to estimate the 95% CI percentage of CR. Patients were observed for up to 4 cycles.

Results

Between February 2024 and January 2026, 66 patients were included, of whom 61 were evaluable for the primary endpoint. The overall

(0–120 h) CR rate in cycle 1 was 88.5% (95% CI 78.2 - 94.3%). The CR rates during the acute (0–24 h) and delayed phases (25–120 h) were respectively 95.1% and 90.2 %. Non-significant nausea rates during the overall, acute and delayed were 78.7%, 91.8% and 80.3 %, respectively. Complete protection (CR plus non-significant nausea) during the overall, acute and delayed phase was 73.8%, 88.5% and 75.4%, respectively.

Conclusions

NEPA was highly effective in chemotherapy-naïve EC patients receiving taxane-platinum chemotherapy with or without immunotherapy or trastuzumab, showing effectiveness comparable to outcomes reported in previous studies

ANTIE-009

FEASIBILITY OF A NOVEL MUSIC THERAPY INTERVENTION FOR CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING

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Introduction

Despite effective antiemetics, chemotherapy-induced nausea and vomiting (CINV) remain a significant burden for patients receiving moderate-to-highly emetogenic chemotherapy (MEC/HEC). While Music Therapy (MT) can modulate stress pathways, previous CINV research has been inconsistent. This study evaluates the feasibility of a novel, app-based MT intervention utilising the iso principle, matching music to mood before slowing tempo to promote physiological relaxation.

Methods

This ongoing single-centre, prospective feasibility trial recruited chemotherapy-naïve adults commencing MEC or HEC. Participants received a handheld device with a custom app containing five commissioned pieces composed by Australian musicians using the iso principle. Participants were asked to listen at least once daily on days 1–6 of their first and second chemotherapy cycles. Primary outcomes were feasibility (recruitment/retention) and adherence. Secondary outcomes assessed CINV-specific quality of life (Functional Living Index-Emesis), sleep quality (Pittsburgh Sleep Quality Index), and anxiety (Edmonton Symptom Assessment System), alongside qualitative acceptability.

Results

Currently 10 participants have been recruited, with 7 completing the protocol (70% retention). Interim analysis of survey data from completers demonstrates high usability, with participants rating the device and app interface predominantly as 'high' or 'extremely high'. 80% of respondents reported the intervention as beneficial and would recommend it to other patients. Qualitative feedback highlighted the intervention as a "calming distraction" that aided in "silencing thoughts" and alleviating anxiety. Preliminary comparisons of pre- and post-listening affective states indicate a positive trend toward reduced distress and increased relaxation. Formal analysis of the clinical effects of the intervention is underway.

Conclusions

Preliminary data supports feasibility of an iso-principle based music intervention for CINV. High usability scores and perceived benefits suggest this app-based model is well-accepted by patients undergoing MEC/HEC. Analysis will explore clinical effects and inform the design of a larger efficacy trial.

ANTIE-010

MOVING BEYOND "ALL-OR-NONE": A GRANULAR ASSESSMENT OF NAUSEA AND VOMITING CONTROL WITH NEPA VS. APREPITANT USING INDIVIDUAL PATIENT DATA

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Introduction

Despite major advances in cancer therapy, nausea and vomiting (NV) remain among the most common and distressing side effects for patients. As cancer treatments have become more targeted, preventing NV, particularly delayed and long-delayed NV (>5 days post-chemotherapy), has emerged as a growing challenge. Traditionally, antiemetic efficacy has been assessed using a binary endpoint of complete response (CR: no emesis and no rescue medication). Using data from published clinical trials, we evaluated an alternative, more granular approach to CR that offers a nuanced assessment of antiemetic efficacy. Interval or ratio-level outcomes retain the full variance of the data, maximizing information content and enabling the use of more powerful parametric methods. This improves the ability to detect subtle associations or differences that may be missed with dichotomous endpoints.

Methods

This individual patient data (IPD) meta-analysis combined data from six clinical studies comparing NEPA ([fos]netupitant/palonosetron) with (fos)aprepitant-based regimens in preventing NV in adults receiving highly or moderately emetogenic chemotherapy. Statistical analysis and associated comparisons of "granular" CR defined as the ratio of positive-response days to total days per patient, were performed by analyzing individual days coded as responder or non-responder. Logistic regression with Generalized Estimating Equations and Exchangeable Covariance Matrix were applied to account for correlation across repeated daily measures.

Results

Mirroring the conventional analysis showing significantly higher CR rates with NEPA in the delayed and overall phases, the more sensitive granular CR approach also produced higher absolute values, with NEPA showing significantly greater mean per-patient percentage of days with CR than aprepitant in both phases.

Time Point	NEPA (n=1468)	Aprepitant (n=1281)	P-value
Conventional Complete Response (% of Patients with CR)			
Delayed (25-120 hours)	78.0%	72.7%	0.0125
Overall (0-120 hours)	75.0%	70.3%	0.0300
Granular Complete Response (Per-Patient Average % of Days with CR)			
Delayed (25-120 hours)	88.0%	84.8%	0.0006
Overall (0-120 hours)	86.2%	85.8%	0.0119

Conclusions

These findings demonstrate that a granular CR endpoint can capture meaningful differences in antiemetic performance that binary measures may obscure. By quantifying the proportion of symptom-free days,

it offers a more nuanced and patient-relevant picture of NV control, especially for therapies with prolonged emetogenicity.

ANTIE-011

CNS SYMPTOM BURDEN AND ANTIEMETIC OUTCOMES WITH LOW-DOSE OLANZAPINE IN PATIENTS WITH BREAST CANCER RECEIVING AC CHEMOTHERAPY: JTOP-B SECONDARY STUDY

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Introduction

Low-dose olanzapine (5 mg) improves chemotherapy-induced nausea and vomiting (CINV) control in women with breast cancer receiving anthracycline-cyclophosphamide (AC) chemotherapy. However, concerns remain regarding central nervous system (CNS) symptoms, including sedation and concentration impairment. The relationship among daily CNS symptom patterns, their cumulative burden, and antiemetic outcomes has not yet been fully characterized.

Methods

This post hoc secondary analysis used data from the phase III double-blind, placebo-controlled JTOP-B trial. Women receiving the first-cycle AC chemotherapy completed daily patient-reported assessments of sedation and concentration impairment for five days after chemotherapy. Two composite CNS metrics were derived: Bad Days (concurrent moderate or severe sedation and concentration impairment) and a CNS Burden Score (sum of daily sedation and concentration scores over five days; range, 0–30). Associations with complete response (CR) during 0–120 h were evaluated.

Results

In both treatment arms, a higher CNS symptom burden was associated with lower CR. CR declined as the number of Bad Days increased in both groups, reducing from 63.5% with no Bad Days to approximately 27–33% among patients with ≥4 Bad Days in the olanzapine group. Comparable declines were observed across higher Bad-Day categories in the placebo group, although several strata included only a few patients. Joint analyses showed that concentration impairment distinguished patients with poor CINV control more clearly than sedation alone. Higher CNS Burden Scores were associated with lower CR in both groups, with non-responders showing higher median scores than responders (olanzapine: 11 vs. 10; placebo: 10 vs. 8), despite overlapping distributions.

Conclusions

Daily CNS symptom burden, especially concentration impairment and recurrent Bad Days, identifies patients at increased risk of suboptimal CINV control. Low-dose olanzapine maintains superior antiemetic

efficacy across all symptom strata, supporting its robustness despite CNS effects. Routine CNS symptom monitoring may help refine individualized antiemetic management strategies.

ANTIE-012

EFFICACY OF FOSNETUPITANT FOR LONG-DELAYED CINV IN OXALIPLATIN-BASED CHEMOTHERAPY: PROSPECTIVE STUDY

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Introduction

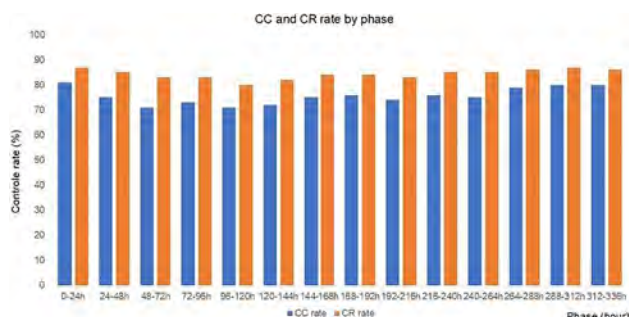
The efficacy of fosnetupitant (FosNTP) combined with palonosetron and dexamethasone for preventing highly emetogenic chemotherapy-induced nausea and vomiting (CINV) has been demonstrated in the phase III CONSOLE study. Although exploratory analyses suggested potential benefit of this triplet regimen across the extended overall period (0–168 hours), its impact during the long-delayed phase (>168 hours) and its utility in moderately emetogenic chemotherapy (MEC) remain unclear. This study prospectively evaluated the effectiveness of FosNTP in preventing CINV beyond 168 hours in patients receiving oxaliplatin-based chemotherapy.

Methods

This single-center, single-arm prospective observational study enrolled patients scheduled to receive oxaliplatin-based chemotherapy. The primary endpoint was the long-delayed (120–336 hours) complete control (CC) rate, defined as absence of vomiting, no moderate-to-severe nausea, and no rescue medication use. Secondary endpoints included long-delayed complete response (CR), and overall (0–336 hours) CC, CR, and total control (TC) rates. Risk factors for CINV were analyzed using logistic regression, reporting adjusted odds ratios (OR) with 95% confidence intervals (CI). Time-to-treatment failure was assessed using the Kaplan–Meier method.

Results

Of 106 enrolled patients, 100 were eligible for analysis. Sixty percent were female, all had ECOG performance status 0, and most received CapeOX (92%). The long-delayed CC, CR, and TC rates were 76.3%, 84.7%, and 75.4%, respectively. The overall CC, CR, and TC rates were 75.6%, 84.3%, and 72.2%. Risk factors associated with failure to achieve long-delayed CC included younger age (OR 0.954; 95% CI 0.909–0.998), female sex (OR 8.808; 95% CI 2.446–41.992), and a history of motion sickness (OR 5.050; 95% CI 1.118–27.548).



The CC rate was defined as the proportion of patients experiencing no emetic episodes and moderate or severe nausea without rescue medication. The CR rate was defined as the proportion of patients experiencing no emesis without rescue medication. These parameters were evaluated during the first cycle of chemotherapy.



The TC rate was defined as the proportion of patients experiencing no vomiting or nausea without rescue medication. These parameters were evaluated during the first cycle of chemotherapy.

The risk factors for CINV in patients who did not achieve CC in long-delayed phase

	P value	OR	95% CI
Age	0.020	0.954	0.909 – 0.998
sex (female)	< 0.01	8.808	2.446 – 41.992
Alcohol consumption history (yes)	0.162	0.447	0.140 – 1.340
Motion sickness (yes)	0.023	5.050	1.118 – 27.548

Logistic regression model was performed for analysis. CC, complete control; defined as participants who experienced neither vomiting nor moderate-to-severe nausea and did not require rescue medication. OR, odds ratio; CI, confidence interval.

Conclusions

The FosNTP-containing triplet regimen showed favorable long-delayed antiemetic efficacy in patients receiving oxaliplatin-based chemotherapy. Nonetheless, those with high emetogenic risk factors may require additional supportive strategies.

ANTIE-013

NEPA VS STANDARD OF CARE IN GUIDELINE-BASED MODERATELY EMETOGENIC CHEMOTHERAPY RISK SUBGROUPS: POST-HOC ANALYSIS FROM THE MYRISK TRIAL

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Introduction

Guidelines are increasingly considering patient-specific risk factors when selecting antiemetic prophylaxis for moderately emetogenic chemotherapy (MEC). MASCC/ESMO currently recommends adding an NK₁RA for high-risk subgroups (eg, females <50 receiving oxaliplatin or patients receiving carboplatin AUC ≥5), while a 5-HT₃RA + dexamethasone (DEX) remains standard of care (SOC) for other MEC regimens. The MyRisk trial demonstrated that when individual CINV risk is considered, NEPA (netupitant/palonosetron) + DEX provided superior CINV control vs SOC across 3 cycles (Molasiotis, *Ann Oncol* 2025). This post hoc analysis evaluates outcomes in both subgroups—those for whom guidelines recommend NK₁RA use (Group 1) and those for whom they currently do not (Group 2).

Methods

MyRisk was a phase IV, randomized, open-label, multinational trial. Adults at increased CINV risk, identified using a predictive risk algorithm, were randomized to NEPA + DEX or SOC. The primary endpoint was complete response (no emesis and no rescue medication) across 3 cycles. Subgroup analyses of CR during the acute, delayed, and overall phases used the same model applied to the overall population, a generalized linear model with logit link and generalized estimating equations, adjusting for study treatment, carboplatin use, and country.

Results

One-third of patients were in the guideline-based Group 1, while two-thirds were in Group 2. NEPA improved CR rates by ~10% over SOC in both subgroups, with statistical significance in the delayed phase for both and in the overall phase for Group 2.

	Group 1: MASCC/ESMO Guideline-based Subgroup (those receiving carboplatin AUC ≥5 or females <50 yrs old receiving oxaliplatin)				Group 2: Subgroup of Remaining at Risk Patients (those receiving MEC for whom MASCC/ESMO guideline does not currently recommend an NK ₁ RA regimen)			
	NEPA N = 64	SOC N = 83	OR (95% CI)	P-value	NEPA N = 125	SOC N = 136	OR (95% CI)	P-value
Probability of Complete Response								
Acute (0-24 h)	94.0%	90.5%	1.85 (0.53, 5.18)	0.361	86.9%	85.0%	1.17 (0.67, 2.04)	0.585
Delayed (24-120 h)	90.3%	78.5%	2.57 (1.08, 6.10)	0.033	80.7%	71.5%	1.67 (1.03, 2.70)	0.037
Overall (0-120 h)	88.9%	78.7%	2.17 (0.96, 4.92)	0.063	78.5%	66.8%	1.67 (1.05, 2.65)	0.030

Conclusions

Consistent with the overall MyRisk results, NEPA provided superior CINV prevention over SOC in both patient subsets. These results confirm existing MASCC guideline recommendations while also addressing an unmet need among patients for whom current guidelines recommend only a 5-HT₃RA + DEX. These data reinforce the relevance of patient-specific risk assessment and may inform future refinements of guideline recommendations in the MEC setting.

ANTIE-014
CHANGES IN THE SEVERITY OF CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING ACCORDING TO THE MENOPAUSAL STAGE OF BREAST CANCER DURING ADJUVANT CHEMOTHERAPY

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Introduction

Breast cancer has been reported to be common in middle-age, but little is known about the relationship between menopausal stage and the severity of chemotherapy-induced nausea and vomiting (CINV) in breast cancer patients. Therefore, we examined the association between menopausal stage and CINV severity.

Methods

Participants were prospectively enrolled from a tertiary general hospital. We evaluated CINV severity of 187 breast cancer patients receiving adjuvant chemotherapy, using a Likert scale from 1 to 10, before chemotherapy (W0), 4 weeks after the first chemotherapy (W4), and 12 weeks (W12) after the first chemotherapy. Premenopause, perimenopause, and postmenopause period were classified by age 45 and 55 years, respectively. CINV severity at different time-points and change values in CINV severity (cCIN, cCIV) at each time point, relative to W0, were compared using a linear mixed model

Results

Significant group-by-time interactions were observed for CIN ($p = 0.011$), CIV ($p = 0.027$), and cCIN ($p = 0.030$). In postmenopausal period women, unlike in premenopausal and perimenopausal period women, the mean change values for CIN and CIV at each time point relative to W0 were not significantly different. In the post-hoc analysis, there was a significant difference ($p = 0.007$) in cCIN at W4 between perimenopausal and postmenopausal period women.

Table 1 Participants' baseline characteristics by menopausal stage				
Characteristics	Menopausal stage			p value
	Premenopause (N=70)	Perimenopause (N=96)	Postmenopause (N=21)	
Age (years)	40.14 (3.65)	50.02 (2.81)	59.62 (3.19)	<0.001
BMI	22.45 (2.70)	23.72 (2.77)	23.60 (2.82)	0.012
Marital status				0.441
Married	59 (84.3%)	83 (86.5%)	20 (95.2%)	
Widowed/divorced/single	11 (15.7%)	13 (13.5%)	1 (4.8%)	
Education years	14.56 (2.08)	13.22 (2.70)	11.14 (3.53)	<0.001
Clinical stage of cancer				0.882
I	23 (32.9%)	36 (37.5%)	8 (38.1%)	
II	37 (52.9%)	51 (53.1%)	11 (52.4%)	
III	10 (14.3%)	9 (9.4%)	3 (9.5%)	
Adjuvant chemotherapy regimens				0.257
FAC (6 cycles)	56 (80.4%)	61 (63.5%)	11 (52.4%)	
AC (4 cycles) -D (4 cycles)	34 (48.6%)	35 (36.3%)	10 (47.6%)	
Number of chemotherapy sessions up to 12 weeks	3.83 (0.38)	3.86 (0.34)	3.95 (0.22)	0.356
Surgery				0.755
Breast-conserving surgery	46 (65.7%)	68 (70.8%)	13 (61.9%)	
Total mastectomy	24 (34.3%)	28 (29.2%)	6 (28.6%)	
Serum FSH level	7.46 (3.19)	43.34 (39.62)	81.79 (52.36)	<0.001
HADS-D	6.77 (3.56)	6.51 (3.53)	7.00 (3.49)	0.804
HADS-A	6.50 (3.25)	6.41 (3.87)	6.57 (4.12)	0.934

Abbreviations: FAC, Fluorouracil-adriamycin-cyclophosphamide; AC-D, Adriamycin-cyclophosphamide + docetaxel

Table 2. Estimated mean of change values for each time point compared to CIN and CIV of W0 and 95% CI results analyzed using a linear mixed model

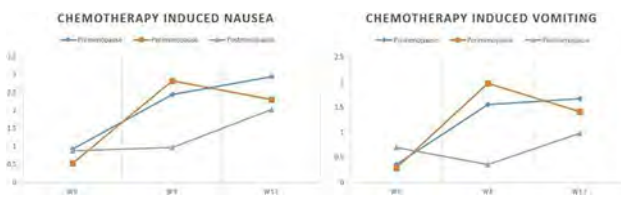
	Effect	Group	Time	Estimate	Lower	Upper	p value
cCIN	Group x Time	Premenopause	W4	1.42	0.68	2.15	<0.001
cCIN	Group x Time	Perimenopause	W4	2.32	1.71	2.93	<0.001
cCIN	Group x Time	Postmenopause	W4	0.28	-1.06	1.62	0.682
cCIN	Group x Time	Premenopause	W12	1.92	1.18	2.65	<0.001
cCIN	Group x Time	Perimenopause	W12	1.80	1.19	2.41	<0.001
cCIN	Group x Time	Postmenopause	W12	1.33	-0.02	2.67	0.053
cCIV	Group x Time	Premenopause	W4	1.06	0.38	1.75	0.003
cCIV	Group x Time	Perimenopause	W4	1.73	1.16	2.30	<0.001
cCIV	Group x Time	Postmenopause	W4	-0.12	-1.37	1.13	0.852
cCIV	Group x Time	Premenopause	W12	1.19	0.51	1.88	0.001
cCIV	Group x Time	Perimenopause	W12	1.16	0.59	1.73	<0.001
cCIV	Group x Time	Postmenopause	W12	0.50	-0.75	1.75	0.431

Abbreviations: cCIN, change value of chemotherapy induced nausea; cCIV, change value of chemotherapy induced nausea; W0, before the start of chemotherapy; W4, 3–4 weeks after the start of the first chemotherapy; W12, 12 weeks after the start of the first chemotherapy.

Table 3. Estimated mean and 95% Confidence interval results of differences between groups for CIN change values analyzed using a linear mixed model

Effect	Time	Group comparison	Estimate	Lower	Upper	p value	
cCIN	Group x Time	W4	Perimenopause vs Premenopause	0.90	-0.07	1.87	0.068
cCIN	Group x Time	W4	Perimenopause vs Postmenopause	2.04	0.58	3.51	0.007
cCIN	Group x Time	W4	Postmenopause vs Premenopause	-1.14	-2.71	0.43	0.153
cCIN	Group x Time	W12	Perimenopause vs Premenopause	-0.12	-1.09	0.85	0.808
cCIN	Group x Time	W12	Perimenopause vs Postmenopause	0.47	-0.99	1.94	0.524
cCIN	Group x Time	W12	Postmenopause vs Premenopause	-0.59	-1.16	0.97	0.456

Abbreviations: cCIN, change value of chemotherapy induced nausea; cCIV, change value of chemotherapy induced nausea; W0, before the start of chemotherapy; W4, 3–4 weeks after the start of the first chemotherapy; W12, 12 weeks after the start of the first chemotherapy.



dexamethasone, NK1R antagonist, and olanzapine as per guidelines. Intravenous (IV) ondansetron and dexamethasone are widely used, however, oral formulations may offer comparable efficacy with ease of administration and reduced cost. This study evaluated whether oral ondansetron and dexamethasone are non-inferior and cost effective to IV antiemetics, when used within a four-drug antiemetic regimen.

Methods

In this phase III, open-label, randomised controlled trial, 210 adults receiving first-cycle of single day HEC were assigned in 1:1 ratio to oral or IV ondansetron and dexamethasone, in combination with aprepitant and olanzapine in both arms. The primary endpoint was complete response (CR - no vomiting and no rescue medication) during the overall phase (0–120 hours) of CIN, with non-inferiority margin of 15%. Secondary endpoints included CR in acute and delayed phases, nausea severity, safety, and cost-effectiveness.

Results

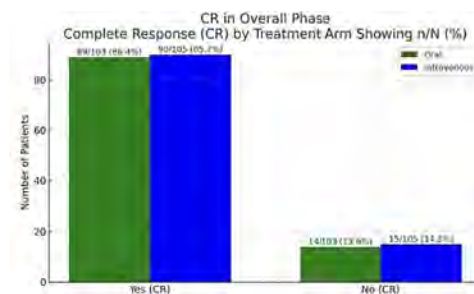


Fig 1: Comparison of CR in overall phase between oral and IV groups.

Bar chart comparing complete response rates between the oral (N=103) and intravenous (N=105) antiemetic regimens during the overall phase. The oral arm achieved CR in 89/103 patients (86.4%), while the intravenous arm achieved CR in 90/105 patients (85.7%). Non-CR rates were 14/103 (13.6%) and 15/105 (14.3%) in the oral and intravenous groups, respectively. Data are presented as n/N with corresponding percentages.

Table 1. Baseline characteristics of patients in the oral and intravenous antiemetic groups.

Baseline Characteristics	Oral (n = 103)	Intravenous (n = 105)	p-value
Age (median, IQR)	38 (27.5–50.5)	39 (29–50)	0.93
Gender			0.51
Male	29 (28.2%)	34 (32.4%)	
Female	74 (71.8%)	71 (67.6%)	
Diagnosis			0.41
Breast cancer	52 (50.5%)	59 (56.2%)	
Hodgkin lymphoma	25 (24.3%)	30 (28.6%)	
Ewing sarcoma	19 (17.5%)	10 (8.6%)	
Soft tissue sarcoma	7 (6.8%)	6 (5.7%)	
Chemotherapy regimen			0.29
AC/EC	52 (50.5%)	59 (56.2%)	
ABVD	25 (24.3%)	30 (28.6%)	
VAC	19 (17.5%)	10 (8.6%)	
Doxorubicin (75mg/m2)	7 (6.8%)	6 (5.7%)	
Comorbidities			0.75
Diabetes mellitus	7 (6.8%)	5 (4.8%)	
Hypertension	1 (1%)	3 (2.9%)	
Hypothyroidism	1 (1%)	2 (1.9%)	
Tuberculosis	1 (1%)	1 (1%)	
Hepatitis B	1 (1%)	0 (0%)	

Median age is presented in years (IQR). Other values are expressed as number (percentage). Abbreviations: AC/EC – doxorubicin + cyclophosphamide / epirubicin + cyclophosphamide; VAC – vincristine, actinomycin D, cyclophosphamide; ABVD – doxorubicin, bleomycin, vinblastine, dacarbazine. p-values were calculated using the chi-square test for categorical variables.

Conclusions

Changes in CIN severity in breast cancer patients follow different patterns according to menopausal stage. Perimenopausal period women seem to be particularly susceptible to CIN. During chemotherapy, it is necessary to manage CIN with consideration of menopausal stage.

ANTI-015

EFFICACY OF ORAL VERSUS INTRAVENOUS ONDANSETRON AND DEXAMETHASONE AS ANTIEMETIC PROPHYLAXIS FOR PATIENTS RECEIVING HIGHLY EMETOGENIC CHEMOTHERAPY

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Introduction

The standard of care for highly emetogenic chemotherapy (HEC) is a four-drug regimen including a 5-HT₃ receptor antagonist,

Table 2: Primary and Secondary Outcome: Comparison of Complete Response (CR) for chemotherapy induced nausea and vomiting in Overall, acute and delayed phase.

Outcomes	Oral (n = 103)	Intravenous (n = 105)	95% CI for absolute risk difference	p-value
CR in overall phase				
Yes	89 (86.4%)	90 (85.7%)	-8.7% to +10.1%	0.89
No	14 (13.6%)	15 (14.3%)	-10.11% to +8.72%	
CR in acute phase				
Yes	92 (89.3%)	94 (89.5%)	-8.56% to +8.16%	0.80
No	11 (10.7%)	11 (10.4%)	-8.4% to +8.8%	
CR in delayed phase				
Yes	96 (93.2%)	92 (87.6%)	-2.37% to +13.54%	0.17
No	7 (6.8%)	13 (12.4%)	-13.54% to +2.37%	
Complete protection in overall phase	59 (57.3%)	65 (61.9%)	-17.95% to +8.70%	0.70
Nausea in acute phase				0.39
No nausea	72 (69.9%)	82 (78.1%)	-18.8% - 2.4%	
Mild	14 (13.6%)	12 (11.4%)		
Moderate	13 (12.6%)	10 (9.5%)		
Severe	4 (3.9%)	1 (1.0%)		
Nausea in delayed phase				0.78
No nausea	63 (61.2%)	65 (61.9%)	-13.1 - 11.7%	
Mild	22 (21.4%)	21 (20.0%)		
Moderate	17 (16.5%)	16 (15.2%)		
Severe	1 (1.0%)	3 (2.9%)		
Nausea in overall phase				0.89
No nausea	59 (57.3%)	64 (60.9%)	-16.4 - 9.0 %	
Mild	20 (19.4%)	21 (20.0%)		
Moderate	21 (20.4%)	18 (17.1%)		
Severe	3 (2.9%)	2 (1.9%)		

Data are presented as number (percentages) with corresponding 95% confidence intervals (CI) for absolute risk difference. The p-value represents the statistical comparison between study groups

Out of 210 enrolled patients, 208 were analysed. CR in overall-phase was achieved in 86.4% in oral and 85.7% in IV arm, demonstrating non-inferiority with risk difference +0.7% (95% CI -8.7% to +10.1%) which was above the predefined margin. CR rates in the acute (89.3% vs. 89.5%) and delayed phases (93.2% vs. 87.6%) were comparable between arms. Nausea control and breakthrough vomiting showed no significant differences. Toxicities were mild and similar across groups, with fatigue and somnolence being most common. The oral antiemetics demonstrated cost effectiveness, reducing mean cost by USD 138.65. Incremental cost-utility analysis had a favourable net monetary benefit across all willingness-to-pay thresholds.

Conclusions

Oral ondansetron and dexamethasone, used within a four-drug antiemetic regimen, are non-inferior, cost effective and easy to administer compared to IV regimen for CINV prevention without any added safety concern. These findings support adoption of oral antiemetics, particularly relevant for resource-limited settings and LMICs.

ANTIE-016

ADHERENCE TO ANTIEMETIC GUIDELINES: A CROSS-SECTIONAL SURVEY OF DOCTORS' PERSPECTIVES IN CHINA

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University Cancer Hospital & Institute, Pharmacy Department, Beijing, ⁵Peking University Cancer Hospital & Institute, Academy Office, Beijing, ⁶Peking University Cancer Hospital & Institute, Day Oncology Unit & Department of Supportive Care, Beijing

Introduction

Chemotherapy-related nausea and vomiting (CINV) is the most distressing side effect of chemotherapy. This survey aimed to evaluate antiemetic practices and to identify the barriers to CINV guideline adherence from the doctors' perspectives.

Methods

We conducted an online survey from July 2022 to August 2022 in China. A total of 259 doctors from 29 hospitals were invited to complete the survey.

Results

The majority of the respondents were confident in their CINV management. Key discrepancies between reported antiemetic use and guideline recommendations in a highly emetogenic chemotherapy (HEC) setting included the underutilization of neurokinin-1 receptor antagonists (NK-1 RAs) and olanzapine, and the excessive use of 5-hydroxytryptamine-3 receptor antagonists (5-HT3 RAs) in the delayed phase. In a moderate emetogenic chemotherapy (MEC) setting, glucocorticoids were underutilized in both the acute and delayed phases. Only 35% of the respondents reported that more than 75% of their patients achieved a complete response. Doctors reported that approximately 10% (IQR 5%-15%) of their patients had chemotherapy delay, discontinued, or dose-reduced due to CINV. Approximately 5% (IQR 2%-10%) of their patients required ED visits or hospitalization due to poorly controlled CINV in the past 1 year. Product(s) insurance coverage was reported as the most important barrier interfering with guideline adherence.

Table 1. Confidence of the respondents in understanding CINV-related knowledge (n=259)

	Sufficient	Good	Normal	Insufficient
CINV risk evaluation	66 (25.5%)	158 (61.0%)	32 (12.4%)	3 (1.2%)
Emetogenic potential of cytotoxic drugs	68 (26.3%)	157 (60.6%)	31 (12.0%)	3 (1.2%)
Definition of acute-onset, delayed-onset and anticipatory CINV	60 (23.2%)	159 (61.4%)	39 (15.1%)	1 (0.4%)
CINV prevention strategies	68 (26.3%)	165 (63.7%)	26 (10.0%)	0 (0%)
Principals of managing break-out CINV	60 (23.2%)	155 (59.8%)	41 (15.8%)	3 (1.2%)
Individualized management of CINV	57 (22.0%)	167 (64.5%)	33 (12.7%)	2 (0.8%)

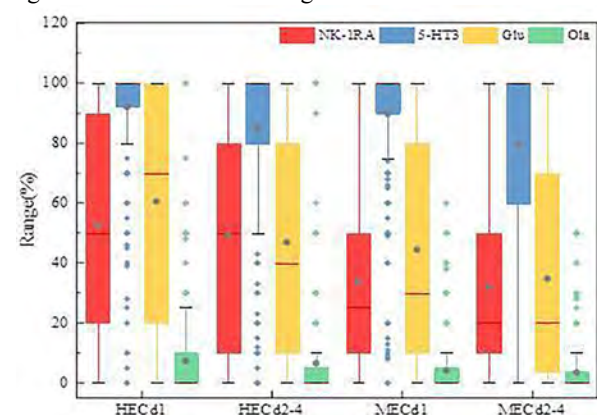
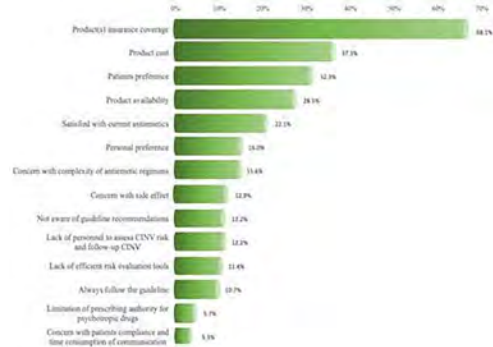
Figure 1. Use of antiemetic agents in HEC and MEC settings

Figure 2. Barriers interfering with the use of guideline-consistent antiemetics



Conclusions

Clinicians play an important role in the management of CINV. Despite their confidence in CINV-related knowledge, adherence to CINV-related guidelines was poor, and there is much to improve in practice.

ANTIE-017

MULTICENTER PROSPECTIVE STUDY OF FOSNETUPITANT-BASED ANTIEMETIC THERAPY AND CINV RISK FACTORS IN UPPER GASTROINTESTINAL CANCER (CCOG2301)

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Introduction

Chemotherapy-induced nausea and vomiting (CINV) remain a major barrier to maintaining treatment in upper gastrointestinal (GI) cancer. Prospective data on fosnetupitant-based triplet antiemetic therapy in this population are limited. CCOG2301 evaluated its real-world efficacy, temporal patterns, and predictors of CINV.

Methods

CCOG2301 was a multicenter, prospective, observational study conducted at Japanese institutions. Patients with upper GI cancer received either highly emetogenic chemotherapy (HEC; cisplatin-based) or moderately emetogenic chemotherapy (MEC; oxaliplatin-based) were enrolled. All patients were treated with fosnetupitant, palonosetron, and dexamethasone. The primary endpoint was overall complete response (CR), defined as no vomiting and no rescue medication within 0–168 h. Secondary endpoints included CR for vomiting and nausea separately, patient-reported nausea severity, and safety. Multivariable logistic regression assessed predictors of CINV.

Results

A total of 116 patients were eligible (HEC 40, MEC 76). In HEC, overall CR was 67.5% (90% CI 55.3–79.7%), meeting the primary endpoint; in MEC, 63.0% (90% CI 52.6–71.6%). CR for nausea was 57.5% (HEC) and 51.2% (MEC). Acute-phase vomiting (0–24 h) was well controlled, whereas delayed-phase vomiting increased after 72 h—more prominently in HEC—and persisted through 168 h. Nausea showed distinct delayed-phase peaks (72–96 h in MEC; 110–144 h in HEC) before

declining. Among 111 patients receiving a second cycle, antiemetic modification occurred in 17 (15.3%), mainly discontinuation of dexamethasone on days 2–4. On multivariable analysis (age, sex, regimen, cachexia), cancer cachexia independently predicted CINV (odds ratio 3.02; 95% CI 1.05–9.62; $p = 0.040$). No fosnetupitant-related treatment or late adverse events were observed.

Conclusions

Fosnetupitant-based triplet therapy met the predefined primary endpoint, but delayed-phase CINV remained common with different peak timings between HEC and MEC. Cancer cachexia independently increased CINV risk, emphasizing the importance of risk-aware management in routine practice.

ANTIE-020

INCIDENCE OF NEW PERSISTENT BENZODIAZEPINE USE IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION RECIPIENTS

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Introduction

Benzodiazepines carry risks including dependence, cognitive dysfunction, and respiratory depression. A study in chemotherapy patients identified benzodiazepine exposure during chemotherapy as a risk for new persistent benzodiazepine use (NPBU), with an incidence of 15.6%. The present study evaluated the incidence of and risk factors for NPBU among allogeneic hematopoietic stem cell transplantation (alloHSCT) recipients, who frequently receive benzodiazepines during hospitalization, primarily for nausea/vomiting.

Methods

This single-center retrospective cohort study included adult alloHSCT recipients treated between August 2023 and August 2024. Patients taking benzodiazepines at transplant admission were excluded. Patient characteristics, peri-transplant benzodiazepine exposure (converted to lorazepam milligram equivalents [LMEs]), and post-transplant benzodiazepine prescription (PTBP) fills were recorded. NPBU was defined as two or more PTBP fills between 90–180 days post-transplant. Univariable analysis identified potential risk factors, with continuous variables assessed by independent samples t-tests and categorical variables by chi-square or Fisher's exact tests.

Results

Among 299 patients (mean age 55 years, 59% male), 280 (93.6%) received peri-transplant benzodiazepines. Nine patients (3.0%) developed NPBU and, compared to those without NPBU ($n=290$), had significantly greater mean total peri-transplant benzodiazepine exposure (27.4 vs. 6.9 LMEs, $p=0.02$), higher mean daily peri-transplant benzodiazepine exposure (1.1 vs. 0.2 LMEs, $p=0.02$), higher rates of current smoking (22.2% vs. 2.1%, $p=0.02$), and more frequent peri-transplant benzodiazepine prescribing for anxiety (66.7% vs. 28.3%, $p=0.02$) and insomnia (44.4% vs. 15.2%, $p=0.04$), but not nausea/vomiting (100% vs. 90.3%, $p=1$).

Conclusions

The incidence of NPBU among alloHSCT patients was 3.0%. Univariable analysis revealed associations between NPBU and increased peri-transplant benzodiazepine exposure (total and daily doses), prescribing indication (anxiety and insomnia), and current smoking. Larger studies with multivariable analysis are needed to confirm these associations.

ANTIE-025

DISTINCT NK1 RECEPTOR MECHANISMS DIFFERENTIATE NETUPITANT/PALONOSETRON FROM APREPITANT/ONDANSETRON

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Introduction

Guidelines suggest the combination of an NK₁ receptor antagonist (RA) and a 5-HT₃RA as part of the antiemetic regimen for preventing chemotherapy-induced nausea and vomiting (CINV) in patients receiving highly emetogenic or high-risk moderately emetogenic chemotherapy. However, not all combinations are equally effective. NEPA (fixed combination of the NK₁RA, netupitant, and 5-HT₃RA, palonosetron) has recently shown a longer duration of efficacy compared with aprepitant (NK₁RA) + 5-HT₃RA (standard of care). Based on previous data, it is known that NEPA has a synergistic effect on receptor functionality, and preliminary data suggest NK₁ receptor internalization and degradation. This study investigated differences in the mechanism-of-action between NEPA and aprepitant + ondansetron (APR/OND).

Methods

Three independent HEK293 cell lines co-expressing NK₁ and 5-HT₃ receptors were used. Cells were pre-incubated for 1 h at 37°C with either NEPA or APR/OND at 5xK_d to achieve near-complete receptor occupancy while maintaining viability. First, to confirm NK₁ receptor blockade, substance P-induced Ca²⁺ mobilization was measured in the continued presence of antagonists. Next, to test the duration of receptor blockade, antagonists were washed out after the 1-h pre-incubation, and recovery of NK₁ receptor function was then assessed at 2, 4, 6, and 8 h; NEPA-treated cells were additionally assessed at 24 h. At each time point, cells were loaded with Fluo-4 AM and stimulated with substance P (SP) to quantify Ca²⁺ mobilization.

Results

Both NEPA and APR/OND competitively inhibited SP-induced Ca²⁺ mobilization at the NK₁ receptor (data not shown). NEPA produced sustained inhibition lasting at least 8 h after removal and was not fully reversed at 24 h (Figure 1A), whereas Ca²⁺ mobilization recovered within 2 h after APR/OND removal (Figure 1B).

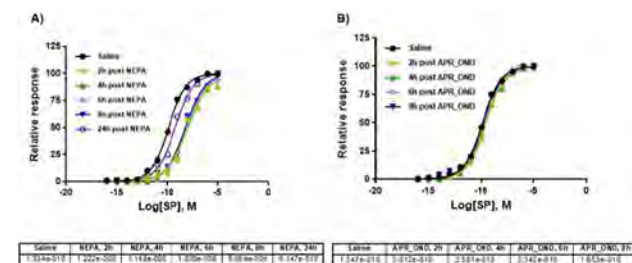


Figure 1. SP-induced Ca²⁺ mobilization in a representative HEK293 cell line expressing both NK₁ and 5-HT₃A receptors after washout of A) NEPA and B) Aprepitant/Ondansetron

Conclusions

NEPA induced sustained functional inhibition of SP-induced Ca²⁺ signalling consistent with NK₁ receptor internalization, in contrast to APR/OND. These findings reveal a mechanistic distinction between NEPA and APR/OND.

ANTIE-027

GUIDELINE-CONGRUENT CARE FOR CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING PROPHYLAXIS: HIGH DOSE METHOTREXATE

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Introduction

Through implementation of a local Chemotherapy Induced (CINV) guideline, we aimed to standardise antiemetic prescribing practice which aligns with the emetic potential of the chemotherapy. The primary aim was to review guideline concordance and describe prescribed CINV prophylaxis for Acute Lymphoblastic Leukaemia (ALL) and Lymphoblastic Lymphoma (LLy) patients who have received High Dose Methotrexate (HD MTX) 5g/m²/dose. Concordant care was defined according to the COG endorsed POGO guideline (Table 2). Secondary aims included prescribing practices for breakthrough CINV management.

Methods

All patients diagnosed with B-cell ALL, B-cell LLy, T-cell ALL and T-cell LLy from 2022 to current who received HD MTX were included. The project involved retrospective data collection including patient demographics, prophylactic antiemetics prescribed and the use of breakthrough medications. Ethics approval was granted.

Results

A total of 40 patients received HD MTX between 2022 and 2025 totalling 160 cycles. Pleasingly, 98% (n=153) of prescribing was concordant with the CINV guideline, with patients being prescribed a 5HT₃ Receptor Antagonist (RA) and neurokinin-1 RA as per the Moderate Emetic Chemotherapy (MEC) pathway. Of the 160 cycles, 74% (n=119) required breakthrough antiemetics, the majority (41%) of these patients being ≥ 13 years. The most frequent prophylactic antiemetics prescribed included aprepitant, fosaprepitant, palonosetron and ondansetron. Breakthrough antiemetics included cyclizine, olanzapine, metoclopramide, levomepromazine, lorazepam and subsequent doses of palonosetron and fosaprepitant or aprepitant at appropriate dosage intervals.

Conclusions

Guideline concordant care is fundamental to optimising antiemetic prophylaxis, promoting a standardised prescribing approach that aligns with the emetic potential of the chemotherapy to ultimately improve quality of life. Locally, there is a need to improve assessment/documentation of patient's experiences of CINV and for prospective evaluation of local breakthrough practices.

ANTIE-028

THOSE EXCLUDED AND DROP-OUTS: A REVIEW OF VIRTUAL REALITY PROGRAMS FOR SYMPTOM MANAGEMENT IN CANCER PATIENTS

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Introduction

Virtual reality (VR) interventions for symptom management show promising effects among cancer patients; however, *who gets left out* of VR studies and *who starts but cannot continue* are central to interpreting effectiveness and real-world scalability. Exclusions and dropouts are a high-stakes issue in VR oncology research because they directly shape who the intervention evidence applies to, how safe/tolerable the intervention is, and whether observed effects are biased.

Methods

A systematic review was conducted. We systematically searched five databases (the Cochrane Library of Systematic reviews, PubMed, PsycInfo, ScienceDirect, and Scopus) from inception through July 2025.

Results

Table 1 Results on exclusion criteria and program drop-outs across studies

Domain	Category	Common examples reported across studies
Excluded participation	Vision/hearing limitations	Vision/hearing impairment; wearing glasses
	Structural/physical constraints	Skull or cervical spine structural abnormalities
	Susceptibility to VR discomfort	History of motion sickness
	Infection control/wound status	Active infections; MRSA; contact precautions; open wounds; wound drains
	Psychiatric/psychological conditions	Psychological or psychiatric conditions
	Medications	Use of neuroleptic or antiepileptic drugs
	Implanted/medical devices & support equipment	Pacemaker/defibrillator; ports; portable oxygen
	Cognitive impairment	Dementia
	Seizure history	Epilepsy; photosensitive seizures
	Substance use	Drug addiction; alcohol abuse
Program dropouts	Participant choice/retention	Declined participation; loss to follow-up
	Logistics	Moved out of the area
	Mortality/disease course	Died; cancer progression; worsening clinical status
	Treatment-related	Chemotherapy side effects; used analgesics for pain
	Non-cancer health issues	Non-cancer lower back pain with sitting; other physical problems
	VR-related adverse effects	Side effects of VR; discomfort from VR device
	Acceptability	Found VR videos boring
	Care transitions / social factors	Discharged; personal/social issues

Across included 27 VR oncology studies, exclusion criteria commonly screened out patients with sensory impairments (vision/hearing, glasses), motion-sickness risk, infections or wound precautions, psychiatric conditions, dementia, epilepsy/photosensitive seizures, substance use, and those using neuroleptic/antiepileptic drugs or carrying implanted/support devices (e.g., pacemakers, ports, oxygen). Dropouts most often reflected refusal/loss to follow-up, relocation, discharge, clinical deterioration or death, treatment side effects, other pain/physical problems, or VR discomfort/boring content. The results are presented in Table 1.

Conclusions

Careful characterization of exclusions is important not only for interpreting efficacy, but also for designing more inclusive, scalable VR programs. Notably, some studies excluded individuals with poor vision or those wearing glasses; however, most current head-mounted displays support eyeglasses or prescription lens inserts, and future VR interventions may be able to include such individuals. Clear reporting of dropouts and associated reasons is needed. The common dropout reasons highlight the need for more attention to feasibility and safety. Several studies reported that participants found the VR videos boring or removed the headset early, in which free online contents were used. The drawbacks of using online free VR videos are that they may lack therapeutic relevance, may be too generic, and are often updated infrequently when sourced from free platforms.

CANCE-004
IMPROVING PAIN PREVENTION OUTCOMES FOR ICU
CANCER PATIENTS THROUGH MULTIMODAL, INDIVIDU-
ALIZED INTERVENTIONS

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Introduction

This project aimed to improve pain prevention outcomes in critically ill cancer patients admitted to the ICU. Addressing procedural pain, metastasis-related discomfort, and anxiety-induced exacerbation, a structured, interdisciplinary model was implemented to support early recognition and timely intervention.

Methods

A multimodal approach was adopted:

- Pharmacologic Bundles** – Preemptive administration of acetaminophen, opioids (e.g., morphine, fentanyl), and adjuvants (e.g., gabapentin) was standardized based on pain scores and anticipated stimuli. Protocols were co-developed with oncology and palliative care for titration and opioid rotation.
- Non-Pharmacologic Therapies** – Music therapy (classical or instrumental), aromatherapy (lavender, bergamot), guided breathing, and comfort positioning were used during care routines.
- Individualized Pain Assessment & Communication**
Used CPOT (Critical-Care Pain Observation Tool) and BPS (Behavioral Pain Scale) for non-communicative patients.
Regular interdisciplinary rounds ensured dynamic pain plan adjustment.
Families were educated on behavioral pain cues and included in non-pharmacologic support (e.g., hand massage, music selection).
- Nurse Empowerment & Team Collaboration**
ICU nurses received simulation training on pain scales, medication timing, and comfort care techniques.
Pain management responsibilities were shared among intensivists, palliative specialists, and nursing educators.

Results

Patients reported better symptom relief, improved sleep, and reduced episodes of breakthrough pain. Observational scores indicated diminished pain behaviors during routine care. Families expressed satisfaction with being able to participate in comfort care and noted increased calmness in their loved ones. Nurses showed improved confidence in pain recognition and timely pharmacologic intervention, while ICU teams noted fewer unplanned sedative escalations or procedure delays due to pain-related agitation.

Conclusions

A structured and individualized approach to pain prevention in ICU cancer patients improved symptom control, patient comfort, and team efficiency. The integration of pharmacologic, non-pharmacologic, and family-assisted strategies enhanced overall quality of care while reducing staff moral distress. Future directions include extending this model to general wards and embedding routine pain coaching into nurse onboarding programs.

CANCE-006
FACTORS ASSOCIATED WITH PAIN AMONG RURAL CAN-
CER SURVIVORS: DATA FROM AN AUSTRALIAN COHORT
STUDY

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Introduction

Cancer survivors living in rural areas experience unique barriers to survivorship care, yet little is known about their experience of cancer-related pain. The aim of this cohort study was to examine the prevalence and cumulative incidence of pain among rural cancer survivors, assess the prevalence of persistent pain over time, and identify factors associated with worse pain outcomes.

Methods

A total of N=659 adult cancer survivors living in Queensland, Australia, and travelling at least 50 kilometres to access cancer treatment were included. Self-reported pain intensity, interference, and frequency over the past seven days was assessed using

the validated AQoL-8D tool at baseline to up to five years follow-up. Sociodemographic, clinical, and psychological factors were assessed at baseline. The prevalence and cumulative incidence of pain, as well as the proportion of survivors reporting persistent pain, was calculated. Cumulative linear mixed modelling and binary logistic regression were used to examine factors associated with worse pain outcomes and higher likelihood of persistent pain, respectively.

Results

Over the follow-up period (median: 3 years), 84% of rural cancer survivors reported experiencing “moderate” to “unbearable” pain in the past seven days, 64% reported serious pain at least weekly, and 66% reported that pain had interfered with their daily activities at least “sometimes” within the past week. Higher psychological distress was associated with worse pain intensity and interference, and more frequent serious pain. 21% of cancer survivors reported experiencing persistent pain, which was also associated with higher psychological distress

Conclusions

Pain is common among rural cancer survivors. There is a need to prioritise integrated survivorship care interventions for rural populations, addressing both psychological and physical health needs. Interventions that improve access to mental health support, facilitate effective pain communication, and are tailored to the needs of rural communities are essential to improve long-term pain outcomes and quality of life.

CANCE-007

A SURVEY OF CLINICIANS’ KNOWLEDGE AND THEIR MANAGEMENT OF CHRONIC PAIN IN CANCER SURVIVORS

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Introduction

Up to 40% of patients completing curative-intent cancer treatment experience chronic pain (CP) (pain lasting > 3 months). Although clinical practice guidelines (CPGs) exist, their uptake is poorly understood. This study sought to understand clinicians’ knowledge of CP CPGs, opioid prescribing practices, attitudes toward risk of opioid misuse, and perceived barriers and facilitators to CP management in cancer survivors.

Methods

We conducted a cross-sectional international online survey using Qualtrics to collect demographic data and Likert-scale ratings of knowledge, practices, attitudes, and barriers and facilitators to CP management. Eligible participants were clinicians involved in managing CP among cancer survivors (i.e., those not in advanced disease stages). Recruitment occurred via email invitations to MASCC members and other professional organizations (CAMO, EONS, EAUN, SIO, EFIC, ISOPP).

Results

Ninety-nine participants completed the survey; n=6 were nurses/nurse practitioners, n=82 were prescribers (n=29 pain and symptom management specialist and n=30 medical oncologists). Most were MASCC members (n= 64) and represented 26 countries, most commonly the USA (n = 24;25.3%), Canada (n=12;12.6%), and India

(n=13;13.7%). About 80% rated their knowledge as good to excellent, while 20% reported fair or poor knowledge. Of the prescribers, over 60% (n=49) reported always or usually following CPGs, whereas 40% (n=33) did so sometimes or never. Approximately 60% (n=49) reported awareness of appropriate prescribing approaches, however, 25% (n=20) reported that they either sometimes or never used multimodal or multidisciplinary approaches or promoted self-management, and 15% (n=12) reported that they either sometimes or never provided patient education. Attitudes toward misuse risk varied, though most endorsed safe prescribing approaches. Common barriers included workload and limited resources, while facilitators included institutional support, multidisciplinary teams, and education.

Conclusions

Variabilities in knowledge, attitudes and practice in CP management for cancer survivors persist, even among supportive care specialists. Targeted educational initiatives and consideration of updated CPGs could be explored in future.

CANCE-008

PREScription TRENDS OF DICLOFENAC SODIUM SYSTEMIC PATCH 75 MG IN JAPAN: AN ANALYSIS OF NATIONAL DATABASE (2021–2023)

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Introduction

The diclofenac sodium systemic patch (DSSP) is a systemically acting transdermal nonsteroidal anti-inflammatory drug (NSAID) designed to provide sustained analgesia with reduced gastrointestinal toxicity compared with oral NSAIDs. Following its approval in Japan in 2021 and subsequent indication expansion for chronic musculoskeletal pain, its clinical use has rapidly increased. We evaluated nationwide prescription trends of DSSP 75 mg using Japan’s National Database (NDB).

Methods

NDB Open Data from April 2021 to March 2024 were analyzed. Annual prescription volumes of DSSP 75 mg were aggregated and stratified by age group, sex, prescription setting (outpatient in-hospital, outpatient out-of-hospital, inpatient), and prefecture. The NDB is a comprehensive nationwide claims database covering more than 95% of insured medical services in Japan.

Results

Total prescriptions increased from 946,370 patches in fiscal year (FY) 2021 to 15,655,611 in FY2022 and 42,413,540 in FY2023, representing a 44.8-fold increase over three years. In FY2023, outpatient prescriptions accounted for 97.0% of use (84.0% out-of-hospital, 13.0% in-hospital).

Prescriptions were strongly concentrated in older adults, peaking in the 80–84-year age group (5.7 million patches). Patients aged ≥65 years accounted for 71.4% of prescriptions, and those aged ≥75 years for 50.3%. Female patients received 22.49 million prescriptions compared with 13.11 million in males (female-to-male ratio, 1.72). Marked regional disparities were observed, with a 24.5-fold difference between the highest (Tokyo, 3.53 million) and lowest (Tottori, 0.14 million) prefectures. The top 10 prefectures accounted for 52.3% of total prescriptions.

Conclusions

DSSP 75 mg has shown unprecedented nationwide uptake in Japan, particularly among older adults, women, and urban populations. These trends likely reflect evolving pain management strategies emphasizing gastrointestinal safety, ease of administration in older patients, and opioid-sparing approaches. DSSP represents an important option in supportive care and chronic pain management in aging societies.

CANCE-010**PAIN MANAGEMENT STRATEGIES FOR ADULT CANCER PATIENTS RECEIVING PALLIATIVE CARE IN LOW- AND LOWER-MIDDLE-INCOME COUNTRIES (LMIC): A SCOPING REVIEW**

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Introduction

Effective pain management is central to palliative care, yet cancer patients in LLMICs continue to experience significant, unrelieved pain. Although global cancer pain guidelines provide a foundation for cancer pain management, their implementation is limited by a lack of context-specific evidence, resource constraints, and system-level barriers. This scoping review maps current cancer pain management strategies and the barriers affecting their implementation in resource-limited settings.

Methods

Following PRISMA-ScR and JBI guidance, we conducted a comprehensive search across MEDLINE, CINAHL, Scopus, Global Index Medicus, ProQuest, EMBASE, and African Journals Online, supplemented by grey literature and citation snowballing. Primary qualitative and quantitative studies were included based on the PCC framework to determine eligibility. Two reviewers independently screened all records. Data were systematically charted using a pre-designed Excel™ tool. A thematic analysis, guided by the JBI methodological framework, was used to structure and synthesize findings. The protocol is registered with OSF (DOI: <https://doi.org/10.17605/OSF.IO/GZNEU>).

Results

A total of 35 studies were included. Effective pharmacological strategies included oral/IV morphine, methadone rotation, transdermal buprenorphine, bone-pain radiopharmaceuticals, and adjuvants. Non-pharmacological approaches such as hypo/multifaction palliative radiotherapy, Scrambler Therapy, yoga, telephone-based psychological support, and spiritual care also improved pain. Integrative models: joint palliative-pain clinics, early ultrasound-guided neurolysis, and combined chemoradiation, showed benefit. Key barriers included opioid supply shortages, restrictive prescribing regulations, inadequate pain assessment practices, and poor knowledge and attitudes among patients, caregivers, and healthcare providers, especially fear of addiction and cultural norms that encourage people to endure pain quietly.

Conclusions

This review synthesizes scarce but important evidence on cancer pain management in resource-limited palliative care settings. Effective strategies include morphine, methadone, buprenorphine, targeted radiotherapy, neuromodulation, psychosocial and spiritual support, and integrated palliative-pain services. Improving opioid access, easing restrictive regulations, strengthening prescriber training, expanding tele-support, and integrating culturally informed care are essential to advance cancer pain relief in LLMICs.

CANCE-011**EFFICACY, SAFETY AND TOLERABILITY OF ADJUNCT METHADONE IN THE MANAGEMENT OF CANCER-RELATED PAIN: SYSTEMATIC REVIEW**

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Introduction

Pain caused by cancer or its treatment (cancer-related pain) is common, but optimal management can be challenging due to the often co-existing complex pain mechanisms. Observational studies suggest that adding methadone as an adjunct to conventional opioids (e.g. morphine), as opposed to use as the sole opioid, may improve analgesia. These findings suggest a reduced need for dose-escalating conventional opioids, limiting associated adverse effects. This systematic review aims to determine the efficacy, safety and tolerability of adjunct methadone in the management of adult cancer-related pain.

Methods

A systematic search (PROSPERO: CRD420251109522) of MEDLINE, Embase, CINAHL, and CENTRAL for randomised controlled trials (RCT) investigating the effects of adjunct methadone in treating cancer-related pain for adults (≥ 18 -year-olds) with active cancer of any stage published between 1970 to 2025 was performed. Quality assessment used the Scottish Intercollegiate Guidelines Network (SIGN) Checklists for individual studies, and Grading of Recommendations Assessment, Development and Evaluation (GRADE) across studies.

Results

Out of 4688 RCTs screened for title and abstracts, 20 full-text studies were assessed for eligibility. Only one RCT (acceptable risk-of-bias) was included in this review, showing significant analgesic benefit from adding low-dose oral methadone (2.5mg twice daily) to regular morphine with no statistically significant increase in adverse events compared to using regular morphine alone. Reasons for full text exclusions were: protocols only (n = 8); methadone as primary (non-adjunct) opioid (n = 4); and non-RCT studies (n = 7) (case report/series [n=3]; systematic review [n = 1]; prospective [n = 1] and retrospective [n = 1] cohort studies; and editorial [n = 1]).

Conclusions

The existing RCT evidence investigating analgesic efficacy and tolerability of adjunct methadone for cancer-related pain is inadequate but demonstrates a signal of analgesic benefit and tolerability. More RCTs exploring the use of adjunct methadone in cancer-related pain are needed.

CANCE-012**HOME-BASED TITRATION THERAPY FOR CANCER PAIN IN AMBULATORY PATIENTS UNDER DAY TREATMENT MODE: A RETROSPECTIVE SINGLE-CENTER COHORT STUDY**

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Introduction

There is a lack of unified standard for effective home-based pain management in ambulatory chemotherapy settings. This study aims to analyze the feasibility, effectiveness, and safety of home-based oxycodone hydrochloride sustained-release tablets titration management for cancer pain patients.

Methods

Patients with cancer pain admitted to Day Oncology Unit through Department of Supportive Care of Peking University Cancer Hospital were collected and divided into three groups: group A(n=106), newly treated cancer pain patients; group B(n=8), patients with poorly controlled cancer pain by oral weak opioids or opioid compound preparations; group C(n=23), patients with poorly controlled cancer pain by oral immediate-release strong opioids. Oxycodone hydrochloride sustained-release tablets were used as the background drug for titration (evaluated and adjusted every 12 h). Patients were followed up for pain relief and related adverse reactions at 12 h, 24 h, 4 d, and 7 d.

Results

137 patients were enrolled. Pain relief rates at 12 h, 24 h, 4 d, and 7 d were 81.75%, 98.54%, 96.35%, 99.27%, respectively. For group A (106 cases), pain relief rates at 12 h, 24 h, 4 d and 7 d were 80.19%, 99.06%, 96.23%, and 100%, respectively. Pain relief rates at 24 h for group B and group C were 100% and 95.65%, respectively. When ideal analgesia achieved, the dosage of oxycodone hydrochloride sustained-release tablets was 10-60 mg q12 h, and median dose was 10 mg q12 h. Median increased dose in patients with poor control of the first medication was 10 mg. Median titration time was 24 h. Main adverse reactions of patients are constipation, nausea, vomiting, dizziness and dysuria, etc., which can be tolerated after symptomatic treatment.

Conclusions

Oxycodone hydrochloride sustained-release tablets as background drugs for titration has high compliance, good safety and effectiveness for cancer pain control in ambulatory chemotherapy settings.

CANCE-013

GABAPENTIN PLUS INTRANASAL KETAMINE FOR PAIN IN PATIENTS UNDERGOING RADIOTHERAPY FOR HEAD AND NECK CANCER: PHASE II TRIAL RESULTS

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Introduction

Prophylactic gabapentin decreases pain, opioid use, and weight loss in HNC patients treated with chemoradiotherapy. None-the-less, significant symptom burden remains. Ketamine is an NMDA receptor antagonist which has neuromodulator and anti-inflammatory properties. We undertook a phase I/II study to explore safety, feasibility and obtain preliminary efficacy data pertaining to the combination of ketamine and gabapentin in HNC patients undergoing radiation +/- chemotherapy. Results of the phase I study were previously reported. Herein we report preliminary results of the phase II portion of the study. Primary outcomes were toxicity and feasibility; secondary outcomes were symptom burden.

Methods

Eligibility: locally advanced HNC patients planned for primary or adjuvant radiotherapy +/- chemotherapy. **Treatment:** Day 1 - gabapentin 100 mg po TID; Day 7 - increase gabapentin to 300 mg po tid; Day 15 - intranasal ketamine 30 mg TID. Dose modifications were allowed

for both agents. **Toxicity:** assessed using CTCAE 4.0. **Feasibility:** data capture by pill counts and patient medication logs. **Efficacy:** patient reported outcomes measures completed at baseline, weekly during radiation and 1-, 2-, and 3-months post-radiation.

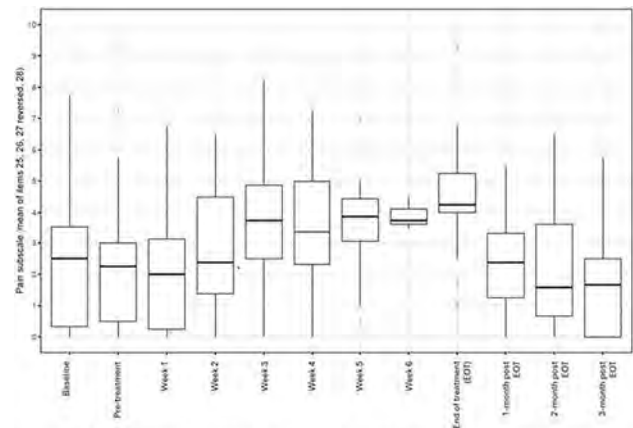


Figure 1. Vanderbilt Head and Neck Symptom Survey version 2.0 pain subscale over time

Results

Patient characteristics: median age 40 yrs, 83% males, 62% p16+, 20 post-operative. **Toxicity:** Of 40 patients who completed treatment, 6 patients experienced a grade 2+ toxicity (4 were probably related to ketamine). Three patients required ketamine dose de-escalation due to dizziness. Six patients eventually discontinued ketamine due to toxicity (15%). **Feasibility:** 37 (92.5%) patients missed <5% of gabapentin doses; 31 (77.5%) patients missed <5% of ketamine doses. **Preliminary Efficacy:** The median pain scores were highest at the end of treatment (4.3) and decreased rapidly (1.6 at 2 months post treatment). Seven patients required PEG placement. Opioid use was limited compared to usual.

Conclusions

The combination of gabapentin and ketamine was safe and feasible. Preliminary data indicates symptom reduction. Larger studies are warranted.

CANCE-015

CONCURRENT CANCER AND PERIPHERAL ARTERY DISEASE PAIN: TRENDS, INTERVENTIONS, OUTCOMES, AND DISPARITIES BY AI ANALYSIS OF 15 MILLION HOSPITALIZATIONS

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¹Mayo Clinic, ²

Introduction

Cancer pain (C-P) and peripheral artery disease pain (PAD-P) coexist due to shared risk factors, as cancer and cancer treatments (chemotherapy, immunotherapy, radiation) drive C-P by increasing inflammation and endothelial dysfunction, which also accelerate atherosclerosis and increase vascular aging and PAD-P. Yet reliable estimates of prevalence, interventions, outcomes, and disparities are largely unknown, undermining optimal practice changes and system responses.

Methods

Quantum Bayesian Machine learning-augmented Propensity Score translational statistics (QBAM-PS) with multivariable regression was performed on the National Inpatient Sample (NIS).

Results

Of the 235,522,075 adult hospitalizations from 2016–2022, 6.67% (15,709,322) had active cancer, of which 6.31% (991,730) had cancer pain. There was a 12.85% PAD prevalence in the general adult population of whom 1.63% had diagnosed PAD-P (compared to over 10% in prior studies), and 12.05% PAD prevalence in the cancer population and 0.11% had diagnosed PAD-P. Within active cancer, the diagnosis of cancer pain linearly increased from 2016 (4.87%) to 2017 (5.36%) to 2018 (5.94%) to 2019 (6.70%) to 2020 (6.82%) to 2021 (7.17%) to 2022 (7.33%), though the prevalence of diagnosed PAD pain was mostly steady in 0.03%–0.05% from 2016–2020, though it more than doubled to 0.11% in 2021 and then held steady in 2022. In PAD by QBAM-PS multivariable regression controlling for clinical confounders, active cancer significantly reduced the odds of receiving endovascular intervention (EI) (OR 0.70, 95% CI 0.58–0.83, $p < 0.001$), though cancer did not increase mortality or cost. Within PAD and cancer, African American (OR 0.47, 95% CI 0.25–0.90, $p = 0.022$) and Hispanic race (OR 0.20, 95% CI 0.06–0.65, $p = 0.007$) compared to Caucasians were significantly less likely to receive EI.

Conclusions

This nationally representative AI analysis suggests that concurrent cancer pain and PAD pain are underdiagnosed (though the latter is improving recently), while patients with cancer are significantly less likely to receive endovascular intervention for PAD that could improve such concurrence.

CANCE-016

QUALITY OF LIFE ASSESSMENT OF CANCER PATIENTS TREATED BY INTRATHECAL DRUG DELIVERY SYSTEM

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¹CLCC Gustave Roussy, ²ICO, Angers

Introduction

Intrathecal Drug Delivery System (IDDS) is an advanced analgesia therapy for patients with refractory cancer pain or opioid intolerance. While its analgesic efficacy is recognised, its impact on quality of life remains poorly documented. This study describes the impact of the IDDS on the quality of life of the patients.

Methods

A retrospective observational study was conducted including 44 patients with refractory cancer pain (average of Oral Morphine Equivalent, 648 mg) or poor opioid tolerance (OME 398 mg). The impact of pain and anxiety on quality of life was assessed before and after implantation of the IDDS (EQ-5D-5L and ESAS), according to physical, functional, psychological and social dimensions. The occurrence of post-implantation headaches was systematically recorded. Opioids were stopped post implantation in all patients and the incidence of the withdrawal syndrome was evaluated. It will be correlated with the initial analgesics, their dose and the level of the implanted catheter.

Results

The implantation of an IDDS is associated with a significant reduction in pain intensity and an improvement in health status. Anxious patients have higher post-implantation pain scores, while non-anxious patients experience a significant reduction in pain scores. Initial high pain scores correlate with a greater reduction after implantation. Withdrawal syndrome was observed in 36.4% of patients, with no sex-related differences. Catheter placement could correlate with lower incidence of withdrawal syndrome.

Conclusions

IDDS is an effective strategy for the management of refractory cancer pain and is associated with significant improvements in quality of life. Maximizing its benefits requires a comprehensive approach that includes systematic and multidisciplinary assessment within a comprehensive patient trajectory.

CANCE-018

OPIOID CONVERSION AND ROTATION RATIOS USED BY PALLIATIVE PHYSICIANS AND PHARMACISTS IN JAPAN

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Introduction

Several versions of equianalgesic tables using various opioid conversion ratios (CRs) and opioid rotation ratios (ORRs) are utilized globally. The use of several different CRs and ORRs may increase the risk for adverse effects, such as uncontrolled pain and accidental opioid overdose. This study was conducted to confirm the actual CRs and ORRs in clinical practice in Japan.

Methods

A cross-sectional survey was conducted between March 7 to 20, 2024, targeting palliative care physicians and pharmacists in the following three societies: Japanese Society for Palliative Medicine, Japanese Society for Pharmaceutical Palliative Care and Sciences, and Japanese Association of Supportive Care in Cancer. The primary endpoint was to determine the CRs and ORRs utilized by participants.

Results

A total of 433 responses were received (68.1% physicians and 31.9% pharmacists), with 30.3 % of respondents conducting more than 30 opioid rotations in the past 6 months. For the majority of CRs and ORRs obtained from all the participants, values for the median, first quartile, third quartile, and mode were highly consistent. Among groups of professions and number of opioid rotations frequency, there were no differences in the median opioid ratios involving morphine, hydromorphone and oxycodone. However, there were significant differences in the ORRs involving intravenous (IV) fentanyl, specifically in the rotation ratios between IV fentanyl and IV morphine.

Table 1. Opioid conversion and rotation ratios				
Conversion or rotation type	n	Median (IQR)	Mode	
CR from IV to oral morphine	449	2 (2, 2)	2	
CR from IV to oral hydromorphone	375	5 (5, 5)	5	
CR from IV to oral oxycodone	410	1.33 (1.33, 1.33)	1.33	
ORR from IV hydromorphone to oral morphine	371	25 (25, 25)	25	
ORR from IV oxycodone to oral morphine	409	2 (2, 2)	2	
ORR from oral hydromorphone to oral morphine	394	5 (5, 5)	5	
ORR from oral oxycodone to oral morphine	421	1.5 (1.5, 1.5)	1.5	
ORR from transmucosal fentanyl 25 mcg/hour to MEDD (mg)	414	60 (60, 60)	60	
ORR from MEDD 100mg to transmucosal fentanyl mcg/hour	411	41.6 (41.6, 41.6)	41.6	
ORR from IV morphine (mg) to IV fentanyl (mcg)	373	20 (20, 30)	20	
ORR from IV fentanyl 30 mcg to IV morphine (mg)	385	1.5 (1.5, 1.5)	1.5	
ORR from oral tapentadol 5mg to oral oxycodone	328	1 (1, 1)	1	

CR, conversion ratio for changing the route of opioid administration; ORR, opioid rotation ratio for rotation from one opioid to another; IV, intravenous; MEDD, morphine equivalent daily dose; IQR, interquartile range; mcg, micrograms; mg, milligrams.

Table 2. Opioid rotation ratios involving transmucosal and intravenous fentanyl					
Level	Sublevel	n	Median (IQR)	Mode	p-value
ORR from transmucosal fentanyl 25 mcg/hr to MEDD (mg)					
Profession	Physician	293	60 (60, 60)	60	0.742
	Pharmacist	120	60 (60, 60)	60	
Number of opioid rotations performed in the past 6 months					
>30		129	60 (60, 60)	60	0.729
≤30		285	60 (60, 60)	60	
ORR from MEDD 100mg to transmucosal fentanyl (mcg/hr)					
Profession	Physician	293	41.6 (41.6, 41.6)	41.6	0.431
	Pharmacist	127	41.6 (41.6, 41.6)	41.6	
Number of opioid rotations performed in the past 6 months					
>30		127	41.6 (41.6, 41.6)	41.6	0.390
≤30		285	41.6 (41.6, 41.6)	41.6	
ORR from IV morphine (mg) to IV fentanyl (mcg) (n=350) ^a					
Profession	Physician	242	20 (20, 25)	20	0.645
	Pharmacist	108	20 (20, 40.6)	20	
Number of opioid rotations performed in the past 6 months					
>30		111	20 (20, 30)	20	0.639
≤30		239	20 (20, 27.5)	20	
Years of clinical experience					
>15		273	20 (20, 30)	20	0.836
≤15		77	20 (20, 30)	20	
Specialty					
Palliative care		317	20 (20, 30)	20	0.395
Others		33	20 (20, 30)	20	
ORR from IV fentanyl 30 mcg to IV morphine (mg) (n=375) ^a					
Profession	Physician	258	1.5 (1.5, 1.5)	1.5	0.826
	Pharmacist	117	1.5 (1.5, 2.0)	1.5	
Number of opioid rotations performed in the past 6 months					
>30		117	1.5 (1.5, 1.5)	1.5	0.804
≤30		258	1.5 (1.5, 1.5)	1.5	
Years of clinical experience					
>15		295	1.5 (1.5, 1.5)	1.5	<0.001
≤15		90	1.5 (1.5, 1.5)	1.5	
Specialty					
Palliative care		346	1.5 (1.5, 1.5)	1.5	0.004
Others		39	1.5 (1.5, 1.5)	1.5	

Conclusions
High consistency was observed in the CRs and ORRs utilized by physicians and pharmacists in palliative care in Japan. These findings would suggest that education on the ratios is well-standardized and established among medical professionals in Japan.

CANCE-019
BE SMART FOR CANCER PAIN: SLOW METHADONE APPROACH REDUCED-RISK TITRATION FOR CANCER PAIN

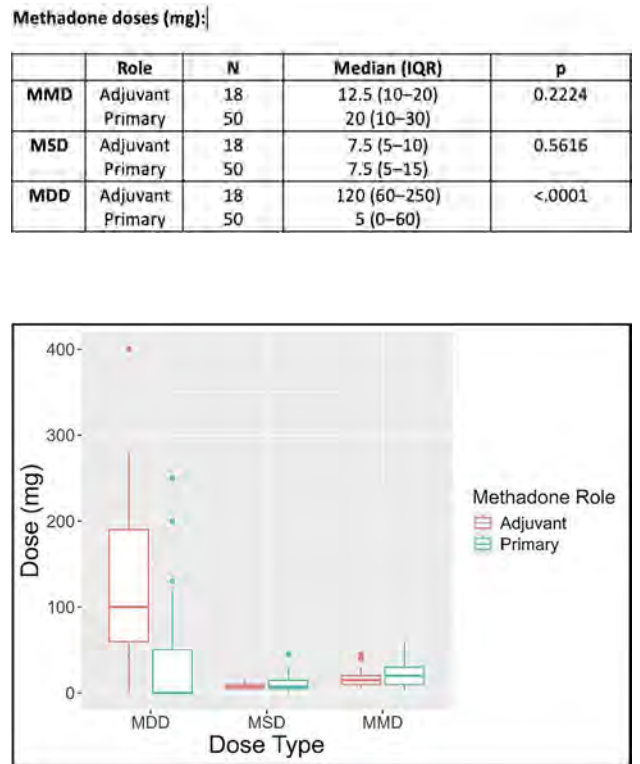
Antonio Noguera¹, Dug Yeo Han², Danni Heron³, Eleanor Wilding³, Warrick Jones³
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Introduction
Methadone has been successfully used for cancer pain either as a first-line opioid or opioid adjuvant. However, concerns about complex titration and methadone safety remain controversial about when and how to initiate. Objective: To describe that methadone can be introduced and titrated slowly for cancer pain in community patients, allowing switching when needed without complex conversion calculations.

Methods
Clinical records of North Haven Hospice community patients were reviewed for one year (June 2024–June 2025), focusing on methadone prescription episodes (MPE). Data were collected, including

pain mechanism, pain response, methadone role (first line/adjuvant), methadone starting dose (MSD), methadone maximum dose (MMD), and morphine daily dose (MDD) during the last days of life when combined.

Results
Of 70 MPE analyzed, 68 were included; 63 (93%) involved cancer patients (mean age 70 years; 60% female). Methadone was used as a first-line opioid in 45 MPE and as an adjuvant in 23; opioid switching was required in 5 MPE. The pain mechanism was neuropathic in 42 MPE and nociceptive in 26. Pain response was good in 44 MPE (65%), moderate in 15 (22%), and mild in 6 (9%). Methadone was discontinued in 7 MPE (10%): 4 (6%) for lack of response and 3 (4%) for intolerable adverse effects.



Conclusions
Methadone was effective and well-tolerated when introduced at low doses and titrated gently under clinical supervision in the community setting. No complex opioid conversion calculations were required.

CANCE-020
ELECTROACUPUNCTURE FOR CANCER-RELATED PAIN: A RANDOMIZED CROSSOVER STUDY COMPARING UPPER- AND LOWER-LIMB ACUPOINTS

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¹Pusan National University, School of Korean Medicine / Korean Medicine Hospital of Pusan University, ²Korea Institute of Oriental Medicine

Introduction
Cancer-related pain is one of the most prevalent symptoms experienced by patients with malignancies. Although opioid analgesics are frequently used for persistent pain, their adverse effects can substantially impair quality of life. In addition, chronic cancer pain is

associated with neuroplastic changes in the nervous system, often leading to reduced responsiveness to conventional treatments. Electroacupuncture (EA) has been proposed as a non-pharmacological intervention with minimal side effects; however, the duration of its analgesic effects and whether stimulation at different limb acupoints produces differential outcomes remain unclear.

Methods

Twenty-four patients with various primary cancers who had experienced cancer-related pain for more than three months were enrolled in a randomized crossover study. Participants received two EA treatments applied for 15 minutes at 2 Hz: one at bilateral upper-limb acupoints (PC6–TE5) and another at bilateral lower-limb acupoints (ST36–SP9). A washout period of 7–14 days was maintained between sessions. Pain intensity was assessed using the numeric rating scale (NRS) at baseline and repeatedly up to 24 hours after treatment. Changes in pain scores were analyzed using paired t-tests and linear mixed-effects models adjusting for baseline pain and potential covariates.

Results

Both EA treatments produced significant reductions in pain intensity compared with baseline. Among treatment responders, NRS scores decreased by more than two points and the analgesic effect persisted for approximately 20 hours on average. EA applied at the lower-limb acupoints (ST36–SP9) tended to produce a more rapid onset of analgesia compared with stimulation at the upper-limb acupoints (PC6–TE5). However, linear mixed-effects analyses showed no statistically significant differences between the two treatments in pain reduction across all time points. This finding remained consistent after adjustment for multiple demographic, clinical, and physiological covariates.

Conclusions

A 15-minute 2 Hz electroacupuncture at PC6–TE5 or ST36–SP9 reduced cancer pain. Lower-limb stimulation showed earlier analgesia, but overall efficacy was similar.

CANCE-025

BUPRENORPHINE FOR INPATIENT CANCER PAIN MANAGEMENT – ACUTE PAIN CONTROL BY THE OPIOID AGONIST-ANTAGONIST WITH UNIQUE SAFETY PROFILE

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Introduction

Pain remains one of the most common distressful cancer-related symptoms globally. Traditional opioids may reduce pain, however, the quality of life is often challenged by the multiple opioid adverse effects including but not limited to additional symptom burden, debilitated functionality, dependence and opioid misuse. Growing studies have shown Buprenorphine's unique effect of providing pain relief with less multi-systemic opioid adverse effects, craving abruption, slowed hyperalgesia, and anxiolytic effect for non-malignant pain. Cancer-related pain studies have also emerged, nearly all focused-on outpatient chronic pain management. Therefore, this retrospective review of inpatient acute cancer-pain management by buprenorphine was initiated at City of Hope National Cancer Center (COH).

Methods

All patients who received buprenorphine from 12/01/2024 to 12/31/2025 at COH were reviewed and intravenous, sublingual, buccal (IV/SL/BF) buprenorphine-treated cases were included. Fourteen cases treated only by transdermal buprenorphine were excluded as the transdermal form is indicated for stable, chronic pain. Patients' maximum pain level in Numeric Rating Scale (NRS) before buprenorphine administration were compared to the median NRS-range over the 24 hours post-administration.

Results

Forty nine of the 63 patients who received Buprenorphine (IV/SL/BF) had pre- and post-administration NRS documented and were analyzed. Patients with moderate (3-7) to severe (8-10) pain had marked pain reduction by 25-45%. (Figure 1)

Figure 1. Pain Intensity Assessment Before and After Buprenorphine Administration

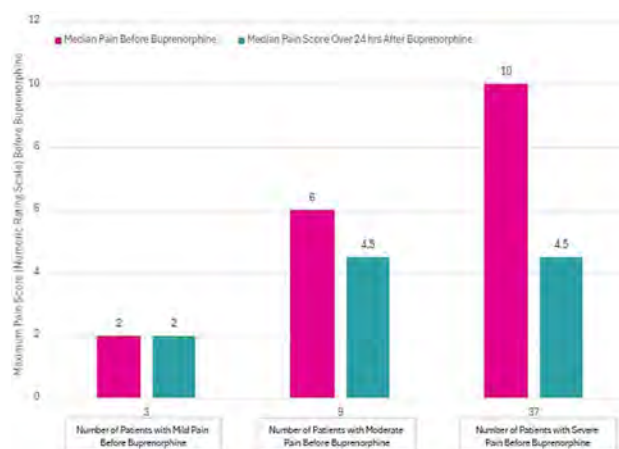


Table 1. Patient Demographics, Disease and Treatment

Demographics	(N=63 patients with 290 total orders)
Age, average (range)	38 (16-84)
Gender, No. of patients (%)	Female, 27 (43%) Male, 36 (57%)
Patient Race, No. of patients (%)	American Indian or Alaska Native and White, 1 (16%) Asian, 8 (13%) Asian and Black or African American, 1 (16%) Black or African American, 4 (6%) Decline to Answer, 2 (3%) White, 43 (68%) Other, 4 (6%)
Cancer Type, No. of patients (%)	Brain, 1 (2%) Breast, 2 (3%) GI, 8 (13%) GU, 1 (2%) GYN, 2 (3%) Head & Neck, 1 (2%) Leukemia, 18 (29%) Lymphoma, 10 (16%) Neuroendocrine, 1 (2%) Thoracic, 2 (3%) Other, 3 (5%) Other hematologic malignancy, 7 (11%) Other solid tumor, 6 (10%)
New Start of Buprenorphine No. of patients (%)	54 (86%)
Buprenorphine Indication, No. of patients (%)	Cancer-related pain, 50 (79%) Hesitancy with opioids and cancer-related pain, 2 (3%) History of substance use disorder and cancer-related pain, 6 (10%) Bone marrow transplant for sickle cell anemia, 2 (3%) Dyspnea, 2 (3%)
Types of buprenorphine orders, No. of orders (%)	Buprenorphine buccal film, 15 (24%) Buprenorphine injection, 189 (58%) Buprenorphine sublingual tablet, 64 (22%) Concomitant buprenorphine 5 mcg/hr transdermal, 27 (9%) Concomitant buprenorphine 7.5 mcg/hr transdermal, 11 (4%) Concomitant buprenorphine 20 mcg/hr transdermal, 4 (1%)
Buprenorphine on Discharge, No. of patients (%)	25 (40%)

Conclusions

Our retrospective case series revealed the substantial efficacy of IV/SL/BF buprenorphine for acute, inpatient cancer-related pain management. The NRS documentation from nursing assessment were found

to have notable variability in frequency, evaluation methods (verbal report vs. translation from observed body expression, single NRS vs. multi-loci scores). We plan to conduct a prospective case-control study and propose a pain assessment strategy specific for buprenorphine with nursing education on timely and uniform assessment with a goal to substantiate inpatient cancer-pain management using buprenorphine.

CANCE-026

NOT ALL THAT RESORBS IS ORN: A SCLERODERMA-LIKE MANDIBULAR RAMUS LESION AFTER HN RADIOTHERAPY

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Introduction

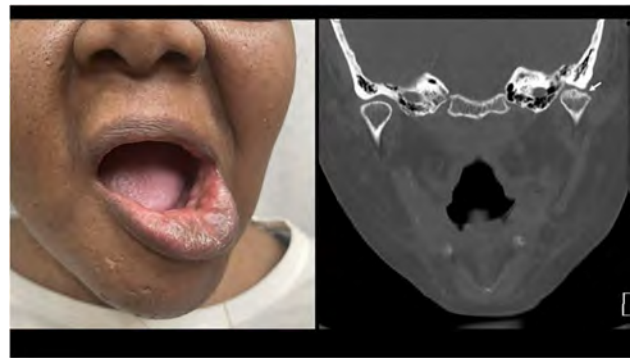
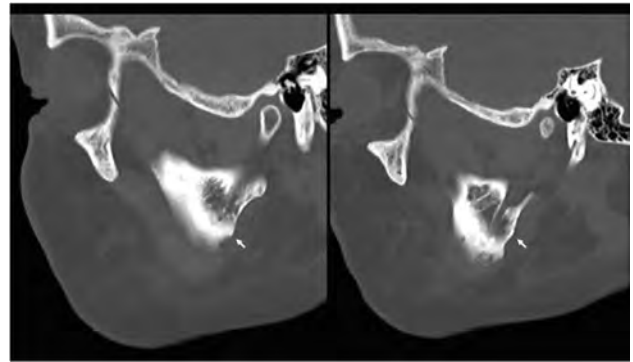
Jaw pain in irradiated patients is often presumed to represent osteoradionecrosis (ORN), yet alternative radiation-induced pathologies may mimic destructive bone disease. This report describes a rare pattern of mandibular ramus resorption, arising from masticatory muscle fibrosis.

Methods

A 73 year-old woman presented with right posterior mandibular pain characterized by four days of spontaneous nocturnal ache rated 8/10. She was fully edentulous and consumed soft foods. Her history included base of tongue SCCa treated with definitive head-and-neck radiation therapy (HNRT) in 2006 and 20 sessions of hyperbaric oxygen therapy in 2007 before mandibular extractions. Examination revealed familiar tenderness of right masseter, maximum opening of 34 mm with left deflection, and a 0.5 × 0.4 cm area of exposed bone on the right posterior edentulous ridge with tenderness. Periapical radiography revealed a radiopaque fragment with adjacent radiolucency concerning for sequestrum. Given a provisional diagnosis of stage 2 ORN, the patient received local debridement, amoxicillin-clavulanate, and chlorhexidine rinses. Exposed bone and local tenderness completely resolved, but nocturnal jaw pain persisted.

Results

Panoramic radiography and CT demonstrated smooth-bordered erosion of the right mandibular ramus, mixed sclerotic and resorptive osteoradionecrotic changes and L TMJ degenerative changes. Findings supported a diagnosis of radiation-induced fibrosis of right masseter causing focal bony erosion along with L TMJ fibrous ankylosis leading to mandibular hypomobility. Amitriptyline 10 mg PO nightly led to complete resolution of these symptoms at three months.



Conclusions

To our knowledge, this is the first reported case of smooth-bordered mandibular ramus resorption after HNRT associated with masseter fibrosis. Scleroderma-like resorption pattern was likely induced by pressure from fibrotic soft tissues, muscle atrophy, and localized ischemia. This case broadens the spectrum of late HNRT-related mandibular changes and highlights the need to consider radiation-induced myofascial pain and fibrosis, not only ORN, when evaluating jaw pain in irradiated patients.

CANCE-028

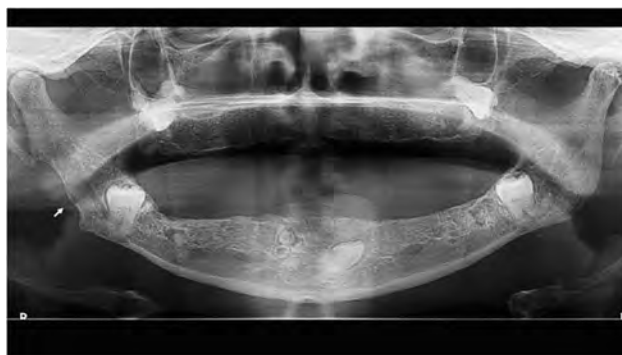
PRIOR AUTHORIZATION REQUESTS FOR OPIOIDS PRESCRIBED FOR PAIN MANAGEMENT AT A COMPREHENSIVE CANCER CENTER OVER A 5-YEAR PERIOD

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Introduction

In response to the opioid crisis in the US policies have been established to reduce the supply of opioids, which include implementation of prior authorization (PA) programs. Despite the benefits of these policies, there are unintended consequences affecting patient care. In 2024 nationwide survey of physicians regarding the effects of PAs 93% reported care delays and 29% reported that a PA has led to a serious adverse event. We set out to examine the trend in frequency and proportion of PA requests for opioid at a comprehensive cancer center.



Methods

This was a retrospective review of patients at MD Anderson Cancer Center in Houston, Texas from 1/1/2017 to 12/31/2021. The review process included all patients who were prescribed opioids to the outpatient MD Anderson pharmacies. The primary outcome was the trend in frequency and proportion of PA requests for long-acting and short-acting opioids. Secondary outcomes included associations between patient and provider demographics and PAs.

Results

197,514 prescriptions were reviewed. The proportion of long-acting opioids requiring PAs increased from 3% in 2017 to a peak of 8.3% in 2019 ($p < 0.001$). Factors associated with higher odds ratio (OR) of requiring a PA included having government insurance (OR = 1.56, $p < 0.001$), long-acting opioids (OR = 3.74, $p < 0.001$), prescriptions from a palliative care physicians (OR = 2.25, $p < 0.001$). Patients with limited-stage cancer were less likely to require a PA (OR = 0.63, $p < 0.001$). Fentanyl (OR = 2.40, $p < 0.001$) and methadone (OR = 1.31, $p < 0.001$) were more likely to require a PA when compared to morphine.

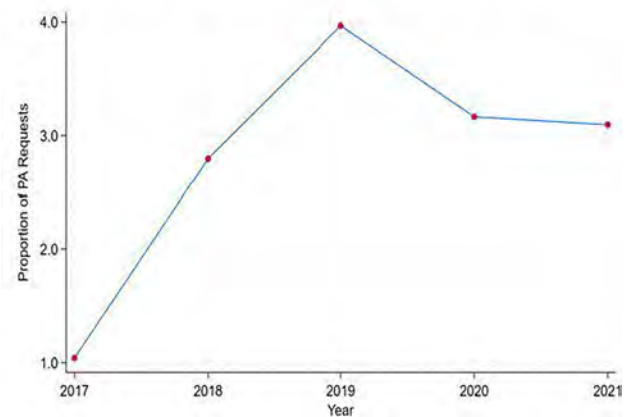
Table 1. Patient Demographics

Characteristic	N	%
Age		
N	70177	
Mean (SD)	57.89 (14.43)	
Median (Min-Max)	60.00 (1.00 - 108.00)	
Gender		
Female	37670	53.68
Male	32503	46.32
Ethnicity		
American Indian or Alaska Native	342	0.49
Asian	3383	4.82
Black or African American	7052	10.05
Declined to Answer	442	0.63
Native Hawaiian or Other Pacific Islander	113	0.16
Other	5703	8.13
Unknown	182	0.26
White or Caucasian	52956	75.46
Ethnicity		
Declined to Answer	1127	1.61
Hispanic or Latino	10101	14.40
Not Hispanic or Latino	58420	83.29
Unknown	491	0.70
Insurance		
Private	69007	98.33
Government	1170	1.67
Primary Cancer		
Brain	710	1.40
Breast	10164	20.00
GI	7859	15.47
GU	7876	15.50
GYN	3235	6.37
Head and neck	4989	9.82
Heme	5474	10.77
Melanoma	3380	6.65
Other	717	1.41
Respiratory	2929	5.76
Sarcoma	2199	4.33
Skin - other than melanoma	943	1.86
Unknown primary site	335	0.66
Stage		
Advanced/Metastatic	13311	34.93
Local/Locally advanced	24437	64.13
NA	360	0.94

Table 2. Logistic Regression Results of PA on Patient's Demographic and Clinical Factors

Predictor	OR	SE	Interval	P-Value
Insurance (Ref. - private insurance)	1.56	0.14	(1.32, 1.85)	<0.001
Long-acting opioid (Ref. short-acting)	3.74	0.11	(3.54, 3.96)	<0.001
Male (Ref. female)	1.18	0.04	(1.10, 1.25)	<0.001
Age	0.99	0.00	(0.99, 0.99)	<0.001
Race (Ref. White)				
American Indian or Alaska Native	1.08	0.22	(0.73, 1.60)	0.687
Asian	0.86	0.08	(0.72, 1.02)	0.082
Black	0.98	0.05	(0.89, 1.09)	0.757
Native Hawaiian or Other Pacific Islander	0.83	0.28	(0.43, 1.62)	0.583
Other	0.83	0.05	(0.73, 0.93)	0.002
Specialty (Ref. Oncology)				
Palliative Care/ Rehab	2.25	0.08	(2.11, 2.41)	<0.001
Pain Medicine	1.52	0.07	(1.38, 1.67)	<0.001
Cancer Stage (Ref. Advanced/Metastatic)				
Limited Stage	0.63	0.03	(0.58, 0.69)	<0.001

Figure 1 Proportion of Overall Opioids That Requires a PA over time



Conclusions

There was more than 100% rise in PA rates. This represents a major burden to patients and clinicians. More research is needed to examine the effects of the rising rates of PAs on our most vulnerable populations.

CANCE-029

PHARMACOLOGIC STRATEGIES FOR CHRONIC CANCER PAIN: A SYSTEMATIC REVIEW OF MULTIMODAL APPROACHES IN ADULT PATIENTS

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The Christie NHS Foundation Trust

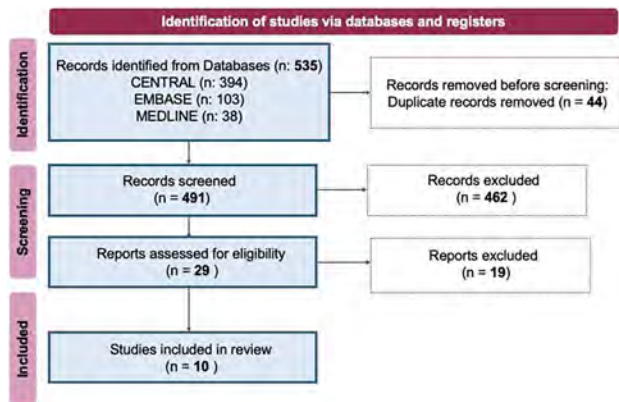
Introduction

Cancer pain remains a major global health challenge, affecting 25% of newly diagnosed patients, 33% during treatment, over 75% with advanced disease, and around 33% of survivors after treatment. Rising cancer prevalence, with 3.6 million UK survivors projected by 2026, highlights the need to address persistent pain in survivorship. While the WHO analgesic ladder guides pharmacologic management, it has limitations regarding chronic use, opioid-related harms, and multimodal strategies. Non-opioid adjuvants and combination therapy may enhance analgesia and reduce side effects, but evidence

remains limited. This review synthesizes current data to inform individualized multimodal pain management.

Methods

A systematic search of PubMed, EMBASE, and CENTRAL (2010–2025) was conducted for RCTs in adults (≥ 18 years) with chronic cancer-related pain. Interventions compared opioid–non-opioid combinations with opioids, placebo, or alternative regimens. Outcomes included pain intensity, responder rates, quality of life, opioid use, and adverse events, with risk of bias assessed.



Results

Several combination therapies showed benefit. Duloxetine added to opioids and Pregabalin significantly improved pain control and pain-related quality of life. Low-dose Gabapentin combined with Imipramine achieved greater pain reduction and reduced opioid rescue use compared with monotherapy. Amitriptyline-Tramadol and Gabapentin-Tramadol provided comparable analgesia. Pregabalin reduced opioid requirements and improved sleep and bowel outcomes. Cannabinoid-based therapies demonstrated inconsistent analgesic efficacy despite some secondary benefits, while nefopam and subcutaneous lidocaine showed no significant short-term advantage over placebo.

Conclusions

This review supports the role of specific multimodal pharmacologic strategies—particularly duloxetine, gabapentinoids, and tricyclic antidepressants—as effective adjuncts to opioids in chronic cancer pain, with potential to improve analgesia, reduce opioid burden, and enhance function. Cannabinoid-based therapies may offer benefit in selected patients, though evidence remains inconsistent. In contrast, nefopam and subcutaneous lidocaine cannot currently be recommended outside clinical trials. Overall, the limited evidence base highlights an urgent need for high-quality studies to inform sustainable long-term pain management in cancer survivors.

CANCE-030 EXPLORING SUZETRIGINE AS A THERAPEUTIC OPTION FOR PAIN ASSOCIATED WITH PATHOLOGIC FRACTURE: A CASE-BASED INSIGHT

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Introduction

Pain related to advanced malignancy and pathologic fractures is often severe and challenging to manage, frequently necessitating high-dose opioid therapy with expected adverse effects. Suzetrigine,

a selective NaV1.8 sodium channel inhibitor, represents a novel non-opioid analgesic mechanism with potential benefit in cancer-related pain.

Methods

We present a young female patient with a history of osteoblastic osteosarcoma where Palliative Medicine was involved for support in complex cancer pain management in the setting of a new pathologic femur fracture.

Results

Prior to her fracture, patient was able to manage her cancer-associated pain with minimal utilization of as needed opioids, averaging 5mg of oxycodone once daily. After her fracture, she found her pain was uncontrolled on her prior regimen, now requiring oxycodone 10mg by mouth every 3 hours to maintain her pain at a manageable level. She expressed desire to minimize opioid use, to the extent possible, to allow her to continue her remote work. With this goal in mind, we started suzetrigine at a loading dose of 100mg by mouth once, followed by maintenance dosing of 50mg by mouth every 12 hours starting 12 hours following the initial dose. She was continued on her usual oxycodone dose of 5 to 10 mg by mouth every 3 hours as needed. Within 48 hours of initiating suzetrigine, patient's oxycodone use decreased by nearly 50%. Following completion of a 2-week suzetrigine course, patient was able to reduce her oxycodone use by over 80%.

Conclusions

This case suggests that suzetrigine may be an effective adjuvant medication in the management of severe cancer-related pain, including pain from pathologic fractures, while facilitating opioid sparing. Its novel mechanism of action and favorable tolerability profile may offer a promising option within palliative care settings. Further study is warranted to better define the role of NaV1.8 inhibition in cancer pain management.

CANCE-031

A NATIONAL PHARMACOEPIDEMIOLOGIC STUDY OF RAPID-ONSET OPIOIDS FOR ADVANCED CANCER IN AUSTRALIA, 2013–2024: RARELY USED, INTENSIVELY DOSED

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Introduction

Nearly half of all breakthrough cancer pain (44%) is reported as incident pain which is linked to greater functional disruption. Rapid-onset opioids (ROOs) have a pharmacokinetic profile which may better match the rapid peak and short duration of incident pain. This study characterises national ROO utilisation in Australia over 13 years compared to other immediate release opioids.

Methods

This population-based study used a 10% random sample of Australians through the Pharmaceutical Benefits Scheme (PBS) from 2013–2025 of people who used immediate release opioids in their last 6 months of life and had cancer treatment. Three rapid-onset opioids (ROOs) were PBS-listed and included: oral transmucosal fentanyl citrate (OTFC), fentanyl sublingual tablets (FST), and fentanyl buccal tablets (FBT). Descriptive statistics summarised prescribing frequency and oral morphine equivalent daily dose (OMEDD). Daily dose was obtained by dividing the tablet dose and number prescribed by number of days per month.

Results

In total, 343,580 people were prescribed immediate release opioids (Table 1). Median dose reduced over the 13-year period from 10mg (IQR 5,28) in 2013, reducing steadily to 7mg (IQR 4,16) in 2025.

Median dose for ROOs was 200mcg (IQR 81,448mcg) compared to only 8mg (IQR 4,19) for non-ROOs. In total, 14,790 people received ROOs (4.5%). Since all three ROOs became available in year 2016, ROO use was proportionally greater compared to when only OTFC was available (Table 2). FST was the commonest (66%; n= 9,690), followed by OTFC (27%; n=4,050) and FBT (7%; n=1,050).

Year	Rapid Onset Opioids (ROOs)		Non-ROO Immediate Release Opioids		Total (ROO + Non-ROO) Immediate Release Opioids	
	n (%)	oMEDD* (mg) (median, IQR)	n (%)	oMEDD* (mg) (median, IQR)	n	oMEDD* (mg) (median, IQR)
2013	7400 (1.7%)	112 (36, 293)	436100 (98.3%)	27 (10, 61)	443500	28 (10, 64)
2014	6100 (1.4%)	65 (24, 146)	436000 (98.6%)	24 (10, 62)	442100	25 (10, 63)
2015	8600 (1.8%)	70 (31, 181)	460000 (98.2%)	25 (10, 58)	468600	25 (10, 61)
2016	13300 (3%)	54 (20, 123)	426200 (97%)	21 (10, 53)	439500	23 (10, 56)
2017	15000 (3.4%)	57 (26, 112)	430100 (96.6%)	21 (10, 47)	445100	21 (10, 51)
2018	17900 (3.8%)	90 (36, 178)	457400 (96.2%)	20 (10, 48)	475300	21 (10, 54)
2019	13800 (3%)	58 (27, 129)	450700 (97%)	20 (9, 45)	464500	21 (9, 48)
2020	14100 (2.9%)	50 (23, 95)	470700 (97.1%)	20 (9, 42)	484800	21 (9, 45)
2021	15100 (3.3%)	75 (31, 149)	437400 (96.7%)	19 (9, 43)	452500	19 (9, 47)
2022	11100 (2.5%)	64 (30, 113)	426300 (97.5%)	18 (9, 41)	437400	18 (9, 42)
2023	9600 (2.1%)	51 (23, 111)	437800 (97.9%)	16 (7, 37)	447400	17 (8, 40)
2024	8800 (2.2%)	61 (32, 122)	388900 (97.8%)	17 (8, 40)	397700	17 (8, 42)
Overall	140900 (2.6%)	64 (28, 134)	5257900 (97.4%)	21 (9, 48)	5398800	21 (9, 51)

*oMEDD = oral morphine equivalent daily dose

Table 1: Immediate Release Opioid (Rapid Onset Opioid and non-Rapid Onset Opioid) Utilisation by Year, 2013–2024

Year	Oral transmucosal fentanyl citrate (OTFC)		Fentanyl buccal tablets (FBT)		Fentanyl sublingual tablets (FST)		All Rapid Onset Opioids	
	n (%)	oMEDD* (mg) (median, IQR)	n (%)	oMEDD* (mg) (median, IQR)	n (%)	oMEDD* (mg) (median, IQR)	n (%)	oMEDD* (mg) (median, IQR)
2013	7400 (100%)	112 (36, 293)	—	—	—	—	7400	112 (36, 293)
2014	6100 (100%)	65 (24, 146)	—	—	—	—	6100	65 (24, 146)
2015	8600 (100%)	70 (31, 181)	—	—	—	—	8600	70 (31, 181)
2016	3900 (29.3%)	53 (20, 98)	300 (2.3%)	19 (12, 33)	3100 (68.4%)	58 (25, 125)	13300	53 (20, 123)
2017	2700 (18%)	97 (35, 155)	2500 (16.7%)	72 (43, 113)	3800 (65.3%)	50 (22, 95)	15000	57 (26, 112)
2018	1900 (10.6%)	100 (60, 186)	2500 (14%)	143 (59, 260)	4300 (75.4%)	90 (32, 163)	17900	90 (38, 178)
2019	1700 (7.8%)	50 (25, 101)	3100 (9.4%)	58 (23, 154)	10800 (78.8%)	55 (23, 114)	18800	58 (27, 129)
2020	1100 (7.8%)	19 (15, 40)	1800 (12.8%)	49 (29, 33)	11200 (79.4%)	52 (20, 105)	14100	50 (23, 95)
2021	1500 (9.9%)	350 (100, 207)	2800 (18.5%)	47 (24, 91)	10800 (71.5%)	58 (24, 132)	15100	75 (31, 149)
2022	800 (7.2%)	184 (100, 230)	1700 (15.1%)	65 (23, 107)	3600 (77.5%)	54 (26, 106)	11300	64 (30, 113)
2023	400 (4.2%)	16 (8, 40)	1800 (18.8%)	47 (23, 85)	7400 (77.1%)	54 (26, 120)	9600	51 (23, 111)
2024	500 (5.7%)	144 (36, 249)	1800 (20.5%)	91 (39, 212)	6500 (73.9%)	54 (30, 86)	8800	61 (32, 122)
Overall	36600 (26.0%)	77 (31, 177)	16500 (11.7%)	64 (31, 155)	87700 (62.3%)	58 (25, 118)	140900	64 (28, 134)

*oMEDD = oral morphine equivalent daily dose

Table 2: Rapid Onset Opioid Utilisation by Year, 2013–2024

Conclusions

ROO use has almost doubled since new formulations were added in 2016. Yet its use remains rare (4.5%) despite recommendations for incident pain. Median ROO dose was much higher than other immediate-release opioids, whereas non-ROO doses have reduced slightly over 13 years. Key drivers of rare ROO use and reasons for relative high dosing warrant further investigation.

CANCE-032 CONSTRUCTION AND VALIDATION OF A RISK PREDICTION MODEL FOR BREAKTHROUGH CANCER PAIN BASED ON THE ECOLOGICAL MOMENTARY ASSESSMENT

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Introduction

Breakthrough cancer pain (BTcP) is a common refractory symptom characterized by acute onset, high intensity, and short duration. Frequent BTcP episodes severely impair patients' quality of life and mental state, delay tumor treatment, and increase medical burden. Current clinical management relies on post-symptom targeted interventions due to the lack of accurate early-warning tools, hindering proactive intervention. The Ecological Momentary Assessment (EMA) enables real-time, dynamic collection of patients' pain-related status and behavioral data, providing a novel perspective to identify potential BTcP risk factors.

This study constructed a BTcP risk prediction model based on EMA to offer scientific evidence for precise clinical prevention and control.

Methods

A total of 220 cancer patients from a cancer hospital (March 2024–February 2025) were enrolled via convenience sampling. Dynamic pain-related data of patients, including baseline pain intensity, emotional state, sleep quality, past BTcP frequency, and activity level, were collected via a smartphone application using EMA technology, with three real-time questionnaires distributed daily for two consecutive weeks. Lasso regression screened key predictors; Logistic regression and LightGBM models were built. The optimal model was selected by AUC, sensitivity, and specificity, with internal validation performed.

Results

A total of 208 eligible cancer pain patients were finally included in this study, with a breakthrough cancer pain (BTcP) incidence of 45.19%. Five key predictors were identified, including baseline pain intensity, self-rating anxiety scale score, sleep duration, activity volume, and past BTcP frequency. The LightGBM model performed best, with an internal validation AUC of 0.863 (95%CI: 0.801–0.925), sensitivity of 0.829, specificity of 0.786.

Conclusions

The EMA-based BTcP risk prediction model has favorable predictive efficacy and clinical utility, enabling accurate identification of high-risk patients. It provides a novel tool for early BTcP warning and personalized intervention, helping reduce pain episodes and improve patients' quality of life.

CANCE-033

CONSTRUCTION AND APPLICATION OF AN INTELLIGENT FOLLOW-UP PLATFORM FOR CANCER PAIN PATIENTS BASED ON AI VOICE INTERACTION TECHNOLOGY

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Introduction

Pain is a common, intolerable symptom in cancer patients, severely impacting daily activities and quality of life. With the growing number of cancer pain patients and demand for home-based management, traditional manual follow-up is inadequate. This study developed and clinically applied an AI voice interaction-based intelligent follow-up platform to provide a scientific tool for continuous whole-process management of cancer pain patients.

Methods

We established a research and development team for the intelligent cancer pain follow-up platform, adopted the retrieval-augmented generation (RAG)-based large language model (LLM) technology, and trained the AI system using interview data from approximately 150 real-world cancer pain patients, ultimately constructing an intelligent follow-up platform for cancer pain patients based on AI voice interaction technology. The system comprises five modules: patient management module, follow-up task management module, follow-up script template management module, cancer pain follow-up knowledge base, and follow-up data statistics module, which are designed to provide medication guidance, pain intervention and pain management for home-based cancer pain patients. We collected and analyzed indicators including follow-up rate, follow-up success rate, number of service recipients, call connection rate, pain recognition accuracy, average follow-up duration and data analysis duration.

Results

After 5 months of application, 407 patients were followed up. The follow-up rate was 100%; follow-up success rate increased from 67.4% to 90.0%; call connection rate was 87.0%; pain recognition accuracy rose from 75% to 93%. Full-time follow-up nurses decreased from 25

to 5 monthly; average follow-up duration reduced from (10.51±2.53) to (4.12±1.02) minutes; each nursing unit saved (15±2.75) hours/month in data analysis.

Conclusions

The intelligent follow-up platform for cancer pain patients based on AI voice interaction technology constructed in this study improves the work efficiency of medical staff and the quality of follow-up services, and realizes the continuous whole-process management of patients from admission and discharge to home-based care.

DIGIT-001

AN ARTIFICIAL INTELLIGENCE (AI)-POWERED MULTI-MODAL PATIENT SIMULATOR FOR SERIOUS ILLNESS COMMUNICATION TRAINING: DEVELOPMENT AND INITIAL TESTING

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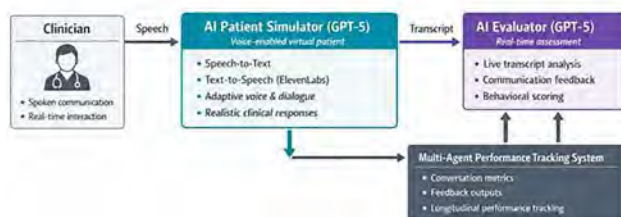
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Introduction

Serious illness communication training is essential for patient-clinician communication. However, scalable, on-demand communication training for busy trainees and clinicians remains limited due to the cost, logistics, and episodic nature of traditional methods. We recently designed a multimodal (voice +text) multi-agent AI-powered patient simulator with built-in AI evaluation and feedback platform designed for serious illness communication training. In this study, we conducted alpha testing to examine its performance.

Methods

Figure 1 Schematic diagram of Multi Agent AI Simulator with built in AI Evaluator and Feedback System



Fifteen synthetic patient profiles were created as ground truth cases and iteratively refined by oncology and palliative care fellows, practicing clinicians, and patient experience representatives to ensure clinical accuracy, emotional realism, and educational relevance. We used single-shot prompting to configure the AI patient simulator and few-shot prompting to guide multi-turn conversational behavior (Fig 1 and 2). An AI evaluator was developed using few-shot and reverse-shot prompting, grounded in communication instruments including PALLI-COM, COM-ON, and ASCO guidelines. The evaluator delivers objective rubric-aligned scores, narrative feedback with behavior-specific examples, and structured self-reflection prompts. Iterative human-in-the-loop testing was used to address challenges including hallucinations, persona drift, abrupt conversation termination, and emotional

inconsistency. Alpha tester examined the realism, context awareness, content appropriateness, and tone qualitatively.

Results

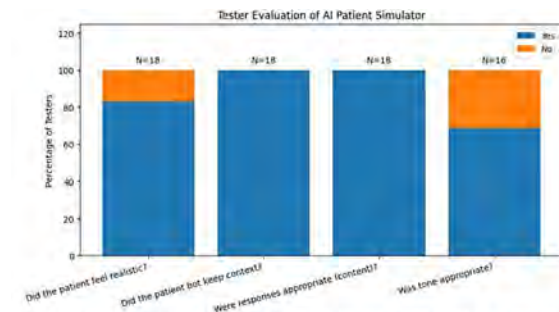


Figure 3. Sample Conversation and AI Generated Feedback with Synthetic Patient

During alpha testing with 6 core clinician users, the AI patient simulator was perceived as realistic (80%), context-aware (100%), clinically appropriate (100%) and tone appropriate (70%) across scenarios, with users reporting natural dialogue flow and effective handling of prognosis, symptom burden, and goals-of-care discussions (Table 1). Key limitations included inconsistent emotional tone, voice variability, and unclear encounter closure, which informed iterative refinements.

Conclusions

Figure 3. Sample Conversation and AI Generated Feedback with Synthetic Patient



We present a proof-of-concept evaluation of an AI-powered patient simulator with integrated assessment for serious illness communication training. Ongoing analyses examine acceptability, feedback quality, and agreement with clinician ratings, informing development of scalable, feedback-driven communication training tools.

DIGIT-002

EVALUATING THE EFFECTIVENESS OF CHATGPT-5 IN ANSWERING PATIENT QUESTIONS REGARDING COGNITIVE DYSFUNCTION IN BREAST CANCER SURVIVORS

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Introduction

The increasing use of artificial intelligence (AI) chatbots, such as ChatGPT-5, has given patients an easily-accessible and interactive platform to seek medical advice. This study assesses the correctness and completeness of ChatGPT-generated answers to commonly asked questions about chemotherapy-induced cognitive dysfunction in breast cancer survivors.

Methods

Based on clinical guidelines in cancer survivorship, fifteen patient-focused questions regarding chemotherapy-induced cognitive

dysfunction were developed. Questions were further refined for clinical relevance by healthcare professionals. A new ChatGPT account was created and each question was entered separately into a new chat to ensure a lack of bias. Three experts individually evaluated each response for correctness on a 6-point Likert scale and completeness on a 3-point Likert scale. Written feedback was also provided. Responses were further analyzed in comparison to evidence-based guidelines. Quantitative ratings were analyzed, and experts' qualitative comments were thematically summarised.

Results

Across the 15 questions, ChatGPT-5 received an average correctness score of 4.84 ± 0.806 and an average completeness score of 2.33 ± 0.777 . Responses with the highest scores focused on the role of exercise, experience of fatigue, and reversible factors of cognitive dysfunction; whereas, timing of cognitive activities, supplement intake, and dietary recommendations were lowest-scoring. Comparing ChatGPT's responses with the National Comprehensive Cancer Network guideline demonstrated consistency among topics of cognitive training, identifying reversible factors, and the detrimental effect of consuming stimulant-containing drinks, and inconsistency regarding supplements, testing of vitamin levels, and the adherence to specific diets.

Conclusions

ChatGPT-5 provided broadly correct and complete responses to patient questions regarding chemotherapy-induced cognitive dysfunction. However, questions with greater complexity and detail demonstrated lacked accuracy. ChatGPT is shown to be a potentially useful tool for medical advice though physician consultation is crucial to ensure patient safety and overall wellbeing.

DIGIT-003

OUTCOMES FROM FINDING MY WAY-ADVANCED - A DIGITAL PSYCHO-ONCOLOGY INTERVENTION FOR WOMEN WITH METASTATIC BREAST CANCER: A NATIONAL MULTISITE RCT.

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¹Flinders University, ²

Introduction

Digital psycho-oncology interventions have proliferated, but few target metastatic disease. *Finding My Way – Advanced (FMW-A)* is a co-designed 6-module self-guided online CBT-based program for women with metastatic breast cancer (MBC). This study evaluated program engagement and efficacy in improving quality of life (QOL) and distress.

Methods

A national multisite RCT recruited eligible women with MBC (aged 18+, life expectancy 6+ months, internet access, sufficient English) via *clinician approach* (62%) across 10 sites in 5 states/territories, or *self-referral* (38%) from professional networks and social media. Participants were randomised to intervention (*FMW-A*) or active-control (Breast Cancer Network Australia's '*My Journey*' online). Measures of QOL (EORTC QLQ; primary outcome) general distress (DASS21), cancer-specific distress (PSS-SR), fear of progression (FoPQ), and unmet needs (SCNS) were assessed at baseline, post-intervention, and 3- and 6-month follow-up.

Results

280 women consented (55% consent rate; 139 intervention, 141 control). Participants (Mean age= 58.4 ± 11.6), were diagnosed an average of 2.9 years prior (39% with de novo MBC) and exhibited significant baseline burden: many exceeded clinical thresholds for impaired mental-QOL (48%), physical-QOL (55%), cancer-related distress (43%), fear of progression (51%), and depression, anxiety and/or stress (38%). After adjusting for baseline, significant between-group differences emerged at 6-month follow-up favouring FMW-A in *Fear of Progression* [EMMdiff: -1.85 (CI: -3.40 to -0.29), $p=.02$] and *Sexual Functioning* [EMMdiff: 4.50 (CI: 1.26 to 7.74), $p=.007$], but favoured control in *global QOL* at 3-month follow-up [EMMdiff: -4.72 (CI: -8.88 to -0.56), $p=0.026$]. Program engagement was moderate (Mean=3.03 modules accessed; 4.75 logins; 30/112 pages accessed); 20% did not access the program.

Conclusions

FMW-A is more effective than the current best-practice resource *My Journey* for improving Fear of Progression and Sexual Functioning in women with MBC, but less effective in mitigating the global QOL declines observed. Future research testing optimisation strategies to bolster engagement and impact is warranted.

DIGIT-004

INTERACTIVE DASHBOARD DEVELOPMENT FOR ACTIONABLE INTERPRETATION OF THE DUTCH SCALP COOLING REGISTRY

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Introduction

Chemotherapy-induced alopecia (CIA) is a distressing side effect of chemotherapy that can be reduced using scalp cooling (SC); however, outcomes vary between patient groups and treatment regimens. Using data from the Dutch Scalp Cooling Registry (DSCR, 2006–2019), we developed an interactive digital dashboard to support dynamic exploration and actionable interpretation of SC outcomes.

Methods

Patient-reported questionnaire data were captured at each chemotherapy session to evaluate experience of SC, hair condition, and severity of CIA. Outcomes visualised within the dashboard included overall head cover use (HC) and World Health Organization (WHO) alopecia scores (0–3). A Shiny-based interface was developed to enable user-directed filtering and stratification across chemotherapy-related variables and outcomes, with results displayed through responsive visualisations and summary outputs to support efficient exploratory analysis.

Results

The dashboard enables rapid, self-service interrogation of longitudinal scalp cooling registry data, allowing users to explore patterns and trends in CIA outcomes across chemotherapy regimens and treatment cycles. Importantly, the application functions as the clinical-facing front-end to a CI/CD-enabled analytics workflow, underpinned by a database architecture that supports seamless ingestion and integration of new incoming data. This infrastructure allows ongoing updates, reprocessing, and continued analytics without interruption to the clinical end-user experience.



Figure 1: A Shiny-based interface was developed to enable user-directed filtering and stratification across chemotherapy-related variables and outcomes, with results displayed through responsive visualisations and summary outputs to support efficient exploratory analysis. **Left:** Responsive data visualisation example without stratification **Right:** Responsive data visualisation example with stratification applied.

Conclusions

By providing an accessible, scalable, and maintainable interface, the dashboard supports timely identification of regimen-specific differences, emerging issues, and clinically relevant trends, facilitating data-driven decision-making and continued optimisation of scalp cooling practice.

DIGIT-005

EVALUATING THE EFFECTIVENESS OF GPT-5 IN ADDRESSING PATIENT QUERIES REGARDING GYNECOLOGICAL ISSUES IN BREAST CANCER PATIENTS TAKING TAMOXIFEN

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Introduction

Tamoxifen is widely used to reduce breast cancer recurrence among patients with hormone-receptor positive (HR+) early breast cancer, but raises frequent concerns about fertility, pregnancy safety, and gynecologic risks, all of which affect adherence and decision-making. Many patients now seek clarification from artificial intelligence (AI) tools, yet the accuracy of AI-generated medical information in this domain is unknown. This study evaluated the correctness and completeness of ChatGPT responses to common patient concerns about tamoxifen-related fertility and gynecologic issues.

Methods

Fifteen clinically relevant patient-centred questions were developed with clinician input. Using a new ChatGPT account, each question was prompted in a separate chat to minimize bias. Three medical oncologists independently rated response correctness (1-6, 6 = correct) and completeness (1-3, 3 = fully complete) using a Likert scale and provided qualitative feedback. Scores and comments were descriptively and thematically analyzed for strengths and areas for improvement, and responses were compared with current guidelines and supporting literature.

Results

Across all questions, GPT-5 received a mean correctness score of 5.73 (SD = 0.375) and a mean completeness score of 2.73 (SD = 0.385). Responses with correctness of 6 and completeness of 3 (n=4) addressed breastfeeding, risk of endometrial cancer, and investigation of vaginal symptoms. Lower-scoring responses included contraception options and alternative treatments to tamoxifen. The responses were well-aligned with ACOG clinical guidelines and recent studies. However, reviewers noted overgeneralization of some recommendations.

Conclusions

GPT-5 provided accurate and comprehensive responses to common fertility and gynecologic concerns among patients taking tamoxifen. There were some limitations in subject areas with evolving or limited evidence. While refinement is needed, GPT-5 demonstrated strong potential to support patient education, enhance health literacy, and support informed decision-making.

DIGIT-007

DIGITAL PREPAREDNESS OF HEALTHCARE PROFESSIONALS AND HEALTH MANAGERS IN ONCOLOGY: ASSESSMENT OF A MULTIDISCIPLINARY TRAINING PROGRAMME

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Introduction

Cancer remains the second leading cause of premature mortality and morbidity despite robust policy initiatives. Navigating complex information throughout the cancer journey underscores the importance of health literacy. Evidence shows that:

- (I) health literacy directly influences health outcomes and healthcare utilization (2);
- (II) healthcare professionals trained in communication and literacy skills can improve care quality and patient outcomes (3); and
- (III) active patient and citizen engagement is essential for effective cancer care delivery.

Methods

The TRANSITION training program was initially made available to 14 European Union Member States through collaborating cancer centers and targeted outreach to individuals who met predefined criteria. Following successful implementation within the EU, the program was expanded globally, allowing participants worldwide to enroll.

A comprehensive evaluation of the program was conducted using CIPP Evaluation Model (Context, Input, Process, and Product), included pre- and post-training assessments utilizing the following instruments:

Learning Objective Review Instrument (LORI) – evaluate alignment with intended learning outcomes.

Online Readiness Questionnaire – assess learners' preparedness and provide a readiness score.

Technology Acceptance Model (TAM v1) – evaluate participant acceptance of the digital training platform.

Post-Study System Usability Questionnaire (PSSUQ v3) – assess overall usability of training system

Results

Over 2,000 participants through 53 countries have enrolled in the program, following tailored learning pathways aligned with specific specialties and professional backgrounds. Statistically significant improvements ($P < 0.05$)

across the majority of assessment domains resulted. Notably, impact of training on participants' ability to utilize digital solutions across various clinical pathways in cancer care continuum was highly statistically significant ($P < 0.001$). The program included scientific publications, social media campaigns, engagement with key stakeholders.

Conclusions

Digital transformation is essential to address growing demands, workforce shortages, and financial constraints while improving care quality and efficiency.

The TRANSITION project offers strong evidence that structured, system-wide digital skills programs can enhance oncology care across the continuum.

DIGIT-008

EFFICACY OF A "SYMPTOM WARRIOR" IN IMPROVING SYMPTOM BURDEN AND QUALITY OF LIFE AMONG CHILDREN IN EARLY CANCER SURVIVORSHIP AND THEIR CAREGIVERS

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Introduction

Symptom burden poses a significant challenge for children surviving cancer and their family caregivers, and it leads to significant psychological distress and compromised quality of life (QoL). This study aimed to develop and examine the efficacy of a symptom management mHealth application, "Symptom Warrior", to improve symptoms experienced by children in the early stage of cancer survivorship and enhance the QoL of their caregivers.

Methods

This is an assessor-blinded two-arm randomised wait-list-controlled trial. Paediatric cancer survivors aged 9-16 years and their caregivers were recruited at a paediatric oncology outpatient clinic in Hong Kong. Child-caregiver dyads were randomised (1:1) into an intervention group receiving the gamified "Symptom Warrior" with personalised nurse support for 12 weeks ($n=75$), or a waitlist control group ($n=75$) which assessed the application for 12 weeks after the intervention group completed all assessments. The primary outcome was the children's symptoms (i.e., anxiety, depressive symptoms, physical function, fatigue, peer relationships, and pain inference) immediately post-intervention (T3). Secondary outcomes included children's symptoms at one- (T1) and two-month (T2) follow-ups and caregivers' QoL at T1, T2, and T3 follow-ups.

Results

Results from Generalized Estimating Equations analysis show significant improvement in the anxiety subscale of children's symptoms in the intervention group compared with the control group [Group $\times$ T3 (group-by-time interaction), $\beta=-3.65$; 95%CI, -6.94, -0.37; $p=.029$]. Regarding the caregivers' outcomes, results showed that, compared to the control group, the caregivers in the intervention group experienced significant improvement in QoL across all subscales at various timepoints: physical health at T2 and T3 (Group $\times$ T2, $\beta=5.30$; 95%CI, 1.43-9.16; $p=.007$; Group $\times$ T3, $\beta=7.72$; 95%CI, 3.88-11.56; $p<.001$), psychological health at T3 (Group $\times$ T3, $\beta=5.68$; 95%CI, 1.70-9.65; $p=.005$), social health at T3 (Group $\times$ T3, $\beta=8.251$; 95%CI, 3.422-13.081; $p<.001$), and environmental health at T3 (Group $\times$ T3, $\beta=7.648$; 95%CI, 2.41-12.88; $p=.004$).

Conclusions

"Symptom Warrior" demonstrated efficacy in reducing the psychological symptom burden of children at the early survivorship stage and enhancing the QoL of their caregivers.

DIGIT-009

STRUCTURING APP-BASED LONGITUDINAL NARRATIVES AS COMPLEMENTARY PATIENT-REPORTED OUTCOMES IN WOMEN WITH CANCER: A MIXED-METHODS STUDY

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Introduction

The objective of this study was to elucidate how women with cancer express their health experiences through app-based longitudinal HR-QOL monitoring and to examine whether narrative data can be consistently structured as complementary patient-reported outcomes alongside standardized measures.

Methods

Quantitative HR-QOL data (symptoms, symptom-related interference, anxiety, depression, subjective well-being/overall QOL) and qualitative narrative data were concurrently collected from 197 women with cancer who participated in an intervention study utilizing a health app at four time points (before and 1, 3, and 6 months after treatment initiation). The integration of both quantitative and qualitative methodologies occurred during the interpretation process.

Results

In the context of statistical analysis, symptoms, symptom-related interference, and anxiety exhibited significant temporal fluctuations. In contrast, depression and overall QOL demonstrated stability, indicating differential sensitivity of HR-QOL domains during treatment. In the qualitative analysis, the changes in symptoms, the symptom-related interference, and anxiety were contextualized by narratives describing treatment processes, symptom onset and recovery, and shifting emotional responses. Conversely, qualitative data concerning depression and subjective well-being demonstrated that participants exhibited signs of emotional distress, made efforts to cope with treatment-related adversities, and continually attempted to maintain their subjective well-being. As time progressed, the participants' discourse transitioned from a focus on treatment-related concerns to a more comprehensive discussion of recovery, coping mechanisms, and the challenges associated with daily living.

Conclusions

The discrepancy between quantitative and qualitative results indicates that, even when employing several standardized PROMs, each PROM score captures only specific aspects of health and may not adequately address domains related to meaning-making, adaptation, and life reconstruction. The taxonomy of text data complemented quantitative findings and elucidated the limitations and boundaries of PROM-based monitoring. These findings suggest that app-based narrative data, when systematically categorized, may function as actionable PROMs that capture patient experiences not reflected in standardized scales.

DIGIT-010

COMPARING AN AI-RATER AND HUMAN-RATERS IN EVALUATING RESPONSE QUALITY OF THREE CANCER-SPECIFIC CHATBOTS TO PSYCHO-ONCOLOGY QUESTIONS

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Introduction

As applications of AI in providing cancer-related information gains popularity, reliable methods for screening chatbot performance are increasingly needed. Human evaluation of chatbot responses can be

subjective and resource-intensive. This study aims to (1) compare the quality of responses generated by three cancer-specific chatbots to psycho-oncology questions, and (2) examine interrater agreement between an AI-based evaluator (“MARK”) and human-raters.

Methods

In January 2026, a set of psycho-oncology questions was presented to three cancer-specific chatbots: *Ask MASCC*, *@Point of Care* (Kaplan), and *Persly* (a commercial AI health-advisor). The questions covered distress screening, evidence for mindfulness intervention, and response to suicidal ideation. Reference answers were manually consolidated from established guidelines/sources for comparison. Six human raters assessed chatbot responses using an adapted quality rubric encompassing six domains and 18 themes (score range 0–18, Table 1). Inter-rater reliability was assessed using intraclass correlation coefficients (ICC) to compare quality ratings from human-raters with those generated by an AI-based chatbot evaluation tool, the Medical AI Reliability & Knowledge Framework (“MARK”; developed by Yap KYL et al).

Table 1. Overall and Individual Domain Intraclass Correlation Coefficient (ICC) between Human-raters and “MARK”

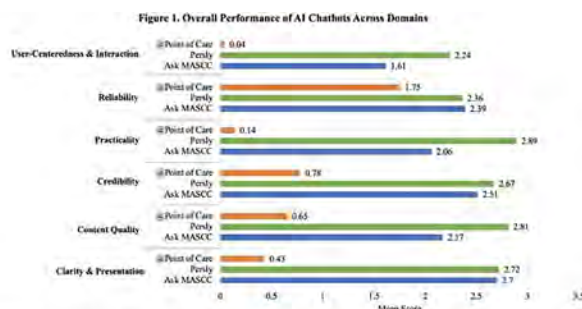
	ICC ^a	95% CI	p-value
Overall ICC	0.92	0.51 – 0.99	< 0.001
ICC for each Quality Domain			
Domain 1 - Clarity & Presentation	0.88	0.75 – 0.94	
Domain 2 - Content Quality	0.82	0.60 – 0.92	
Domain 3 - Credibility	0.79	0.23 – 0.92	< 0.001
Domain 4 - Practicality	0.88	0.72 – 0.95	
Domain 5 - User-Centeredness & Interaction	0.93	0.86 – 0.97	
Domain 6 - Reliability	0.46	0.40 – 0.75	0.016

Remark:

ICC: Intraclass correlation coefficient; an ICC of > 0.75 is indicative of good agreement between human-raters and “MARK”. “MARK” – The Medical AI Reliability & Knowledge Framework, an in-house developed Gen AI chatbot that contextualizes quality evaluation of healthcare AI applications for clinicians.

Results

Among human-raters, *Persly* (score: 15.69±1.92) and *Ask MASCC* (15.69±1.92) generated comparably high-quality responses (Figure 1). Performance varied significantly across chatbots ($p<0.001$, $\eta^2=0.984$), with no significant main effect of question ($p>0.05$). *Ask MASCC* achieved the highest scores for Reliability (2.39±0.64) and was comparable to *Persly* in Clarity and Presentation. Inter-rater reliability among human-raters was excellent (ICC=0.96, $p<0.001$). Agreement between human-raters and “MARK” was outstanding overall (ICC=0.92, $p<0.001$), with weaker agreement in Credibility (ICC=0.79) and Reliability (ICC=0.46) than in other quality domains.



Remark: A higher score is indicative of better quality; min-max score range 0 to 3.

Access to respective AI chatbots:

Ask MASCC – <https://panoramic.make.org/en/partner/mascc/event/cancer-supportive-care/panoramic>

@Point of Care – <https://suitehome.atpointofcare.com>

Persly – <https://www.persly.ai>

Conclusions

AI chatbot performance in addressing cancer-related psychological needs varied considerably. Future studies should expand quality assessments to include a broader range of cancer-specific chatbots. AI-driven raters may provide support in content-focused domains but require further calibration for judgment-intensive areas such as reliability and credibility.

DIGIT-011

PREPARES DIGITAL SYMPTOM MONITORING: OUTCOMES OF A PILOT PROJECT

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Introduction

PREPARES is a digital symptom monitoring program for people receiving systemic cancer treatment. Digital symptom monitoring has been shown to improve symptom control and patient outcomes in previous studies, yet implementation in routine care remains limited. PREPARES patients report symptoms between clinic visits by completing online surveys on their mobile phones. They then receive tailored self-management advice and generate alerts to clinicians for follow-up when indicated. This pilot evaluated the feasibility and acceptability of PREPARES and explored early impacts at Flinders Medical Centre (FMC).

Methods

The PREPARES pilot was delivered over eight months at FMC. Eligible patients were 54 adults commencing outpatient treatment who had access to a suitable mobile device. Patients completed weekly patient-reported outcome (PRO) surveys via a web-based app. Feasibility and acceptability were evaluated using PRO completion rates and a patient evaluation survey. Healthcare outcomes were evaluated by retrospective chart review.

Results

Overall engagement was high, with participants completing 70% of weekly PRO surveys. Alerts were generated across all PRO categories, with the frequency of alerts included in Table 1. Symptom reports identified issues not otherwise known to the care team, prompting earlier review or intervention. Thirty-three patients responded to an anonymous evaluation survey, providing positive feedback from the vast majority of respondents (Table 2). Preliminary chart review suggests potential to reduce emergency department presentations and treatment delays. Main challenges included clinician workload and integration with existing clinical systems.

Table 1. Frequency of alerts by PRO category

PRO category	Alerts as % of total
Other (Fatigue, nausea/vomiting, mouth ulcers, headaches, dizziness, neuropathy, reflux, pain, taste changes)	24%
Pain	16%
Reduced Activity	13%
Nausea	12%
Feeling down	9%
Reduced eating or drinking	6%
Constipation	4%
Insomnia	4%
Diarrhoea	4%
Financial hardship	4%
Falls	1%
Vomiting	1%
Shortness of breath	1%

Table 2. Patient evaluations

Survey question	Agree or strongly agree %
The online questionnaires were easy to use.	94
Reporting symptoms every week made me feel more in control of my own care.	93
I would recommend this program to other patients.	89
Participant quotes	
"I actually enjoyed doing the survey and I felt like someone had my back when going through treatment thank you"	
"Very informative and always available if needed"	
"Having space to provide information around the relevant symptom could be useful."	
"The follow up from the Cancer Care Hotline people was very good. Made no difference at all with care by my Drs."	

Conclusions

The PREPARES pilot demonstrates that digital symptom monitoring is feasible, acceptable, and valued by patients. It provides a patient-centred approach that supports timely symptom reporting and enhances connection to the care team. High response rates and positive patient feedback indicate strong engagement. The next phase involves expanded use at FMC and rollout to additional SA Health sites, supporting wider implementation of innovative digital healthcare in cancer care.

DIGIT-012**EVALUATING GENERATIVE AI IN HEALTHCARE: DEVELOPMENT AND VALIDATION OF A STRUCTURED ASSESSMENT RUBRIC**

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Introduction

The rapid adoption of generative AI in the community and healthcare necessitates reliable, human-led evaluation of generative AI tools. We aimed to develop a rubric to support healthcare professionals and researchers in evaluating the quality of generative AI outputs in health-contexts.

Methods

A rubric was developed through a synthesis of reviews and iterative feedback from an international, multidisciplinary panel of health professionals, healthcare AI experts, researchers, and educators. The rubric was designed for use by evaluators with sufficient subject-matter expertise to assess generative AI outputs against clinical standards, safety principles, and appropriate evidence sources. This study presents a pilot of the rubric, applied by four oncologists to evaluate twenty

responses generated by each of GPT-5 and Claude Opus 4.1, following validated instructions for producing oncologist-to-physician letters. Rubric evaluation scores were analysed using chi-square and inter-rater agreement by weighted Cohen kappa and pairwise agreement.

Results

The developed rubric comprised ten domains—Accuracy, Safety, Recognises Uncertainty, Completeness, Communicates Clearly, Empathetic, Context Aware, Referencing, Follows Instructions, and Avoids Coerciveness—each rated on a four-point Likert scale (Strongly Disagree → Disagree → Agree → Strongly Agree) or 'Not Applicable'. Applied to the oncology letters, pairwise agreement was 30.8 % among the four assessors on rubric responses. Over 50 % of assessments for Referencing and Coerciveness were marked "Not Applicable," indicating that these domains were not relevant to this scenario. Across oncologist assessments, both models demonstrated ≥ 70 % broad agreement in evaluator ratings for Accuracy, Safety, Completeness, Recognises Uncertainty, Communicates Clearly, Empathetic, Context Aware, and Follows Instructions, indicating consistent performance across key evaluative domains for the task.

Conclusions

The oncologists successfully piloted the rubric, which is now being tested across a wider range of health applications as a framework to guide transdisciplinary health professionals in evaluating an increasing variety of generative AI tools across expanding health scenarios.

DIGIT-013

ARTIFICIAL INTELLIGENCE AS AN EDUCATIONAL TOOL: EVALUATING EFFECTIVENESS OF GPT-5 IN ADDRESSING QUERIES ON SLEEP DISTURBANCES IN BREAST CANCER PATIENTS

Ananya Dhillon¹, Britney Zhang², Partha Patel³, Lavinia Mascan⁴, Petra Oprea⁵, Alina Nuica⁶, Elizabeth (Toni) Barnes², Ava Hilkowitz¹, Srinivas Raman⁷, Philiz Goh⁸, Muna Al-Khaifi⁹, Edward Chow², **Henry CY Wong¹⁰**

¹University of Waterloo, Faculty of Health, Waterloo, ²Sunnybrook Health Sciences Centre, Department of Radiation Oncology, Toronto, ³University of Ottawa, Faculty of Medicine, Ottawa, ⁴Yorkdale Medical, Department of Family Medicine, Richmond Hill, ⁵York Medical Centres, York Medical, Department of Family Medicine, East Gwillimbury, ⁶HealthPath MD, Department of Family Medicine, Oakville, ⁷BC Cancer, Department of Radiation Oncology, Vancouver, ⁸Sunnybrook Health Sciences, Department of Nursing, Toronto, ⁹University of Toronto, Department of Family and Community Medicine, Toronto, ¹⁰Princess Margaret Hospital, Kowloon West Cluster, Department of Oncology, Hong Kong, SAR

Introduction

Sleep problems are among the most frequent challenges (up to 62%) reported by breast cancer survivors and can significantly influence quality of life. Artificial intelligence (AI) models such as GPT-5 are increasingly being explored as tools for health education. This study evaluated how accurately and comprehensively GPT-5 addressed patient questions about insomnia and sleep disturbances after breast cancer treatment.

Methods

15 questions were derived from the European Society for Medical Oncology (ESMO) guideline on insomnia in cancer patients encompassing behavioral, lifestyle, and pharmacologic management strategies. Using a new GPT-5 account, each question was entered into separate sessions to minimize bias. Five clinical experts evaluated the responses using a 1–6 Likert scale for correctness and a 1–3 Likert scale for completeness, and provided optional written comments. Descriptive statistics were used to summarize scores, and reviewer comments were analyzed to identify recurring strengths and weaknesses in GPT-5's performance. Each response was compared with

expert recommendations and ESMO guidelines to assess clinical alignment.

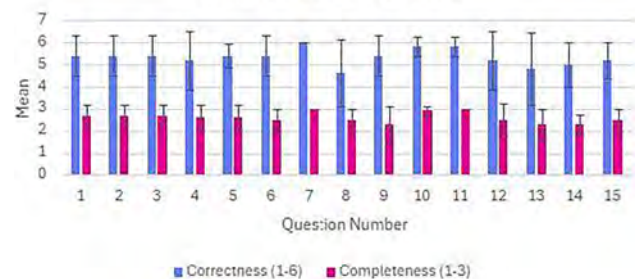
Results

GPT-5 achieved a mean correctness score of 5.33 ± 0.90 and a mean completeness score of 2.61 ± 0.45 across all 15 responses (refer to figure 1). Questions on cognitive behavioral therapy for insomnia and general sleep hygiene received the highest ratings, while those on pharmacologic sleep aids scored lowest. Experts observed that the model's recommendations were largely consistent with the guidelines set forth by ESMO regarding behavioral strategies and relaxation techniques. However, it was noted that the model occasionally presented complex medication guidance in a simplified manner.

Conclusions

GPT-5 demonstrated strong overall accuracy and completeness when addressing sleep-related concerns among breast cancer survivors, particularly in non-pharmacologic areas. Although guidance on pharmacologic options lacked specificity, the model's responses aligned well with established clinical recommendations. With expert oversight, GPT-5 may serve as a supportive educational resource in cancer survivorship care.

Figure 1 - Expert Correctness and Completeness Rating of GPT-5 Responses



DIGIT-014

HOW ARE DIGITAL TOOLS SUPPORTING CANCER TREATMENT ADHERENCE: CURRENT EVIDENCE ON STRENGTHS, LIMITATIONS, AND DIRECTIONS FOR FUTURE SUPPORTIVE CARE.

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Introduction

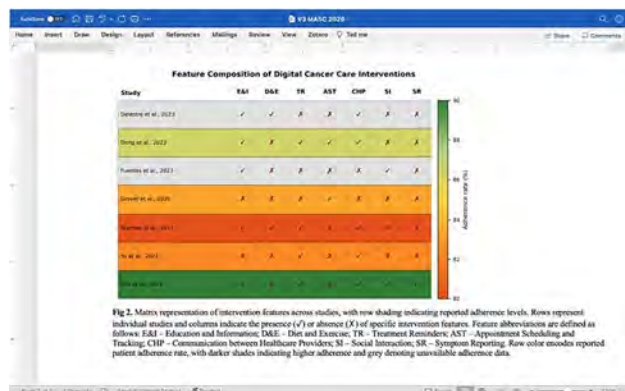
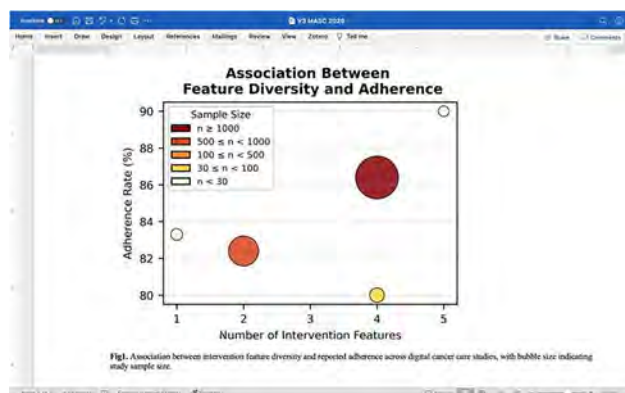
Adherence to recommended cancer treatment remains a persistent challenge, influenced by symptom burden, treatment toxicity, psychosocial factors, financial toxicity, and perceived and actual efficacy. Digital platforms increasingly support cancer treatment adherence through education, monitoring, and reminders; however, their design characteristics, functional capabilities, and real-world limitations remain poorly synthesised within a supportive-care context. To narratively synthesise the design features, functional capabilities, and reported adherence outcomes of digital health interventions developed to support treatment adherence in adults with cancer, and to identify implications for future supportive care solutions.

Methods

A scoping review was conducted in accordance with the Joanna Briggs Institute methodology and the PRISMA-ScR guidelines to synthesize literature on digital interventions supporting cancer treatment adherence published between 2015 and 2025 across five electronic databases.

Results

Among 14 eligible studies, including seven review articles and seven primary studies, the primary studies represented diverse cancer types (breast, head and neck, gynecologic, colorectal, prostate, and lung), sample sizes ranging from 5 to 2,675 participants, and were conducted across six countries (Botswana, China, France, Italy, Spain, and USA). Digital solutions included both mobile and web-based platforms. Educational content and treatment reminders were the most consistently implemented features, while appointment tracking, symptom reporting, and social interaction capabilities appeared less frequently. Reported adherence to digital interventions ranged from 80% to 90%. Despite high adherence to digital solutions, no study reported clinical outcomes or disease-related measures, limiting the evidence of the clinical significance of the use of digital interventions.



Conclusions

Digital health interventions designed to support cancer treatment adherence demonstrate promising levels of patient engagement and incorporate a range of supportive-care features. However, the absence of clinical outcome reporting and rigorous follow-up of patient perspectives highlights important gaps in evidence. Future digital supportive-care solutions should include stronger clinical evaluation and consistent adherence metrics to emphasize their impact on patient outcomes.

DIGIT-015

HEALING IN IMMERSION: HOW VIRTUAL REALITY ENHANCES SYMPTOM MANAGEMENT AND WELL-BEING IN YOUNG PEOPLE WITH CANCER AND THEIR CAREGIVERS

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Introduction

Adolescents and young adults (AYAs) with cancer often face unaddressed psychosocial distress and symptom burden, which are shared by their caregivers. To support these dyads beyond hospital settings, this study explored how virtual reality (VR) can be integrated into remote, home-based supportive care to enhance symptom management, emotional well-being, and peer connection.

Methods

Qualitative study was conducted between 2024 and 2025 using a user-centred design framework. Semi-structured interviews were carried out separately with AYAs aged 15–39 years undergoing chemotherapy and their primary caregivers, in European countries, both in person and online. Participants were invited to discuss their daily symptom management challenges, coping strategies, previous digital experiences, and desired features of a supportive VR environment. Interviews were audio-recorded, transcribed verbatim, and analysed through inductive thematic analysis. Coding focused on identifying functional, emotional, and social needs, as well as perceived barriers and facilitators for home-based VR use. Reflexivity, peer debriefing, and member validation ensured analytical rigour.

Results

AYAs expressed a need for accessible digital tools that provide relaxation, distraction, and connection with peers who “understand their journey.” They envisioned VR environments offering mood-based content, symptom tracking, and private yet socially interactive spaces. Caregivers highlighted the need for shared experiences that reduce anxiety, strengthen communication, and provide coping guidance within the home. Both groups emphasized simplicity, personalization, and credible clinical linkage as prerequisites for trust and sustained engagement. Limited technological literacy and equipment access were cited as key barriers. The findings outline essential design domains for a co-created VR platform: physical, emotional relief, self-management support, communication, and community.

Conclusions

Home-based VR interventions hold promise for strengthening symptom management, emotional resilience, and caregiver–patient bonding in AYA oncology. The insights will guide the co-design of a digital, evidence-based platform enabling continuous, person-centred supportive care beyond hospital walls.

DIGIT-017

A CASE OF SMART HOME SENSORS DETECTING ACTIVITY LEVEL AND SLEEP DISTURBANCE IN AN OLDER ADULT WITH PROSTATE CANCER

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Introduction

Cancer symptom monitoring at home traditionally relies on self-report, introducing methodological limitations in older adults with cancer (age ≥ 65). Ambient sensing offers possibilities for objective, continuous direct observation of symptom manifestations. This feasibility study explores sensor-based monitoring to assess symptom-related behavior changes in the home setting.

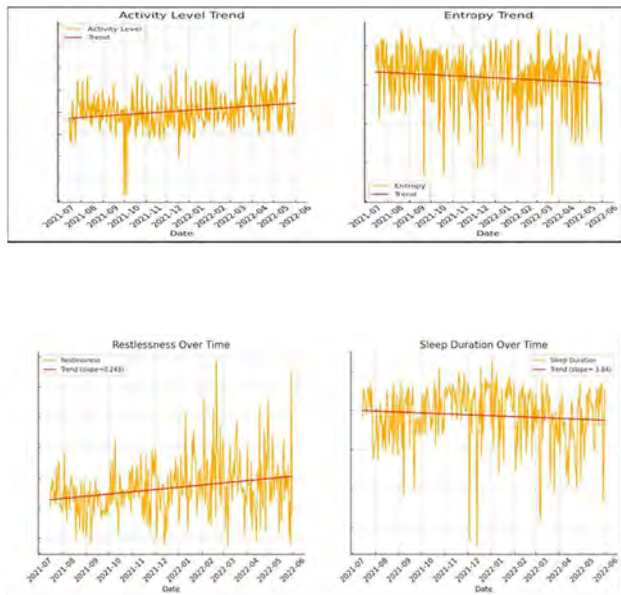
Methods

A case report of a 92-year-old male with prostate cancer participating in a larger study (R01NR016732) for 1-year was conducted. Researchers transformed the existing home into a smart home by installing multi-sensors in all rooms and exterior doors to monitor whole-home motion, door use, light, and temperature. A machine learning model identified digital behavior markers associated with symptom manifestation. Researchers

assessed mean walking speed, activity level, time out of the home, and sleep throughout enrollment in the study. Customized Python code supported analysis of time-series data. Missing data were imputed using carry forward/backward. Linear regression models predicted statistically significant trends. All measures were normalized.

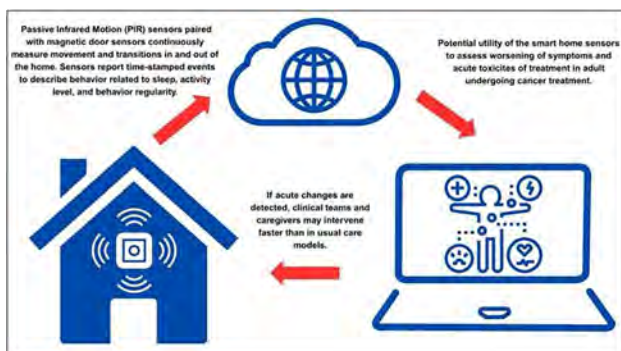
Results

July 2021 through April 2022 the SHSs detected significant changes in the patient's activity levels, concordant with self-reported weakness (Fig 1A and 1B). Undesirable changes in sleep patterns were observed aligning with the participant's weekly report of increasing weakness. Restless sleep increased (Slope=0.25, $p<.001$) while daily sleep duration decreased over time (Slope=-3.84, $p=.078$; 2 outliers removed). Mean walking speed did not change significantly. The participant's ability to walk was somewhat stable despite daily fluctuations.



Conclusions

The feasibility of sensor-based recognition of activity level and sleep disturbance changes within the home environment is promising. Automated and objective measurement of cancer-related symptoms using SHSs is inherently complex; however, this case illustrates a context in which objectively detected behavioral changes aligned with patient-reported outcomes (Fig 2). Future studies with larger samples should establish clinically relevant thresholds for SHS-derived measures, and test efficacy compared to standard of care.



DIGIT-018

OPERATIONALIZING AN INCLUSIVE ONCOLOGY SKIN TOXICITY DIGITAL IMAGE REPOSITORY

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Introduction

Underrepresentation of diverse skin tones in oncology education contributes to delayed or inaccurate recognition of dermatologic toxicities. Less than 20% of medical literature reflects nonwhite skin, and fewer than 5% of medical textbook images include diverse skin tones. To address this, an open-access photo repository was created for oncology nurses, by oncology nurses to catalog oncology-related skin toxicities across a broad range of skin tones. Development required coordinated infrastructure, cross-organizational collaboration, and defined workflows for image acquisition, metadata standardization, and digital preservation.

Methods

A structured approach was used to guide development beginning with a diagnostic wish list to inform image acquisition. Digital platform options were evaluated for security, optimized search functionality, and standardized cataloging capabilities. Organizational partnerships were established to support obtaining photo consents and deidentified images. After initial image submissions, process refinement, including updated contributor guidance, metadata and quality requirements, and the adoption of a validated, objective skin tone (Fitzpatrick) classification scale were implemented from learnings. Refinements ensured greater consistency, clinical accuracy, and equitable representation across skin tones before public launch of the repository.

Results

Between April and December 2025, 46 images were entered into the repository. Radiation dermatitis emerged as the most submitted diagnosis, while Fitzpatrick skin type III (medium white to olive) represented the majority of skin tones submitted. Early operational challenges included obtaining a steady and diverse flow of images, and the workload burden for clinicians capturing images in real time or securing consent to share previously obtained photos. Despite challenges, iterative refinement of workflows enabled establishment of a scalable, multisite image acquisition pipeline that positions the project for sustainable growth.

Conclusions

Development of the repository required coordinated operational design across governance, workflows, and partnerships. These efforts produced a viable model for creating inclusive oncodermatology resources that may enhance nursing education, support earlier toxicity recognition, and improve timely response.

DIGIT-019

EVALUATING THE QUALITY, RELIABILITY AND READABILITY OF DIGITAL AND ARTIFICIAL INTELLIGENCE RESOURCES FOR ADULTS WITH CANCER WHO HAVE CHILDREN (<18)

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Introduction

Families often report searching the internet for guidance on how best to support children when a significant adult has cancer. This study

aimed to identify and evaluate the quality, reliability, readability and content of websites, videos, and artificial intelligence (AI) resources available to adults with cancer who have caregiving responsibilities for children under 18.

Methods

Online platforms were searched using 10 keyword phrases across seven sources (Google web, YouTube, TikTok and four AI platforms). The modified DISCERN scale was used to assess reliability and quality, with the Global Quality Score used to assess overall quality. Readability was assessed using the online NHS Medical Document Readability Tool to estimate reading age. Quantitative differences between sources were determined using a pairwise analysis (Kruskal Wallis test).

Results

Google web resources had significantly higher quality and reliability compared with AI and TikTok sources, with mean mDISCERN and GQS scores of 3.74 and 3.72, respectively. AI-generated resources showed lower mean mDISCERN and GQS scores of 2.77 ($P<.05$) and 2.32 ($P<.05$), respectively, while TikTok videos had similarly lower scores of 2.73 ($P<.05$) for mDISCERN and 2.49 ($P<.05$) for GQS. The estimated reading time was significantly longer ($P<.05$) for Google web resources (11:45 mins) compared to AI responses (02:09 mins).

Conclusions

While adults with cancer accessing websites via Google web searches are more likely to encounter materials of better quality and greater reliability, higher reading ages may suggest that the information and guidance is not understood or usable for many families. AI presents an opportunity whereby a single high-quality and evidence-based resource can be rapidly adapted into multiple formats, reading levels, language and be made culturally relevant. Future resources should be co-created using a trusted, regulated, and centralised information hub or large language model agent, with supportive collaboration between health and social care professionals and technology companies.

DIGIT-021

ARTIFICIAL INTELLIGENCE AS AN EDUCATIONAL TOOL: EVALUATING EFFECTIVENESS OF GPT-5 IN ADDRESSING QUERIES ON BRCA MUTATIONS IN HEREDITARY BREAST CANCER

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Introduction

Artificial intelligence chatbots, such as ChatGPT, may be able to facilitate patient education through providing answers to pertinent medical questions in an interactive manner. The aim of this study is to evaluate the responses of ChatGPT to patient-centered questions on BRCA1/2 mutations and hereditary breast cancer.

Methods

Fifteen patient-centered questions on BRCA mutations were developed in accordance with clinical guidelines and were assessed by healthcare professionals (HCPs) to ensure clinical validity and linguistic coherence. To control for biases, a new ChatGPT-5 account was created, and each

question was entered into a separate chat. Three HCPs independently evaluated the correctness (1-6) and completeness (1-3) on Likert scales, supported by written remarks. ChatGPT-5 responses were then assessed based on clinical guidelines on BRCA genes and hereditary breast cancer.

Results

Across the 15 questions, the mean correctness score was 5.44 ± 0.62 , and a mean completeness score of 2.53 ± 0.50 . Questions that yielded the strongest results were on lifetime risk of cancer and concerns about underlying BRCA mutations, starting age and modalities of breast cancer screening and age to consider genetic counselling when an immediate family member has a BRCA mutation. The lowest scoring question among evaluators was medications to decrease the risk of breast cancer with a mutation. Reviewers commented on a lack of information on the mutation and treatment options, insufficiencies in supporting studies and variances from standard recommendations. In comparing guidelines to responses, there was strong alignment in types of cancers associated with BRCA mutations, age of screening, genetic counselling, and prophylactic surgeries to reduce cancer risk.

Conclusions

ChatGPT-5 provided relatively accurate information and complete answers to patient-centered questions on BRCA mutations and hereditary breast cancer. While ChatGPT-5 can serve as a tool in providing patients with an interactive resource, HCP insight is critical in ensuring individualized, patient-centered care, prioritizing safety and accuracy.

DIGIT-022

FEASIBILITY OF THE SAFE MOBILE APPLICATION FOR SUPPORTING ORAL ANTICANCER MEDICATION ADHERENCE AND SYMPTOM MANAGEMENT IN PATIENTS WITH GASTRIC CANCER

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Introduction

Oral anticancer medication requires patients to consistently adhere to prescribed regimens while monitoring treatment-related symptoms. This study examined the feasibility of Smart Adherence program For Enhancing self-care for oral anticancer medicine (SAFE), a digital intervention designed to support medication adherence and symptom management in patients with gastric cancer.

Methods

A one-group pretest–posttest feasibility study was conducted with 30 patients with gastric cancer receiving oral anticancer medication. Participants used the SAFE mobile application (app) for 3-weeks to record medication intake and complete weekly symptom monitoring, with automated self-management guidance. Feasibility outcomes included enrollment, retention, protocol adherence, application use, and user satisfaction. Medication adherence was assessed using in-app medication logs. Exploratory outcomes included symptom measured by the Edmonton Symptom Assessment Scale and unplanned acute care utilization. Descriptive statistics and paired t-tests were used, and subgroup differences by eHealth literacy were examined using Mann–Whitney U test, Fisher's exact test, and ANCOVA.

Results

Among 37 patients screened, 30 were enrolled (81.1%), and all participants completed the three-week intervention. Protocol adherence

was achieved by 76.7% of participants. Medication intake logging for at least 75% was observed in 60.0% of participants. Overall satisfaction with the SAFE app was high. Participants with higher eHealth literacy reported higher perceived effectiveness and intention to use the intervention ($p < .05$), whereas ease of use did not differ by eHealth literacy levels. Most symptoms remain stable, except for a decrease in hand–foot syndrome ($p = .019$). No emergency department visits or unplanned hospital admissions reported.

Conclusions

The SAFE app was feasible as a digital nursing intervention for supporting medication adherence and symptom management for patients with gastric cancer receiving oral anticancer medication. Differences in satisfaction by eHealth literacy level highlight the importance of literacy-sensitive intervention design. Further randomized controlled trials are warranted.

DIGIT-023

CONSTRUCTION AND EFFECT EVALUATION OF A FERTILITY SUPPORT INTELLIGENT PLATFORM FOR CHILD-BEARING-AGE BREAST CANCER PATIENTS

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Introduction

Young breast cancer patients (≤ 40 years) account for over 10% of all breast cancer cases in China, and 40% of childbearing-age patients have fertility needs post-treatment. However, only 28.1% of domestic doctors propose fertility preservation advice, with insufficient awareness among healthcare providers-leaving patients lacking fertility information support, facing decision conflicts and anxiety. Thus, this study aims to construct a "diagnosis-treatment-rehabilitation" full-cycle fertility support intelligent platform and evaluate its clinical effectiveness.

Methods

A multidisciplinary team (breast oncology, reproductive medicine, endocrinology, nursing) developed the platform, integrating core modules: multidimensional fertility needs assessment, personalized fertility preservation program push, chemotherapy-induced ovarian function protection guidance, AI intelligent consultation robot, remote multidisciplinary consultation, and maternal-infant health follow-up. Fifty-eight eligible patients with fertility needs and not yet initiated treatment were divided into the control group ($n = 29$, routine health education and fertility guidance) and the observation group ($n = 29$, routine care + platform-based intervention). After 12 months of intervention, key outcomes including fertility decision conflict, serum Anti-Müllerian Hormone (AMH), Follicle-Stimulating Hormone (FSH) levels, fertility anxiety, knowledge scores, and fertility intention achievement rate were compared.

Results

Fifty-five patients completed the follow-up (27 in control, 28 in observation). The observation group showed significantly lower fertility decision conflict and fertility anxiety scores, higher fertility knowledge and medical social support levels (all $P < 0.001$), and better ovarian function (both $P < 0.05$) than the control group. Its fertility intention achievement rate (28.6%, 8/28) was significantly higher than the control's 7.4% (2/27) ($P < 0.05$). The platform achieved a 91.3% daily AI consultation response rate, 57.1% remote consultation utilization rate, and 92.9% overall patient satisfaction.

Conclusions

The full-cycle intelligent platform delivers precise, continuous multidisciplinary support, effectively alleviating fertility-related distress, enhancing knowledge and social support, protecting ovarian function, and improving fertility intention. With high patient acceptance, it

provides an efficient informatization solution for reproductive health management in this population.

DIGIT-024

DIGITAL HEALTH LITERACY AND ENGAGEMENT WITH A PRO-CTCAE-BASED CANCER PAIN MOBILE APPLICATION IN HEMATO-ONCOLOGY OUTPATIENTS AT A SINGLE CENTER

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Introduction

Digital health literacy may influence engagement with mobile health applications in hemato-oncology. We evaluated differences in application registration and subsequent symptom reporting, and examined discrepancies between clinic-documented symptoms and application-based entries among hemato-oncology outpatients.

Methods

This prospective observational study was conducted at Kangwon National University Hospital (Republic of Korea). All hemato-oncology outpatients visiting the clinic between 01 July and 28 November 2025 were approached and provided with a standardized explanation of a PRO-CTCAE-based cancer pain mobile application. Patients who consented to app use completed a digital literacy assessment and were registered, while those who declined completed the literacy assessment only. Digital health literacy was measured using selected items adopted without modification from a previously validated scale for older adults (Kim et al., 2025). The application collected PRO-CTCAE symptom items and pain intensity using a numeric rating scale (NRS, 0–10). Outcomes included application registration and symptom entry among registered users. An EMR-reviewed subset assessed clinic-documented symptom or discomfort.

Results

Seventy-four patients were included (mean age 57.8 ± 10.3 years); 27.0% had hematologic malignancies. The mean digital literacy score was 2.65 ± 1.20 and was inversely correlated with age (Spearman's $r_s = -0.70$). Application registration occurred in 48/74 (64.9%), and higher literacy independently predicted registration (OR 2.46, 95% CI 1.14–5.29 per 1 SD). Among registered patients ($n = 48$), only 9 (18.8%) reported any symptoms via the application. Literacy was not significantly associated with symptom reporting among registrants. In the EMR-reviewed cohort ($n = 44$), clinic-documented symptom or discomfort was more frequent than application-based reporting (56.8% vs 15.9%). Despite weekly nursing reports and clinician reinforcement, application-based symptom reporting remained limited.

Conclusions

Digital health literacy was associated with application registration but did not ensure subsequent symptom reporting. The gap between clinic-documented symptoms and application-based entries highlights barriers to sustained digital engagement in hemato-oncology care.

DIGIT-027

EFFECTIVENESS OF TELEHEALTH IN PALLIATIVE CARE FOR ADVANCED CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS

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¹Nagoya University, ²

Introduction

Telehealth is increasingly integrated into palliative care for patients with advanced cancer to improve access to specialized services. However, its effectiveness and implementation requirements remain unclear. This study evaluates the effectiveness of and implementation requirements for telehealth in palliative care patients with advanced cancer.

Methods

We conducted a systematic review and meta-analysis with narrative synthesis (registered: CRD42024581786). MEDLINE, Embase, and the Cochrane Library were searched in September 2025. Eligible studies included controlled trials, observational studies, and qualitative studies involving adults with advanced cancer who received telehealth in palliative care. The effects on patients' quality of life, symptom burden, and depression were analyzed using random-effects meta-analysis of randomized controlled trials. Narrative synthesis was conducted for all included studies.

Results

Of 4,232 records screened, 42 studies met inclusion criteria, and six randomized controlled trials were eligible for meta-analysis. Telehealth modalities primarily involved videoconferencing, telephone, or text-based communication. Telehealth in palliative care significantly improved quality of life (standardized mean difference [SMD] 0.81; 95% CI 0.09 to 1.53) and reduced symptom burden (SMD -1.44; 95% CI -2.24 to -0.65). No significant effects were observed for depression. Implementation requirements included trained multiprofessional teams, accessible digital infrastructure, sustainable reimbursement mechanisms, and standardized outcome measurements.

Conclusions

Telehealth in palliative care significantly improved quality of life and alleviated symptom burden among patients with advanced cancer. Key implementation requirements were identified as essential for successful integration and policy development. Future research should explore optimal delivery models and address equity-related barriers to facilitate wider adoption.

DIGIT-029

DEVELOPMENT AND VALIDATION OF AN AUTOMATED INVASIVE FUNGAL INFECTION DETECTION ALGORITHM FOR CLINICAL SURVEILLANCE

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Introduction

Invasive fungal infections (IFIs) are associated with high mortality and significant healthcare costs, predominantly affecting immunocompromised patients such as those with haematological malignancies or undergoing stem cell transplantation. Surveillance is critical for early outbreak detection, identifying emerging risks, and evaluating infection prevention strategies to improve patient outcomes. Traditional surveillance methods are manual, resource-intensive, and reliant on complex case definitions. We aimed to develop and validate an automated tool for timely, standardised IFI surveillance in clinical settings.

Methods

Data were extracted from the electronic medical record (EMR) for patient demographics and investigations relevant to IFI diagnosis

(microbiology, non-culture-based tests, imaging, and histopathology reports). Rule-based algorithms and natural language processing (NLP)-based machine learning (ML) models were developed to detect evidence of IFI in these reports. An algorithm based on the revised EORTC-MSG criteria, integrated these results to detect temporal episodes of IFI while excluding colonisation. The algorithm was validated against a gold-standard dataset of clinically confirmed IFI episodes in haematology patients admitted to two hospitals (Jan 2018–Dec 2022). The tool was integrated into a digital health platform with an interactive dashboard for infection trend monitoring.

Figure 1. Automated IFI Detection Algorithm Workflow

This flow diagram illustrates the sequential steps of the IFI detection process, including application of rule-based and ML-driven methods to identify tests suggestive of IFI, and exclusion criteria for non-relevant results. A broader rule-based algorithm aggregates positive findings for a single organism into infection episodes.



Figure 2. Invasive fungal infection surveillance dashboard mock-up



Results

The gold-standard dataset contained 176 IFI episodes. Preliminary analysis showed algorithm sensitivity of 90.3% (159/176) and a positive predictive value of 30% (Table 1). Highest sensitivity was for proven yeast infection (100%). Lowest sensitivity was for possible invasive mould infection (52.4%). Missed cases were due to incomplete EMR extraction, diagnosis date mismatches, and ML misclassification. False positives reflected mould colonisation rather than infection and incorrect ML classification. The algorithm detected infections missed by manual surveillance.

Table 1. Algorithm Sensitivity Across IFI Categories Compared to Gold Standard

Organism category	Gold standard (n)	Algorithm detected (n)	Sensitivity
Mould	119	102	93.6%
Proven	23	22	95.6%
Probable	68	63	92.6%
Possible	21	11	52.4%
Clinical diagnosis (not meeting EORTC-MSGERC criteria)	7	6	85.7%
Candida and related species	45	45	100.0%
Cryptococcus	12	12	100.0%
Overall	176	159	90.3%

Conclusions

An automated IFI surveillance tool demonstrated high sensitivity and identified cases overlooked by manual processes, supporting its potential to enhance infection monitoring and timely clinical response. Future work will focus on improving positive predictive value, deployment and implementation of the digital tool.

DIGIT-030

CLINICIAN-BENCHMARKED EVALUATION OF LLMs FOR DISTRESS RATING IN AUTHENTIC KOREAN PSYCHO-ONCOLOGY INTERVIEWS: RELIABILITY AND ERROR PROFILES

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Introduction

Psychiatric distress is common among patients with cancer, yet systematic screening remains difficult in routine care. Large language models (LLMs) offer scalable potential for psychiatric assessment; however, their reliability and error characteristics in authentic non-English clinical interviews remain insufficiently validated. We evaluated the performance and error profiles of contemporary LLMs using real-world psycho-oncology interviews.

Methods

Figure 1 shows the flow of the study. Between April 2024 and May 2025, 101 adults receiving active cancer treatment in South Korea underwent semi-structured interviews. Board-certified psycho-oncologists provided real-time, time-stamped ratings of 39 items. GPT-4o, Claude 3.5, and Gemini 2.5 generated item scores and brief rationales using identical Korean zero-shot rubrics. Concordance between clinician ratings was evaluated using ordinal and binary screening metrics. Patient-level total symptom burden was compared using paired Wilcoxon test. Binary mismatches were clinically adjudicated as ambiguous or definite overestimation/underestimation with an eight-etiology taxonomy (Table 1). Model-generated rationales were further meta-evaluated by GPT-5 across citation, structure, mapping, and expansion. The associations between meta-evaluation results and absolute error were examined using cross-classified mixed-effects models.

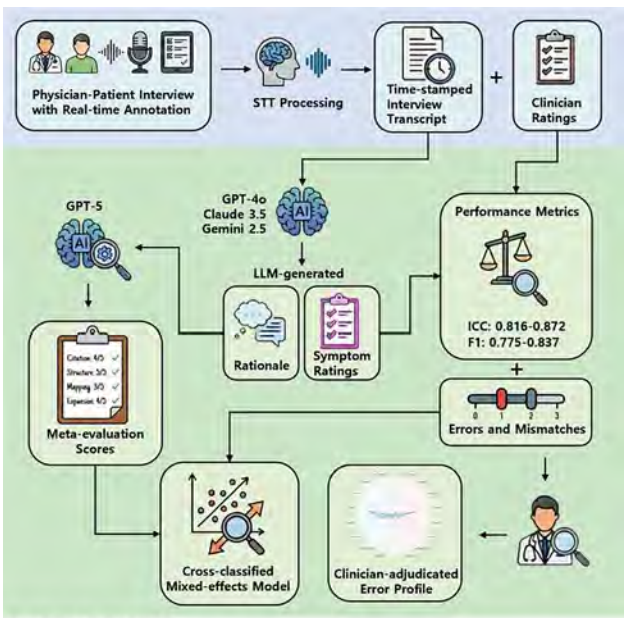


Figure 1. Flow of the study

Table 1. Clinician-adjudicated error taxonomy for large language model-clinician discrepancies

Subtype	Definition
Implicit cues	Misinterpretation of subtle or indirect emotional cues, either by over-attributing or under-recognizing clinically meaningful affective signals.
Other information	Use of information drawn from the wrong symptom domain, reflecting misalignment between the evaluated item and the evidence selected from the transcript.
Comprehension	Errors arising from misunderstanding, mis-parsing, or insufficiently attending to the literal content of the patient's statements.
Criteria application	Incorrect application of standardized scoring criteria, including misjudgment of symptom frequency, duration, or functional impact.
Personality attribution	Confusion between stable personality characteristics and acute clinical symptoms, resulting in distorted severity assessment.
Somatic confounding	Misattribution between physical and psychiatric symptoms, leading to over- or under-estimation of psychological distress.
Temporal misalignment	Incorrect interpretation of the temporal reference window, including misclassification of symptom timing relative to the 1–2-week evaluation frame.
Construct misclassification	Incorrect mapping of a symptom expression to the wrong clinical construct, reflecting confusion in symptom definition rather than mis-selection of transcript evidence.

Results

Across 3931 item ratings, all models showed good agreement with clinicians (intraclass correlation coefficient: 0.816–0.872), with GPT performing the highest. Screening performance was strong (F1: 0.775–0.837). Claude and Gemini yielded significantly higher patient-level symptom burden ($p < 0.001$ and $p = 0.002$, respectively), whereas GPT did not ($p = 0.145$). Clinician adjudication showed ambiguity in 29%–39% of mismatches. Severity-threshold misapplication was the predominant definite error (Figure 2). Higher Expansion and Citation were associated with greater absolute error, suggesting that excessive extrapolation beyond evidence and anchoring on isolated utterances drive rating misalignment.

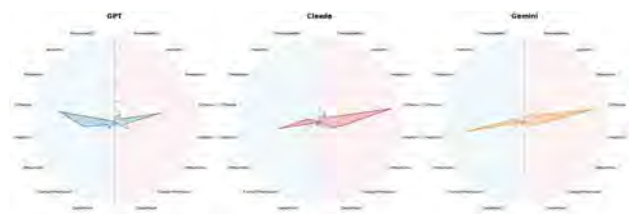


Figure 2. Model-wise distribution of non-ambiguous error subtypes
Radar plots showing the distribution of clinician-adjudicated error subtypes among non-ambiguous mismatches (overestimation and underestimation) for GPT, Claude, and Gemini. For each model, subtype proportions were renormalized to a sum of 1 after excluding ambiguous cases. The right semicircle represents overestimation subtypes, and the left semicircle represents underestimation subtypes (implicit cues, other information, comprehension, criteria application, personality attribution, somatic confounding, temporal misalignment, and construct misclassification). GPT, generative pre-trained transformer.

Conclusions

Contemporary LLMs demonstrated clinician-level reliability in Korean psycho-oncology interviews, establishing their viability in non-English settings. Importantly, identifying specific error patterns highlights the need to move beyond aggregate metrics toward strategies accounting for distinct model profiles.

DIGIT-031
INVESTIGATING IMPLEMENTATION FEASIBILITY OF THE
SMART CANCER CARE PLUS PROGRAM: A MULTICENTER
PILOT STUDY

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Introduction

Cancer patients experience multiple treatment-related symptoms that negatively affect quality of life during chemotherapy. Electronic patient-reported outcomes (ePROs) enable real-time monitoring and timely clinical response. We developed *Smart Cancer Care*, an app integrating CTCAE-based symptom grading and a standardized

telenursing protocol. Before conducting randomized controlled trial incorporating a cost-effectiveness evaluation, this study evaluated its implementation feasibility across multiple centers.

Methods

A usability test was conducted at a single site, and a multicenter feasibility assessment was performed across six hospitals. Eligible adults receiving chemotherapy for gastric, lung, breast, or colorectal cancer used the app for 12 weeks. Nurses received alerts for grade ≥ 3 symptoms and provided protocol-based telephone counseling. Outcomes included technical acceptance, System Usability Scale (SUS), overall satisfaction, completion rate, quality of life (EORTC QLQ-C30), and factors associated with feasibility.

Results

A total of 104 patients were enrolled (mean age 56.5 years; 71% female). Cancer types included breast (45%), colorectal (33%), lung (13%), and gastric (10%). Baseline digital literacy was moderate (mean 25.1/34), and app adherence during the 12-week intervention period was high (mean 86.5%). Technical acceptance was also high (mean 4.53/5), with ease of download and registration receiving the highest rating (4.74). User acceptance remained consistently high from baseline to week 12 (6.18 and 6.19/7). SUS score at week 12 was 76.8/100, reflecting good usability. Satisfaction with telephone counseling similarly high (4.50/5). QoL scores declined over the 12-week period, consistent with expected treatment-related symptom burden. Factors associated with adherence included digital literacy, age, cancer type, institution, perceived usefulness at baseline, and satisfaction with telephone counseling.

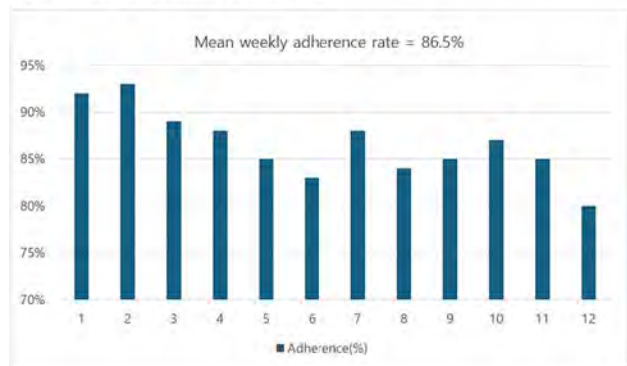
Table 1. Baseline Characteristics of Study Participants (n=104)

Characteristic	Value (%)
Age, mean $\pm$ SD	56.5 $\pm$ 9.3 years
Female sex	71.2%
Cancer type	
Breast	45.2%
Colorectal	32.7%
Lung	12.5%
Gastric	9.6%
Disease stage	
I–II	27.9%
III	23.1%
IV	49.0%
Chemotherapy purpose	
Neoadjuvant	25.0%
Adjuvant	21.2%
Palliative	53.8%
Digital literacy score	25.1 $\pm$ 7.6
Adherence (12-week completion)	86.5% $\pm$ 18.8

Table 2. User Acceptance, Usability, and Satisfaction Outcomes

Outcome Measure	Score ^a
Technical acceptance (5-point)	4.53 ± 0.41 ^a
Ease of app download/registration	4.74 (highest item) ^a
Symptom management helpfulness	4.13 (lowest item) ^a
User acceptance (7-point)	
Baseline	6.18 ± 0.90 ^a
Week 12	6.19 ± 0.74 ^a
System Usability Scale (0–100)	76.78 ± 15.48 ^a
Overall satisfaction (5-point)	4.35 ± 0.68 ^a
Telephone counseling satisfaction	4.50 ± 0.58 ^a

Figure 1. Weekly Adherence Rate (n=104)^a



Conclusions

The *Smart Cancer Care* program demonstrated high feasibility, strong usability, and positive user acceptance across multiple clinical settings. Finding suggest that enhancing users’ digital literacy, optimizing interface navigation, and strengthening nurse training for telenursing may further support successful implementation before proceeding to large-scale trials.

DIGIT-032
EVALUATING THE EFFECTIVENESS OF GPT-5 IN ADDRESSING PATIENT QUERIES ON RADIATION THERAPY FOR THE TREATMENT OF BONE METASTASES

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Introduction

Bone metastasis (BM) is a common complication of advanced cancers. Radiation therapy (RT) is frequently used to relieve pain, provide local control, and prevent fractures of malignant spinal cord compression in patients with BM. The aim of this study is to evaluate the accuracy of Chat-GPT in answering patient-centered questions regarding RT for BM.

Methods

15 patient-centered questions were developed based on established clinical recommendations on RT for BM. A new GPT-5 account was created, and each question was prompted in a separate chat to minimize bias. Nine radiation oncologists with expertise in treating BM were invited to rate each GPT-5 response for accuracy with a 6-point Likert scale, and completeness with a 3-point Likert scale, alongside comprehensive feedback for each response. Each response was also compared against clinical guidelines for using RT for BM. The ratings were analyzed to identify performance trends, and common themes were identified from the experts’ comments.

Results

For all questions, the mean score for correctness was 4.7 ± 1.3, and 2.6 ± 0.5 for completeness, demonstrating an overall adequacy in generating accurate responses to most questions. GPT-5 showed strengths (mean >5) in answers regarding treatment response, dose-fractionation schedules, post-operative RT, and RT for malignant spinal cord compression. Generally, the responses were accurately and consistently aligned with the clinical guidelines. Minor misalignments and omissions still present were exhibited in topics regarding side effects of RT, dose-fractionation schedules, selection of RT technique, and use of corticosteroids.

Conclusions

GPT-5 demonstrated an overall acceptable performance in answering patient-centered questions on RT for BM, showing itself to be a promising tool to supplement patient education with quick, accessible, direct answers. However, when faced with highly nuanced questions, it presented with deficiencies and in its ability to stay within the scope of evidence-based clinical guidelines.

DIGIT-034
A QUALITATIVE RETROSPECTIVE CHART REVIEW OF REMOTE COMMUNICATION FOR RURAL OLDER CANCER SURVIVORS.

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Introduction

Compared to younger and more urban cancer survivors, telehealth uptake is reduced for rural older cancer survivors. In rural communities, telehealth uptake has increased rapidly as access to high-quality healthcare has declined. Consequently, rural older cancer survivors are uniquely vulnerable to technology usability challenges and gaps

in coordinated care. Evidence assessing how they utilize telehealth, and more narrowly, patient portal use, is limited. To this end, we analyzed MyChart messages—as a proxy for patient portal use—among rural older cancer survivors to reveal key insights into their patient portal use.

Methods

We conducted a retrospective qualitative chart review of MyChart messages of rural older cancer patients receiving care from an urban academic hospital from March 1, 2020, to May 25, 2023. Participants were cancer patients aged at least 65 years old, from a rural ZIP code. Messages were reviewed systematically using a qualitative thematic approach.

Results

Paired reviewers screened and double-coded messages until no new codes emerged. The resulting sample consisted of 860 coded messages from 411 patients with a mean age of 73 years old. The qualitative analysis yielded 1,290 coded occurrences, from which nine themes emerged, centering on clinical care and supportive care needs. Most frequent coded messages were identified as *Ongoing Clinical Care Concerns* ($n=464$) and *Supportive Care* ($n=128$). The least frequently coded theme was *Requesting telehealth* ($n=35$).

Conclusions

Our analysis of MyChart messages of ROCS revealed key themes from their patient-provider communication. This population demonstrates high engagement with MyChart messaging, which is particularly notable given their position at the intersection of reduced access to healthcare resources, complex care coordination needs, and age-related digital divides. The findings from this study have implications for practice and the use of tailored patient portal designs or other mHealth tools with this uniquely vulnerable patient population.

DIGIT-037

EVALUATING THE EFFECTIVENESS OF GPT-5 IN ADDRESSING CANCER PATIENT QUERIES ABOUT SMOKING CESSATION

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Introduction

Smoking cessation is associated with improved outcomes amongst cancer patients and survivors. Artificial intelligence (AI) chatbots, such as GPT-5, provide interactive, accessible information, making them increasingly popular platforms for patients seeking information. This study evaluated the correctness and completeness of GPT-5 generated responses to common questions about how smoking cessation impacts cancer risk and management.

Methods

Fifteen patient-centered questions on smoking cessation were developed using established clinical guidelines and refined by healthcare professionals (HCPs) for clinical and linguistic relevance. GPT-5 responses were generated using a new account, with each question in a separate chat, avoiding bias. Four oncologists independently rated

each response for correctness (6-point Likert scale) and completeness (3-point Likert scale) and provided written feedback. Each response was assessed against expert recommendations for smoking cessation in cancer patients to determine consistency with guideline-based care.

Results

GPT-5 achieved a mean correctness score of 5.23 ± 0.87 and mean completeness score of 2.73 ± 0.45 across all questions. Highest rated responses addressed the risk of cancer from smokeless tobacco products and nicotine replacement therapies (NRTs). Lower-rated responses included how smoking cessation medications would affect cancer treatment, and interactions with supportive care medications, including anti-nausea drugs. Reviewers noted a lack of evidence-based guidance, inaccurate referencing, and an insufficient depth and completeness of rationale for recommendations. They also suggest that actionable clinical recommendations, like cognitive behavioural therapy (CBT), could be clearer. Comparison with clinical guidelines revealed alignment on foundational topics such as smoking-related cancer risks, but discrepancies with medication interactions, oncology care integration, and behavioural support strategies.

Conclusions

GPT-5 demonstrated strong performance in delivering accurate responses on well-defined topics. However, overall completeness was limited, especially in complex clinical scenarios involving medication interactions and cancer treatment. While it may serve as a supplementary tool for patients, clinician oversight and more robust resources remain essential to ensure comprehensive and accurate recommendations.

DIGIT-038

EVALUATING THE EFFECTIVENESS OF CHATGPT IN ADDRESSING PATIENT-CENTRED QUESTIONS ON CHEMOTHERAPY FOR HORMONAL RECEPTOR POSITIVE EARLY BREAST CANCER

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Introduction

Artificial intelligence (AI) chatbots like ChatGPT-4o offer accessible and informative platforms for patient education. This study evaluated the correctness and completeness of ChatGPT's responses to common patient-centered questions related to chemotherapy for hormonal receptor positive early breast cancer.

Methods

Fifteen patient-centered questions about chemotherapy for hormone receptor-positive early breast cancer were developed and refined by healthcare professionals (HCPs) to ensure clinical accuracy. ChatGPT-4o responses were generated using a new account, and each question was entered in a separate chat to avoid bias. Four physicians independently rated each response for correctness (1–6 on a Likert scale) and completeness (1–3 on a Likert scale) and provided written feedback. Quantitative data was analyzed and qualitative reviewer comments were synthesized to identify recurring themes and patterns in ChatGPT-4o's accuracy and performance.

Results

Across all fifteen questions, ChatGPT-4o achieved a mean correctness score of 5.42 ± 0.57 and a mean completeness score of 2.47 ± 0.57 . The reviewers did not identify factual errors in ChatGPT's responses, however, reviewers emphasized the importance of presenting information at the patients' level of understanding and tailoring recommendations to specific disease characteristics such as tumor grade, nodal status, and subtype. Reviewers described the explanations of genomic assays, treatment sequencing, and patient-centered decision-making as clear, though some answers were overly general or insufficiently contextualized to hormone-receptor-positive early breast cancer.

Table 1: Quantitative Assessment of Response Correctness and Completeness for Questions on Chemotherapy in Hormone Receptor-Positive Early Breast Cancer

Question	ChatGPT-4o		
	Mean	SD	Median (IQR)
Correctness			
1	5.00	0.00	5.00 (0.00)
2	4.50	1.00	4.00 (0.50)
3	5.50	0.58	5.00 (1.00)
4	5.50	1.00	5.00 (0.50)
5	5.25	0.50	5.00 (0.25)
6	6.00	0.00	6.00 (0.00)
7	4.75	1.50	4.00 (2.25)
8	4.75	0.96	5.00 (1.25)
9	5.25	0.50	5.00 (0.25)
10	5.75	0.50	6.00 (0.25)
11	5.75	0.50	6.00 (0.25)
12	5.75	0.50	5.50 (0.25)
13	6.00	0.00	6.00 (0.00)
14	5.75	0.50	6.00 (0.25)
15	5.75	0.50	6.00 (0.25)
Overall Performance (n=15)	5.42	0.57	5.30 (0.48)
Completeness			
1	2.50	0.58	2.50 (1.00)
2	2.50	0.58	2.50 (1.00)
3	2.50	0.58	2.50 (1.00)
4	2.50	0.58	2.50 (1.00)
5	2.50	0.58	2.50 (1.00)
6	3.00	0.00	3.00 (0.00)
7	2.50	0.58	2.50 (1.00)
8	2.00	1.15	2.00 (2.00)
9	2.00	1.15	2.00 (2.00)
10	2.50	0.88	2.50 (1.00)
11	2.50	0.58	2.50 (1.00)
12	2.00	0.00	2.00 (0.00)
13	2.75	0.50	3.00 (0.25)
14	2.75	0.50	3.00 (0.25)
15	2.50	0.58	2.50 (1.00)
Overall Performance (n=15)	2.47	0.57	2.50 (0.90)

SD standard deviation, IQR interquartile range

Table 2: Summary of Reviewer Evaluations on ChatGPT Responses to Patient Questions

Question	ChatGPT Alignment Summary
1. As a hormonal receptor positive early breast cancer patient, what is the expected benefit of receiving adjuvant chemotherapy if I have a high risk disease?	Reviewers agreed ChatGPT's response was generally comprehensive and accurate but suggested refinements. They noted the need to clearly communicate individualized disease factors to patients, improve wording around Oncotype and recurrence score discussions (including mention of inflammatory breast cancer), and clarify that factors like tumor size alone don't determine "high risk" without grading or nodal context. Overall, reviewers praised the coverage and emphasis on individualized risk-benefit.
2. As a hormone receptor positive breast cancer patient, when will I be considered for neoadjuvant chemotherapy?	Reviewers agreed that ChatGPT's response addressed many relevant factors but could be more precise in differentiating neoadjuvant vs. adjuvant chemotherapy decisions. They noted that some factors, such as a high Oncotype RS, determine the need for chemotherapy rather than its timing. Additionally, while genomic assay use was accurately described as "in some cases," reviewers cautioned that phrasing around tumor stage (e.g., T2N0 ER+) could be slightly misleading.
3. What are factors that affect my response to neoadjuvant chemotherapy as a hormonal receptor positive early breast cancer patient?	Reviewers noted that ChatGPT's response could better distinguish chemotherapy from endocrine/hormonal therapy, as the overlap in terminology may cause confusion. They also highlighted that not all patients require anthracycline-based regimens.
4. What is Ki67 and how does it affect whether I am indicated for adjuvant chemotherapy as a hormonal receptor positive early breast cancer?	Reviewers agreed that while ChatGPT's response was generally accurate, it lacked discussion of other genomic assays and their roles in decision-making. They emphasized that Ki-67 should not be used alone to determine chemotherapy need and is primarily relevant for adjuvant tamoxifen consideration. Additionally, reviewers noted that the Ki-67 cutoff value is evolving, with both 20% and 30% cited in recent clinical practice.
5. As someone with hormone receptor-positive cancer, what tumor related factors determine whether I need adjuvant chemotherapy in addition to endocrine therapy?	Reviewers found the response thorough but noted inconsistencies and areas for improvement. They suggested clarifying that 1-3+ positive lymph nodes qualify for genomic assay testing (especially in postmenopausal patients) and ensuring this point is consistently included. They also recommended emphasizing genomic assays as the preferred decision tool, explaining that high-risk factors should be interpreted collectively, and adding that neoadjuvant therapy is often used for HER2-positive cases.
6. What is the most appropriate time to receive adjuvant chemotherapy after breast cancer surgery?	Reviewers agreed the response was accurate and aligned with clinical practice, noting that chemotherapy should typically begin within 4-6 weeks regardless of biomarker status.
7. Should I receive adjuvant chemotherapy before or after radiation therapy?	Reviewers found the response too broad and unclear, noting that it included examples from multiple cancer types, which reduced its relevance to HR+ early breast cancer. They emphasized that the question should explicitly specify the cancer type, as sequencing (e.g., chemotherapy before radiation in breast cancer) varies by context. Despite this, they acknowledged the accurate general principles and the useful emphasis on consulting an oncologist for individualized guidance.
8. What is the usual treatment schedule like for adjuvant chemotherapy as a hormonal receptor positive early breast cancer patient?	Reviewers found the response incomplete and partially misleading. They noted that dose-dense AC chemotherapy should be specified as standard and that the inclusion of endocrine and radiation therapy blurred the focus, potentially confusing patients about treatment types. Additionally, reviewers recommended clarifying that aromatase inhibitors (AIs) are used in postmenopausal and high-risk premenopausal patients with ovarian function suppression (OFS), and mentioned that the response should also cover HR+HER2+ treatment timelines and adjuvant CDK4/6 inhibitor use.
9. What are common adjuvant chemotherapy regimens for a hormonal receptor positive early breast cancer patient?	Reviewers agreed the response was incomplete, noting it did not adequately address HR+ or HER2+ treatment variations. They emphasized that AC chemotherapy should be administered every two weeks (q2 weeks) as the standard outside of KEYNOTE protocols for triple-negative breast cancer, and suggested elaborating on how regimens might be adjusted for HER2+ cases.
10. What is dose-dense chemotherapy and is it more effective to reduce my risk of recurrence as a hormonal receptor positive early breast cancer patient?	Reviewers emphasized that treatment recommendations should be individualized and explained clearly to patients. One noted that the response for HR+ breast cancer was somewhat misleading—q2 weekly AC is not preferred for lower-risk cases, where TC (doxorubicin-cyclophosphamide) would be more appropriate. Despite this, the overall response was regarded as clear and evidence-based.
11. When are anthracycline-free chemotherapy options recommended as a hormonal receptor positive breast cancer patient?	Reviewers had mixed feedback: one found the answer unclear, particularly regarding early cancer management and the focus on achieving the best outcomes with minimal complications to preserve quality of life. However, another reviewer described the response as comprehensive and consistent with major international guidelines.
12. As a hormone receptor positive early breast cancer patient, what are genomic assays and how does it help guide whether I am indicated for adjuvant chemotherapy?	Reviewers found the response clear but lacking depth. They suggested elaborating on test validation and expanding discussion around intermediate recurrence scores (RS), noting that postmenopausal patients typically gain no benefit. To enhance completeness, they recommended specifying that OncotypeDX is the preferred genomic assay endorsed by major guidelines such as NCCN, St. Gallen, NICE, and ASCO.
13. How does nodal status affect the interpretation of the OncotypeDX score?	Reviewers agreed the response was clinically accurate but could be more precise. They suggested replacing "older" with "postmenopausal" and adding clarification about intermediate-risk premenopausal patients, noting uncertainty about whether the observed benefit is due to ovarian function suppression (OFS) from chemotherapy rather than the chemotherapy itself.
14. How does menopausal status affect the interpretation of the OncotypeDX score?	Reviewers suggested it should further elaborate on the prognostic impact of lymph node (LN) status, both negative and positive, to provide a more complete discussion.
15. Is neoadjuvant immunotherapy an option for me if I have hormonal receptor positive early breast cancer?	One reviewer found it misleading, noting inconsistency in how the role of immunotherapy was described for HR+ breast cancer, where it is not an appropriate option.

Conclusions

Overall, ChatGPT-4o performed well for straightforward, guideline-based questions, but clinical oversight remains essential to ensure the accuracy of individualized tumour and patient characteristics. Future research should explore strategies for refining AI outputs to reflect context-specific oncology decision-making and safe integration into patient communication.

DIGIT-039

DEVELOPMENT OF A COMPREHENSIVE, REMOTE HEALTH AND LIFESTYLE ASSESSMENT FOR CHILDHOOD CANCER SURVIVORS: FEASIBILITY, ACCEPTABILITY, AND CONCORDANCE

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Introduction

Childhood cancer survivors are at lifelong risk of treatment-related late effects and require ongoing, risk-based follow-up care. However, access to survivorship services is increasingly constrained by workforce limitations, geographic distance, and growing survivor populations. Scalable models are needed to support care beyond specialist centres. The Engage Health and Lifestyle Assessment (HLA) is a digital, patient-reported tool designed to capture survivors' health concerns and behaviours to support remote multidisciplinary review and personalised recommendations.

Methods

The Engage intervention was trialled at two tertiary paediatric hospitals in Sydney, Australia. Survivors (diagnosed <18 years; ≥5 years post-diagnosis; in remission; >2 years since previous specialist visit) completed the HLA online, followed by nurse consultation and multidisciplinary review. Feasibility, acceptability, and survivor–nurse concordance (exact agreement across clinical domains) were assessed. Completion time and discordance rates were compared between survivors with/without learning disability (LD vs no LD).

Results

A total of 138 survivors consented (mean age at diagnosis 8.6 years; mean time since diagnosis 14.5 years; 55% brain cancer) and 127 completed the HLA. Acceptability was high overall, with 80.7% of survivors reporting the HLA questions were relevant to their medical care and 82.9% finding it easy to complete. Completion time differed by learning disability, with survivors with LD taking longer to complete the HLA than those without LD (Mann–Whitney U = 983.5, Z = −2.05, p = .040). Overall concordance was high. Domain-level discordance ranged from 2.9% to 15.8% and was highest for endocrine (15.8%) and CNS (13.8%). Survivors with LD had higher discordance than those without LD (10.8% vs 7.1%; RR = 1.52).

Conclusions

The remote HLA was feasible and acceptable, with high survivor–nurse concordance. Longer completion times and higher discordance among survivors with learning disability support targeted nurse assistance when implementing this model at scale.

DIGIT-040

CONSUMER PERSPECTIVES OF GENERATIVE AI IN ONCOLOGY: A SCOPING REVIEW OF PATIENT PERCEPTIONS AND CONCERNS

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Introduction

Despite growing interest of generative artificial intelligence (AI) in cancer care, consumer perspectives remain underexplored. We reviewed consumer views on generative AI in oncology, mapping findings to five responsible-AI domains: (1) usability and effectiveness, (2) safety and reliability, (3) fairness and bias, (4) transparency and accountability, and (5) security and privacy.

Methods

We conducted a scoping review in December 2025 using Embase (Ovid) and PubMed. Studies were eligible if they reported perspectives on generative AI from cancer patients, survivors, or carers. After removing duplicates, titles and abstracts were screened, followed by full-text review. We recorded the number of studies addressing each of the five predefined domains, along with relevant examples.

Results

The search identified 804 records, with 19 studies meeting inclusion criteria. A pooled total of 989 participants from Europe (11 studies), North America (4 studies), and Asia (4 studies), comprising mixed and cancer-specific populations

All 19 studies reported findings relevant to usability and effectiveness; wherein 13/19 studies, patients reported that AI-generated cancer information has the potential to improve readability of clinical documents. Safety and reliability were discussed in 14 studies; wherein 6/14, concerns were raised by patients about AI hallucinations. Fairness and bias were explored in 5 studies; wherein 2/5, patients highlighted the potential for AI to reduce language and cultural barriers in healthcare. Transparency and accountability were assessed in 14 studies; in 10/14, participants preferred AI as a supplement to clinical care, rather than a replacement. Security and privacy were covered in 6 studies; wherein 4/6, patients identified data privacy concerns as a barrier to AI use.

Conclusions

Consumers generally view generative AI as useful in oncology; however, trust is limited by concerns about reliability and accountability. Significant research gaps remain, particularly in understanding consumer views on fairness, bias, security, and privacy.

DIGIT-041

VIRTUAL DELIVERY OF SUPERVISED PHYSICAL FITNESS ASSESSMENTS FOR CHILDHOOD CANCER SURVIVORS: A FEASIBILITY STUDY

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Introduction

Childhood cancer survivors experience long-term treatment effects impairing physical function and health. Access to in-person exercise physiology is limited, particularly for families where distance to specialised services are barriers. Virtual healthcare services may offer a scalable, accessible alternative for integrating exercise physiology into survivorship care; however, feasibility in this population remains underexplored.

Methods

This study evaluated the feasibility of delivering virtually supervised physical fitness assessments via Microsoft Teams for survivors aged 5–18 years who had completed treatment. The assessment battery included 30-second sit-to-stand (lower-body strength), 30-second push-up (upper-body strength), timed up and go (mobility), single-leg balance (balance), two-minute step (endurance), and sit-and-reach (flexibility) tests. Feasibility benchmarks included recruitment (≥ 15 participants within three months), assessment battery completion ($\geq 85\%$ participants completing all six assessments), individual assessment completion ($\geq 90\%$ planned assessments completed), technique fidelity ($\geq 85\%$ assessments performed correctly), session duration ($\geq 90\%$ sessions completed in ≤ 30 minutes), safety (0 adverse events), and participant satisfaction (qualitative feedback). Data were analysed descriptively.

Results

Thirty participants were enrolled between March–September 2025; with two dropping out, leaving 28 datasets available for analysis. The sample (61% male) had a mean age of 9.8 ± 3.7 years (range 5–16), with acute lymphoblastic leukaemia the most common diagnosis (46%). Recruitment exceeded benchmark (23 participants within three months). Assessment battery completion was 92.9% (26/28), individual assessment completion 98.8% (166/168), and technique fidelity 90.9%, lowest for push-ups (73.1%). Most sessions (92.9%) were completed < 30 minutes (median 19.5 min; range 15–33). No adverse events occurred. Qualitative feedback indicated high satisfaction, convenience, engagement, and practicality.

TABLE 1 Baseline participant characteristics (n=28)

	mean (SD); range
Age, years	9.8 (3.7); 5–16
Time since treatment completion, years	median (IQR); range 1.3 (0.5–6.3); 0–15.3
Sex	n (%)
Male	17 (60.7)
Female	11 (39.3)
Primary diagnosis	
Acute lymphoblastic leukaemia	13 (46.4)
Rhabdomyosarcoma	3 (10.7)
Bone cancer (incl. osteosarcoma/Ewing sarcoma)	2 (7.1)
Brain/spinal cord tumours	2 (7.1)
Neuroblastoma	2 (7.1)
Wilms tumour	2 (7.1)
Acute myeloid leukaemia	1 (3.6)
Other	3 (10.7)
Treatment received ¹	
Chemotherapy	28 (100)
Surgery	17 (60.7)
Radiotherapy	11 (39.3)
Stem cell transplant	5 (17.9)
Other ²	1 (3.6)
Maintenance chemotherapy during study	
Yes	2 (7.1)
No	26 (92.9)
Comorbidities	
0	3 (10.7)
1	21 (75.0)
2	3 (10.7)
≥ 3	1 (3.6)
Residential location ³	
Metropolitan	25 (89.3)
Non-metropolitan	3 (10.7)

Note. SD = standard deviation; IQR = interquartile range; n = number of participants.

¹ Participants could receive more than one treatment; percentages may not total 100%.

² "Other" treatment refers to one participant who underwent clinical trial therapy for chronic graft-versus-host disease.

³ Residential classification based on ARIA (metropolitan vs non-metropolitan) categories.

TABLE 2 Feasibility outcomes compared with predefined benchmarks

Domain	Observed outcome	Benchmark	Achieved (Y/N)
Recruitment	23 participants (within three months)	≥ 15 within three months	Y
Assessment battery completion	26/28 participants (92.9%)	$\geq 85\%$	Y
Individual assessment completion	166/168 assessments (98.8%)	$\geq 90\%$	Y
Technique fidelity ¹	151/166 assessments (90.9%)	$\geq 85\%$	Y
Duration	26/28 participants (92.9%) ≤ 30 min Median 19.5 min (range 15–33)	$\geq 90\%$	Y
Safety	0 serious AEs; 0 minor AEs	0 serious AEs	Y

Note. Y = yes; N = no; AE = adverse event.

¹ The denominator for technique fidelity excludes two unperformed assessments (push-up tests) for which fidelity could not be evaluated.

TABLE 3 Spearman correlations between participant characteristics and technique fidelity outcomes¹

Variable pair	ρ	p-value
Child age $\leftrightarrow$ Overall technique fidelity	0.61	< 0.001
Child age $\leftrightarrow$ Sit-to-stand technique fidelity	0.43	0.024
Child age $\leftrightarrow$ Push-up technique fidelity	0.50	0.010
Time since treatment completion $\leftrightarrow$ Overall technique fidelity	0.32	0.092
Time since treatment completion $\leftrightarrow$ Sit-to-stand technique fidelity	0.24	0.226
Time since treatment completion $\leftrightarrow$ Push-up technique fidelity	0.23	0.268

Note. ρ = Spearman's rank-order correlation coefficient.

¹ All other individual test-specific correlations were non-significant ($p = 0.09–0.34$, $p > 0.05$) and are therefore not presented in the table.

Conclusions

Virtually supervised physical fitness assessments are feasible, safe, and acceptable in paediatric oncology. These findings support the potential of telehealth-based models to provide accessible, tailored survivorship care beyond the hospital setting. Future research should validate virtual fitness testing across diverse contexts to guide clinical implementation.

DIGIT-043

DIGITAL SYMPTOM MONITORING TO IMPROVE CANCER CARE: A SYSTEMATIC REVIEW

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Introduction

Many modern anticancer treatments are delivered in outpatient settings. While this approach has benefits, it places responsibility on patients to monitor symptoms, detect adverse events, and seek help appropriately. This can result in suboptimal treatment, delayed presentation of severe toxicities, and inefficient healthcare utilisation.

Digital health technology enables healthcare teams (HCTs) to monitor patients' symptoms during home-based treatment. Patients submit regular surveys, with real-time alerts triggering urgent HCT intervention for severe symptoms and personalised self-management advice for mild to moderate symptoms. Digital symptom monitoring (DSM) in routine cancer care is relatively new, and existing research shows mixed results. We therefore conducted a systematic review to summarise the available evidence.

Methods

We searched MEDLINE, Embase, Scopus, and PsycINFO using the terms "cancer," "remote symptom monitoring," and "systemic therapies." Included studies enrolled at least 10 adult patients receiving systemic cancer therapy who used DSM multiple times during treatment. Outcomes included emergency department (ED) presentations, hospital admissions, days spent in hospital (DSH), overall survival, progression-free survival (PFS), disease-free survival (DFS), quality

of life (QoL), treatment duration, dose intensity, and patient satisfaction with care. Where datasets were suitable, meta-analysis was undertaken.

Results

Seventeen studies were included. Heterogeneous methodologies and reporting limited direct comparison. To address this, vote counting was used to assess direction and significance of effects. DSM use was consistently associated with improvements in QoL, ED presentations, and DSH, although results were not always statistically significant. Meta-analysis suggested DSM was associated with a significant reduction in acute care use.

Conclusions

DSM is a promising but emerging area of research. While several studies demonstrated reduced acute care use and improved QoL, findings were not universal. We recommend future studies adopt standardised methods and outcome reporting to enable more robust evaluation of DSM in cancer care.

DIGIT-044

EVALUATING THE EFFECTIVENESS OF GPT-5 IN ADDRESSING PATIENT QUERIES ABOUT SEXUAL DYSFUNCTION IN BREAST CANCER PATIENTS

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Introduction

ChatGPT (GPT-5) is an artificial intelligence model that is increasingly used for patient education, yet evidence on the accuracy of its responses to oncologic topics remains limited. Breast cancer (BC) is the most prevalent cancer among women, with female sexual dysfunction (FSD) affecting up to 70–90% of patients and is commonly associated with diminished quality of life. This study assessed the accuracy and completeness of GPT-5 responses to patient questions about FSD in BC patients.

Methods

Fifteen patient-centred questions on FSD were developed with expert input for clinical relevance. GPT-5 responses were generated using a new account, with each question entered in a new chat to minimize bias. Six physicians separately evaluated each response for correctness (1–6 Likert scale) and completeness (1–3 Likert scale), and provided comments on their selections. Responses were also evaluated against clinical guidelines to identify compliance with evidence-based recommendations for the management of FSD in BC. Quantitative scores were analyzed descriptively, and reviewer comments were thematically synthesized to identify strengths and weaknesses in GPT-5-generated responses.

Results

GPT-5 achieved a mean correctness and completeness score of 4.85 ± 1.052 and 2.53 ± 0.494, respectively. Highest-rated responses on

both correctness and completeness scales addressed FSD prevalence in BC patients, flibanserin safety in survivors, specialist referral indications, and frequency of sexual health discussions with clinicians during survivorship. Conversely, the lowest-rated responses involved the safety of vaginal estrogen and dehydroepiandrosterone use in hormone-receptor-positive survivors. Reviewers noted a recurring limitation in the lack of citation of established clinical guidelines. Concordance with guidelines was strongest for responses covering straightforward topics and weakest for complex topics.

Conclusions

GPT-5 generated largely accurate and comprehensive responses. However, performance varied by topic complexity, with limitations emerging for multifaceted topics. While GPT-5 is promising as a patient educational resource, clinician oversight remains critical for safe use.

DIGIT-045

UTILISATION OF TELEHEALTH SERVICES IN PEOPLE WITH CANCER COMPARED TO PEOPLE WITHOUT CANCER

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Introduction

Telehealth service has rapidly increased since COVID-19 pandemic and is particularly useful for people with limited access to healthcare and those with complex needs such as immunocompromised patients. There is limited data on the extent of telehealth use across different patient groups to inform healthcare planning. This study compared the prevalence and characteristics associated with telehealth service use in people with and without cancer.

Methods

Cross-sectional study using data from the Australia's Patient Experience Surveys (2022–2023 & 2023–2024) of all participants aged ≥25 years. We performed multivariable logistic regression analyses to assess the characteristics associated with telehealth use between cancer and non-cancer groups, and to compare self-assessed health status, presentation to emergency department (ED) and hospitalisations by telehealth use and cancer status.

Results

Over one-third of respondents with cancer (n=797/2109, 38%) and one-quarter of respondents without cancer (n=11,984/45,438; 26%) used telehealth. The presence of mental health conditions and other long-term health conditions were associated with higher odds of telehealth service use in both cancer and non-cancer groups. In contrast, several characteristics including being unmarried, uninsured, having a lower education level and a more recent survey were associated with lower odds of telehealth service use. The odds of reporting poor health status, presentation to ED and hospital admission were highest in people with cancer and telehealth use, followed by people with cancer who did not use telehealth and people without cancer who use telehealth, when compared to people without cancer and telehealth usage. Over 90% of people who used telehealth showed positive perceptions of the service regardless of cancer status.

Conclusions

While over one-third of respondents with cancer utilised a telehealth service, the majority did not. Further research should investigate the barriers to accessing telehealth services to inform the development of health policy and strategies targeting people with greatest needs.

DIGIT-046 **SUPPORTING PATIENTS BETWEEN VISITS: IMPLEMENTING THE RESPONSE SYMPTOM MONITORING PROGRAM**

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Introduction

Patients receiving systemic cancer treatment in community oncology settings often experience gaps in timely symptom support between clinic visits, particularly outside regular clinic hours. These gaps may contribute to unmanaged symptoms, increased caregiver distress, and potentially avoidable emergency department utilization. Digital symptom monitoring using patient-reported outcomes has demonstrated benefit; however, real-world implementation in community oncology settings remains inconsistent, particularly outside tertiary centers. This abstract describes the implementation and early outcomes of RESPONSe (Remote Symptom and Patient Monitoring System), a digital symptom monitoring program designed to strengthen supportive cancer care.

Methods

The Symptom Management Nurse Monitors the Dashboard and Responds to Patients who Reported Concerning Symptoms



RESPONSe was implemented as a quality improvement initiative in a community-based outpatient oncology clinic. The program was co-developed through a structured interprofessional quality improvement process involving medical oncology, oncology nursing, and virtual health partners. Oncology nurses lead day-to-day program delivery, including patient onboarding, symptom monitoring, self-management coaching, and coordination of care escalation. Patients receiving systemic therapy completed regular electronic symptom assessments using validated tools, including ESAS-r: Cancer and evidence-informed symptom guidance aligned with COSTaRS. Program evaluation included symptom severity, nursing interventions, care escalation, and qualitative feedback from patients and clinicians.

Results

Enrolled patients submitted regular symptom reports, with a substantial proportion identifying moderate to severe symptoms requiring nursing follow-up. Nurse-led clinical review enabled timely symptom management, patient education, reassurance, and appropriate escalation of care. Patients reported increased confidence in symptom recognition and reassurance knowing their symptoms were monitored between visits. Clinicians described strengthened continuity of supportive care within existing workflows.

Conclusions

This collaborative model underscores the value of interprofessional partnership while highlighting oncology nursing leadership in translating digital symptom data into timely supportive care. By extending supportive care beyond clinic visits, RESPONSe enhances access to symptom support for patients and caregivers and reinforces the role of oncology nurses in delivering and sustaining digital supportive care interventions in community oncology settings.

DIGIT-047 **USING ELECTRONIC PATIENT-REPORTED OUTCOME MEASURES (EPROMS) TO ENABLE RESOURCE-STRATIFIED PRE-TREATMENT ASSESSMENT IN ROUTINE CANCER CARE**

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Introduction

Rising cancer incidence and increasing treatment complexity are placing growing strain on cancer services, highlighting the need for resource-stratified approaches that improve efficiency without compromising care quality. Pre-assessments for systemic anti-cancer therapy (SACT) are essential to ensure patient suitability but can be resource-intensive. We evaluated the service impact of embedding electronic patient-reported outcome measures (ePROMs) into routine SACT pre-assessment.

Methods

Patients with solid tumours scheduled to receive SACT were invited to complete an ePROM, comprising EQ-5D-5L and 21 CTCAE-adapted symptom items, three days before treatment. One day before treatment, nurses reviewed investigations and ePROM responses for patients requiring pre-assessment, excluding those receiving first-cycle treatment or recently reviewed in clinic. Telephone pre-assessments were undertaken only when ePROMs or investigations raised concerns. Service efficiency outcomes were prospectively collected over four weeks. Time savings were estimated using our previously reported ePROM-related reductions in telephone assessment durations (4.7 versus 7.2 minutes with and without ePROMs), and the time invested in service implementation was recorded to calculate efficiency gains.

Results

Among 3,739 SACT appointments, 494 were first-cycle treatments, 1,673 followed recent clinical review, and 160 were cancelled, leaving 1,412 appointments eligible for pre-assessment. ePROMs were completed for 703/1,412 appointments (49.7%). Telephone pre-assessment was required for 688/1,412 (48.7%), while 418/1,412 (28.6%) required no telephone review because ePROMs and investigations identified no concerns. This reduction in telephone assessments was associated with an estimated saving of 3,010 minutes (50 hours) over four weeks. When extrapolated over two years, this corresponds to 1,304 hours saved, representing a 12-fold return on the time invested in service implementation.

Conclusions

Routine use of ePROMs within SACT pre-assessment reduced the need for telephone reviews, streamlining workflows and delivering measurable efficiency gains. This digitally enabled, resource-stratified model offers a scalable approach to sustainable cancer care, with ongoing evaluation planned to assess downstream benefits, including reduced medication wastage.

DIGIT-050 **VIRTUAL REALITY-BASED INTERVENTIONS TO ADDRESS DISTRESS MANAGEMENT IN PATIENTS WITH CANCER: A SCOPING REVIEW**

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Introduction

Distress, a multifactorial and unpleasant experiences, is prevalent among patients with cancer. Severe distress is associated with reduced quality of life and impaired coping, potentially leading to poorer clinical outcomes. Virtual Reality (VR) has been increasingly explored in psychosocial interventions, including distress management, yet a comprehensive understanding of VR-specific strategies and concepts remains limited in that context.

Methods

Based on the JBI methodology and PRISMA-ScR guidelines, a scoping review was conducted to understand how VR has been used in distress management for patients with cancer. We searched PubMed, CINAHL, Embase, Web of Science, and PsycINFO using a combination of keywords and MeSH terms. We included empirical studies written in English and published since 2018. Four reviewers independently conducted study selection in two sequential stages. Any discrepancies were resolved through discussion and consensus. Subsequently, the reviewers independently extracted data and cross-checked for completeness and accuracy. Given the heterogeneity of the included studies, a narrative synthesis approach was used.

Results

Among the 197 identified articles, 13 met inclusion criteria. Of the 13 studies, 6 referenced the NCCN distress definition or employed the NCCN distress thermometer for assessment. In terms of strategies, 10 studies employed distraction mechanism, while only two applied coping skills training. Human involvement (in-person moderators, pre-intervention training, and the safety monitoring) differed across the included studies; only one study implemented all three. Although all assessed psychological outcomes, only two studies included physiological indicators, such as heart rate or salivary cortisol.

Conclusions

The majority of the studies overlooked standardized concepts and definitions of distress in their designs of VR-based interventions. Most interventions focused on distraction mechanisms, which are helpful in alleviating distress temporarily. In future work, there is room for an extended role of VR interventions in empowering cancer patients to take control of their distress.

DIGIT-052

QUALITY OF LIFE IN A RANDOMIZED TRIAL OF REMOTE PATIENT MONITORING IN A US SAFETY-NET ONCOLOGY SETTING

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Introduction

Remote patient monitoring (RPM) of toxicities and biometric data during chemotherapy can enable earlier detection of adverse events and intervention to mitigate their effect. Few studies have evaluated RPM in medically underserved U.S. patients. We evaluated feasibility and quality of life (QOL) outcomes in a trial that evaluated RPM in adults with advanced cancer receiving chemotherapy in a U.S. safety-net integrated health care system.

Methods

Patients were randomized 1:1 to 90-day RPM plus usual care or usual care alone. RPM-assigned patients used Bluetooth-enabled devices to measure daily biometrics and self-reported symptoms. A nurse

navigator received alerts when biometrics or symptoms exceeded pre-established thresholds and triaged patients according to standard care. All completed the EuroQol 5 Dimensions (EQ-5D) quality of life (QOL) measure and the Patient Activation Measure (PAM) at baseline, 4, 8, and 12 weeks (end of study).

Results

228 completed the trial including: 66% female, 8% White non-Hispanic, 79% White Hispanic, 12% non-Hispanic Black. In addition, 67% were Spanish-speaking, 73% had no health insurance, 82% were unemployed, and 63% not married/partnered. Mean age was 52 years (range, 18-80 years). Both quality of life and patient activation were associated with study group assignment, as those randomized to usual care alone reported worse QOL (estimate=-0.083, p=0.009) and lower PAM scores (p=0.002) compared to the RPM group 98% of patients assigned to RPM reported satisfaction and ease of use with the intervention.

Conclusions

Findings support the feasibility of implementing RPM with medically underserved cancer patients in a safety-net oncology care setting. RPM participation may result in improved QOL as well as more active participation in managing cancer care during a challenging treatment period.

DIGIT-053

EPROM ASSESSMENT DURING AMBULATORY ONCOLOGY REHABILITATION CAN IDENTIFY PATIENTS REPORTING POOR BENEFIT AND ENABLE PATIENT-CENTERED PROGRAM ADJUSTMENT

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Introduction

Tumor Zentrum Aargau, Hirslanden Radiotherapy and Urology invite cancer patients to undertake ambulatory oncological rehabilitation (Onco-Reha), a 4-month program of supportive care overseen by Onco-Reha Coaches.

Patients complete online questionnaires (ePROMs) targeted to their treatment and Onco-Reha, shared with providers to coordinate and evaluate care. Many patients report significant benefit. This study aimed to identify early indicators of less substantial benefit, enabling interventions to be modified.

Methods

All ePROM data for Onco-Reha patients was obtained from Dec-2020 to Dec-2025. We extracted all records within one year of Onco-Reha, excluding patients with insufficient submissions.

ePROM data for 301 patients (176 female) was analyzed by harmonizing and normalizing responses over 14 questionnaires. An overall patient status score was determined from key responses at four

timepoints (Onco-Reha start, Onco-Reha end, 7 and 12 months after start).

Results

Overall, patients reported an improvement on their Onco-Reha start scores over all domains, with the greatest improvement during the Onco-Reha period (Figure 1).

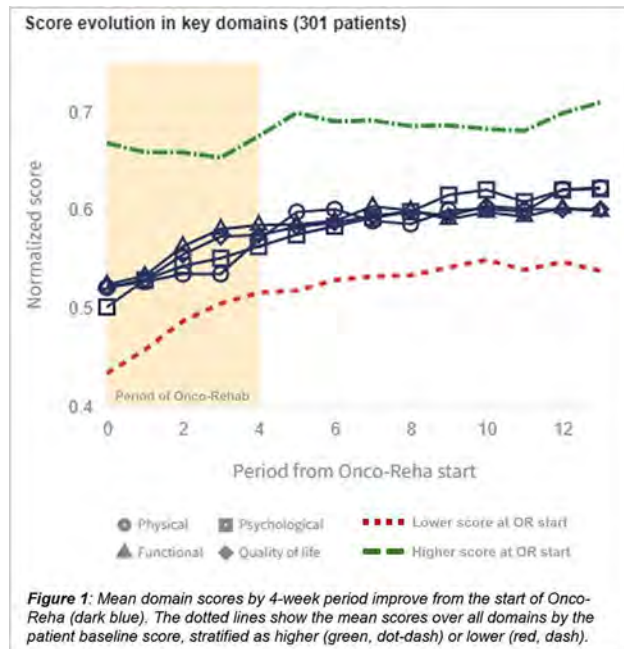
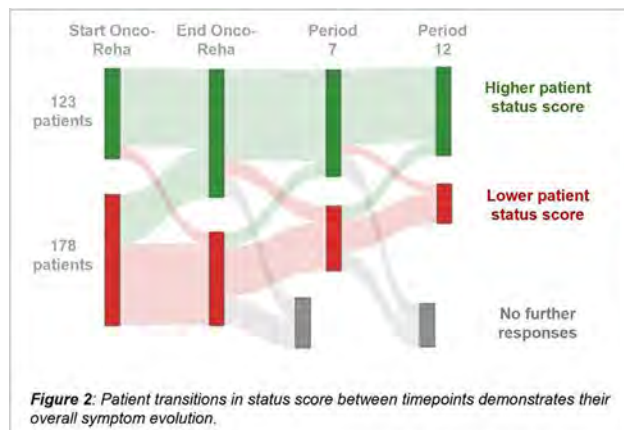
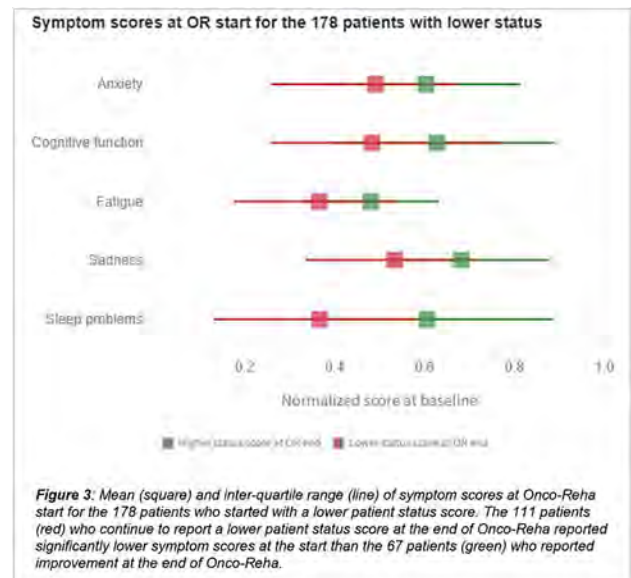


Figure 2 presents the transition of patients between higher and lower patient status scores. While many patients (174) demonstrated a higher patient status at the end of Onco-Reha, a significant proportion (127) retain or transition to a lower score.



We identified initial symptoms that indicate patients at risk of poorer outcomes; these include anxiety, cognitive function, fatigue, sadness and sleep ($p < 0.01$, Figure 3). A weak positive correlation was observed between Onco-Reha patient satisfaction and patient status at each timepoint (Pearson r : 0.14–0.28).



Overall physical, psychological and functional score trajectories and the predictive symptoms associated with these will be presented.

Conclusions

Many patients undertaking Onco-Reha report an improvement in symptom burden. We have demonstrated that patients with a less substantial benefit can be identified from prior symptom reporting, indicating that proactive PROMs monitoring can support program adjustment and modified interventions.

DIGIT-054

EXPLORING ALAS AN EDUCATIONAL TOOL: EVALUATING THE EFFECTIVENESS OF GPT-5 IN ADDRESSING PATIENT QUERIES ABOUT METASTATIC SPINAL CORD COMPRESSION

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Introduction

Artificial intelligence (AI) chatbots such as ChatGPT (GPT-5) provide accessible platforms for patient education, yet their accuracy in oncology-related topics remains understudied. Metastatic spinal cord compression (MSCC) occurs in 2.5–5% of patients with advanced cancer and is a time-sensitive emergency requiring early recognition and treatment to prevent morbidity and neurologic impairment. This study assessed the accuracy and completeness of GPT-5 responses to common patient questions regarding MSCC.

Methods

Fifteen patient-centred questions were developed from international guidelines (ASTRO, ESTRO, NICE) and refined with clinician input. To reduce contamination and recall bias, GPT-5 responses were generated using a new account without prior chat history, with each question submitted in a separate session. Responses were independently rated by nine experts in spinal oncology for correctness (on a 1–6 Likert scale) and completeness (on a 1–3 Likert scale). Scores were summarized descriptively and benchmarked against guideline recommendations.

Results

GPT-5 achieved a mean correctness score of 5.09 ± 0.900 and completeness score of 2.68 ± 0.462 . The highest-rated responses addressed predictors of ambulation recovery following MSCC and imaging guidance in asymptomatic spinal metastases; lowest-rated responses involved treatment recommendations for MSCC and pharmacologic management at diagnosis. Key limitations included overstating the role of systemic therapy in the management of MSCC and over-reliance on prognostic models as the primary decision-making framework for treatment selection. Concordance with guidelines was strongest for initial assessment and diagnostic workup, and weakest for recommendations on the appropriate radiation fractionation schedule and mischaracterization of systemic therapy's role in MSCC management.

Conclusions

GPT-5 produced mostly accurate and largely comprehensive responses for MSCC, with performance strongest in diagnostic evaluation and outcome prediction, while treatment recommendations showed inconsistencies. Although GPT-5 may supplement patient education, clinical oversight remains essential to ensure accurate and safe communication and appropriate integration of AI tools into patient-facing information.

DIGIT-056

ONLINE PATIENT-DRIVEN STEPPED-CARE FOR MANAGING MENOPAUSAL SYMPTOMS AFTER CANCER: HEALTHCARE PROFESSIONALS' PERCEIVED ENABLERS AND BARRIERS TO USE.

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Melbourne, Parkville, ⁷*Division of Obstetrics and Gynaecology, Medical School, The University of Western,* ⁸*Specialty of Child and Adolescent Health, Sydney Medical School, Faculty of Medicine and Health, The University of Sydney,* ⁹*Melbourne Medical School, The University of Melbourne, Parkville,* ¹⁰*Department of Obstetrics and Gynaecology, Royal Women's Hospital, University of Melbourne, Parkville,*

Introduction

Women living with and beyond cancer experience menopausal symptoms that can impact their quality of life. While they often rely on healthcare professionals (HCPs) for care, some needs remain unmet. HCPs admit challenges, including high demand, resource limitations, and difficulty prioritising complex cases. Innovative strategies, involving symptom assessments and tailored or stepped-care approaches, may address these issues. We explored HCPs' perceived enablers and barriers to adopting recommendations from a stepped-care platform for managing menopausal symptoms in these women.

Methods

HCPs with expertise in managing menopause were invited through various organisations and HCPs' societies. Semi-structured interviews, grounded in theory-based approaches, were conducted. Using content analysis, belief statements were coded into capability, opportunity, motivation-behaviour (COM-B) model and theoretical domain framework (TDF) constructs, analysed into themes and categorised as perceived enablers or barriers.

Results

Twenty HCPs aged 37–68 years participated. More were females (n=17), Australian-born (n=15), and part-time/casual workers (n=11). Six were primary care physicians and had over 20 years clinical experience (n=10). Hot flushes (n=20), and vulvovaginal dryness (n=19) were the commonest symptoms managed. Twenty-one themes were identified. The enablers were the participants' knowledge and practice of the stepped-care concept, the platform's user-friendliness, patients' engagement and usefulness. Barriers included healthcare system limitations and patient-related factors like health and digital literacy, and access to technology. Participants expressed willingness to adopt the platform's recommendations, depending on patient acceptance, peer influence, and professional endorsement.

Conclusions

The platform was perceived as a valuable tool improving HCPs' efficiency as it offers clear management pathways and resources. The findings will guide the development of the stepped-care platform's prototype.

DIGIT-057

DEVELOPMENT AND PRACTICALITY OF AN INTELLIGENT REHABILITATION MANAGEMENT PLATFORM FOR DAYTIME LUNG CANCER SURGERY PATIENTS AFTER DISCHARGE

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Introduction

Daytime lung cancer surgery is increasingly adopted with minimally invasive techniques and enhanced recovery protocols, but patients face short hospital stays (≤ 48 h) and lack professional monitoring during home rehabilitation. Postoperative symptoms (e.g., pain, cough, fatigue) and symptom clusters are prevalent, dynamic, and associated with reduced quality of life and increased complication risks. Thus, this study aims to develop an intelligent post-discharge rehabilitation management platform to accurately track postoperative symptom changes, reduce complication risks, and improve rehabilitation quality and patients' quality of life.

Methods

A multidisciplinary team (thoracic surgery, nursing, information engineering) built a 5-layer intelligent platform (underlying environment, support, database, algorithms, application). It integrates a complication knowledge base, a CNN-based risk prediction model, and wearable device-based vital sign collection, with core modules: symptom monitoring, risk early warning, personalized rehabilitation pushes, AI consultation, and remote multidisciplinary channels. A historical controlled study included 45 control patients (Jan–May 2025) and 45 experimental patients (Jun–Oct 2025) from a Chongqing cancer hospital. Postoperative NRS scores, complication incidence, rehabilitation compliance, and satisfaction were compared at 1, 3, 14, 30 days.

Results

All patients completed the follow-up. The pain scores in the experimental group at all postoperative time points were significantly lower than those in the control group (all $P < 0.05$). The incidence of complications in the experimental group was 6.67% (3/45), which was significantly lower than 24.44% (11/45) in the control group ($P < 0.05$). The rehabilitation training compliance (91.11%) and patient satisfaction (88.72 ± 5.63 points) in the experimental group were significantly higher than those in the control group (68.89%, 73.25 ± 7.81 points) (all $P < 0.05$).

Conclusions

This intelligent platform, via multi-dimensional data integration and precise early warning, effectively alleviates postoperative symptoms, reduces complications, improves compliance and satisfaction, and enhances nursing quality. It provides an efficient tool for continuous, precise post-discharge rehabilitation management of daytime lung cancer surgery patients.

DIGIT-059

EVALUATING THE EFFECTIVENESS OF CHATGPT-5 IN ADDRESSING PATIENT QUERIES ON THE MANAGEMENT OF POSTPROCEDURAL ACUTE PAIN IN CANCER PATIENTS

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Introduction

As digital technologies continue advancing, artificial intelligence (AI) chatbots, including ChatGPT-5, are becoming increasingly relevant in interactive and accessible patient education. This study evaluated the correctness and completeness of ChatGPT-5 generated responses to common questions related to the management of postprocedural acute pain.

Methods

Fifteen patient-centered questions on postprocedural acute pain management were developed and entered into ChatGPT-5 using a new, unbiased account, ensuring each question was entered into a separate chat. Two healthcare professionals (HCPs), a family physician and a radiation oncologist, independently rated each response for correctness (1–6 Likert scale) and completeness (1–3 Likert scale), and provided qualitative feedback. Each ChatGPT-5 generated response was additionally compared against findings from a targeted literature review and clinical practice guidelines to assess alignment with evidence-based recommendations.

Results

Across all questions, ChatGPT-5 achieved a mean correctness score of 5.73 ± 0.38 and a mean completeness score of 2.67 ± 0.38 . Out of the 15 generated ChatGPT-5 responses, 6 were given full correctness and

completeness scores by both experts, with these responses addressing non-drug alternatives for pain reduction, safe medication to use with liver problems, and how to use a pain pump. Areas for improvement included greater age inclusivity, particularly pertaining to differences in post-procedural acute pain management for paediatric patients and the need for polypharmacy consideration in older adults. Additional limitations involved insufficient recognition of typically avoided or infrequently used medications for the management of acute pain. Additionally, AI-generated responses generally aligned with clinical practice guidelines.

Conclusions

ChatGPT-5 performed well in providing correct and complete responses to common patient questions on postprocedural acute pain management. When used alongside clinician expertise, ChatGPT-5 generated responses can be a complementary educational resource, offering accessible and holistic answers to patient inquiries.

DIGIT-060

HARNESSING ARTIFICIAL INTELLIGENCE WITH CHAT-BOTS TO GUIDE FINANCIAL NAVIGATION IN RURAL CANCER CARE

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Introduction

Cancer is the costliest chronic condition in the US. Rural cancer patients face distinct financial challenges with cancer care. Given the complexity of information and the need for tailored support, digital tools that increase the accessibility and comprehensibility of financial navigation and self-advocacy information are urgently needed.

Methods

After Institutional Review Board approval, we convened a nine-member community advisory board (CAB). Using a human-centered design process, we developed two chatbots from a previously co-developed resource toolkit with rural cancer patients, caregivers, and national patient advocacy organizations. We used the GARDE-Chat chatbot authoring tool developed by the institution's biomedical informatics department with the Open.AI ChatGPT 5.2 LLM. GARDE is an open-source software platform that supports the design and implementation of population health management interventions. The GARDE-Chat authoring tool was developed to allow individuals with no computer programming skills to create chatbots for health interventions.

Results

An iterative process of development, feedback, and refinement was used to finalize chatbots with the CAB and four novice chatbot authors, supervised by a chatbot development expert. A rules-based chatbot was developed to provide only responses from the resource toolkit. A second version leveraged retrieval augmented generated responses with a Large Language Model (LLM) that drew from the validated information of the toolkit. CAB sessions focused on the accuracy, comprehensibility, safety, acceptability, and feasibility of the chatbots. Sessions also refined the tone the chatbot, integrated the user experience with clinical referral workflows, and identified technical issues to be resolved.

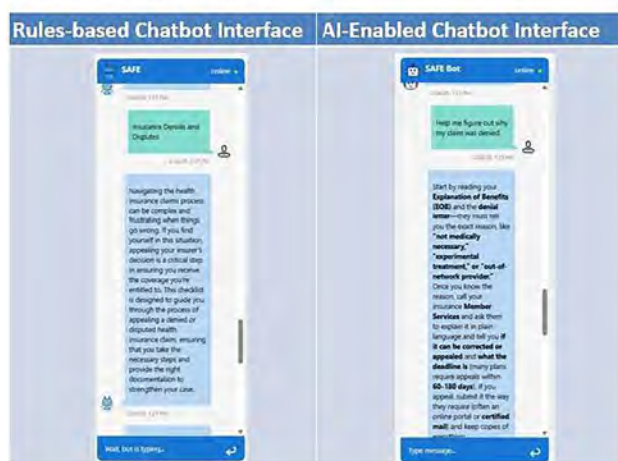
Conclusions

Chatbots are digital tools that can improve the delivery of complex, individualized information. This is the first study to develop a chatbot for rural financial advocacy for cancer patients. The next phase of the study will test the efficacy and usability of the two chatbots in a randomized, two-arm, parallel-group pilot trial.

Figure 1. Excerpts from Community Co-Developed Resource Toolkit Based on Self-Determination Theory and Rural Nursing Theory



Figure 2. Self-Advocacy for Financial Empowerment (SAFE) Chatbot interface: Rules-Based versus AI Chatbot



DIGIT-062

PATTERNS OF VIRTUAL CARE USE IN OUTPATIENT CANCER SERVICES AND THEIR ASSOCIATIONS WITH UNPLANNED HEALTH SERVICE USE IN AUSTRALIA

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Introduction

Virtual care is expanding access to cancer services across Australia, yet little is known about its use in cancer care or its implications for subsequent health service use. This knowledge is essential for designing models and systems that optimise access to care and the potential of virtual care. The Smarter Hospitals Project conducted linked administrative data studies to examine virtual care use in outpatient oncology and its association with unplanned emergency department presentations and hospitalisations, aiming to inform integration of virtual care within Australian cancer services.

Methods

Retrospective cohort studies were conducted using linked administrative data from New South Wales, Victoria, and Queensland. Outpatient oncology records were linked with cancer registries, hospital admissions, emergency department presentations, and mortality data. Adults aged ≥ 18 years with cancer receiving outpatient oncology care between 2018 and 2021 were included and followed for one year. Regression models examined predictors of virtual care use and associations with unplanned acute health service use.

Results

Among 120,230 individuals with cancer, 51.9% used virtual care at least once within a 12-month period. Higher virtual care use was associated with rural residence (OR 1.20; 95% CI 1.15–1.26), mental health conditions (OR 1.59; 1.50–1.68), greater comorbidity burden (OR 1.15; 1.09–1.21), and care during the COVID-19 pandemic (OR 5.50; 5.10–5.91). Lower use was observed among older adults (≥ 75 vs 18–44 years: OR 0.67; 0.61–0.73) and those born overseas (OR 0.89; 0.85–0.94). Any virtual care use was associated with higher rates of unplanned emergency department presentations (OR 1.64; 1.50–1.79) and hospitalisations (OR 1.20; 1.10–1.30), but not cancer-related admissions.

Conclusions

Virtual care is more frequently used by people with cancer who have greater clinical complexity. Its association with higher unplanned acute care use highlights the need for ongoing monitoring. Further research is required to determine how virtual care can be optimally targeted and integrated within cancer services.

DIGIT-063

EVALUATING THE EFFECTIVENESS OF GPT-5 IN ANSWERING QUESTIONS ON OPIOID DOSING STRATEGIES IN CANCER PAIN MANAGEMENT

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Introduction

Artificial intelligence (AI) chatbots are computer programs that can simulate human conversation and provide information across a range of topics. In clinical contexts, they are increasingly used to generate health-related information and may have applications in patient education and clinical decision support. However, their reliability in complex and high-risk domains such as cancer pain management remains uncertain. This study aims to evaluate the correctness and completeness of GPT-5-generated responses to patient-centered questions about opioid dosing strategies in cancer-related pain management.

Methods

ChatGPT-5 was tested using fifteen patient-centred questions addressing opioid dosing strategies in cancer pain management. These questions were derived from established clinical guidelines and refined by healthcare professionals. Each question was entered into a separate GPT-5 conversation using a new Google account to minimize bias. Responses were independently assessed by three oncologists, who rated correctness (6-point scale) and completeness (3-point scale), and provided qualitative feedback. Quantitative findings were summarized descriptively, and thematic analysis was conducted on reviewer comments.

Results

ChatGPT-5 achieved a mean correctness of 4.60 ± 0.125 and mean completeness of 2.23 ± 0.0789 across all questions. Scores showed minimal variation between questions, indicating a consistent level of performance. Thematic analysis revealed three recurring issues: a lack of supporting evidence or references, the use of overly reassuring language without sufficient emphasis on risks or safety considerations, and the omission of key elements such as contextual factors or practical guidance.

Conclusions

ChatGPT-5 demonstrated a moderate level of correctness and completeness in its responses. While answers were generally coherent and relevant, identified limitations raise concerns on potential risks if patients rely on these responses for medical decisions without professional oversight. These findings suggest that ChatGPT-5 may provide a useful starting point for general patient education or serve as a supplementary education tool, but should not be relied upon for clinical guidance without expert review.

DIGIT-064

PATIENT-FACING CHATBOT TO PROVIDE PERSONALIZED EMOTIONAL SUPPORT AND ADVICE ON CANCER TREATMENT OPTIONS

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La Trobe University

Introduction

Cancer is a growing concern in Australia, with half of the population projected to be diagnosed by age 85, and nearly 30% of deaths being

attributed to cancer. Therefore, it is important for cancer treatment to be holistic with consideration for mental and emotional wellbeing. To this end, we developed and preliminarily assessed a chatbot to provide emotional support and advice on cancer treatment options to breast cancer patients.

Methods

A patient-facing chatbot was developed with a controlled Generative AI (Gen AI) capability built in the backend. As a feasibility test, the chatbot was tested with 10 AI-based breast cancer patient actors, with each patient doing 5 conversational interactions, resulting in 50 chatbot responses. Each response was assessed across three dimensions: Empathy, Understandability, and Quality of Information, using a scale that combines conversational empathy measures from previous research, and DISCERN and PEMAT instruments.

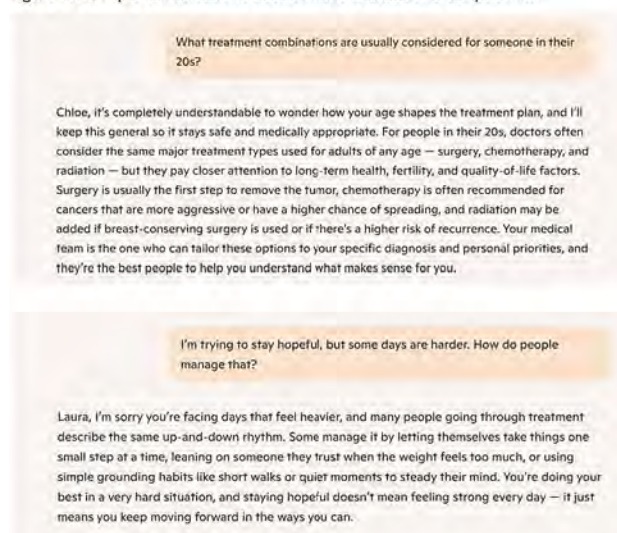
Results

The chatbot responses attracted overall scores of 86% in empathy, 85.7% in understandability, and 64.7% in quality of information. Granular results are presented in Table 1, with an example conversation flow given in Figure 1.

Table 1: Assessment of chatbot responses.

Main Category	Subcategory	Score	Cumulative Average Score
Empathic Rating	Empathetic	82%	85%
	Sympathetic	50%	
Understandability (Relevant categories selected from DISCERN)	The material makes its purpose completely evident.	100%	85.7%
	The material does not include information or content that distracts from its purpose.	100%	
	The material uses common, everyday language.	100%	
	When used, medical terms are defined.	0%	
	The material uses the active voice.	100%	
	Numbers appearing in the material are clear and easy to understand.	100%	
	The material does not expect the user to perform calculations.	100%	
Quality of information (Relevant categories selected from PEMAT)	Does it describe how each treatment works?	90%	64.7%
	Does it describe the benefits of each treatment?	100%	
	Does it describe the risks of each treatment?	16.7%	
	Does it describe what would happen if no treatment is used?	0%	
	Does it describe how the treatment choices affect overall quality of life?	46.2%	
	Is it clear that there may be more than one possible treatment choice?	100%	
	Does it provide support for shared decision-making?	100%	

Figure 1: Example conversations between the chatbot and the patients.



Conclusions

The scores indicated chatbot responses being empathetic and accurate due to modern Gen AI capabilities, and with the ability of hardcoding intelligent AI control guardrails when designing solutions. The AI was effective in providing accurate information to patients using the controlled sources we provided. However, we limited the AI being too elaborative or creative by placing maximum character limits and

strict rules for its responses, thereby making the responses succinct and easily understandable, not overwhelming, yet being empathetic. With such guardrails, we observed a balance of empathy and accuracy, with depth of information adequate to patients, indicating that AI can assist in cancer treatment pathways especially in tasks as providing emotional support and cautious, low-risk, and controlled advice to cancer patients.

DIGIT-065

MINDONLINE – EVALUATION OF AN ONLINE MINDFULNESS PROGRAM FOR PEOPLE LIVING WITH CANCER

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Introduction

Most people living with cancer experience elevated levels of fear of cancer recurrence (FCR). Little is known about the success of brief online and self-directed mindfulness interventions in improving FCR. A 9-week online mindfulness program (MindOnLine) was developed and tested in a Randomised Control Trial (RCT) involving breast, bowel or prostate cancer. Follow up occurred 9-weeks and 9-months post baseline. This presentation provides a comprehensive overview of work conducted to examine the effectiveness, cost-effectiveness, participant satisfaction, adherence, and recruitment strategies of MindOnLine.

Methods

The RCT reports on 434 participants (intervention n=233 and waitlist control n=201) who were mostly female (70%) and had breast (58%), prostate (26%) or bowel (n=16%). Fear of cancer recurrence, anxiety and depression were assessed for effectiveness, and quality of life and resource use were used in the economic evaluation. Satisfaction was self-reported by participants and usage data was captured from the MindOnLine program to assess adherence. The relationship between recruitment strategies, recruitment rates and costs of recruitment was assessed.

Results

MindOnLine showed a significant ($p < 0.05$) and sustained reduction in FCR, anxiety and depression at 9-weeks and 9-months. Mindfulness was significantly improved at 9-weeks ($P < 0.05$). Participants using MindOnLine were satisfied with the program and reported it improved their skills in applying mindfulness to their daily lives. Adherence was highest in the first three-weeks, and one-third of participants completed five or more modules. The cost-effectiveness and recruitment strategies evaluations are underway.

Conclusions

MindOnLine presents a brief, self-directed and online mindfulness program which not only improved peoples' wellbeing outcomes, but also contributed to their ability to incorporate mindful practice into their daily lives. Future studies, include expanding MindOnLine to other cancer types, other chronic conditions, carers, and scaling it into routine care.

DIGIT-066

CO-DESIGNING AN INTERACTIVE WEBSITE FOR PEOPLE AFFECTED BY UPPER GASTROINTESTINAL CANCERS

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Australia, ⁸Department of Health Services Research, Sir Peter MacCallum Cancer Centre, Melbourne, Victoria, ⁹Deakin University, Faculty of Health, Melbourne, Australia

Introduction

Due to their complexity, people living with, or supporting someone with, upper gastrointestinal cancer, may experience extreme levels of burden and distress. Compared to more common cancers, there is minimal information and few readily available resources for people affected by these cancers, leading to ongoing unmet needs and uncertainty during the illness trajectory. The initial concept and framework of iCare was co-designed in previous studies for general cancer support and colorectal cancer care. Through co-design, this project aimed to adapt an existing website (iCare) for people affected by upper gastrointestinal cancers.

Methods

Leading national consumer organisation representatives (n=6), patient and carer representatives (n=2) and clinicians (n=4) were engaged in a co-design process. An iterative approach was applied to develop the content, design, navigation and features of iCare. Workshops were held with consumer organisation representatives, patients, and carers to determine the content of iCare. Two rounds of user testing occurred throughout the development phase, and participants were asked to provide feedback on design and navigation of iCare, and interactive features e.g. pain diaries.

Results

Main topics for inclusion were areas such as information about side effects, as well as determining suitable existing evidence-based web resources to include in iCare. Content was reviewed by clinicians who specialise in gastrointestinal cancers and any additional evidence-based resources were incorporated. The appearance of iCare was acceptable; navigation and language used throughout iCare was reviewed with consumers to ensure ease of use and enhance understanding of the program content.

Conclusions

iCare has the potential to address inequities in care by providing information and resources to people affected by upper gastrointestinal cancer. A randomised controlled trial is currently underway testing the feasibility and acceptability of iCare and its preliminary effectiveness on quality of life, burden and unmet needs.

DIGIT-067

DEVELOPMENT AND EVALUATION OF A VIRTUAL REALITY-ASSISTED SMOKING CESSATION MANAGEMENT PROGRAM FOR LUNG CANCER PATIENTS

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Introduction

Smoking cessation directly improves treatment efficacy and prognosis. However, lung cancer patients face clinical challenges of low smoking cessation willingness, poor behavioral adherence, and high relapse rates due to strong nicotine dependence, psychological distress, and lack of personalized intervention tools. To address these issues, this study leverages the immersive and interactive advantages of virtual reality (VR) technology to develop a smoking cessation management program, aiming to enhance smoking cessation motivation, and reduce relapse risk.

Methods

Following the "content design - needs analysis - program development - product trial" framework: a comprehensive literature review summarized evidence-based smoking cessation strategies

and management experiences for lung cancer patients, laying the foundation for content design. Purposive sampling recruited 12 lung cancer patients with smoking history for semi-structured interviews, exploring their smoking cessation pain points, psychological needs, and VR functional design preferences. Combined with Nielsen's Usability Theory, an initial program draft was constructed. Eighteen interdisciplinary experts (oncology, nursing, psychology, information technology) conducted two rounds of Delphi consultations to optimize indicator settings and feasibility. Finally, 20 smoking lung cancer patients were conveniently sampled for a pilot trial to evaluate usability, immersion, and safety.

Results

The final VR-assisted smoking cessation management program included 5 primary indicators (VR immersive cognitive intervention, behavioral training, real-time physiological monitoring, personalized adjustment, continuous follow-up), with 17 secondary indicators and 32 tertiary indicators. All 20 patients completed the trial without interruptions. Usability evaluation showed a system usability scale score of 88.6 ± 7.0 , an immersion scale score of 202.2 ± 11.2 , and simulator sickness questionnaire scores ranging from 0 to 3 (median=1), with no patients reporting obvious discomfort or adverse reactions.

Conclusions

The VR-assisted smoking cessation management program for lung cancer patients is scientifically rigorous and practically feasible. By integrating immersive cognitive education, behavioral intervention, and real-time monitoring, it effectively enhances patients' smoking cessation motivation and behavioral adherence while ensuring safety and comfort.

DIGIT-068

ARE AI GENERATED SURVIVORSHIP CARE PLANS(SCPS) READY FOR WIDESPREAD USE? A REVIEW OF ACCURACY AND READABILITY OF LLM GENERATED SCPS

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Introduction

Cancer survivors have unmet needs that impact their health-related quality of life (HRQOL). These include management of ongoing side effects of treatment, surveillance for cancer recurrence, informational needs, health promotion, and care coordination. A Survivorship Care Plan (SCP) is a document generated and delivered at the end of curative cancer treatment, at the transition from active treatment to survivorship care. SCP uptake has been low as they are time-consuming and have shown limited benefit in survivorship care outcomes. Artificial intelligence/large language models (AI/LLM) can automate SCP generation, while allowing time for discussion.

Methods

We generated SCPS using prompts with a 45-year-old premenopausal woman with stage III breast cancer and a 57-year-old female with Stage III right-sided colon cancer. We compared the SCPS with the NCCN survivorship guidelines to assess concordance. We also assessed readability and reading grade level using the Flesh-Kincaid score.

Results

We generated 7 colon and 7 breast cancer SCPS using the most common AI/LLM models. It took less than a minute to generate SCPS using an AI/LLM model. All of the SCPS were accurate in addressing the general health needs (surveillance, diet, physical activity, alcohol consumption). We identified discrepancies in specific areas of the SCPS, as only two LLMs aligned with the NCCN on lymphedema management/prevention, and only 6.5% of the SCPS aligned with advice on

supplements. The average grade reading level was 11. Only 1 SCP generated was below the 50th percentile, and on average SCPS generated were in the 94th percentile for reading ease.

Chatbot	Breast Cancer Responses Similar to NCCN	Colon Cancer Responses Similar to NCCN
ChatGPT	50%	56%
Google Gemini	56%	63%
Perplexity AI	50%	50%
Open Evidence	63%	56%
DeepSeek	63%	38%
Ernie Bot (Baidu)	56%	56%
Institutional version of ChatGPT	56%	75%
Claude (Anthropic)	75%	63%

Chatbot	Percentile Reading Ease Breast	Percentile Grade Level Breast	Percentile Reading Ease Colon	Percentile Grade Level Colon
ChatGPT	0.9995	12.7	0.9998	11.6
Google Gemini	0.9233	9.8	0.9714	11.2
Perplexity AI	0.8752	9.7	0.4903	7.5
Open Evidence	0.9664	9.8	0.9999	13.4
DeepSeek	0.9999	13.1	0.9999	12.9
Ernie Bot (Baidu)	0.9995	11.7	0.9959	11
Institutional version of ChatGPT	0.9821	10.9	0.9271	9.2
Claude (Anthropic)	0.9908	10.6	0.9934	12.1

Conclusions

Using clinical vignettes, the SCPS generated through AI/LLMs were significantly less time-consuming however they had significant differences in concordance with NCCN guidelines. Additionally, the LLMs produced SCPS well above the average reading level, thus challenging for most patients to utilize.

DIGIT-070

DIGITAL HEALTH HUMANITIES FRAMEWORK FOR STREAMING MEDIA'S THERAPEUTIC POTENTIAL IN CANCER CARE: MIXED-METHOD ANALYSIS OF KPOP DEMON HUNTERS

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Introduction

Media on streaming platforms (Netflix, Disney+, Prime Video, YouTube) are increasingly being consumed globally, including by cancer patients. However, healthcare professionals (HCPs) lack the tools to systematically evaluate streaming media content (SMC) for supportive care. Music and narrative therapies are established non-pharmacological approaches, but their applications in SMC are still relatively unexplored. We developed the *K-Wave Element Mapping and Assessment (KEMA)* framework to systematically evaluate SMC's therapeutic potential, using Netflix's viral movie "*KPop Demon Hunters*" (KPDH) as an exemplar case.

Methods

A systematic review of music therapy and narrative therapy studies across 5 databases (PubMed, Google Scholar, Korea Citation Index,

ScienceDirect, and PolyLibSearch) identified various therapeutic themes and clinical mechanisms that are applicable when evaluating SMC. In-depth thematic analysis of KPDH examined how the themes were manifested through the story narrative, character arcs, song lyrics and musical elements; through which the KEMA framework was then developed.

Results

Nine therapeutic themes that were identified from 90 studies (75 music therapy, 15 narrative therapy) were used to develop KEMA (Table 1) – Cognitive Engagement (n=16), Community Support (n=8), Coping through Narration (n=3), Cultural Connectivity (n=5), Emotional Connection (n=3), Emotional Wellness (n=16), Healing from Distress (n=33), Self-Identity (n=5), and Taking Ownership of Life (n=1). All 9 themes were observed in KPDH. Through key movie examples, KEMA provides observable elements that HCPs can identify in SMC.

Themes (Number of Studies)	Clinical Mechanisms	Key Observable Elements in KPDH
Cognitive Engagement (n=16)	Rhythmic auditory stimulation, melodic intonation therapy	• Rhythm and action in songs "How It's Done" and "Takedown" • Rumi's voice loss and recovery → Healing journey
Community Support (n=8)	Group therapy builds peer rapport and resonance	• Hunter/x teammates share thoughts and emotions • Song lyrics of "What It Sounds Like" shift from "I" to "We" • Collective voices of fans singing → Defeat Gwi-Ita
Coping through Narration (n=3)	Cinematherapy, escapism	• Character journeys of Rumi and Jinu from shame/guilt to self-acceptance • Song lyrics show coping of difficult emotions: – "Free" (vulnerability, connection), "What It Sounds Like" (self-acceptance), "Takedown" (confrontation), "Golden" (recovery of self-worth)
Cultural Connectivity (n=5)	Cultural familiarity, validation and affirmation	• Iconic Seoul locations, Korean foods, English-Korean bilingual song lyrics
Emotional Connection (n=3)	Lyrical resonance, emotional outlets through shared experiences	• Different song tones to relatable themes: – "Free" (emotional ballad), "Takedown" (battle anthem), "Golden" (uplifting), "What It Sounds Like" (vulnerability)
Emotional Wellness (n=16)	Receptive/active interventions for emotional processing	• Rumi's dual identity struggle → Isolation → Acceptance → Healing • Song "What It Sounds Like" shows Rumi's self-acceptance → Healing
Healing from Distress (n=33)	Neurobiological regulation	• Characters' healing of anxiety/panic (Rumi) and guilt (Jinu) through confession and self-acceptance • Shared emotional experiences in the song "Free" → Healing
Self-Identity (n=5)	Self-awareness, exploration, narrative re-authoring	• Rumi hiding dual identity → Finding connection with Jinu (song "Free") → Self-acceptance and embracing true self (song "What It Sounds Like")
Taking Ownership of Life (n=1)	Passive subject to active authorship	• Rumi confronts and rejects external pressure/control → Embracing authentic self (song "What It Sounds Like")

Conclusions

KEMA addresses a clinical practice gap by enabling HCPs to systematically evaluate the therapeutic potential of SMC for cancer supportive care. This framework is platform-agnostic and can be applied to various media genres that patients already watch (e.g. K-dramas, Bollywood, Doramas/J-dramas, anime, musicals). HCPs can use KEMA as an adjunctive digital health humanities approach to address patients' psychosocial needs. We encourage user-testing in cross-cultural settings, and across a wide range of streaming media genres.

EDUCA-001
TRAINING AND SUPPORT NEEDS OF CLINICAL NURSE SPECIALISTS IN BLOOD CANCER CARE: A SCOPING REVIEW

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Introduction

Clinical Nurse Specialists (CNSs) play a pivotal role in blood cancer care, yet their training and support needs remain poorly defined. This scoping review aimed to map and describe existing evidence on the training and support needs of CNSs working in blood cancer care across the UK and comparable healthcare systems.

Methods

A scoping review was conducted following JBI methodology and reported in accordance with PRISMA-ScR guidelines. Searches were performed across CENTRAL, MEDLINE, PubMed, Embase, PsycINFO, CINAHL, and the British Education Index, supplemented by targeted searches of professional societies, policy documents, and charity resources. Eligible sources included empirical research, reports, guidelines, competency frameworks, and educational standards (2004-2025). Data were extracted and analysed using descriptive content analysis for qualitative findings and descriptive statistics for quantitative data.

Results

From 2,975 records, 26 sources representing 25 studies were included. Evidence originated primarily from the UK, Europe, North America, and Australia. Most studies were hospital-based and focused on specialist haematology/oncology services. Reported training needs encompassed specialist clinical knowledge of blood cancers and emerging therapies (e.g., CAR-T, immunotherapies), management of treatment-related toxicities, survivorship care, and psychosocial impacts. Studies also identified gaps in advanced clinical procedures, communication skills, research, leadership, and teaching competencies. Barriers to continuing education included workload, staffing shortages, and limited funding. Structured supervision, mentoring, peer support, and clear career pathways were consistently highlighted as essential for professional development and retention.

Conclusions

CNSs in blood cancer care require tailored, accessible education addressing specialist clinical knowledge, advanced skills, and leadership development. Institutional support for protected time, structured training programmes, and psychologically safe learning environments are considered critical to sustain workforce capability and improve patient outcomes.
Funder: Blood Cancer UK

EDUCA-003
A FRAMEWORK TO ENHANCE PATIENT PERSPECTIVES IN RESEARCH PRIORITISATION AND DESIGN

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Introduction

Effective partnerships with patients goes beyond improving healthcare efficiency; integration of diverse lived experiences fosters collaborative decision-making and deepens the understanding of patients' preferences. Consumers - people with a lived experience of cancer - have an expectation to be involved in research that influences health and care. Correspondingly, there is a responsibility to ensure involvement is maximised in publicly-funded research. An evaluation was conducted on two consumer-led research studies undertaken in personalised cancer care, and value-based cancer care.

Methods

A convergent, parallel mixed methods was undertaken including online survey, semi-structured interviews with consumers, program and executive staff, researchers and contractors (grouped as non-consumers), and review of resources created. The evaluation focused on the 1) establishment of consumer groups, 2) iterative approach with researchers to prioritise direction and structured education tailored to the research area, and 3) associated patient-facing activities as part of the research study.

Results

An in-depth narrative of participants' experiences identified elements of effective consumer-led research (n=12 consumers, n=11

non-consumer stakeholders). The identified core components include a) organisation and stakeholder readiness to commit resources and learn, b) optimal engagement opportunities, c) skill development and education, d) articulating roles and responsibilities, and e) creating an ecosystem for cohesive and respectful group dynamics. Bi-directional learning for all stakeholders was reflected in the experience score with an average success rating for consumers at 8.1/10, and for non-consumers 7.5/10. Additionally, assessing the likelihood to recommend this approach to others increased scores to 9/10 and 8.1/10 for consumers and non-consumers, respectively.

Conclusions

Meaningful involvement of people with lived experience in research strengthens relevance and having a structured consumer-led model aids design and implementation. The evaluated framework identified core elements of effectiveness and illustrates an adaptability to enhance consumer leadership at all stages of research.

EDUCA-005

THE ROLE OF RADIATION THERAPISTS IN CANCER SURVIVORSHIP: A CO-DESIGN PROJECT

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Introduction

Radiation Therapists (RTs) play a pivotal role in cancer care, yet they report a lack of knowledge, skills and confidence in providing survivorship care. Cancer survivors report unmet needs in communication, psychosocial support, and care continuity during treatment which are areas where RTs may make a significant impact. This co-design project sought to understand experiences related to survivorship care during radiation therapy with the aim of developing an evidence-based education resource for RTs to strengthen survivorship care delivery.

Methods

An experienced based co-design approach was used involving RTs, cancer survivors, caregivers, and oncology nurses. The process involved three stages: (1) capturing experiences of consumers and health professionals; (2) identifying key components of an educational resource (3) formalising draft resource content and format. Data were collected through individual patient interviews and group workshops. Content analysis was used with deductive coding related to patient experiences, health professional educational gaps, barriers and enablers to survivorship care provision, and resource design.

Results

Participants identified that person centred care was the key factor in survivorship care and suggested that online webinars with 5-6 modules on differing topics was the ideal format. Connection and respect, emotional support, individualised care and practical information were the main categories identified as important to patients. RTs identified role clarity, communication skills, patient care, empathy and compassion, advocacy and referral and professional capabilities as important areas for their role in survivorship care.

Conclusions

This co-design project identified patient and RT experiences related to survivorship care and highlighted areas of importance to both groups. These findings are now being used to develop a prototype resource to equip RTs with knowledge and skills to deliver holistic survivorship care, bridging a critical gap in practice. Next steps include pilot testing the educational resources including evaluation of learning outcomes and impact on practice.

EDUCA-006

KNOWLEDGE REGARDING GENETICS AND GENOMICS AND RELATED FACTORS AMONG NURSE PRACTITIONERS IN TAIWAN

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Introduction

The completion of the Human Genome Project and rapid advances in sequencing technologies have made genomics a cornerstone of precision medicine. Specialist nurse practitioners (NPs) play a vital role in applying genomic knowledge in clinical practice; however, studies worldwide show that nurses often lack sufficient genomic literacy. Limited data exist regarding the genomic knowledge of NPs in Taiwan.

Methods

A descriptive cross-sectional study was conducted to evaluate genomic knowledge and related factors among NPs in Taiwan. Participants were recruited through purposive sampling via the Taiwan Association of Nurse Practitioners and hospitals nationwide. Eligible participants held valid NP licenses and were currently practicing clinically. Data were collected online via the REDCap platform from May 7 to 31, 2025. The survey included demographic information and the Genomic Nursing Concept Inventory (GNCI), which assesses knowledge across four domains: genome basics, mutations, inheritance patterns, and genomic healthcare. Descriptive statistics and multiple linear regression analyses were performed.

Results

A total of 187 valid responses were analyzed. The mean GNCI correct rate was 34.3%, indicating limited genomic knowledge among Taiwanese NPs. The highest performance was in genomic healthcare (45.5%), while the lowest was in genome basics (26.0%). Regression analysis showed that holding a master's degree or above ($p = 0.01$) and working in surgical departments ($p = 0.04$) were positively associated with higher scores, whereas working in critical care ($p = 0.02$) was associated with lower scores.

Conclusions

Taiwanese NPs demonstrated limited genomic knowledge, particularly in genome fundamentals. Higher education and surgical specialization were linked to stronger genomic literacy. Targeted genomic education and specialty-specific training are urgently needed to enhance NPs' competencies and support the implementation of precision medicine in Taiwan.

EDUCA-007

A COMPREHENSIVE INTERVENTION STRATEGY TO INCREASE HEALTH LITERACY ON CANCER PREVENTION AND CARE

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Introduction

Health literacy is essential for effective cancer prevention, early detection, and survivorship. Yet, education programmes addressing this domain remain fragmented and unevenly evaluated. Within the EU4Health-funded *iINTERVENE* project, this work proposes a comprehensive intervention strategy to enhance health literacy among healthcare professionals, patients, and caregivers, supporting the creation of a Health Literacy Index and Virtual Library Hub for cancer care.

Methods

Building on insights from a multinational evidence review and stakeholder consultations, a two-phase mixed-method design was applied. Phase I applied the systematic literature review using Kirkpatrick and RE-AIM frameworks to co-develop and pilot educational modules addressing digital, communicative, and cultural competencies. Phase II focused on developing policy and National Community health Literacy programmes to embed health literacy education.

Results

Systematic synthesis of evidence demonstrated a lack of harmonisation in evaluation methods, with fewer identified programmes using validated outcome tools. Comparative coding across Kirkpatrick levels revealed that most initiatives measured satisfaction or short-term learning, while behavioural and system-level outcomes were rarely assessed. Cross-national mapping revealed considerable variation in how health literacy is taught and implemented, with fragmented or informal approaches in most settings. The need for practical, digitally accessible tools to engage patients and caregivers is identified. Comparative synthesis across partner countries produced a harmonised competency framework now informing the *iINTERVENE Health Literacy Index*. The analysis also uncovered strong synergy with other EU-funded initiatives—such as *TRANSITION* (digital oncology skills) and *eCAN Plus* (tele-oncology education)—creating opportunities for aligned digital content, shared evaluation metrics, and inter-project policy dialogue.

Conclusions

Findings inform a three-pillar intervention strategy: (1) competency-based training for healthcare professionals, (2) accessible digital learning for patients and caregivers, and (3) policy alignment to embed health literacy in national cancer plans. This evidence-driven framework supports *iINTERVENE*'s goal of building equitable, digitally enabled, and person-centred cancer prevention and care.

EDUCA-008

THE SILENT IMPACT: EDUCATIONAL AND CAREER DISRUPTIONS AMONG AYA WITH A PARENT OR SIBLING FACING CANCER

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Introduction

Adolescence and young adulthood are critical life stages for shaping future aspirations in education and career, which are key social determinants of health. Disruptions can lead to reduced economic productivity, social participation, and poorer wellbeing. While some interventions exist for AYA diagnosed with cancer, little evidence addresses the unique challenges faced by those impacted by a parent or sibling's cancer, an urgent gap this study sought to address.

Methods

The mixed-methods survey included author-developed items, validated measures and open-ended responses assessing education and employment participation, goals, barriers, support needs and suggestions for service development of AYA (12–25 years) impacted by a parent or sibling with cancer. Results were analysed using descriptive statistics and thematic analysis.

Results

Sixty-one AYA participated ($M_{age} = 17.6$ years; 68% female; 92% off-spring; 8% sibling). Only 50% reported being fully engaged in education or employment, a smaller proportion compared to same-age peers and those with their own cancer diagnosis (81% and 66%, respectively). Half reported changing their education (52%) and employment (46%) goals due to their cancer experience. Only one-third reported high confidence to achieve their goals, citing mental health, skills acquisition, and caregiving responsibilities as barriers. Only 28% felt very supported in education and employment, and over half (53%) felt worried

about selecting a career. Participants highlighted the need for services to help manage emotional impacts, provide academic support, and tailored career support assist with re-engagement in study, training, or work.

Conclusions

Young people with a parent or sibling diagnosed with cancer experience greater disruptions to education and career than those with their own cancer diagnosis, changing of goals, low confidence to achieve the goals and limited support to achieve their goals. These findings informed the expansion of an Education and Career Service to address critical gaps in support within a community-based setting.

EDUCA-009

ASSESSING SPECIALIST CANCER NURSING SKILLS – DEVELOPMENT, PSYCHOMETRIC TESTING AND IMPLEMENTATION OF THE CANCER NURSE SELF-ASSESSMENT TOOL (CAN-SAT)

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Introduction

Specialist cancer nurses (SCN) provide supportive care to people with cancer encompassing clinical, education, coordination and psychosocial care. SCNs have varied experience and educational preparation upon commencement of their roles and thus must be able to identify and address their individual learning needs to enable optimal care provision. To address this we developed, psychometrically tested and implemented a comprehensive Cancer Nurse Self-Assessment Tool (CaN-SAT).

Methods

The study was conducted over three phases. Phase 1: Tool structure and content were developed by an expert working group. Phase 2: Using a modified Delphi method and the Content Validation Index (CVI), each item was rated for relevance and clarity by cancer nursing experts. Consensus was defined as a CVI of ≥ 0.78 . Free-text feedback informed adaptations to item wording. Phase 3: Reliability of the tool was tested with current SCNs via an online survey.

Results

The initial CaN-SAT consisted of 15 elements of practice containing a total of 93 items. After round one of the modified Delphi ($n=24$ experts), three items achieved a CVI < 0.78 , 26 items were revised and one new item was added based on feedback. All revised items received a CVI above 0.78 in round two ($n=15$ experts). Cancer nurses ($n=56$) from across Australia completed the tool for reliability testing, achieving Cronbach's alpha coefficients between 0.92–0.98 for all elements.

Conclusions

The CaN-SAT is a comprehensive, valid and reliable tool that is useful for identifying individual nurse learning needs and for informing and evaluating cancer nursing education programs. Whilst developed in the Australian context, the CaN-SAT has transferability to other comprehensive cancer care settings. The tool has been implemented across the McGrath Cancer Care Nurse Service and will soon be hosted on the Cancer Nurses Society of Australia website for free access and use by all cancer nurses.

EDUCA-010**FROM KNOWLEDGE TO EMPOWERMENT: STRENGTHENING HEALTH LITERACY EDUCATION WORLDWIDE**

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Introduction

Health literacy is a cornerstone cancer prevention and survivorship care. Yet, education and training initiatives addressing health literacy remain fragmented, with limited integration into clinical practice. Within the EU4Health *INTERVENE* project, aim is to map, analyse existing health literacy education and training programmes worldwide. The findings guide the creation of a comprehensive **Cancer Health Literacy Index** and a **Virtual Library Hub** to support healthcare professionals, cancer patients, and caregivers in accessing high-quality, evidence-based resources for supportive care.

Methods

A systematic review was conducted following **PRISMA-ScR** guidelines. Six databases (PubMed, CINAHL, Scopus, Web of Science, ERIC, Embase) and grey literature sources were searched for studies describing or evaluating health literacy education interventions in healthcare and community settings. Data extraction was structured using the **Kirkpatrick Model** (reaction, learning, behaviour, results) and the **RE-AIM Framework** (reach, effectiveness, adoption, implementation, maintenance). Programmes were further analysed against the *Cancer Health Literacy Index* dimensions to assess their relevance to cancer prevention and care.

Results

The review findings reveal a diverse range of health literacy education initiatives delivered across clinical, academic, and community environments. From more than 3200 records screened, majority (>50%) of programmes targeted healthcare professionals, followed by patients, while caregivers were the least represented group. Mapping RE-AIM framework revealed strong *reach* and *effectiveness* in short-term knowledge and communication improvements but limited *adoption*, *implementation*, and *maintenance* within institutional settings. Analysis through the Kirkpatrick Model indicated that most interventions achieved positive outcomes at the *reaction* and *learning* levels, whereas evidence of sustained *behavioural change* and *results* impacting care quality or system integration was scarce. Digital and blended formats showed potential to enhance engagement.

Conclusions

Review highlights the urgent need for standardized, inclusive, sustainable health literacy education frameworks to directly inform the design of the *INTERVENE* **Cancer Health Literacy Index** and **Virtual Library Hub**, fostering digital, person-centred, equitable supportive cancer care worldwide.

EDUCA-011**PARTNERING WITH PURPOSE: PATHWAYS TO MEANINGFUL CONSUMER ENGAGEMENT**

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Introduction

Consumer engagement is recognised as essential for shaping research priorities, funding decisions, and reflect consumer needs. While co-design and inclusive practices are promoted as best practice, meaningful engagement remains challenging due to skill, knowledge and confidence gaps among consumers and researchers. Targeted, evidence-informed training is critical to building capability and fostering effective partnerships across the cancer research system.

Methods

Breast Cancer Network Australia (BCNA) delivered two in-person workshops in March and November 2025, co-designed through a lived experience-led, iterative approach. Programs included interactive sessions, co-presentations, and reflective practice activities. A mixed-methods evaluation captured pre- and post-workshop surveys (quantitative and qualitative) and six-month follow-up surveys with ethics approval obtained, supplemented by structured debriefs. Workshops aimed to build skills and confidence, strengthen relationships between consumers and researchers, and generate evidence to inform sustainable capacity-building initiatives.

Results

147 individuals attended both workshops including consumers, researchers, non-profit organisations and clinicians across cancer types. Key findings (pre- to post workshop changes):

- Perceived value of consumer engagement
March: +17% (consumers), +32% (researchers)
November: +11% (consumers), +34% (researchers)
 - Confidence to collaborate:
March: -8%(consumers), +19% (researchers)
November: +5% (consumers), +17% (researchers)
 - 100% reported new insights into consumer-researcher collaboration (November)
 - 95% felt the workshop met or exceeded expectations; 100% would attend again and recommend them to others (both)
- Participants reported strong relevance, and a clear demand for ongoing opportunities to connect, learn and collaborate. Six-month follow-up data (March) indicated sustained engagement beyond the event, with long-term evaluation of November data ongoing.

Conclusions

Codesigned, iterative and lived experience-led training strengthens consumer-researcher capability and fosters meaningful partnership across the cancer sector. Embedding lived experience in program design and evaluation enhances relevance and applicability. This approach positions consumer organisations as key partners in building a skilled, connected, and collaborative research ecosystem.

EDUCA-012**IMPACT OF SPECIALIST NURSE KNOWLEDGE-PROVIDING ACTIVITY ON LEARNING BARRIERS AND PERCEIVED USEFULNESS OF TRAINING AMONG ONCOLOGY NURSES IN RURAL JAPAN**

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Introduction

This study aimed to examine how the presence and perceived knowledge-providing activity of specialist nurses, including Certified Nurse Specialists and Certified Nurses, influence learning barriers,

information-seeking behavior, and perceived usefulness of external training among oncology nurses in rural Japan.

Methods

A cross-sectional anonymous questionnaire survey was conducted among 92 nurses who participated in ten independent oncology nursing workshops, each lasting approximately two hours, held between 2024 and 2025 in a rural prefecture in the Tohoku region of Japan. Based on nurses' perceptions, workplace status of specialist nurses was categorized as specialists actively providing up-to-date oncology nursing knowledge, specialists not actively providing such knowledge, or absence of specialists. Survey variables included learning barriers (lack of opportunities to learn from experts), frequency of internet-based information seeking, and perceived usefulness of training (1–10). Group differences were analyzed using chi-square tests and one-way analysis of variance with Tukey's HSD post hoc tests ($\alpha = 0.05$). Analyses used valid responses for each variable.

Results

Among valid respondents, 20 nurses worked in settings with knowledge-providing specialists, 15 with non-knowledge-providing specialists, and 40 with no specialists.

The proportion reporting a lack of opportunities to learn from experts was significantly higher in the non-knowledge-providing specialist group (73.3%) than in the no-specialist group (35.0%; $p = .041$).

Perceived usefulness of training differed significantly among the three groups ($p = .003$). The non-knowledge-providing specialist group reported significantly lower scores (mean = 8.00) than the no-specialist group (mean = 9.59; $p = .002$).

Conclusions

These findings suggest a paradox in rural oncology nursing practice: the presence of specialists who do not actively provide up-to-date knowledge may negatively affect nurses' learning environments and perceptions of training usefulness. Improving oncology nursing quality in rural areas requires not only specialist placement but also organizational support to promote active knowledge dissemination and clinical learning.

EDUCA-013

GENOMIC EDUCATION AND PRACTICE CHALLENGES AMONG ONCOLOGY NURSES IN TAIWAN

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Introduction

Previous studies have shown that nurses see the importance and hold a positive attitude toward integrating genetics/genomics into practice. However, they face limitations in developing genomic competence, hindering their ability to incorporate genomics into clinical care effectively and affecting the quality and safety of patient care. The purpose of this study is to examine the experience, need, possible barriers, and facilitators of using genetics/genomics medicine in clinical practice among oncology nurses.

Methods

Focus group interviews were conducted. Inclusion criteria for the nurses include 1) being a certified registered nurse, 2) having at least 6 months of experience working in oncology units, 3) the ability to speak and understand Chinese or Mandarin, and 4) willingness to participate in the study. All interviews were recorded and transcribed verbatim. Content analysis was then used to identify themes from the data.

Results

Results: Five focus groups with 18 nurses—staff nurses, case managers, and nurse practitioners—revealed four themes. 1) Misalignment

of Clinical Relevance: Diagnostic info limited to physicians and labs restricts impact. Nurses' unfamiliarity and patient misunderstanding highlight translating complex terms into actionable care. 2) Hope and Cost: Genetic testing, seen as a last resort, offers hope but involves high costs and uncertain results, causing psychological and financial stress. 3) Shifting Motivation: Clinical learning is passive, driven by curiosity, family, or requirements. Linking education to credits or growth can boost engagement, exposing facilitators and barriers. 4) Process and Ethics: Deciding when to test, refer, and navigate familial risks involves workflow, regulation, and ethical considerations.

Conclusions

Oncology nurses faced a challenging situation in the era of precision medicine. Advanced technology demands that oncology nurses deepen their understanding of genomic knowledge. However, limitations such as the treatment options based on genetic testing and associated costs, along with ethical considerations, influence nurses' motivation to receive further training in genomics.

EDUCA-014

MAPPING THE LANDSCAPE OF ONLINE EDUCATION IN CANCER SURVIVORSHIP: A MASCC SURVIVORSHIP STUDY GROUP REVIEW

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Introduction

With a growing number of cancer survivors there is a need to expand capacity to deliver care, yet cancer survivorship education is not integrated into professional education. We reviewed available English language online courses to assess covered topics and identify gaps that could inform the development of a more advanced educational offering.

Methods

We searched key terms in Google, reviewed cancer center websites, and queried members of MASCC Survivorship Study Group. We included active courses focused on general or specific survivorship topics available to external audiences and used a standardized data extraction form, including institution/organization, year developed/updated, intended audience, learning objectives, format, duration, didactic methods, sponsor, credits, publications and educational outcomes.

Results

We identified 12 courses developed in Australia, Canada, and the United States, ranging from 1-20 hours, produced and updated between 2010 and

2025 by universities (George Washington, Miami, Harvard, Melbourne, Stanford, Mayo Clinic), professional societies (Canadian Association of Nurses in Oncology, Oncology Nursing Society), Cancer Centers (MD Anderson Cancer Center), and nonprofit health organizations (American Cancer Society, Australian Cancer Survivorship Centre, After Cancer). Registration fees range from \$0- \$675(US). One course features a live lecture, two are self-guided through PDFs or slideshows, and nine are pre-recorded lectures, with one integrating live virtual telementoring. Nine courses address essential survivorship components such as disease specific surveillance for recurrence, new cancers, management of physical/ psychosocial long-term effects, health promotion and care coordination. One course focuses on specialized survivorship sexual health, two provide introductory content in 1-2 hours. We found two courses specifically designed for primary care clinicians and two for nurses. Most courses focused on knowledge acquisition, with limited opportunities for applied skill development.

Conclusions

Our review identified several comprehensive ongoing online courses that cover essential components of survivorship care. These findings support the need for more advanced curricula to enhance knowledge and develop skills.

EDUCA-015 INCLUDING PATIENT VIGNETTES IN AN EDUCATIONAL VIDEO INCREASES INTEREST IN PRE-TREATMENT DPYD TESTING

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Introduction

Dihydropyrimidine dehydrogenase (DPD) deficiency substantially increases risk of severe and fatal toxicity from fluoropyrimidine chemotherapy, yet *DPYD* testing uptake remains inconsistent. Effective patient-facing educational strategies may increase demand for testing and information dissemination. We evaluated whether a patient education video incorporating personal patient vignettes and medical information was more effective than an information-only video or no education in influencing attitudes toward *DPYD* testing.

Methods

Healthy volunteers in USA were randomized to view the Full Video (patient vignettes and medical information), Information-only Video, or No Video before completing a Qualtrics survey of their interest in *DPYD* testing with Likert scale responses. Survey responses were compared between groups using ANOVA and t-tests.

Results

Participants who viewed the Full Video (n=55) reported significantly greater interest in *DPYD* testing than those who viewed the Information-only Video (n=58) or No Video (n=60). Likelihood of requesting testing for oneself and recommending testing to friends or family was highest in the Full Video group (all $p < 0.001$, Table 1). Likelihood of requesting testing declined with increasing cost in all groups; however, participants in the Full Video condition demonstrated higher willingness to pay across all cost levels and were significantly more likely to request testing than Information-only Video participants at costs $\geq \$250$ (all $p < 0.05$, Table 2). Participants exposed to the Full Video were also more likely to state they would share information about *DPYD* testing on social media, with their friends or family, and with friends and family diagnosed with cancer compared with participants in other groups (all $p < 0.05$, Table 3).

Table 1: Likelihood of Requesting Testing for Self or Recommending to Friend or Family (Mean on scale 1-7)

	Full Video	Information-only Video	No Video	Full vs. No Video	Full vs. Information-Only Video
Request testing for self	6.85	6.19	5.07	$p < 0.001$	$p < 0.001$
Recommend testing to friend or family	6.79	6.30	4.79	$p < 0.001$	$p < 0.001$

Table 2: Likelihood to Request *DPYD* Testing at Different Costs (Mean on scale 1-7)

Test Cost	Full Video	Information-only Video	No Video	Full vs. No Video	Full vs. Information-Only Video
\$0	6.89	6.66	6.25	$p < 0.001$	$p = 0.25$
\$100	6.80	6.21	5.40	$p < 0.001$	$p = 0.15$
\$250	6.56	5.54	4.42	$p < 0.001$	$p = 0.001$
\$500	5.84	4.61	3.37	$p < 0.001$	$p < 0.001$
\$1,000	5.30	4.19	2.68	$p < 0.001$	$p = 0.002$

Table 3: Likelihood of Sharing *DPD* Deficiency Information and Videos (Mean on scale 1-5)

	Full Video	Information-only Video	No Video	Full vs. No Video	Full vs. Information-Only Video
Share information on Social Media	3.40	2.76	2.49	$p < 0.001$	$p = 0.022$
Share information with friends or family	4.38	3.85	3.88	$p = 0.019$	$p = 0.015$
Share information with friends or family with cancer	4.77	4.28	4.16	$p < 0.001$	$p = 0.007$

Conclusions

Patient education that combines medical information with personal vignettes significantly increases interest in *DPYD* testing, perceived value of testing, and likelihood of sharing information. Incorporating patient stories may enhance the impact of patient educational interventions aimed at reducing toxicity in patients with cancer.

EDUCA-016 EXAMINING THE BEHAVIOUR CHANGE FACTORS OF A CANCER HEALTHCARE WORKFORCE IN PROVIDING SEXUALITY CARE

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Introduction

Patients with cancer experience significant sexuality changes but have variable support. This study aimed to determine behaviour change factors influencing sexuality care provision, perceived barriers, and how practitioner training should be delivered to enhance competency.

Methods

A mixed methods study was conducted: quantitative electronic survey with qualitative in-person workshop. The survey was distributed to our workforce, comprising questions on demographics, preferred training methods and statements around behaviours involved in delivering care, informed by COM-B (Capability, Opportunity, Motivation-Behaviour) and AACT (Action, Actor, Context, Target) frameworks. Descriptive statistics and median Likert scale scores were calculated. The workshop was conducted with practitioners purposively and conveniently sampled, facilitated using a semi-structured guide, recorded, transcribed and data thematically analysed. Workshop and survey data were subsequently triangulated.

Results

Fifty survey responses were received, majority from nursing (84%). Average respondent age and years in practice were 39.5 years and 13.8, respectively. *Capability* and *opportunity* to provide sexuality care were relatively low (6/10 and 5/10), whilst *motivation* was high (8/10). Most believed initial conversations should occur through general resources (90%) and screening tools (88%), and preferred training methods were online modules (45/50; 90%) and workshops (33/50; 66%).

Six nurses participated in the workshop. Three themes were identified: 1) Service delivery, 2) Educational needs, 3) Resources. A *tiered training model* (Fig. 1) was recommended: mandatory online training for all patient-facing practitioners (bottom tier); resources e.g. videos, conversation prompts (middle tier); and workshops and role plays (top tier, for “champions”). A *candid educational delivery style* was felt beneficial for learning sexuality care e.g. navigating relationship dynamics.

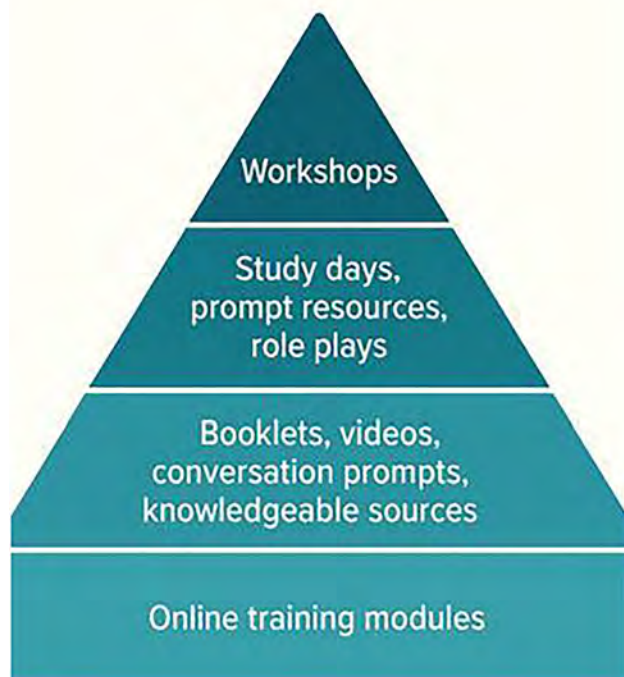


Fig 1: Training model

Conclusions

Whilst respondents do not have capability to provide care and are limited in opportunity, they are highly motivated to change this through intensive training. A tiered training model would meet the diverse needs of the workforce and of all patients with cancer.

EDUCA-017

MAPPING COMMUNICATION NEEDS AND PREFERENCES FOR HOMOLOGOUS RECOMBINATION DEFICIENCY TESTING AMONG PATIENTS AND PROVIDERS IN OVARIAN CANCER CARE

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Introduction

Homologous Recombination Deficiency (HRD) testing became standard of care in Australia in January 2024 for newly diagnosed patients with stage III-IV Epithelial Ovarian Cancer (EOC), expanding access to targeted treatments. However, there remains unclear pathways around informing patients and currently, no clinic-ready resources exist. Providing tailored information can alleviate patient distress and support informed decision-making. Our study aimed to map preferences for delivering HRD testing information from both patients and healthcare provider (HCP) perspectives to identify actionable opportunities for improvement.

Methods

We conducted six online focus groups, each with up to four participants, involving two stakeholder groups: EOC patients and caregivers, and HCPs, to achieve data saturation. Discussions were structured using the *Action, Actor, Context, Target, Time* (AACTT) framework to map current communication practices and preferred approaches. Transcripts underwent deductive coding using the AACTT framework followed by inductive analysis to determine who needs to do what, where, when and for whom to support effective HRD-related communication.

Results

Two key communication sub-actions were identified: the provision of HRD testing information and patient-initiated information seeking. Nine HCPs and ten patients/caregivers outlined their experiences with current practice, which were then compared to patients' preferences for care. Misalignment was evident in the *context* and *time* domains. Patients received primarily verbal information but expressed a strong preference for written materials to aid recall, share with others and guide online searches. Acknowledging the time pressures and heightened anxiety during initial consultations, patients wanted this information to be reinforced across multiple or extended appointments.

Conclusions

Applying the AACTT framework enabled systematic mapping of preferences across actions, actors, contexts, and timing. These insights will directly inform Phase 2 of the study, which focuses on co-designing a tailored, clinic-ready information resource aligned with patient priorities and clinical workflows. More broadly, this approach provides a reproducible model for translating future innovations into practice.

EDUCA-018

SATISFACTION AND CONTENT OF EXTERNAL TRAINING PROGRAMMES ON CANCER NURSING IN REGIONAL AREAS OF JAPAN

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Introduction

The purpose of this study is to clarify the satisfaction levels and content of external training programmes concerning cancer nursing.

Methods

A cross-sectional anonymous questionnaire survey was conducted among participants who attended ten separate tumour nursing workshops (each approximately two hours long) held in regional prefectures within Japan's Tōhoku region between 2024 and 2025. The questionnaire items comprised participant background, workshop evaluation (new insights, problem solving, satisfaction (lectures/exercises), practical application) (1–10 points). The workshop evaluation was categorised into three groups: “1-4”, “5-7”, and “8-10”. Inter-group comparisons of participant background and workshop evaluation were conducted using chi-square tests.

Results

There were 92 respondents to the questionnaire. Approximately 90% held nursing qualifications, and hospitals accounted for around 70% of their affiliated institutions. Participants from the central region of the prefecture constituted approximately 65% of the total. All respondents except one attended the training session in person. The only items showing significant differences in the chi-squared test were “New findings by affiliated institution” ($p=0.003$) and “New findings by presence/absence of resource nurses” ($p=0.008$). Analysis of open-ended responses regarding satisfaction revealed that satisfaction stemmed from nine distinct factors, including “The opportunity to experience the technology firsthand during the practical session” and “The ability to deepen learning in areas of interest and concern”.

Conclusions

Cancer nursing training programmes in regional areas, which included practical exercises, contributed to high satisfaction levels. Furthermore, the opportunity for nursing staff from multiple facilities to interact with each other and with workshop instructors also contributed to satisfaction. We believe that planning training workshops incorporating these opportunities will contribute to improving the quality of cancer nursing among nursing staff in regional areas.

EDUCA-019

IMPACT OF GENE EXPRESSION-BASED EDUCATION ON CHEMOTHERAPY DECISIONS AND OUTCOMES IN WOMEN WITH EARLY-STAGE BREAST CANCER – PRELIMINARY DATA ANALYSIS

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Introduction

Adjuvant chemotherapy offers uncertain benefit for women with early-stage HR-positive, HER2-negative breast cancer, often leading to decisional conflict and anxiety. Although gene expression profiling tests treatment selection, insufficient genomic understanding may impair value clarification and worsen psychological distress, highlighting the need for genomic education. To develop a genomic-based decision-aid video and evaluate its effects on patients' genomic knowledge, chemotherapy preferences, decisional conflict, and decisional regret.

Methods

Guided by the Ottawa Decision Support Framework, this prospective experimental study delivered a genomic-based decision-aid video to eligible women with early-stage breast cancer, with assessments at baseline (T0), 1 week (T1), 1 month (T2), and 2-month follow-ups (T3). The Generalized estimating equation (GEE) was used to estimate the outcomes, including knowledge, decisional conflict, and decisional regret.

Results

Twenty-three women were recruited in our study. The results showed that the knowledge at T1 and T2 improved after the intervention, though no significant difference was observed. Regarding chemotherapy preference, the proportion of patients with a clear preference increased from 47.8% to 71.4% after the intervention. Additionally,

patients' decision conflict scores decreased at both T1 and T2 post-intervention, with a significant difference observed at T2. Furthermore, patients' decision regret scores decreased, though this reduction was not statistically significant.

Conclusions

According to the study findings, genomic-based education can help patients make informed decisions about their chemotherapy preferences. However, the effects on knowledge enhancement, decision conflict, and decision regret have not yet been significant. Future research is recommended to explore the psychological aspects of chemotherapy choice among early-stage breast cancer patients in greater depth.

EDUCA-020

EVALUATING NURSE AND PATIENT EDUCATION FOR T CELL ENGAGER THERAPY AT CANCER CARE MANITOBA

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Introduction

T-cell engagers (TCE) are a newer novel systemic therapy used to treat cancer. This new therapy poses significant immune related adverse effects (irAE) to patients with dose initiation and escalation. These patients are at risk of cytokine release syndrome (CRS) and immune effector cell receptor associated neurotoxicity syndrome (ICANS) which can be fatal if not identified early. When T-cell engager therapy was introduced at Cancer Care Manitoba, comprehensive paper-based education tools and processes were developed for both nurses and patients to recognize and manage adverse effects.

This study aims to evaluate the perceived effectiveness of these tools by Oncology Nurses and patients at Cancer Care Manitoba.

Methods

The education tools and processes were provided to all nursing staff involved in T-cell engager therapy in January 2025. The evaluation of these tools and processes will be undertaken from January – March 2026 by administering surveys to nursing staff and patients that received T-cell engager therapy in 2025. Nursing staff will be asked to evaluate the effectiveness of the educational tools in supporting their own education as well as their ability to teach patients about TCE. Patients will be asked about their awareness of CRS and ICANS, confidence in recognizing symptoms, use of self-monitoring tools, and knowing when to contact their care team. Frequencies in responses will be calculated.

Results

It is anticipated that nurses awareness and confidence in delivering TCE education to patients and caregivers will be enhanced. Additionally, improved patient understanding, engagement, and self-management is expected, with particular emphasis on symptom recognition and timely communication with their care team.

Conclusions

The introduction of structured education tools and processes for TCE therapy demonstrates significant potential to improve both nursing practice and patient outcomes. Future work will focus on analyzing survey data to validate our anticipated outcomes and refine educational strategies.

EDUCA-021

UPDATED STANDARDS AND CAPABILITIES FOR SPECIALIZED ONCOLOGY NURSES: CANADIAN ASSOCIATION OF NURSES IN ONCOLOGY

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Introduction

In April 2026, the Canadian Association of Nurses in Oncology / Association canadienne des infirmières en oncologie (CANO/ACIO) will release an updated document, *Specialized Oncology Nurse: Specialty Practice Standards and Capabilities*. These revised standards reflect the evolving roles and responsibilities of oncology nursing practice, emphasizing the importance of lifelong learning to keep pace with rapid technological and therapeutic advancements, while maintaining a strong focus on human relationships and patient-centered care.

This presentation will showcase the newly developed Specialty Oncology Nursing (SON) Standards and Capabilities, emphasizing their structure, key components, and practical implications for care.

Methods

Two oncology nursing experts led the development of the updated CANO/ACIO SON Standards and Capabilities. The revision was informed by a comprehensive review of national and international specialty practice standards, published literature, and relevant resources and frameworks.

Results

The updated CANO/ACIO SON Standards and Capabilities provide a contemporary framework that enhances role clarity and encourages professional development, while promoting consistency and high-quality, patient-centered oncology nursing practice. These standards are intended for use by academics, clinicians and professional leaders to guide education and practice, to evaluate performance and support oncology nurses to achieve defined capabilities and shared goals.

Conclusions

These updated standards establish a strong foundation for future advancements, including revisions to key CANO/ACIO resources such as the Practice Framework, Systemic and Radiation Therapy Standards. They will also inform and shape other strategic initiatives aimed at strengthening oncology nursing practice across Canada. The standards could be of value to nurses in other countries.

EDUCA-022

DEVELOPMENT OF LINE APP EDUCATIONAL MATERIALS TO SUPPORT COLORECTAL CANCER PATIENTS UNDERGOING CHEMOTHERAPY

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Introduction

To develop a proactive, multifaceted, patient-centered LINE app that helps colorectal cancer patients undergoing chemotherapy maintain

and improve their independent lifestyles. While traditional methods relied on paper materials like pamphlets, we developed LINE app educational materials accessible 24hours a day.

Methods

Based on findings from the study “Perceptions of Colorectal Cancer Patients Receiving Oral Anticancer Drug Therapy in Outpatient Settings” and relevant literature, researchers thoroughly discussed and created the LINE app materials. The developed LINE app underwent multiple rounds of review and discussion among researchers before finalization. The LINE app enables easy information sharing as needed.

Results

The LINE app educational content provides basic knowledge about colorectal cancer, explains symptom management for side effects caused by anticancer drugs, and addresses anxieties patients may feel during treatment, along with coping strategies.

Conclusions

We plan to present the developed LINE app at the academic conference. Furthermore, we will subsequently apply the developed app to target patients and evaluate its effectiveness.

EDUCA-023

PHARMACOGENOMICS IN PAEDIATRIC ONCOLOGY: IDENTIFYING BARRIERS, DRIVING IMPLEMENTATION

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Introduction

Children with cancer often require complex and intensive treatment regimens, involving potent medications that need precise dosing to avoid adverse drug reactions (ADR). These ADRs can lead to long-term health complications and reduced quality of life. Optimising drug therapy through pharmacogenomics (PGx) has the potential to improve outcomes and reduce toxicity in this vulnerable population and is of prime importance. We set out to assess the unmet needs and perceived barriers related to the implementation of PGx in paediatric oncology, focusing on health-care professionals (HCPs) requirements and preferences.

Methods

Brief 15-minute semi-structured interviews were conducted with HCPs in a paediatric oncology institute to validate our assumptions and gain insights into their views on genotype-informed prescribing, educational needs, and preferred learning methods. Our assumptions included: (1) genotype-informed prescribing is relevant and potentially impactful factor in paediatric oncology, (2) HCPs would identify specific educational needs related to this area and (3) HCPs would have preferences for certain learning methods. Data analysis involved thematic coding and interpretation to identify key patterns and insights.

Results

All 15 HCPs favoured genotype-informed prescribing (e.g. PGx) to improve patient outcome and 19% identified education as a barrier to implementation. Education and equity gaps were evident, with only 13% of HCPs supporting universal pre-emptive PGx availability for all patients and 17% supported targeted testing after an ADR. Preferred learning methods included education delivered on ward rounds and face-to-face (39%) and visual (e.g. videos, apps) or practical education (23%) as beneficial.

Conclusions

Immersive or case-based education is preferable for enhancing health workforce capability in using PGx in practice. To enhance medication safety and efficacy through targeted PGx education programs, the next phase of research will explore barriers and enablers to practice change focussing on contextual differences to design and implement a scalable and sustainable multi-faceted immersive education intervention.

EDUCA-024**MENTION PGx AUS: IMMERSIVE EDUCATION FOR TRAINING AND IMPLEMENTATION OF A NATIONAL PHARMACOGENOMICS WORKFORCE IN AUSTRALIA**

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Introduction

In the era of personalised medicine, pharmacogenomics (PGx) provides an opportunity to reduce medication toxicity and increase efficacy. Whilst optimising drug therapy through PGx has the potential to improve outcomes in paediatric oncology, implementation remains limited. Healthcare professionals (HCPs) frequently cite a lack of specialised knowledge and the tension between service provision and educational opportunities as primary barriers. The MENTION PGx AUS program addresses this research gap by developing an evidence-based educational intervention designed to enhance HCP capability, opportunity, and motivation to integrate PGx into routine clinical practice.

Methods

This study employs a Design-Based Research framework across four iterative stages. Stage 1 (Plan) involves a literature review and stakeholder workshops to map barriers and enablers using the COM-B model and the Behaviour Change Wheel. Stage 2 (Develop) utilises co-design workshops to create immersive educational content and a "Theory of Action" linking intervention components to behavioral shifts. Stage 3 (Deliver) consists of a pilot implementation at The Royal Children's Hospital, Melbourne, using mixed-methods evaluation to assess feasibility and acceptability. Stage 4 (Scale) focuses on knowledge transfer and the development of national scaling guidelines.

Results

This research will yield a refined educational intervention tailored to the unique constraints of the paediatric oncology environment, such as a rotating workforce and high-stress care settings. Expected results include a comprehensive summary of educational evidence gaps and the establishment of a multidisciplinary stakeholder working group. Preliminary pilot data will evaluate changes in HCP confidence and the effectiveness of the immersive learning materials in addressing identified "capability" and "motivation" deficits.

Conclusions

MENTION PGx AUS demonstrates how theory-driven, co-designed education can overcome systemic barriers to precision medicine. By empowering local "Intervention Champions" and providing a scalable educational framework, this program aims to standardise PGx application across Australia, ultimately improving medication safety for vulnerable paediatric populations.

EDUCA-025**LEVEL OF HEALTH AWARENESS AMONG PATIENTS UNDERGOING CANCER TREATMENT.**

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Introduction

Health awareness is an individual's ability to obtain, process, and understand basic information about their health and, which is necessary to make decisions. In cancer patients it is a crucial for active participation in treatment, better understanding of the disease, and improved quality of life, available therapies, side effects as well as strengthening hope and a sense of agency, making the patient a partner in the treatment process. A quick test for

assessing health literacy is the "SILS." The purpose of the test is to quickly identify individuals with limited ability to read health-related materials in order to adapt the level of communication (simpler language) to their cognitive abilities. Scores above 2 points indicate a low level of health awareness.

Methods

The study sample consisted of 335 participants, treated in oncology departments in Opole. Women comprising the majority of the sample 71.3%. The median age was 65 years. 27.2% lived in rural areas, 30.4% in towns with fewer than 20,000, and 42.1% in cities with more than 20,000 inhabitants. 8.7% had primary education, 21.2% had vocational education, 38.5% had secondary education, and 31.6% had higher education. Nearly half were retired 49.6%, 38.8% were professionally active, and 11.0% were disability pensioners. A series of chi-square tests of independence was conducted to examine the associations between health awareness and selected sociodemographic variables.

Results

51.7% of respondents had a high level of health awareness. Largest proportion of participants reported that they sometimes needed such assistance 31.0% a comparable share indicated that they never required help 28.1%, while 23.6% reported needing assistance rarely. Less frequently, participants indicated that they often required help 15.5%. Table 1. The analysis (chi-square tests) that health awareness was not significantly associated with sex, the relationship between health awareness and place of residence did not reach statistical significance. Finally, no significant association was found between health awareness and educational level, although the p-value indicated a statistical trend. Table 2.

Table 1. The distribution of responses to the question assessing the frequency of needing assistance when reading written materials provided by a physician or pharmacy

Health awareness	n	%
Never (1 point)	94	28.1
Rarely (2 points)	79	23.6
Sometimes (3 points)	104	31.0
Often (4 points)	52	15.5
Always (5 points)	6	1.8
Missing data	0	0

Note. Percentages are based on the total sample.

Table 2. Effects of sex, place of residence, and education on the frequency of needing assistance when reading medical materials - Pearson's chi-square test

	χ^2	df	p	Cramer's V
Health awareness x sex	2.51	1	0.113	0.17
Health awareness x residence	2.07	2	0.355	0.16
Health awareness x education	6.77	3	0.080	0.28

Conclusions

The results suggest that health awareness does not differ significantly across sex, residence, or education in the studied sample.

EDUCA-026**EFFECTS OF NURSING-GUIDED ORAL CARE EDUCATION ON ORAL PAIN AND QUALITY OF LIFE IN HEAD AND NECK CANCER PATIENTS RECEIVING CHEMORADIOTHERAPY**

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Introduction**Background:**

Head and neck cancer is the fourth most common cancer among men in Taiwan. Oral mucositis is a major adverse effect of concurrent chemoradiotherapy, often causing oral pain and reduced quality of life.

Purpose:

This study examined the effects of a nursing-guided oral care education program on oral pain and quality of life in patients with head and neck cancer receiving concurrent chemoradiotherapy.

Methods

A quasi-experimental design was used. Newly diagnosed head and neck cancer patients receiving concurrent chemoradiotherapy were recruited from a radiation oncology outpatient clinic. The control group ($n = 32$) received routine care, while the experimental group ($n = 31$) received individualized nursing oral care education. Oral pain was measured using a 0–10 numeric rating scale, and quality of life was assessed using the Taiwanese versions of the EORTC QLQ-H&N35. Pain data were collected weekly during treatment and one month after treatment. Quality of life data were collected before radiotherapy, at week 5, at treatment completion, and one month post-treatment. Data were analyzed using two-way repeated measures ANCOVA.

Results

Quality of life–related symptoms and social functioning showed a non-linear pattern, with symptom severity increasing during treatment and partially improving afterward, yet remaining higher than baseline at one month post-treatment. During treatment, the experimental group reported significantly lower oral pain scores than the control group, although this effect did not persist at one month. The experimental group experienced less pain, xerostomia, and discomfort. Taste and smell problems worsened in the control group but remained stable in the experimental group. One month after treatment, the experimental group showed greater improvement in xerostomia and viscous saliva, and less distress related to sexual functioning.

Conclusions

Nursing-guided oral care education effectively reduced oral pain and symptom burden during concurrent chemoradiotherapy and may improve quality of life in patients with head and neck cancer.

EDUCA-027

EMPOWERMENT AND BALANCE: A MULTI-DIMENSIONAL ANALYSIS OF THE PRACTICE ENVIRONMENT AND ITS INFLUENCING FACTORS AMONG ONCOLOGY NURSE SPECIALISTS

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Introduction

The training and application of oncology nurse specialists (ONS) play a vital role in continuous supportive care in cancer, yet their practice environment remains understudied. Guided by an integrated “Empowerment-Balance” framework combining Structural Empowerment Theory and the Job-Demands-Resources model, this study investigated the practice environment and its influencing factors among 400 ONS have been trained in Guangdong Province, South China.

Methods

A cross-sectional survey was conducted in March 2024 using convenience and snowball sampling ($n=216$). The research instruments included a self-designed general information questionnaire (35 variables) and the revised Nurse Practice Environment Assessment Scale (10 dimensions, 37 items). Multiple linear regression analyzed the influencing factors.

Results

The mean total practice environment score was 81.19 ± 15.42 . Among the 10 dimensions, “nurse-physician collaboration” scored the highest (87.27 ± 16.14), while “participation in hospital management” scored the lowest (61.01 ± 28.69), demonstrating an “empowerment imbalance” characteristic — adequate empowerment in “support” (nurse-physician collaboration) and “information” (professional development), but inadequate empowerment in “power” (participation in hospital management) and “resources” (salary and benefits). Multiple regression analysis revealed that “self-rated role function fulfillment” ($\beta=0.324$) and “increased work pressure” ($\beta=-0.200$) were the strongest positive and negative predictors of the total practice environment score, respectively. “Post allowance for ONS” ($\beta=-0.247$), “employment type” ($\beta=-0.195$),

and “type of academic organization attended” ($\beta=0.119$) were also significant influencing factors. These five variables collectively explained 26.8% of the variance in the total practice environment score. Dimensional regression analysis further revealed: post allowance was the strongest or second strongest predictor in six dimensions (salary and treatment, staffing, internal support, etc.); role function fulfillment entered the regression equation in nine dimensions; increased work pressure showed significant negative prediction in seven dimensions.

Conclusions

ONS practice environments exhibit significant empowerment imbalance with power and resource deficits. Targeted interventions should address role empowerment, institutional incentives, resource support, and professional(educational) development to create enabling practice environments.

EDUCA-028

FINDING CANCER EARLY IN REGIONAL AND REMOTE WESTERN AUSTRALIA: PERCEPTIONS OF A STATEWIDE CANCER DETECTION CAMPAIGN

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Introduction

Supportive care in cancer includes strategies that reduce distress, improve access to care, and support timely engagement with health services. People living in regional and remote areas experience poorer cancer outcomes and greater psychosocial and practical burden, often linked to delayed symptom recognition and help-seeking. Public health campaigns promoting early cancer detection may play an important supportive care role by facilitating earlier presentation and reducing uncertainty. This study evaluated awareness, recall, and perceptions of Cancer Council Western Australia’s Find Cancer Early campaign among adults living in regional and remote Western Australia.

Methods

A cross-sectional evaluation was conducted using computer-assisted telephone interviews with adults aged ≥ 40 years residing in regional and remote Western Australia. Survey measures assessed exposure to the Find Cancer Early campaign, attitudes towards early detection and symptom awareness, and perceptions of campaign relevance, clarity, and credibility. Exposure was measured using unprompted recall and prompted recognition of television, radio, online, and print materials. Quantitative data were analysed using descriptive statistics and frequencies. Open-text descriptions of recalled advertising were analysed using inductive thematic analysis to capture contextual and supportive care–relevant interpretations.

Results

Of 5,088 participants, 67.1% recalled the campaign, indicating substantial reach in regional and remote communities. Attitudes towards early detection campaigns were positive. Campaign materials were perceived as credible and locally relevant, particularly when featuring rural doctors and regional champions. However, fewer participants reported learning new information, and recall of campaign content was often fragmented. Three themes were identified: Rural Doctors and Regional Champions, Pieces of the message, and Contextual influences, including service access and broader health messaging.

Conclusions

The Find Cancer Early campaign achieved strong reach and acceptability in regional and remote populations, supporting its role as a population-level supportive care intervention. Strengthening message integration and reinforcing actionable guidance may further support timely help-seeking and reduce cancer-related burden in underserved communities.

EDUCA-029**REACTIONS OF UNIVERSITY STUDENTS WHO WATCHED CANCER EDUCATION VIDEOS FOR ELEMENTARY SCHOOL STUDENTS**

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Introduction

In Japan, there have been numerous reports in recent years on the necessity and implementation of cancer education, aimed at promoting healthy lifestyle habits among adolescents and advancing cancer screening. To improve these issues in Japanese elementary school cancer education we developed “tailor-made elementary school cancer education video materials. The purpose of this study is to collect foundational data for developing future educational materials for AYAs, based on this teaching material.

Methods

University students were asked to select one of three video materials (Parents are undergoing treatment, Bereavement with parents, Parents are healthy), watch it, and answer a questionnaire. This study was conducted with the approval of the ethical committee from the researcher’s university.

Results

The responses from university students totaled 257, of which 86.4% were non-medical students and 13.6% were medical students. Among the respondents, 49.8% had taken cancer education courses. For video selection, 80.2% chose the “Parents are healthy” The most common reason for selection (multiple answers allowed) was cancer prevention, cited by 72.3%. Regarding reactions to the educational materials, key themes included the need for evidence-based explanations about cancer development, the body’s immune system, treatment methods, and carcinogens; increased awareness about their own and their family’s health; and thoughts about their family and children.

Conclusions

The results of this survey suggest that when creating educational materials for the AYAs, it is necessary to provide explanations based on medical evidence rather than relying on character creation or story-like dialogue, as seen in elementary school cancer education materials. Furthermore, it was found that university students’ choice of educational materials is significantly influenced by their awareness of cancer prevention. We plan to develop educational materials for the AYAs, that can be utilized in schools, homes, and medical institutions.

EDUCA-030**BUILDING THE BLUEPRINT: DEFINING ADVANCED PRACTICE PROVIDER COMPETENCIES IN ONCOLOGY URGENT CARE THROUGH A QUALITY IMPROVEMENT SURVEY**

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Introduction

Oncology Urgent Care (OUC) clinics are an emerging care model in the U.S., with limited literature focusing on care delivery and patient presentations. All describe advanced practice provider (APP)-led clinics, with one specifying oncology-certified APPs. No studies explore core competencies or onboarding. At our institution, the OUC clinic is staffed by experienced APPs from diverse clinical backgrounds with tailored onboarding. This project evaluates APP backgrounds and onboarding perceptions to guide the development of a centralized clinical handbook outlining core competencies and resources.

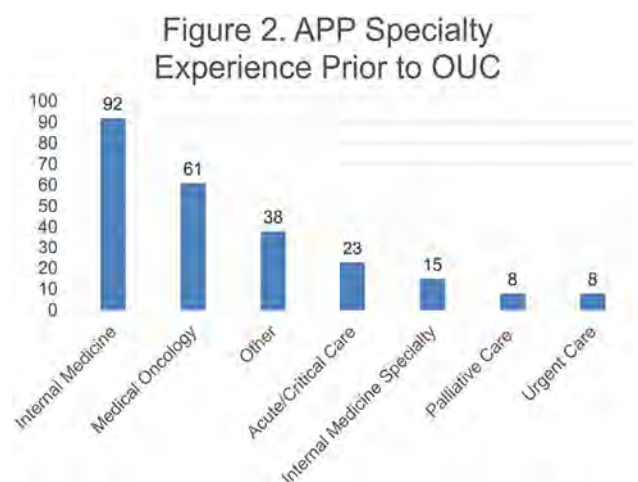
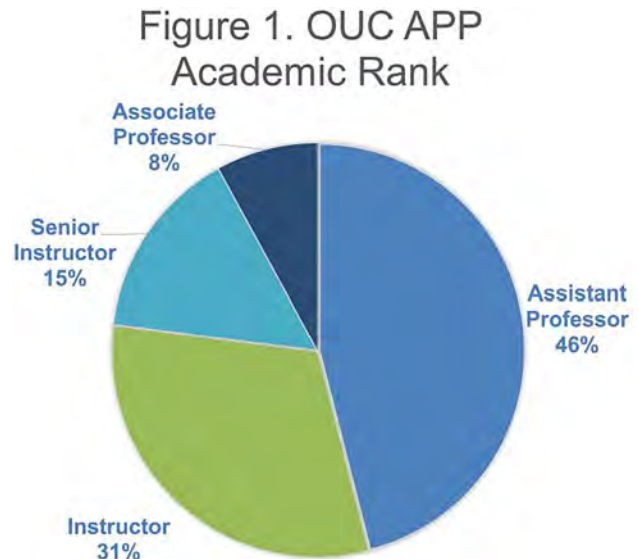
Methods

The project was exempt from IRB review. A voluntary, anonymous RedCap survey was conducted among APPs in the our institution’s OUC clinic, including 11 quantitative and 4 qualitative questions. No intervention occurred. Quantitative data were aggregated in RedCap; qualitative responses were de-identified, combined, and thematically analyzed.

Results

Thirteen APPs responded (87% response rate), with a median of 10 years of clinical experience. Fifty-four percent were Assistant Professor rank or above (Figure 1). All had worked in inpatient and academic settings. Prior to OUC, 85% had oncology experience, and 69% had palliative care exposure. Backgrounds included internal medicine (92%), medical oncology (61%), and acute/critical care (23%) (Figure 2).

Qualitative themes highlighted the value of experience in inpatient oncology, palliative care, managing acute oncology issues, and collaboration with outpatient teams. Respondents suggested additional training in cancer-directed therapies and palliative care.

**Conclusions**

APPs with backgrounds in oncology, inpatient care, and familiarity with institutional systems may be well-suited for OUC roles. Core competencies should draw from inpatient, oncology, and palliative care principles. A centralized electronic handbook will define competencies, offer resources, and guide best practices, with a potential digital platform to enhance accessibility and scalability. Publication of these findings will address a critical gap in OUC APP competencies and onboarding literature.

EDUCA-032**TELEHEALTH EDUCATION FOR PATIENTS WITH CANCER: A STANDALONE SOLUTION FOR SYMPTOM RELIEF**

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Introduction

Telehealth-delivered education provides an effective platform for chemotherapy teaching and supporting patient-driven symptom self-management. Advanced practice providers (APPs), including nurse practitioners and physician assistants, play a critical role in guiding oncology patients through treatment, particularly in symptom management and the prevention of avoidable emergency department (ED) visits. This study evaluated whether an APP-led telehealth symptom education and monitoring (TSEM) intervention enhanced patient engagement in symptom self-management and reduced ED utilization among cancer patients.

Methods

A retrospective, quasi-experimental cohort design study included 120 patients with gastrointestinal (GI), lung, or sarcoma cancers treated at a single academic institution. The intervention group ($n = 61$) received tailored telehealth education from specialized oncology APPs within seven days of treatment initiation. The control group ($n = 59$) received standard patient education. Outcomes included ED visits and symptom self-management engagement, measured via medical record-documented patient-initiated symptom support calls. Data were analyzed using multivariable binary logistic, linear, and negative-binomial regression models adjusted for demographic, clinical covariates.

Results

The intervention did not significantly reduce ED utilization overall. Patients with GI cancer in the TSEM group had increased odds of ED visits. However, patients in the TSEM group made significantly more symptom self-management calls (74% higher; $p < 0.05$), especially those with GI cancer, suggesting increased patient engagement in managing treatment-related symptoms.

Conclusions

Advanced practice provider-led telehealth education noticeably enhanced patient engagement in proactive symptom self-management, though it did not significantly reduce emergency department visits. These findings underscore the pivotal role of the APP team in providing individualized, cancer-specific education that empowers patients to identify and manage symptoms earlier in the treatment course. Future prospective, multi-site research is warranted to evaluate the long-term impact of nurse practitioner-driven, APP-led telehealth programs on acute care utilization, patient-reported outcomes, and quality of oncology care across diverse populations.

EDUCA-033**CULTURALLY TAILORED PREOPERATIVE AUDIO-VISUAL EDUCATION ON LYMPHEDEMA FOR BREAST CANCER PATIENTS: A PRE-POST STUDY FROM EGYPT**

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Introduction

Lymphedema after breast cancer surgery has major consequences and is often poorly explained to patients, particularly in low- and middle-income countries (LMICs). We evaluated whether a brief, culturally tailored pre-operative audio-visual intervention could improve patients' knowledge and beliefs about lymphedema and post-surgical arm care.

Methods

This single-center pre-post study was conducted at the Breast Cancer Comprehensive Center, National Cancer Institute, Cairo University. Consecutive women ≥ 18 years with operable breast cancer scheduled for upfront surgery completed a baseline Validated questionnaire on lymphedema awareness, risk factors, and beliefs (treatability/curability). Patients then viewed a 5-minute video in simple Egyptian Arabic covering lymphedema precautions and post-surgical exercises, followed by a 15–20-minute group discussion with patient educators. The same questionnaire plus satisfaction items was administered 30 days post-surgery. Changes in paired responses were analyzed using the Stuart–Maxwell marginal homogeneity test.

Results

Of 88 eligible patients, 76 completed both assessments (median age 49 years, range 32–79). At baseline, only 18.4% had heard of lymphedema; after the intervention, 100% reported awareness. Correct identification of key domains improved markedly: poor hygiene (44.7%→90.8%), arm trauma (51.3%→100%), arm constriction (57.9%→96.1%), arm overuse (61.8%→97.4%), and weight gain (26.3%→81.6%). Belief that lymphedema is treatable increased from 64.5% to 97.4%, and that it can be controlled/“completely curable” from 47.4% to 97.4%. All changes were statistically significant (standardized Stuart–Maxwell 4.58–6.18; $p < 0.001$). Most patients (90.8%) felt calmer before surgery, and all found the video helpful and easy to understand.

Table 1. Sociodemographic and clinical characteristics of the study cohort (N = 76)

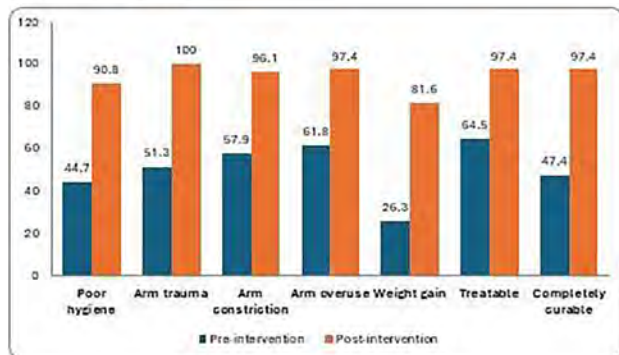
Variable	Category	n	%
Age	Median (range), years: 49 (32–79)	–	–
Gender	Female	76	100.0
Province	Greater Cairo	61	80.3
	Delta	6	7.9
	Suez	6	7.9
	Upper Egypt	3	3.9
Marital status	Married	64	84.2
	Divorced	5	6.6
	Widowed	7	9.2
Education	Illiterate	20	26.3
	Primary	4	5.3
	Secondary	30	39.5
	Tertiary	22	28.9
Type of surgery	Breast-conserving surgery	44	57.9
	Total mastectomy	25	32.9
	Total mastectomy + immediate reconstruction	7	9.2
Axillary surgery	Axillary lymph node dissection (ALND)	65	85.5
	Sentinel lymph node dissection (SLND)	11	14.5

Table 2. Change in lymphedema knowledge and beliefs before and after the educational intervention (N = 76)

Domain	Correct pre, n (%)	Correct post, n (%)	Absolute change (percentage points)	Standardized Stuart-Maxwell statistic	P-value
Poor hygiene	34 (44.7)	63 (80.8)	+46.1	5.00	<0.001
Arm constriction	44 (57.9)	73 (96.1)	+38.2	5.00	<0.001
Arm overuse	47 (61.8)	74 (97.4)	+35.6	4.88	<0.001
Weight gain	20 (26.3)	62 (81.6)	+55.3	6.18	<0.001
Treatable disease	40 (54.5)	74 (97.4)	+32.9	4.58	<0.001
Completely curable*	36 (47.4)	72 (97.4)	+50.0	5.44	<0.001

*Patients' belief that lymphedema can be controlled or substantially improved.

Abbreviation: Stuart-Maxwell = Stuart-Maxwell marginal homogeneity test.

Figure 1. Change in lymphedema knowledge and beliefs before and after the educational intervention

Conclusions

A short, low-cost audio-visual plus interactive educational intervention embedded in preoperative care produced statistically robust gains in lymphedema knowledge and more hopeful beliefs among breast cancer patients in an LMIC setting. This scalable model of patient education aligns with MASCC priorities in supportive cancer care and could be adapted across languages and centers to standardize counseling and empower patients in preventive self-management.

EDUCA-034

TRAUMA-INFORMED TRAINING IN EXERCISE ONCOLOGY: ACCEPTABILITY, PERCEIVED VALUE, AND IMPLICATIONS FOR PRACTICE

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Introduction

Exercise is a core component of supportive cancer care; however, trauma exposure and minority stress may undermine engagement with exercise services. Trauma-informed care (TIC) emphasises safety, trust, collaboration, and empowerment, yet its application within exercise oncology, and the education required to support its implementation, remains underdeveloped.

Methods

This program of research comprised three complementary studies. First, a two-year co-design study conducted at a major Australian tertiary cancer centre explored patient and clinician experiences of a cancer prehabilitation service. Second, insights from this work informed the development of a brief online TIC training module, which was evaluated using a mixed-methods design with Australian exercise oncology professionals (n = 55). Third, a qualitative study with LGBTIQ+ cancer survivors (n = 25) examined experiences of exercise and evaluated the relevance of the clinician-facing module for providing trauma-informed care to LGBTIQ+ communities.

Results

Co-design findings demonstrated that routine exercise practices could be experienced as triggering, reducing willingness to engage. Exercise oncology professionals rated the TIC module as highly acceptable, reporting strengthened intentions to deliver trauma-informed exercise care. Among LGBTIQ+ participants, high acceptability ratings reflected perceptions of the module as a starting point rather than a sufficient intervention. Participants emphasised the importance of inclusive communication, visible safety cues, and clinician confidence in responding to distress, alongside concerns that asynchronous e-learning alone may be insufficient to support relational and identity-affirming care.

Conclusions

Trauma-informed education can enhance workforce readiness to deliver psychologically safe exercise oncology services. Brief online training is acceptable and provides a valuable foundation; however, ongoing professional development to complement online learning, together with integration of trauma-informed principles into service protocols, is needed to better support exercise professionals in ensuring psychological safety. Future research should examine exercise service experiences among other priority groups identified in the Australian Cancer Plan to identify additional training and system-level requirements.

EDUCA-036

DEFINING CORE COMPETENCIES FOR FACILITATORS OF METASTATIC SUPPORT GROUPS: INSIGHTS FROM A NATIONAL CONSULTATION TO INFORM CURRICULUM DEVELOPMENT

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¹Metastatic Breast Cancer Action Australia, ²Myeloma Australia, Melbourne, ³University of Sydney, Faculty of Medicine and Health, Sydney, ⁴Breast Cancer Care WA, Perth, ⁵Cancer Council NSW, Sydney, ⁶Sensus Health Group, Sydney, ⁷Metastatic Breast Cancer Action Australia, Sydney, ⁸Metastatic Breast Cancer Action Australia, Melbourne, ⁹Advanced Breast Cancer Groups, Brisbane, ¹⁰Faculty of Medicine and Health, The University of Sydney, Sydney

Introduction

Support groups for people with metastatic cancer address critical psychosocial needs yet differ substantially from groups designed for those treated with curative intent. These differences create facilitation challenges and require competencies beyond standard support group training. To address this gap, Metastatic Breast Cancer Action Australia undertook a national consultation to inform the development of a metastatic cancer-specific facilitator training curriculum (see Figure below).



Methods

This mixed-methods study consulted with facilitators/managers of metastatic cancer support groups and experts in supportive care. Consultation comprised: (1) online survey (n=30); (2) four online focus groups (n=21); and (3) a full-day expert consensus workshop and interviews (n=11). Survey data were analysed descriptively; focus group data were analysed thematically to identify priority skills, challenges, and training needs. Consensus on core curriculum elements was reached through discussion and prioritisation exercises at the workshop (see Figure below).



Results

Survey respondents reported confidence in general facilitation skills but identified gaps in areas unique to metastatic contexts. One-third expressed a need for further training in managing death and dying (35%), fostering cohesion (31%), and maintaining boundaries (31%). Focus groups highlighted the emotional intensity of metastatic groups and the complexity of managing diverse illness trajectories, cultural perspectives, and misinformation. Participants emphasised the need for advanced communication skills, trauma-informed approaches, and strategies for facilitator self-care. The expert workshop synthesised findings into a modular curriculum framework comprising:

- **Foundational module:** planning, sustainability, group purpose/boundaries, and facilitator self-care.
- **Skills-based modules:** (1) death and dying, (2) balancing hope and reality, (3) managing conflict and group dynamics.

Supporting activities, including a community of practice, mentorship, and access to practical tools, were endorsed to ensure ongoing professional development and sustainability.

Conclusions

The study confirms the need for metastatic cancer-specific facilitator training and provides an evidence-informed framework for curriculum development. Stage 2 will focus on developing, piloting and evaluating the training modules.

EDUCA-037

STUDENT CONTRIBUTIONS TO CANCER CARE: A MIXED-METHODS SYSTEMATIC REVIEW

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Introduction

With rising demand for cancer care, the contributions of health professional students remain underexplored and underutilised. This review aims to identify student contributions to the care of people at risk of, or living with cancer and beyond, and their experiences of receiving cancer care or as carers.

Methods

A mixed methods systematic review of nine databases from inception to 12th September 2025 were searched to identify primary studies. Data extraction and critical appraisal of study methodology using JBI tools were conducted by two authors. Student contributions to people at risk of, or affected by cancer were narratively synthesised. Integrative meta-aggregation was conducted on student experiences.

Results

Thirty-two studies were included, reporting on 2,841 people at risk of, or affected by cancer and 1,258 students from 13 countries. Students contributed to care across the cancer continuum including prevention programs (25%), screening (9%), supervised clinical care in cancer treatment and palliative care settings (57%) and patient navigation (9%). Patients expressed satisfaction with student care, however, no studies reported patient health and wellbeing outcomes or carer outcomes. Students reported improvements in confidence, skills, knowledge and competency, while expressing the need for supportive learning environments and cancer specific preparation to enable effective interaction and contribution to patient care.

Conclusions

Students have demonstrated their ability to contribute across various roles in the cancer care continuum. Embedding cancer specific education within curricula is required to prepare students for future roles in cancer care.

EDUCA-038

CORE GENOMICS COMPETENCIES FOR ONCOLOGY NURSES: RESULTS FROM A SCOPING REVIEW.

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Introduction

Genomics and its technological advances have accelerated the development of precision cancer medicine. As frontline caregivers, nursing staff should have the essential knowledge and competencies in genomics. This research aimed to identify the core genomic competencies required in oncology nurse.

Methods

This scoping review was performed using the PRISMA-ScR checklist. Relevant search terms were used to determine the prevalence and correlates of nurse, genomic, genetic and competence. Articles were identified using MEDLINE, EMBASE, CINAHL, Cochrane, Scopus and Web of Science from inception to November 19, 2025.

Results

The initial search identified 4,274 studies, of which 15 were included in the scoping review. The competencies were organized in four main domains "knowledge" "attitude" "behavior" and "communication".

Conclusions

By clearly defining oncology nurses' core competencies in genomic care, this article identifies priority actions for genomics integration in oncology nursing practice. These findings can also guide nursing administrators in developing foundational policies to support expanded genomics-guided care.

EDUCA-040

EVALUATION OF AN ONLINE TRAINING MODULE FOR HEALTHCARE PROFESSIONALS TO ADDRESS FEAR OF CANCER RECURRENCE IN CLINICAL PRACTICE

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Introduction

Fear of cancer recurrence (FCR) is the most reported unmet supportive care need among people affected by cancer. The FCR Clinical Pathway provides a structured approach for multidisciplinary health professionals (HPs) to identify and assess FCR, then triage to stepped care. However, HPs are often unsure how to integrate FCR screening and management into routine care. Training has been identified as a key enabler of pathway implementation. This study evaluated an online FCR training module's acceptability and its impact on HP's knowledge and confidence, and perceived feasibility of pathway implementation.

Methods

A pre-post study was conducted with Australian HPs working with adult cancer survivors, recruited through peak bodies and non-government organisations. Participants completed online questionnaires pre-training (T0), immediately post-training (T1), and three-months post-training (T2). Measures included mean post-training acceptability, knowledge and confidence addressing FCR, feasibility of pathway implementation, and recommendations for module improvement. Quantitative data were analysed descriptively and with linear mixed models. Qualitative data were inductively content analysed.

Results

Ninety-one HPs (nurses n=65, 71%) completed T0, 60 completed the training, 61 completed T1, and 50 completed T2. Mean acceptability (n=60) was high (4.6/5, SD=0.5). Significant improvements from T0-T1 were observed in knowledge (MD=4.24/35, 95% CI [3.21,5.27], p<0.01), confidence (MD=1.11/4, 95% CI [0.94,1.28], p<0.01), and feasibility of pathway implementation (MD=0.4/5, 95% CI [0.23,0.58], p<0.01). Improvements were significantly attenuated from T1-T2 (knowledge/confidence: p<0.01, feasibility: p=0.04), but remained significantly higher than pre-training (all p<0.05). Most participants would recommend the training (58/60, 97%); additional communication examples were requested. Barriers to pathway implementation included limited specialist psychologist services (82%) and culturally appropriate interventions (76%).

Conclusions

The online training module was acceptable and improved HPs' knowledge, confidence, and perceived feasibility of implementing the pathway. Additional strategies are needed to sustain skills and address barriers to implementing the FCR pathway in routine practice.

EDUCA-041

A NURSING PROJECT TO ENHANCE CHEMOTHERAPY CARE COMPETENCIES AMONG MEDICAL INTENSIVE CARE UNIT(MICU) NURSES

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Introduction

Chemotherapy is an essential treatment for cancer patients; however, it is not routinely administered in ICU, resulting in limited experience among nurses. Due to the high toxicity of chemotherapy agents, errors in dosage or administration techniques, as well as extravasation, may lead to severe adverse effects and pose significant patient safety risks. Currently, nurses often rely on more experienced staff for chemotherapy administration, increasing workload and indicating a lack of standardized processes. Therefore, this nursing project was initiated to strengthen chemotherapy care competencies among nurses in the MICU through workflow optimization and structured education.

Methods

Through questionnaires, interviews, on-site observations, and root cause analysis, three root causes were identified: insufficient knowledge and hands-on experience, lack of standardized protocols and competency assessment, and inadequate equipment. Accordingly, improvement strategies were implemented, including establishing a chemotherapy cart and medication cabinet, developing quick-reference tools and instructional videos, standardizing audit processes, training seed nurses, and providing structured in-service education.

Results

After the interventions, chemotherapy-related knowledge accuracy improved from **54% to 89%**, and administration skill accuracy increased from **72.2% to 97.5%**. Clinical performance also improved, as the use of a dedicated chemotherapy cart and medication cabinet enabled clearer identification of chemotherapy drugs, reducing medication confusion and workspace clutter. Integrated PPE shortened preparation time, while quick-reference tools reduced stress during administration. Nurses reported enhanced confidence and perceived safety, and the strategy demonstrated potential for broader implementation in other ICUs.

Conclusions

Workflow improvement and standardized training effectively enhanced chemotherapy care safety and quality in the MICU. Initial challenges related to unfamiliarity with new equipment and limited training time were addressed through staggered sessions and online learning resources. Future efforts will focus on collaborating with oncology units to develop symptom-recognition tools, further strengthening clinical judgment, and supporting continuity of cancer care.

EMERG-002

ATO/ATRA-BASED REGIMEN OUTCOMES IN APLM: STEROID USAGE IS A MAJOR CONCERN IN LMICS

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Introduction

Induction therapy for APLM is based on ATO/ATRA based regimen. However, its usage is often linked to differentiation syndrome (DS), which necessitates the use of pre-emptive steroids. Given the increased risk of fungal and MDR bacterial infections in Indian setting, long-term steroid usage could be adverse. Therefore, this study was conducted in order to evaluate the complications associated with ATO/ATRA protocol in our context.

Methods

This retrospective single-center study was performed on the data retrieved from the APLM registry database maintained for an IEC-approved and CTRI registered study (CTRI/2020/02/023455). APLM patients aged ≥15 years treated between 2013–2018 were included in the analysis. Sanz risk criteria (low/intermediate vs. high risk) was used to stratify the patients. Low/intermediate-risk patients received ATO/ATRA, whereas high-risk patients received chemotherapy alongside ATO/ATRA. The primary

endpoint was the incidence of steroid-associated complications such as infections and hyperglycemia. Secondary endpoints included Event Free Survival (EFS), Overall Survival (OS), and induction mortality rate.

Results

A total of 149 patients were included, of whom 110 (73.8%) received ATO/ATRA with or without chemotherapy (study cohort), while 39 (26.1%) who received ATO and ATRA alone were excluded from the analysis. The mean age of 36.75 ± 14.10 years, and 60% of the participants were male. Table 1 describes baseline clinical status of patients. Induction mortality was 5.45% ($n=6$), and were due to infections ($n=3$), coagulopathy ($n=1$), and DS ($n=2$). Table-2 describes the steroid-associated toxicities. The 6-year survival probability was 90.6% (95% CI: 0.851 - 0.961) and EFS was 78.4% (95% CI: 0.704 - 0.864) (Table 3). Relapses occurred in 6.36% (medullary: 57.1%, CNS: 14.2%, both: 28.5%).

Table 1: Baseline Characteristics

Parameters	n (%)
Sanz Risk	
Low Risk	18 (16.4)
Intermediate Risk	70 (63.6)
High Risk	22 (20)
Baseline ECOG	
≤ 2	94 (85.4)
≥ 3	16 (14.5)
t (15;17) translocation	
Yes	103 (93.6)
No	7 (6.4)
Major Bleeding Manifestation	11 (10)

Table 2: Steroid-associated toxicities

Variables	Values, n (%)			
Steroid Users	83 (75.45)			
Hyperglycemia	11 (13.2)			
Fungal Pneumonia	18 (21.7)			
IFI Scoring				
	Possible	12 (66.6)		
	Probable	5 (27.7)		
	Proven	1 (5.5)		
Blood Stream Bacterial Infections	9 (10.8)			
Variables		Steroids		P Value
		Yes	No	
Hyperglycemia	Yes	11	0	0.021
	No	72	26	
Fungal Infection	No	71	21	0.724
	Yes	12	6	

Table 3: Event Free Survival Based on Sanz-Risk classification

			1 Year		6 Year		P Value
Sanz Risk	N	N of Events	Survival Probability	95% CI	Survival Probability	95% CI	
Low	18	2	0.938	0.819 - 1.000	0.865	0.691 - 1.000	0.636
Intermediate	70	13	0.852	0.768 - 0.937	0.804	0.709 - 0.900	
High	22	5	0.847	0.688 - 1.000	0.722	0.510 - 0.934	

Conclusions

Steroid-associated risks in APLM patients poses significant challenges in LMICs and highlights the need for careful clinical monitoring and improved supportive care.

EMERG-009

PSYCHOMETRIC EVALUATION OF THE TRADITIONAL CHINESE VERSION OF THE FUNCTIONAL ASSESSMENT OF CANCER THERAPY – IMMUNE CHECKPOINT MODULATOR

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Introduction

Immune Checkpoint Inhibitors (ICIs) are a novel, life-prolonging treatment for various cancers, yet cause unique immune-related adverse events (irAEs) distinct from chemotherapy. These toxicities can impair patients' overall well-being. The Functional Assessment of Cancer Therapy-Immune Checkpoint Modulator (FACT-ICM) was developed to specifically evaluate the Quality of Life of patients receiving ICIs. As no Traditional Chinese version exists, this study aimed to translate the FACT-ICM into Traditional Chinese and evaluate its psychometric properties within a Taiwanese population.

Methods

The FACT-ICM was translated into Traditional Chinese using a standardized methodology. Psychometric evaluation was subsequently performed on 226 cancer patients. The study assessed structural, convergent, discriminant, and criterion-related validity, as well as internal consistency. Test-retest reliability was evaluated by retesting 62 participants after a one-week interval.

Results

Exploratory factor analysis (EFA) of the ICM subscale identified six factors (skin, psychological, gastrointestinal/fatigue, flu-like, abdominal/bloating, and miscellaneous symptoms), accounting for 59.89% of the total variance. The scale demonstrated good internal consistency (Cronbach's $\alpha = 0.896$) and excellent test-retest reliability (ICC = 0.935). Convergent validity was established with a negative correlation with the Symptom Severity Scale ($r = -0.705$, $p < 0.001$). Discriminant validity was supported by higher scores in patients with Karnofsky Performance Status (KPS) > 80 ($t = -4.813$, $p < 0.001$). Criterion-related validity was confirmed by a positive correlation with European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30 (EORTC QLQ-C30) ($r = 0.585$, $p < 0.001$).

Conclusions

The Traditional Chinese FACT-ICM is a reliable and valid tool, filling a critical gap in supportive care for non-Western populations. Its six-factor structure provides a clinically actionable profile of ICI-related toxicities. This instrument facilitates early monitoring and individualized interventions to mitigate the impact of unique irAEs, ultimately enhancing the quality of life for cancer patients receiving ICIs.

EMERG-010

HEPATITIS AT HOME: AMBULATORY MANAGEMENT OF SEVERE IMMUNE CHECKPOINT INHIBITOR RELATED HEPATITIS

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Introduction

Liver toxicity is common in patients treated with immune checkpoint inhibitor (ICI) therapy. Most guidelines advocate for the admission of patients with grade 3/4 ICI mediated hepatitis. Ambulatory emergency care forms a fundamental part of the strategy of trying to ensure safe and sustainable acute care services.

Methods

An ambulatory pathway for ICI mediated hepatitis (CTCAE grade 3/4) was commenced in March 2023. Patients with ICI mediated hepatitis with normal synthetic liver function (bilirubin <30μmol/L, INR <1.5, albumin >30g/L and grade ≤2 encephalopathy) were considered as potential candidates for acute ambulatory management. Patients received either ambulatory intravenous methylprednisolone 1mg/kg for 2-3 days or 1mg/kg oral prednisolone. The primary outcome measure was 30-day readmission due to progressive/refractory hepatitis. Secondary outcome measures were decision to rechallenge with ICI therapy and 30-day all-cause mortality.

Results

Eighty-nine patients treated with ICI therapy presented with grade ≥ 3 transaminase rises during the study period. Thirty-eight patients were diagnosed with ICI mediated hepatitis of whom 23 (59%) patients were managed on the ambulatory pathway.

Ambulatory pathway patients had a median age of 62 years (37-78) and 10 (43.5%) were male. Median ALT was 323u/L (range 10-49u/L) and AST 302u/L (range 0-33u/L).

No patients required admission due to failure of ambulatory management or worsening liver function. No patients died of any cause within 30 days.

Conclusions

Our ambulatory care pathway has been utilised successfully to treat patients with severe ICI-mediated hepatitis. There were no observable adverse outcomes including readmissions and deaths. The adoption of this pathway for appropriate patients could potentially lead to a reduction in hospital admissions, reducing the financial burden of toxicity care, improved patient outcomes and enhancing patient experience.

EMERG-011

ORAL TOXICITIES SECONDARY TO TROP2 AND HER2 DIRECTED ANTIBODY DRUG CONJUGATES (ADC) IN PATIENTS WITH ADVANCED-STAGE CANCERS.

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Introduction

The aim of this retrospective multicenter study was to evaluate the frequency and clinical characteristics of oral toxicities (OTs) secondary to TROP2 and HER2-directed antibody–drug conjugates (ADCs) in patients with metastatic cancers.

Methods

A total of 207 patients treated with TROP2- or HER2-directed ADCs for metastatic or unresectable solid malignancies were included from Sapienza/Umberto I University Hospital and Miami Cancer Institute. Sociodemographic, clinical, and treatment data, along with OT features, including type, severity, onset, duration, and management, were collected from electronic medical records.

Results

Overall, 47 patients (22.7%) developed OTs, with a median onset time of 7.5 days (range: 1–358). The OT prevalence was similar between TROP2 (n=27, 23.5%) and HER2-directed (n=20, 21.7%) ADCs, however, oral mucositis (OM) was more frequent with TROP2-directed ADCs (14.8% vs 5.4%, $p=0.040$), whereas xerostomia (10.9% vs 6.1%, $p=0.308$) and dysgeusia (9.8% vs 5.2%, $p=0.282$) were more common with HER2-directed ADCs, although not reaching statistical significance. In terms of severity, HER2-directed ADCs were associated with higher OT scores in dysgeusia and dysesthesia but not in xerostomia. Patients receiving TROP2-directed ADCs had a 3.02-fold higher-risk of developing OM compared to those receiving HER2-directed ADCs (95% CI: 1.07–8.52, $p=0.040$), after adjusting for age and cancer-stage, and were significantly associated with a higher frequency of grade 2 OM ($p=0.041$), with lesions on the tongue ($p=0.005$) and also receiving treatment for OM ($p=0.001$) compared to HER2-directed ADCs. Ultimately, ADC dose reduction (DR) was required in 43 patients (20.8%) and was significantly more frequent with TROP2-directed ADCs (26.1% vs 14.1%, $p=0.039$).

Conclusions

TROP2-directed ADCs are associated with a higher-risk of OM ($p=0.040$), and greater treatment ($p=0.001$) and DR requirements ($p=0.039$). In contrast, HER2-directed ADCs are associated with more prevalent xerostomia and dysgeusia, a higher overall severity, a later onset of OTs, and similar or less duration.

EMERG-012

CORRELATION OF IMMUNE-RELATED ADVERSE EVENTS WITH CLINICAL RESPONSE IN PATIENTS TREATED WITH LOW-DOSE IMMUNE CHECKPOINT INHIBITORS: A REAL-WORLD STUDY

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Introduction

While immune-related adverse events (irAEs) are established biomarkers for treatment efficacy with standard dose immunotherapy, their predictive value in low dose regimens remains undefined. This

study evaluates the association between irAEs and clinical outcomes in patients receiving low dose immune checkpoint inhibitors (ICI) in a real world setting.

Immune checkpoint inhibitors (ICIs) can lead to immune-related adverse events (irAEs), which may be linked to clinical benefit. Data correlating irAEs with treatment response in low-dose ICI regimens are limited. We assessed this association in a real-world population.

Methods

We reviewed medical records of patients with advanced solid tumors who received low-dose nivolumab (≤ 1 mg/kg q2w) or pembrolizumab (≤ 100 mg q3w) between Jan 2021 and Dec 2023. irAEs were classified per CTCAE v5.0. Best overall response (BOR) was evaluated using RECIST v1.1. Association between irAEs and clinical outcomes was analyzed using chi-square tests and multivariable logistic regression.

Results

Among 102 patients, 41 (40.2%) developed ≥ 1 irAE. Most common irAEs were endocrinopathies (15%), dermatitis (10%) and colitis (6%). The objective response rate (ORR) was significantly higher in patients with irAEs vs those without (43.9% vs 18.3%, $p=0.005$). Disease control rate (DCR) was also higher (70.7% vs 39.4%, $p=0.002$). Median progression-free survival (PFS) was 5.8 months in the irAE group vs 2.6 months in the non-irAE group ($p=0.01$). On multivariable analysis, occurrence of irAEs was independently associated with improved ORR (OR 3.6, 95% CI: 1.5–8.7, $p=0.004$).

Table (max 600 characters):

Variable	irAE (n=41)	No irAE (n=61)	p-value
ORR (%)	43.9%	18.3%	0.005
DCR (%)	70.7%	39.4%	0.002
Median PFS (mo)	5.8	2.6	0.01

Conclusions

In this analysis, development of irAEs was significantly associated with higher response rates and prolonged PFS among patients receiving low-dose ICIs. These findings suggest irAEs may serve as predictive markers even in reduced-dose regimens, supporting their relevance in cost-sensitive and routine clinical practice.

EMERG-013

EPIDEMIOLOGICAL CHARACTERISTICS AND INFLUENCING FACTORS OF TIME TOXICITY IN PATIENTS WITH ADVANCED CANCER: A MULTICENTER CROSS-SECTIONAL STUDY

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Introduction

Time toxicity is an emerging non-somatic toxicity in cancer care, yet large-sample multicenter data on its epidemiological characteristics and influencing factors in advanced cancer patients are lacking in China. This study aims to investigate the prevalence, distribution features, and key influencing factors of time toxicity in this population, providing evidence for targeted mitigation strategies.

Methods

A multicenter cross-sectional study was conducted in 12 tertiary cancer centers across 7 provinces/municipalities (East, Central, West China) from February to October 2025. A validated integrated assessment questionnaire (Cronbach's $\alpha=0.823$, content validity index=0.94) was used to collect data on demographic characteristics, disease/treatment information, medical service utilization, and treatment-related time consumption. Time toxicity was defined as

total time spent on treatment-related activities (travel, waiting, procedures, etc.) in 1 month; moderate-to-severe time toxicity was defined as time consumption $>15\%$ of monthly total time. Univariate analysis (t-test, chi-square test) and multivariate logistic regression were used to identify influencing factors.

Results

A total of 2316 valid questionnaires were collected (53.4% male, median age 60 years). Top cancer types were gastrointestinal (35.2%), lung (27.8%), breast (15.3%), and head-neck cancer (8.7%). The overall prevalence of time toxicity was 81.6%, with 43.5% experiencing moderate-to-severe toxicity. Average monthly time consumption was 224.8 ± 61.5 hours (17.2% of monthly total), mainly from travel (34.1%), hospital waiting (27.6%), and treatment procedures (23.8%). Multivariate regression showed rural residence (OR=2.432), travel distance >50 km (OR=3.215), follow-up frequency ≥ 2 times/month (OR=2.846), combined treatment (OR=2.178), lack of caregivers (OR=1.963), and cross-provincial medical treatment (OR=2.674) were independent risk factors (all $P<0.05$).

Conclusions

Time toxicity is highly prevalent among Chinese advanced cancer patients, with nearly half facing moderate-to-severe burden. Geographic factors, medical accessibility, treatment intensity, social support, and medical-seeking scope are key influencers. Clinical practice should prioritize this emerging toxicity, with targeted interventions (optimized medical processes, telemedicine promotion, regional medical resource balancing) to alleviate patient time burden.

EMERG-014

PROPHYLACTIC BETA-BLOCKERS IN REDUCING ANTHRACYCLINE-RELATED HEART FAILURE: A RETROSPECTIVE STUDY USING GLOBAL AND SINGLE-CENTER TRINETX DATA

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Introduction

Anthracycline-based chemotherapy remains a cornerstone of breast cancer treatment but is limited by cardiotoxicity, particularly heart failure (HF). Although beta-blockers (BBs) are not routinely recommended for cardioprotection in current international guidelines, emerging evidence suggests a potential preventive role. Taichung Veterans General Hospital (TCVGH) has adopted a proactive strategy of prescribing low-dose BBs before anthracycline initiation in patients without pre-existing cardiovascular disease, providing a unique real-world context for evaluation.

Methods

Data were retrieved on December 19, 2025, from the TriNetX Global Collaborative Network and a single-center TriNetX dataset from TCVGH, encompassing electronic medical records—including diagnoses, procedures, medications, laboratory data, and genomic information—from approximately 89,288 patients across 165 healthcare organizations. Prophylactic BB users and non-users receiving anthracycline chemotherapy were identified. After propensity score matching, cohorts comprised 3,193 patients per group globally and 258 patients per group at TCVGH. The primary outcome was the 5-year incidence of HF, with secondary outcomes including all-cause mortality and cardiac safety indicators.

Results

In the global cohort, BB use was associated with a higher incidence of HF (hazard ratio 1.97, $p < 0.001$). In contrast, within the TCVGH cohort—where BBs were prescribed prophylactically using a standardized approach—baseline characteristics were well balanced. HF incidence did not differ significantly (3 vs. 4 cases), while all-cause mortality was lower in the BB group (28 vs. 55 deaths). No increase in adverse cardiac safety events was observed.

Conclusions

Within a prevention-oriented clinical strategy, prophylactic beta-blocker use was well tolerated and associated with reduced all-cause mortality without increasing HF risk. The higher HF incidence observed in the global cohort likely reflects indication bias related to baseline cardiovascular risk. Differences between global and single-center data highlight the importance of prescribing context in observational analyses and support the need for prospective randomized trials to clarify the cardioprotective role of beta-blockers during anthracycline-based chemotherapy.

EMERG-016

UNDERSTANDING OCCURRENCE OF IMMUNE-RELATED ADVERSE EVENTS AND TIME FROM FIRST EXPOSURE TO TOXICITY IN AN AUSTRALIAN STATE-WIDE HOSPITAL POPULATION.

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Introduction

Our study aimed to estimate rates of gastrointestinal and cardiac toxicities induced by immune checkpoint inhibitors (ICI) and compare exposure-to-toxicity time among hospital patients (admitted and emergency) cross Victoria, Australia using linked administrative datasets.

Methods

We analysed hospital episodes coded by International Statistical Classification of Diseases and Related Health Problems 10th Revision Australian Modification (ICD-10-AM) to infer toxicities. We used the *Transforming Outcomes through Research in Cancer Healthcare in VICTORIA Cohort* containing patients in the Victorian Cancer Registry diagnosed with specific cancers between 2010-2021, linked to Pharmaceutical Benefits Scheme (PBS) data. ICI cohort received at least one dose of PBS-funded ICI. Non-ICI cohort received any other PBS-funded cancer medication. We applied ICD-10-AM-defined irAE to the Victorian Admitted Episodes Dataset (VAED) and Victorian Emergency Minimum Dataset (VEMD) to estimate toxicity rates and calculate exposure-to-toxicity time.

Results

Among 222,332 patients, 8,003 were identified for ICI-exposed cohort and 98,168 for non-ICI-exposed cohort. Colitis/enterocolitis was the most common gastrointestinal irAE in VAED and VEMD at a combined rate of 22.28%. Time from exposure to gastrointestinal toxicities was shorter among ICI-exposed compared to non-ICI-exposed patients. Pooled cumulative distribution in VAED and VEMD showed 25% of gastrointestinal events occurred within 47 days (ICI-exposed) and 118 days (non-ICI-exposed). Cardiac toxicities were inferred from VAED. Inference rates for myocarditis and pericarditis were 0.84% and 0.70%, respectively. Pooled cumulative distribution in VAED and VEMD showed that 25% of cardiac events happened within 42 days (ICI-exposed) and 309 days (non-ICI-exposed). Rare types of irAE were also inferred including neurological.

Conclusions

Our findings show that inferred gastrointestinal and cardiac toxicities occurred sooner after first dose of ICI treatment compared to first dose of non-ICI treatment. Our research contributes to growing knowledge on real-world irAE prevalence. Importantly, identifying irAE occurrence at a population level is a crucial step towards evaluating factors associated with irAE risk.

EMERG-017

A SINGLE-ITEM INDICATOR OF SIDE-EFFECT BURDEN FOR PEOPLE WITH CANCER: THE PSYCHOMETRIC PERFORMANCE OF EORTC ITEM Q168

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Introduction

There is growing interest in using patient-reported outcome measures to capture treatment tolerability in cancer trials. The US Food and Drug Administration guidance on core patient-reported outcomes in cancer clinical trials highlights the potential value of single items, including item Q168 “To what extent have you been troubled with side-effects from your treatment” from the European Organisation for Research and Treatment of Cancer (EORTC) Item Library. This study examined the psychometric properties of item Q168 in a diverse sample of cancer patients.

Methods

Data were drawn from a cross-sectional, online panel study conducted in 11 countries. Patients completed the core EORTC QLQ-C30 questionnaire and item Q168. Psychometric analyses focused on convergent validity, assessed using polyserial correlations between item Q168 and the QLQ-C30 Global Health Status domain, and known-groups validity, examined through comparison across clinical and functional subgroups using ANOVA and chi-square analyses.

Results

The sample included 2,643 cancer patients (mean age 58 years; 50% female), representing a range of cancer diagnoses, most commonly breast (21%) and prostate cancer (14%). Over two-thirds (72%) of participants reported being “Not at All” or “A little” troubled by side effects. Item Q168 demonstrated expected convergent associations with related constructs: higher side effect burden was moderately correlated with poorer Global Health Status ($r=-0.37$), lower functioning ($r=-0.46$ to -0.69), and greater symptom burden ($r=0.32$ to 0.52). Known-groups validity was supported by significant differences in Q168 responses according to cancer status and functional status (both $p<0.001$), with worsening clinical status associated with greater reported bother from side effects.

Conclusions

Overall, EORTC item Q168 performed as expected, with evidence of both convergent and known-groups validity across cancer types and countries, supporting its use as an efficient global indicator of side effect burden. This single-item indicator may facilitate efficient assessment of treatment tolerability in clinical trials and routine care.

EMERG-018

CHLOROPHYLLIN OR PLACEBO FOR REDUCING ACUTE TOXICITY IN ADVANCED RECTAL CANCER PATIENTS: PHASE II DOUBLE BLINDED RCT

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Introduction

Total neoadjuvant therapy (TNT) and brachytherapy (BCT) are intensified treatments aimed at improving outcomes in rectal cancer. However, gastrointestinal, haematological, and genitourinary (GI/HT/GU) toxicities affect almost 70% of patients, which may compromise therapeutic efficacy. Sodium-copper-chlorophyllin (CHL) has potential cyto-protective, radioprotective, and antioxidative properties attributed to its ability to activate Nrf2.

Methods

This phase II, randomised, double-blinded, placebo-controlled trial included locally advanced rectal cancer patients, who underwent short-course radiotherapy (SCRT: 25-30Gy in five fractions), 18 weeks of chemotherapy (CAPOX/FOLFOX/single-agent 5-FU) interdigitated with brachytherapy. CHL(750mg/OD) or placebo was started 10-14 days before and continued till 3 months post-treatment completion, with the primary objective of reducing cumulative acute GI/GU/HT $\geq$ grade 2 CTCAE v5 toxicity rates from an estimated 70 to 40%. The planned sample size was 76 (Fisher's exact test, power 80%, 2-sided alpha 10% and drop-out rate 10%). The toxicity endpoints were compared using risk ratios (RR) with 95% CI. The adjusted RR accounting for potential confounders (TNT regimen, brachytherapy status) was also estimated using modified Poisson regression with log link and robust (sandwich) variance estimator. Two-sided $p < 0.05$ was considered significant. CTRI/2023/04/051458.

Results

Of 76 patients randomised, 73 initiated treatment (37-CHL, 36-Placebo). The primary endpoint of cumulative GI/GU/HT grade >2 toxicity was significantly less in CHL arm in both unadjusted (94.4% versus 64.9%; $RR=0.69$; $CI[0.53-0.88]$; $p=0.003$) and adjusted analysis ($RR=0.69$; $CI[0.54-0.90]$; $p=0.005$). Similarly, grade >3 GI/GU/HT toxicity showed significant improvement in both unadjusted (52.8% versus 27%; $RR=0.512$; $CI[0.277-0.945]$ $p=0.032$) and adjusted analysis ($RR=0.52$; $95\%CI:0.27-0.99$; $p=0.049$). Site-specific analysis for grade >2 and >3 toxicity showed significant reduction for GI (86.1% vs 45.9%, $p<0.001$; and 22.2 vs 2.7%, $p=0.014$, respectively), a non-significant trend for HT (72.2% vs 59.5%; $p=0.37$ and 41.7% vs 24.3%; $p=0.18$, respectively) and no difference for GU.

Conclusions

Chlorophyllin significantly improved acute toxicity during aggressive neoadjuvant treatment with chemotherapy and radiotherapy for locally advanced rectal cancer.

EMERG-019

HOSPITALIZATION DUE TO IMMUNE-RELATED ADVERSE EVENTS AMONG PATIENTS TREATED WITH IMMUNE CHECKPOINT INHIBITORS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Immune-related adverse events (irAEs) can lead to hospitalization in patients receiving immune checkpoint inhibitors (ICIs) and impose significant clinical and financial burdens. The incidence of and risk factors for irAE-related hospitalizations in ICIs have not been systematically characterized.

Methods

We searched PubMed, EMBASE, CINAHL, and Scopus from January 2000 to June 2025 for observational studies and clinical trials reporting hospitalization in patients treated with ICI. The primary analyses focused on outcomes during or within one year of treatment. Random-effects meta-analyses pooled incidences of all-cause and irAE-related hospitalizations. Subgroup analyses explored differences by cancer type and ICI regimens and identified most common irAEs leading to hospitalization and associated risk factors.

Results

A total of 96 studies were included (93 observational, 3 trials). Most studies included multiple cancer types ($n=51$, 53.1%), followed by lung cancer ($n=22$, 22.9%) and melanoma ($n=15$, 15.6%) only. Among studies reporting outcomes during or within one year after completion of treatment, the pooled incidence of all-cause hospitalization in ICI-treated patients was 41.4% (95% $CI=30.1-53.7\%$), and 9.6% (95% $CI=7.1-12.9\%$) of patients were hospitalized due to irAE. Among patients developing irAEs, 27% required hospitalization due to irAE. Combination ICI therapy (using more than one ICI agent) was associated with a more than threefold higher incidence of irAE-related hospitalization compared with monotherapy (31.7% vs 8.7%). A higher incidence of hospitalization was also found in patients with comorbidities such as COPD. While patterns differ by cancer type, colitis (21.9%) and pneumonitis (19.8%) were the most common irAEs at hospitalization.

Conclusions

Over 40% of patients receiving ICI were hospitalized, with approximately one in four hospitalizations related to irAEs. Hospitalization incidence was substantially higher among patients receiving combination ICI compared with single-agent therapy. Optimizing toxicity prevention and early intervention to reduce irAE-related hospitalizations is critical to minimizing the clinical and economic burden of immunotherapy.

EMERG-023

QUANTIFICATION OF PATIENTS WITH OR AT RISK OF DIABETES AND RECEIVING CORTICOSTEROIDS DURING ANTICANCER THERAPY FOR SERVICE PLANNING

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Introduction

Approximately 20% of cancer patients also have diabetes, and systemic anti-cancer therapies (SACT), particularly when combined with corticosteroids, can exacerbate hyperglycaemia. The Joint British Diabetes Societies (JBDS) recommend the early identification and management of patients at high risk of developing hyperglycaemia. This includes a pre-existing diagnosis of diabetes as well as other risk factors. We aimed to evaluate the prevalence of diabetes, pre-diabetes and high-risk features among cancer patients receiving SACT, and to assess current screening practices to identify resource requirements and inform future service models.

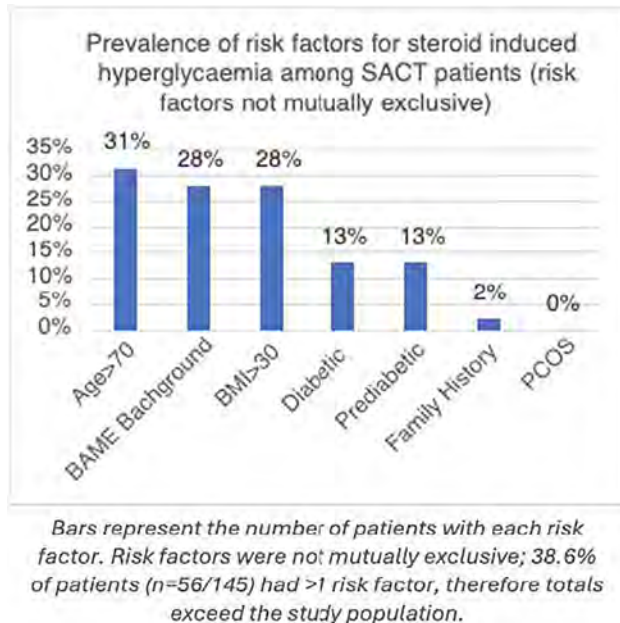
Methods

Retrospective analysis of patients receiving short-course dexamethasone with SACT over a six-month period (February-July 2025). Digital health records were reviewed to determine the proportion of outpatients with a diagnosis of diabetes, pre-diabetes or predisposing risk factors and to assess whether these patients were appropriately screened before commencing SACT.

Results

A total of 145 patients were included in the final analysis. Of these, 68% (99/145) had at least one risk factor for steroid-induced hyperglycaemia.

The most common risk factor was age > 70 years, followed by BMI > 30 and BAME ethnicity, then prediabetes and pre-existing diabetes (both 13.8%, 20/145). Screening for diabetes and its risk factors among patients commencing SACT was poorly documented. However, 67% of patients completed peri-procedural questionnaires that screened for diabetes (nonetheless, identifying only two patients in whom diabetes was the sole risk factor). HbA1c monitoring within the year prior to starting SACT was performed in 49.7% of patients, with 22.8% of those (33/145) conducted at the cancer hospital. The average HbA1c was 40.9 mmol/mol.



Conclusions

Two-thirds of patients receiving SACT with steroids are at risk of developing diabetes and therefore require appropriate hyperglycaemia risk management. To align clinical practice with SACT board guidance on glycaemia management in cancer patients, a multidisciplinary steering committee is implementing a pathway to screen, monitor and manage steroid and SACT-induced hyperglycaemia.

EMERG-024

IMMUNOTHERAPY ASSOCIATED COLITIS IN HOSPITALIZED SOLID TUMORS PATIENTS RISK FACTORS

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Introduction

Immunotherapy has significantly improved clinical outcomes for cancer patients. However, it can lead to potential serious complications such as Colitis. The objective of this study is to identify risk factors associated with the development of immunotherapy-related (IR) Colitis

Methods

We conducted a retrospective chart review of solid-tumor patients admitted to our tertiary center's hospital medicine service for

immunotherapy-related toxicities between 2021 and 2022, to identify cases of immunotherapy-related Colitis. Patient demographics and baseline characteristics were analyzed by descriptive statistics. Logistic regression analysis was used to assess the association between baseline characteristics and the relative risk of developing IR Colitis

Characteristic	n (%)
Age (mean ± SD)	62.1 (12.3)
Gender (male/female)	112/32
Race (White/Black/Asian/Hispanic/Latino/Other)	108/24/12/10/8
Line of therapy (1st/2nd/3rd/4th/5th/6th/7th/8th/9th/10th)	112/24/12/10/8/6/4/3/2/1
Immunotherapy (PD-1/PD-L1/CTLA-4/Other)	112/24/12/10/8/6/4/3/2/1
Baseline characteristics (Diabetes/Prediabetes/Family History/PCOS)	112/24/12/10/8/6/4/3/2/1
Outcome (Colitis/No Colitis)	30/114

Results

During the study period, 144 patients were admitted to the hospital for IR toxicity related complications. Of those, 30 (20.8%) were diagnosed with Colitis. Baseline characteristics and demographics are shown in table 1. After logistic regression univariate analysis, characteristics associated with risk of developing IR colitis included: Line of therapy (OR 1.93 CI 1.20 – 3.12 p = 0.007), use of Ipililumab (OR 4.40 CI 1.92 – 10.02 p = < 0.001), Nivolumab use (OR 2.09 CI 0.97 – 4.49 p = 0.059), Anti CTLA-4 (OR 5.45 CI 1.37 – 21.76 p = 0.016) and Anti CTLA-4 with Anti PD-1 (OR 4.66 CI 1.90 – 11.39 p = 0.001) respectively

Conclusions

Use of Ipililumab, Anti CTLA-4 alone or in combination with Anti PD-1, carries a higher risk of developing IR Colitis. Close surveillance and early diagnosis of IR colitis may improve outcomes in these population. Larger studies are needed to corroborate these findings

EMERG-027

IMMUNE CHECKPOINT INHIBITORS IN HEAD AND NECK CANCER: A SCOPING REVIEW OF TREATMENT RELATED ADVERSE EVENTS

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Introduction

Established treatments for head and neck squamous cell carcinoma (HNSCC) are supported by well-defined allied health models, however, the incorporation of immune checkpoint inhibitors (ICI) introduces new toxicities to this patient cohort. This scoping review

maps the treatment-related adverse events (TRAEs) and impact on health-related quality of life (HRQoL) reported in the literature for HNSCC patients receiving ICIs to synthesize the current evidence base and identify opportunities relevant to supportive care planning.

Methods

Reported symptoms were extracted using a scoping review methodology and the PRISMA-ScR reporting guideline. Search terms included head and neck cancer AND immunotherapy AND symptoms. Four databases were included for studies published between 2014–2025.

Results

We identified 2523 papers. Following screening, 99 unique studies were included. Of these, 46 studies reported treatment-related adverse events in ICI monotherapy studies. Symptoms experienced by patients receiving ICI monotherapy are heterogeneous, predominantly low grade, and generally emerge within the first few months of treatment. Remaining studies (n=53) reported ICIs used in combination with other multimodality therapies, documenting a small increase in TRAEs. Most studies reported discontinuation rates of <10% though the range varied widely across studies (0%–16.7%). Quality of life at baseline is generally poor, underlining the need for psychosocial support. Inconsistencies in TRAE reporting and limited use of patient reported outcome measures (PROMs) and HRQoL data was identified.

Conclusions

ICI treatment has both functional and psychosocial impacts, many of which can be effectively managed through allied health interventions. Early screening using ICI-specific PROMs is recommended to assist early identification and management of issues that can be supported through allied health. Variability in TRAE reporting and scarce baseline functional and HRQoL data leave only a partial picture of ICI-related impacts in HNSCC. An improved understanding of these toxicities is essential to inform future effective detection, monitoring, and supportive care models.

EMERG-028

THE UTILITY OF A SPECIALIST, BESPOKE COMPLEX TOXICITY CLINIC UTILISING AN INTEGRATED APPROACH TO MANAGEMENT

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Introduction

In 2024 a bespoke specialist oncotoxicity and immunotherapy service (OTIS) was established at Sussex Cancer Centre, Sussex, UK supported by the Surrey and Sussex Cancer Alliance supporting a population of 2.2million. Its purpose was the management and support of patients experiencing toxicities of oncological treatment incorporating a spectrum of supportive services including advice and guidance, remote monitoring, complex toxicity management and additional immunosuppression pathways. A weekly bespoke toxicity clinic was established in October 2024.

Methods

Patients were discussed at the weekly pan-regional toxicity advice and guidance meeting. Those identified as having complex or refractory toxicity were seen within seven days by a experienced oncotoxicity medical oncologist. Patients were optimised in terms of their immunosuppression, organ-specific support and the utilisation of supportive oncology therapies.

Results

Sixty-six pan-tumour patients were reviewed in 12 months. The majority were rheumatological/MSK toxicities (n=25; 38%). Other complex toxicities: respiratory (n=6); GI/HPB (n=13); cardiac (n=5); subacute

cytokine release syndrome (CRS) (n=4), CNS (n=4), nephritis (n=2). Organ and symptom supportive medications were optimised. Corticosteroids were rationalised with 93% (n=62) of patients stopping therapeutic dose corticosteroids. Additional immunosuppression agents included T-cell-directed and cytokine-directed therapies. Short term biological agents were used in 23% (n=15) with the majority of patients receiving anti-TNFα agents. All patients with CRS experienced symptom resolution with corticosteroids +/- anti-IL6. Patients were supported with OTIS telephone support alongside clinic. The median visit number was 2.5 (range 1–11) with 87% (n=58) of patients discharged from clinic with 97% (n=56) (85% (n=56) of the clinic population) being discharged as toxicity has resolved.

Conclusions

Specialty complex oncotoxicity clinics led to improved management of toxicity with a triad of therapies: immunosuppression, organ optimisation and supportive symptom management alongside an integrative support approach with expert review; majority toxicity resolution despite complex/refractory toxicity and optimisation of immunosuppression, care coordination and symptom management.

EMERG-029

CTLA-4 CHECKPOINT INHIBITOR-INDUCED COLITIS IS CHARACTERIZED BY EXPANSION OF TC17 AND REGULATORY T CELLS

Elisabeth Orgler-Gasche¹, Jiao Shen², Mary Thompson¹, Abigail Elvin-Ivey¹, Sophia Shaughnessy¹, Sofia Arnet¹, Enoch Chung¹, Keri M Sullivan¹, Stephanie Dougan², Michael Dougan¹

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Introduction

Immune checkpoint inhibitors (ICIs) reactivate exhausted T cells by targeting Cytotoxic T-Lymphocyte-Associated protein 4 (CTLA-4) and Programmed Death-1 (PD-1) / PD-Ligand-1 (PD-L1). However, they frequently cause immune-related adverse events causing considerable morbidity and limiting combination treatments. Colitis is a common toxicity, affecting 14–20% of patients receiving dual CTLA-4/PD-1 therapy and 2–5% of those treated with PD-1 inhibitors alone. It is unclear why dual ICI therapy leads to much higher incidence of colitis, but CTLA-4 antibodies are thought to preferentially deplete regulatory T cells (Tregs), due to their high CTLA-4 expression. Here, we report results of single-cell RNA sequencing (scRNA-seq) of colon biopsies from 52 patients to define differences among colitis subtypes.

Methods

Two published scRNA-seq datasets of ICI colitis were integrated with 6 newly sequenced biopsies from PD-1 ICI colitis patients to allow for direct comparison across colitis subtypes. In total, samples from 14 PD-1 ICI colitis, 13 dual ICI colitis, 9 ICI controls, and 16 healthy controls were analyzed.

Results

Both ICI colitis subtypes featured dramatic increases in cycling and cytotoxic effector CD8+ T cells, replicating published findings. However, only dual ICI colitis was uniquely characterized by an expansion of Th17-like CD8+ T cells (Tc17) expressing high levels of *IL17A*, *CCR6* and *IL23R*. Additionally, both ICI colitis subtypes revealed expansions of Tregs and cytotoxic effector CD4+ T cells. Treg subclustering identified 11 subclusters, all of which were increased or unchanged relative to total CD4+ T cells across both colitis types.

Figure 1.

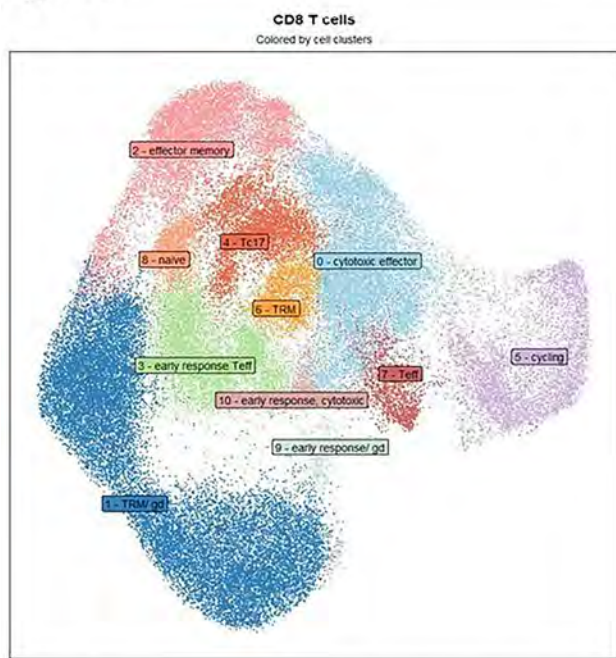


Figure 1. A. Sub-clustering of CD8 T cells from all samples

Figure 2.

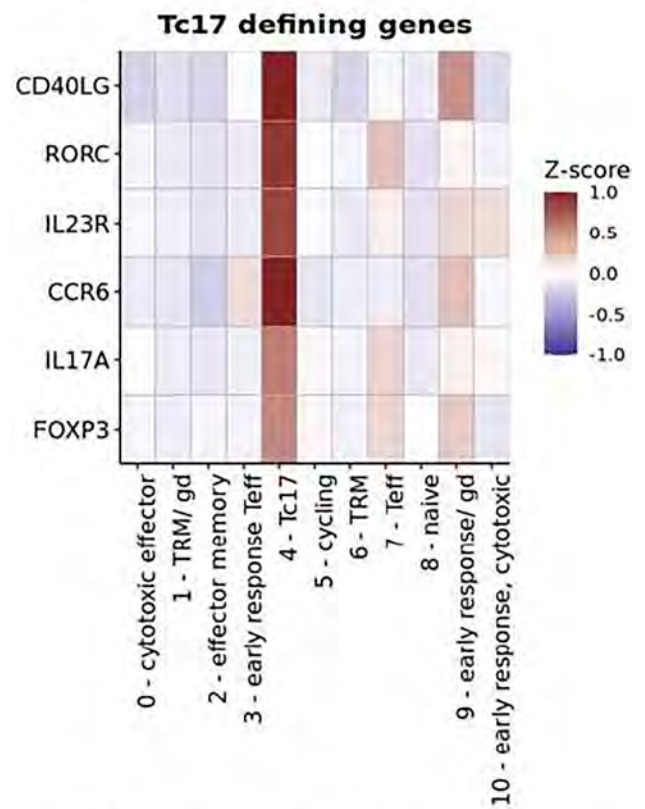


Figure 2. Heatmap of subcluster defining genes reveals unique features of each Treg subcluster type.

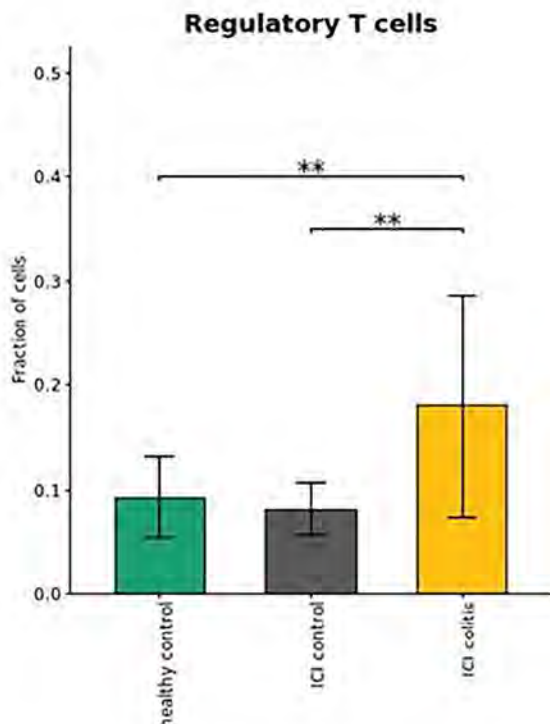
Figure 3.

Figure 1. Comparison of abundance of Regulatory T cells between different groups. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$, Kruskal-Wallis test

Conclusions

Using this uniquely large scRNA-seq dataset, we show that Treg depletion by CTLA-4-blocking antibodies is not a contributing mechanism in dual ICI colitis; instead, Tregs expand in both colitis subtypes. Additionally, we identify a unique increase in Tc17 cells in dual ICI colitis, underscoring a potential pathogenic role for these cytotoxic CD8+ T cells.

EMERG-030

EXPANSION OF CYTOTOXIC CD8+ T CELLS IS REVERSED BY INFlixIMAB AND CORTICOSTEROIDS IN CHECKPOINT INHIBITOR-INDUCED COLITIS

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Introduction

With the success of immune checkpoint inhibitors (ICI), inflammatory toxicities have become common, leading to significant morbidity. Colitis is one of the most common toxicities affecting 14–20% of patients receiving combination ICIs. Treatment of ICI colitis is often empirical, with corticosteroids as first-line therapy, despite their potential

to impair anti-tumor response and limitations for long-term use. In contrast, biologicals offer a targeted approach and can be used alongside ICI therapy. Single-cell RNA sequencing (scRNA-Seq) studies have identified TNF- α as a promising therapeutic target in ICI colitis. Here, we use scRNA-Seq of colon biopsies from ICI colitis patients treated with corticosteroids or infliximab to define the cellular effects of these therapies.

Methods

In this randomized, open-label phase 2 clinical trial (NCT04305145), 16 patients with ICI colitis received either high-dose corticosteroids or infliximab. Colon biopsies were collected at colitis diagnosis and at a follow-up endoscopy 1–3 months after treatment initiation, resulting in 22 paired samples. Biopsies underwent scRNA-Seq and were integrated with a published dataset of ICI colitis patients and controls to create a robust dataset referencing a healthy state. In total, samples from 24 ICI colitis patients, 6 ICI-treated controls, and 8 healthy controls were analyzed.

Results

At diagnosis, ICI colitis was characterized by an expansion of cycling and cytotoxic CD8+ and regulatory T cells (Tregs), reproducing published findings. After colitis treatment, these changes were reversed: both cytotoxic CD8+ T cells and Tregs returned to baseline levels. Notably, there was an increase in CD8+ cells expressing high levels of apoptosis-associated markers after treatment.

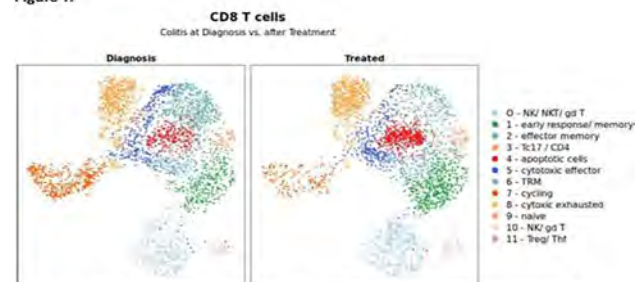
Figure 1.

Figure 1. UMAP of CD8+ T cell clusters shown separately for ICI colitis at time of diagnosis and after receiving treatment. The cell clusters of cycling (dark orange) and cytotoxic (dark blue) cells are decreased and cells expressing apoptosis-associated markers (red) are increased after treatment.

Conclusions

These findings provide the first insights into how treatment of ICI colitis influences immune cell populations and mediates therapeutic effects. We show that the hallmark features of ICI colitis are largely reversed following treatment, accompanied by an increase in apoptotic CD8+ T cells.

EMERG-031

DEVELOPING MASCC'S FIRST CLINICAL PRACTICE GUIDELINES FOR THE PREVENTION AND MANAGEMENT OF DIARRHEA INDUCED BY ORAL TARGETED AGENTS

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Introduction

Targeted agents, particularly tyrosine kinase inhibitors, induce significant diarrhea that negatively impacts quality of life, treatment adherence and survival, whilst also driving significant financial toxicity to the individual and broader healthcare setting. Currently, there are no clinical practice guidelines to inform how diarrhea induced by targeted therapy can be mitigated, or symptoms managed.

Methods

To address this significant gap in clinical knowledge and practice, the MASCC Mucositis and Emerging Toxicities Study Groups collaborated to systematically review and synthesise current evidence on potential strategies for prevention or management of diarrhea caused by targeted therapy. A search strategy was developed in partnership with a medical librarian from Adelaide University, and MEDLINE, PubMed, and Embase databases were searched from January 1997 until present as per criteria outlined in Table 1. The protocol was registered on PROSPERO (ID: 1333308).

Table 1. Eligibility criteria for database search.

Category	Inclusion Criteria	Exclusion Criteria
Study characteristics	Randomised control trials; observational studies	<i>In vitro</i> , <i>in vivo</i> , and <i>ex vivo</i> studies; studies not in English; case studies; abstracts of conference reports; clinical trial protocols
Population	People diagnosed with solid or haematological malignancies; aged >18 years; treated with targeted agent in isolation or combination with other anti-cancer treatments	Aged <18 years; not treated with targeted agent
Intervention/exposure	Prospective assessment of prevention/management interventions for targeted agent-induced diarrhea	No prevention/management intervention for targeted agent-induced diarrhea assessed
Comparator/context	Passive comparator (e.g. placebo or no treatment); active comparator (e.g. other anti-diarrheal intervention)	N/A
Outcome	Occurrence/severity of diarrhea either by patient-reported outcome (e.g. Bristol Stool) or by healthcare professional (e.g. CTCAE); duration of diarrhea; prevention/reduction of incident of diarrhea (acute/delayed); type of stool (e.g. Bristol stool chart); frequency of defecation; presence of blood in stool; associated pain with stool; fever; vomiting; emergency hospital visits; changes in eating habits	N/A

Results

In total, 5265 studies were identified, with 302 deemed eligible after title and abstract review. Full text review and data extraction is ongoing, with key data to be extracted in alignment with the PICO framework, with a focus on patient population characteristics and their anti-cancer treatment, intervention details (e.g. timing and frequency of delivery), assessment of diarrhea, and efficacy of the intervention. Eligible studies will be assessed for risk of bias using RoB2, while Grading of Recommendations Assessment, Development and Evaluation (GRADE) will be used to synthesise evidence and recommendations.

Conclusions

With increasing use of targeted agents, both in isolation and combination with conventional therapies, the prevalence and impact of diarrhea is growing. Diarrhea of any severity places a significant burden on the individual, impacting physical function, social connection and vocational stability, all of which make tolerating treatment more difficult.

MASCC is uniquely positioned to develop and disseminate clinical practice guidelines to inform and improve the quality of care provided to those receiving targeted therapy.

EMERG-032

A SEQUENTIAL EMOLLIENT REGIMEN AS A NEW SUPPORTIVE TREATMENT FOR ANTI-TUMOR TREATMENT-RELATED ADVERSE CUTANEOUS EVENTS (TRACE): A REAL-WORLD STUDY

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Introduction

The clinical manifestations of anti-tumor treatment-related adverse cutaneous events (TRACE) are a common cause for dose reduction or discontinuation of anti-tumor treatment. Gaps in traditional management implementation require novel proactive interventions, suitable for real-world clinical settings, in order to ensure continuity of treatment.

Methods

This retrospective, self-controlled observational study, used real-world data to evaluate the clinical value of a sequential topical administration of two specialized emollients. Patients with a grade 2/3 skin toxicity (as per CTCAE v5.0), were enrolled in the study. All patients following their original anti-cancer therapy, received a standardized sequential application of two emollients three times daily, specifically targeting acute symptom relief and skin barrier repair, for 7 days. Primary endpoint was the proportion of patients achieving a significant reduction in skin toxicity grade on Day 7 compared to baseline. Secondary endpoints included the proportion of improvement in patient-reported symptoms and objective skin signs at multiple time points (5 minutes, 15 minutes, Day 3, and Day 7). Statistical analysis employed paired tests.

(A) Distribution of Cutaneous Adverse Reactions by Type and Severity (Grades 2-3) in the Study Population (N=113)

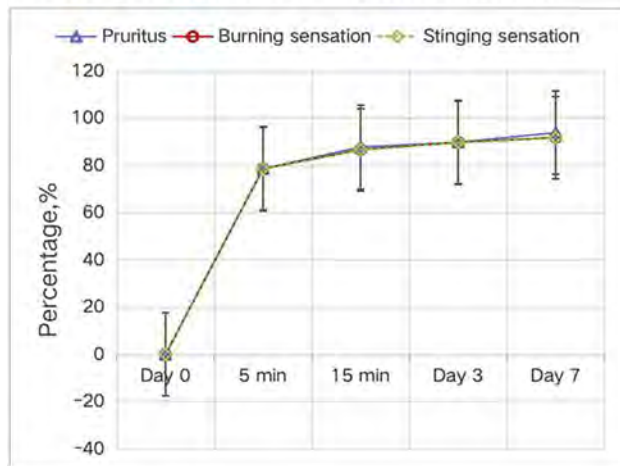
	Type	(n, %)
CTCAE Grade	Grade 2	67 (59.20%)
	Grade 3	46 (40.70%)
Type of Cutaneous Adverse Event	Rash	39 (34.5%)
	HFS/HFSR	36 (31.86%)
	Xerosis/Fissures	10 (8.80%)
	Radiation dermatitis	8 (7.08%)
	Stevens-Johnson syndrome (SJS)	8 (7.08%)
	Psoriasisiform eruption	5 (4.4%)
	Chemotherapy-induced erythematous toxicity	3 (2.65%)
	Pemphigus	2 (1.76%)
	Dyspigmentation	1 (0.88%)
	Cutaneous small vessel vasculitis (CSVV)	1 (0.88%)

Note: Adverse reactions were graded according to CTCAE v5.0. Data are presented as number (percentage).

Results

This study enrolled 113 cancer patients from 47 hospitals across China. The proactive, sequential emollient regimen demonstrated rapid and significant efficacy with a reduction of 93.8% (95% CI: 87.8-97.5%) in toxicity grade at D7 ($p<0.001$). At the 5-minute mark, the mean proportion of improvement in patient-reported symptoms was 78.6% (95% CI: 69.0-86.6%) ($p<0.001$); by Day 3, the mean proportion of patients showing improvement in objective skin signs was 86.7% (95% CI: 79.2-92.4%) ($p<0.001$). It supported the continuity of anti-tumor treatment and improves overall patient quality of life.

(B) Rate of Improvement in Subjective Indicators:



Conclusions

This real-world study demonstrates that a regimen based on skin toxicity grade, independently of causative agents, constitutes an effective strategy for TRACE. By delivering rapid symptom relief and mitigating skin toxicity manifestations, this strategy provides a unified solution for skin toxicity management across diverse cancer types under treatment.



EMERG-033

IMMUNE CHECKPOINT INHIBITOR-ASSOCIATED DYSAUTONOMIA PRESENTING AS A POTS PHENOTYPE: TWO CASES OF SEVERE ORTHOSTATIC INTOLERANCE

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The Christie NHS Foundation Trust

Introduction

Dysautonomia is a rare and under-recognised immune-related adverse event of immune checkpoint inhibitors (ICIs). Postural orthostatic tachycardia syndrome (POTS) may be immune-mediated in some patients, presenting with orthostatic intolerance, excessive heart rate rise on standing and symptoms such as palpitations, presyncope, fatigue and cognitive disturbance. Misattribution to more common causes can delay diagnosis. We report two pembrolizumab-associated cases consistent with a POTS phenotype.

Methods

Patient records were retrospectively reviewed for demographic and clinical characteristics, ambulatory observations, investigations, management, and outcomes.

Results

Two patients with triple-negative breast cancer received neoadjuvant pembrolizumab/paclitaxel/carboplatin followed by epirubicin/cyclophosphamide. In both, cardiac markers and echocardiography were consistently normal, CT pulmonary-angiography was negative, and there was no orthostatic hypotension. Case 1 developed tremor, dizziness, headache and postural palpitations during cycle 4 with sinus tachycardia to 150 bpm. ECG active stand testing showed progressive orthostatic tachycardia; the patient was unable to tolerate standing over 4 minutes, requiring temporary wheelchair use (Figure 1). Ongoing symptoms led to cardiology referral for suspected ICI-induced POTS and initiation of propranolol. She completed planned treatment, proceeding to surgery. Case 2 developed exertional and postural palpitations from cycle 2 with orthostatic tachycardia up to 130 bpm alongside significant upper gastrointestinal symptoms treated as suspected immune-related toxicity. Symptoms improved on corticosteroids but recurred during taper. Persistent orthostatic tachycardia was subsequently managed with ivabradine. Neoadjuvant treatment was discontinued after cycle 5 due to toxicity, proceeding to surgery. Both patients developed ICI-mediated ACTH deficiency during later cycles, having no prior evidence of cortisol deficiency.

Conclusions

To our knowledge, these are the first reported cases of ICI-associated POTS. The association with pembrolizumab and response to corticosteroids may support an immune-mediated mechanism. These cases also suggest that POTS may precede ACTH deficiency. Early consideration of dysautonomia, with orthostatic assessment and endocrine evaluation, may reduce morbidity and inform safe continuation of cancer therapy.

EMERG-035

DEVELOPMENT AND APPLICATION OF A CUTANEOUS ADVERSE EVENTS MANAGEMENT PROGRAM FOR LUNG CANCER PATIENTS UNDERGOING MOLECULAR TARGETED THERAPY

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Introduction

Cutaneous adverse events (cAEs) are the most common adverse events associated with molecular targeted therapy in lung cancer patients, with an incidence rate as high as 79%–90%. Long-term and severe

cAEs not only impair patients' quality of life but also affect medication adherence and treatment outcomes. Therefore, this study aimed to construct and apply a management program for cAEs related to molecular targeted therapy in lung cancer patients, providing a reference for clinical practice.

Methods

The program was established via literature review, semi-structured interviews, and expert panel discussions. It covers risk early warning, graded interventions, symptom-specific nursing, patient education with psychological support, and multidisciplinary follow-up, clarifying intervention procedures, medication standards, and nursing priorities for cAEs of varying grades. A historical control study was conducted at a Chongqing cancer hospital: 58 lung cancer patients on targeted therapy (Feb–Apr 2025) were conveniently selected as the control group, and another 58 (Jun–Aug 2025) as the intervention group. The control group received routine nursing care, while the intervention group implemented the constructed program for 3 months. The incidence of grade 2 or higher cAEs, quality of life scores, and patient satisfaction were compared between groups.

Results

After intervention, the incidence of grade ≥ 2 cAEs in the intervention group (20.69%) was significantly lower than that in the control group (36.20%); the total quality of life score in the intervention group (102.04 ± 18.20) was significantly higher than that in the control group (99.63 ± 15.77); and the patient satisfaction score in the intervention group (90.89 ± 6.72) was significantly higher than that in the control group (85.72 ± 5.56) ($P < 0.05$).

Conclusions

The constructed management program for cAEs is clinically practical and feasible. It can effectively prevent cAEs related to molecular targeted therapy in lung cancer patients, improve their quality of life, and provide a scientific reference for clinical management of molecular targeted therapy-associated cAEs.

EMERG-036

RISK FACTORS ASSOCIATED WITH IMMUNOTHERAPY RELATED PNEUMONITIS IN HOSPITALIZED SOLID TUMOR CANCER PATIENTS

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Introduction

Immunotherapy has significantly improved clinical outcomes for patients with cancer. However, can be associated with immune-related adverse events, including pneumonitis. The objective of this study was to identify risk factors associated with the development of immunotherapy-related (IR) pneumonitis

Methods

We conducted a retrospective chart review of solid-tumor patients admitted to our tertiary center's hospital medicine service for immunotherapy-related toxicities between 2021 and 2022, to identify cases of immunotherapy-related Pneumonitis. Patient demographics and baseline characteristics were analyzed by descriptive statistics. Logistic regression analysis was used to assess the association between baseline characteristics and the relative risk of developing IR Pneumonitis

Results

144 patients were hospitalized due to IR toxicities. 55 (38.20%) were diagnosed with Pneumonitis.

Table 1 shows patients demographics and baseline characteristics

Characteristics associated with the relative risk of developing IR Pneumonitis in the logistic regression univariate analysis included: Hyperlipidemia OR 1.99 CI 1.13 – 3.53 $p=0.018$, Anti CTLA-4 treatment OR 6.16 CI 1.81- 20.95 $p=0.004$, and a trend with Hypertension OR 1.74 CI 0.94 – 3.23 $p= 0.080$

Table 1 Patient demographics

		Total number of patients = 55
GENDER, n (%)	F	21 (38.18%)
	M	34 (61.82%)
AGE	Mean (SD)	55 (13.01)
RACE, n (%)	Asian	5 (9.1%)
	Black or African American	3 (5.5%)
	Other	5 (9.1%)
	White or Caucasian	42 (76.3%)
CANCER STAGE, n (%)	Stage I	1 (1.82%)
	Stage II	8 (14.55%)
	Stage III	42 (76.36%)
	Stage IV	4 (7.27%)
	Unknown	0
SMOKING, n (%)	NO	7 (12.7%)
	YES	48 (87.3%)
HYPERTENSION, n (%)	NO	16 (29.6%)
	YES	38 (70.4%)
DIABETES, n (%)	NO	39 (70.91%)
	YES	16 (29.09%)
HYPERLIPIDEMIA, n (%)	NO	26 (47.27%)
	YES	29 (52.73%)
AUTOIMMUNE DISEASE, n (%)	NO	55 (100.0%)
	YES	0 (0.0%)
CORONARY ARTERY DISEASE, n (%)	NO	49 (89.10%)
	YES	6 (10.90%)
IMMUNOTHERAPY, n (%)	Pembrolizumab	8 (14.54%)
	Nivolumab	24 (43.64%)
	Cemiplimab	14 (25.45%)
	Atezolizumab	2 (3.63%)
	Durvalumab	4 (7.27%)
	Durvalumab	7 (12.72%)
IMMUNOTHERAPY TYPE	ANTI PD-L1	36 (65.45%)
	ANTI PD-L1	8 (14.55%)
	ANTI PD-L1 / ANTI PD-L1	4 (7.27%)
	ANTI CTLA-4	5 (9.09%)
	ANTI CTLA-4 WITH ANTI PD-L1	5 (9.09%)
CANCER TYPE	Head and Neck	8 (14.55%)
	Lung and Thorax	30 (54.55%)
	GI	10 (18.18%)
	GU	4 (7.27%)
	Skin	2 (3.64%)

Conclusions

Risk factors associated with development of IR Pneumonitis include Hyperlipidemia, Anti CTLA-4 cancer treatment and possibly Hypertension. Larger studies are needed to validate and further explore these findings, which may improve clinical outcomes through earlier diagnosis.

EMERG-038

CORTICOSTEROID USE AMONG PATIENTS WITH ADVANCED MELANOMA WHO RECEIVED IMMUNOTHERAPY

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Introduction

Previous observational studies leveraging electronic health records (EHR) and claims data have employed International Classification

of Disease (ICD) diagnosis codes and corticosteroid use as proxies of immune-related adverse events (irAEs). However, these codes are non-specific to irAEs and corticosteroids are widely used in melanoma for non-irAE indications. We aimed to describe systemic corticosteroid use patterns in advanced melanoma among patients with and without ICD codes potentially indicative of irAEs.

Methods

We conducted a retrospective cohort study using the deidentified Flatiron Health Research Database comprising EHR data from oncology centers across US. Patients with advanced cutaneous melanoma who received immunotherapy (4/2011-2/2025) and had ≥2 visits were eligible. Patients with multiple primary cancers, prior autoimmune disorders, or used oral corticosteroids ≤6 months before immunotherapy were excluded. Potential irAE episodes were identified using ICD codes commonly associated with irAEs ≤2 years after final immunotherapy dose; consecutive codes within 180 days were considered a single episode. We compared systemic corticosteroids received after immunotherapy initiation between those with and without potential irAEs, and quantified the proportion of irAE episodes with corticosteroids ordered within defined timeframes.

Results

A total of 9,521 patients were analyzed (Table 1) and 1,757 (18.5%) had ≥1 potential irAE episode with a total of 2,448 episodes. In 16.7%, 20.5% and 25.6% of episodes, corticosteroids were received ≤14, 28 and 56 days, respectively. Although a higher proportion of patients with potential irAEs (66.8%) received corticosteroids, 50.7% of patients with no potential irAEs also received corticosteroids. Similar rates of corticosteroid use were observed when analysis was limited to either enteral or parenteral corticosteroids (Table 2).

Table 1. Characteristics of eligible patients

Characteristics	Overall cohort (N = 9521)	No potential irAE (n = 7764)	≥1 potential irAE (n = 1757)
Age at first immunotherapy, mean (SD)	65.9 (13.8)	66.1 (13.9)	64.8 (13.6)
Sex at birth, n (%)			
Female	3225 (33.9%)	2534 (32.6%)	691 (39.3%)
Male	6295 (66.1%)	5229 (67.3%)	1066 (60.7%)
Missing	1 (<1%)	1 (<1%)	0 (0.0%)
Race/ethnicity, n (%)			
Non-Hispanic White	6772 (71.1%)	5362 (69.1%)	1410 (80.3%)
Non-Hispanic Black	36 (0.4%)	32 (0.4%)	4 (0.2%)
Asian	17 (0.2%)	14 (0.2%)	3 (0.2%)
Hispanic/Latino	193 (2.0%)	160 (2.1%)	33 (1.9%)
Others	291 (3.1%)	244 (3.1%)	47 (2.7%)
Unreported	2212 (23.2%)	1952 (25.1%)	260 (14.8%)
De novo metastatic disease, n (%)			
No	6071 (63.8%)	4900 (63.1%)	1171 (66.6%)
Yes	2162 (22.7%)	1804 (23.2%)	358 (20.4%)
Unknown	1288 (13.5%)	1060 (13.7%)	228 (13.0%)
Documented brain metastasis, n (%)	654 (6.9%)	504 (6.5%)	150 (8.5%)
Insurance payer after melanoma diagnosis, n (%) ¹			
Commercial payers	4450 (46.7%)	3584 (46.2%)	866 (49.3%)
Medicare	5768 (60.6%)	4635 (59.7%)	1133 (64.5%)
Medicaid	732 (7.7%)	602 (7.8%)	130 (7.4%)
Others	1287 (13.5%)	1038 (13.4%)	249 (14.2%)
Self-pay	22 (0.2%)	19 (0.2%)	3 (0.2%)
Socioeconomic status (Yost index quintile), n (%)			
1 st (Lowest SES)	1030 (10.8%)	854 (11.0%)	176 (10.0%)
2 nd	1557 (16.4%)	1293 (16.7%)	264 (15.0%)
3 rd	1883 (19.8%)	1527 (19.7%)	356 (20.3%)
4 th	2141 (22.5%)	1733 (22.3%)	408 (23.2%)
5 th (Highest SES)	2079 (21.8%)	1683 (21.7%)	396 (22.5%)
Unreported	831 (8.7%)	674 (8.7%)	157 (8.9%)
Exposure to immunotherapy, n (%) ²			
Pembrolizumab	3334 (35.0%)	2707 (34.9%)	627 (35.7%)
Nivolumab	6163 (64.7%)	4951 (63.8%)	1212 (69.0%)
Ipilimumab	4335 (45.5%)	3464 (44.6%)	871 (49.6%)
Atezolizumab	29 (0.3%)	26 (0.3%)	3 (0.2%)
Relatlimab	640 (6.7%)	480 (6.2%)	160 (9.1%)
Comorbidities, n (%) ³			
Type 2 diabetes	671 (7.0%)	503 (6.5%)	168 (9.6%)
Hypertension	1892 (19.9%)	1444 (18.6%)	448 (25.5%)
Coronary heart disease	25 (0.3%)	18 (0.2%)	7 (0.4%)
Heart failure	149 (1.6%)	116 (1.5%)	33 (1.9%)
Liver impairment	263 (2.8%)	179 (2.3%)	84 (4.8%)
Renal impairment	223 (2.3%)	166 (2.1%)	57 (3.2%)

¹Patients may be included in more than one category

Abbreviations: irAE, immune-related adverse events; SD, standard deviation; SES, socioeconomic status

Table 2. Corticosteroid use patterns among eligible patients

Variables	Overall cohort (N = 9521)	No potential irAE (n = 7764)	≥1 potential irAE (n = 1757)
Received systemic steroids after diagnosis, n (%)	5316 (55.8%)	4109 (52.9%)	1207 (68.7%)
After initiation of immunotherapy	5108 (53.6%)	3935 (50.7%)	1173 (66.8%)
Received enteral systemic steroids after diagnosis, n (%)	4473 (47.0%)	3423 (44.1%)	1050 (59.8%)
Dexamethasone	1318 (13.8%)	1019 (13.1%)	299 (17.0%)
Prednisolone/prednisone/methylprednisolone	3723 (39.1%)	2815 (36.3%)	908 (51.7%)
Hydrocortisone	449 (4.7%)	271 (3.5%)	178 (10.1%)
Received parenteral systemic steroids after diagnosis, n (%)	2808 (29.5%)	2014 (25.9%)	794 (45.2%)
Dexamethasone	1863 (19.6%)	1392 (17.9%)	471 (26.8%)
Methylprednisolone	989 (10.4%)	7	389 (22.1%)
Hydrocortisone	719 (7.6%)	440 (5.7%)	279 (15.9%)

Abbreviations: irAE, immune related adverse event

Conclusions

Algorithms to identify irAEs from secondary data sources using ICD codes and/or corticosteroid use should be thoroughly validated with deep phenotyping and chart review as using either component alone may not be sufficiently robust to identify irAEs.

EMERG-039

EVALUATION OF CLINICAL RECOGNITION AND MANAGEMENT OF IMMUNE CHECKPOINT INHIBITOR-RELATED PNEUMONITIS IN A LARGE UK TERTIARY CANCER SPECIALIST CENTRE

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Introduction

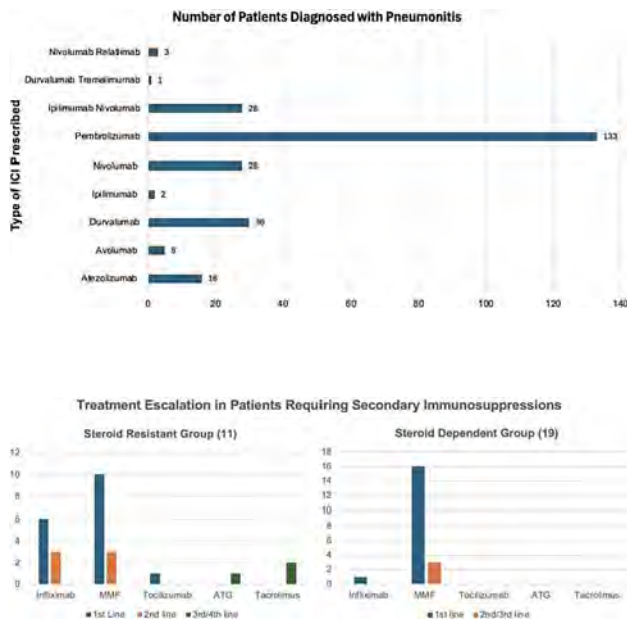
ICI-related pneumonitis is relatively uncommon but potentially life-threatening, with higher morbidity and mortality compared to many other immune-related adverse events (irAE). Diagnosis and management during active cancer treatment are challenging due to overlapping clinical and radiological features with infection, disease progression, radiotherapy-related toxicity, and other treatment-related complications. This study aims to characterise the prevalence, clinical outcomes, and pathways from recognition to management of ICI-related pneumonitis in a large UK Tertiary Cancer Specialist Center.

Methods

A retrospective clinical audit was conducted of patients who received immune checkpoint inhibitor (ICI) therapy between January 2017 and July 2025. Suspected or confirmed ICI-pneumonitis cases were identified through electronic medical records and radiology reporting systems. Data collected included patient demographics, primary tumour diagnosis, ICI type, CTCAE grading, treatment escalation—including secondary immunosuppressions (SI) and critical care unit admission—and clinical outcomes.

Results

A total of 242 patients were diagnosed with ICI-related pneumonitis. The most common malignancies were lung cancer and melanoma, followed by renal and breast, with additional cases across gastrointestinal, head and neck, urological, and other tumours. Pembrolizumab was most frequently prescribed, followed by Durvalumab, Nivolumab, Ipilimumab–nivolumab, and Atezolizumab. 30 patients required escalation to SI. Among these, 27 required hospital admission and four required critical care. Escalation patterns evolved, with Infliximab used initially and MMF as preferred first-line in later cases. Of 89 Grade ≥3 events, 71 were Grade 3, 9 Grade 4, 9 Grade 5, including four Grade 5 in patients receiving SI.



Conclusions

ICI-related pneumonitis was a clinically significant irAE. Approximately one in eight patients required escalation beyond corticosteroids, with MMF frequently used as a steroid-sparing agent. Steroid-refractory cases were associated with substantial clinical complexity, highlighting the importance of early recognition, structured escalation pathways, and multidisciplinary management. The study could not determine the efficacy of secondary immunosuppressive agents, highlighting the need for prospective studies to optimize management.

EMERG-040

VALIDATION OF REAL LIFE PREDISPOSING FACTORS TO DEVELOPMENT OF CYTOKINE RELEASE SYNDROME FROM BISPECIFIC T-CELL ENGAGERS

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Introduction

Bispecific T-cell engagers (BiTES) have transformed the cancer treatment environment but introduced potentially life-threatening toxicity such as cytokine release syndrome (CRS). The rates of CRS are variable from 50–88%^{1,2}. Baseline risk factors such as Lactate Dehydrogenase (LDH)³, ferritin, myelosuppression^{4,5}, patient age and kidney function⁵ are reported to influence the occurrence of CRS in haematological malignancies. This analysis aimed to compare real-world CRS incidence and risk factors against literature to improve stratification of patients developing CRS from BiTES.

Methods

A retrospective audit was conducted on adult patients that initiated on a BiTE at a tertiary referral hospital between January 2024 and December 2025. A comparative descriptive analysis (n=42) was conducted identifying patient characteristics, incidence and severity CRS,

and treatment with tocilizumab. Statistical analyses included Mann-Whitney U-test and Fischer exact test.

Results

All grades of CRS occurred in 50% of patients (n=21), with 77% requiring tocilizumab intervention for severity of symptoms. All patients with haematological malignancies developed CRS compared to only 48% of solid tumour patients. Low platelet count at baseline was statistically significant the development of CRS (median 238 vs 187, p=0.01). A trend was observed with elevated LDH, ferritin, bilirubin and CRS development. Patients with a larger body size e.g., obesity appear to have a protective effect in developing CRS. There was no correlation between age, sex, neutrophil count, kidney function and hepatic transaminases with CRS development.

Conclusions

Although some patient factors i.e., platelet count, LDH and high disease burden reflected literature others were not as pronounced in our real-life population. This is the first study that observed CRS incidence in haematological and oncological populations. A larger sample size is required create a risk prediction model for predisposing factors for CRS from BiTES across all tumour groups to potentially enhance predictability of safe administration in the community vs inpatient setting

EMERG-042

REAL WORLD MONITORING OF OTOTOXICITY AND CLINICAL UTILITY OF SODIUM THIOSULFATE INJECTION IN AYA AND ADULT CANCER PATIENTS RECEIVING CISPLATIN

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Introduction

Cisplatin chemotherapy remains a mainstay of treatment for several solid malignancies, despite carrying a five-fold increased risk of hearing impairment. Although over half of adult and pediatric patients experience cisplatin-induced ototoxicity, standardized clinical guidelines for the monitoring and prevention of hearing loss remain underutilized, most notably in the adult cancer population.

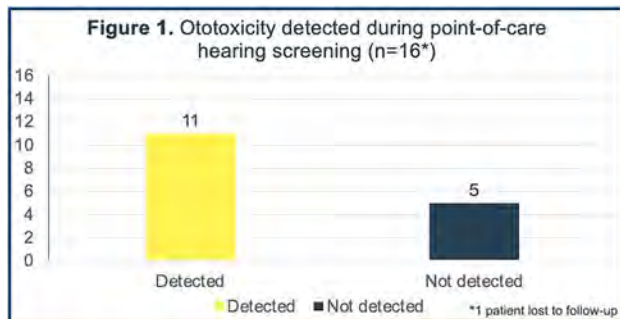
Methods

This real-world evidence study, conducted across academic and community settings, is a non-interventional, prospective, single-center pilot study. The study evaluates the incidence and severity of ototoxicity alongside the clinical utility of sodium thiosulfate injection (PED-MARK) in adolescent and young adult (AYA) and adult cancer patients receiving cisplatin chemotherapy. The target enrollment is 30 patients (n=15 historical control; n=15 sodium thiosulfate injection). Baseline characteristics are collected, including an assessment of hearing using a nursing-led, iPad-based point-of-care (POC) audiometry system. This novel hearing assessment captures pure-tone audiometric thresholds through standard and ultra-high frequencies, allowing monitoring of ototoxicity at baseline (cisplatin naive) and the start of each cycle. American Speech-Language-Hearing Association criteria determined clinically significant shifts in hearing.

Results

In the historical control group, 17 patients were consented (mean age 58, range 34–83; 53% female). Primary malignancies included head & neck, cervical, testicular, bladder, and gastrointestinal cancers. Racial distribution was 76% White, 18% Black, and 6% Asian. Ototoxicity was identified in nearly 70% of the cohort (Figure 1), establishing a clinical basis

to evaluate sodium thiosulfate injection. Data collection is ongoing and results will be presented characterizing the clinical utility and impact.



Conclusions

The high incidence of ototoxicity in this diverse oncological cohort underscores the need for rigorous POC auditory monitoring during cisplatin treatment. These findings further support the need to evaluate preventive strategies, such as sodium thiosulfate injection, to mitigate treatment-induced ototoxicity. This study will provide foundational evidence that is critical to enhance clinical standards for assessing and preventing ototoxicity in real-world settings.

EMERG-043

ORAL MUCOSAL IMMUNE-RELATED ADVERSE EVENT MANIFESTING AS PLASMA CELL STOMATITIS IN CANCER PATIENTS TREATED WITH IMMUNE-CHECKPOINT INHIBITORS

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Introduction

Immune check point inhibitors (ICIs) have significantly improved cancer outcomes but are associated with immune-related adverse events (irAEs). While oral mucosal irAEs such as lichenoid and bullous disorders are well described, plasma cell stomatitis-like inflammation has not been previously characterized as an ICI-associated oral toxicity. This case series describes the clinical, histopathologic, and management features of a novel oral mucosal irAE resembling plasma cell stomatitis.

Methods

A retrospective case series was conducted involving cancer patients treated with ICIs at two academic medical centers (Brigham and Women's Hospital, USA; Sheba Medical Center, Israel). Patients who developed oral mucosal inflammation clinically consistent with plasma cell stomatitis after initiation of ICI therapy were included. Clinical presentation, histopathologic findings, timing relative to immunotherapy initiation, management strategies and outcomes, and impact on cancer therapy were analyzed.

Results

The study included eight patients with advanced cancer diagnoses with a mean age of 66 years (range 55-81). ICI therapy included pembrolizumab, nivolumab, and combination regimens with other ICIs (ipilimumab, relatlimab). Oral irAEs presented between 2.5 and 50.7 months after initiation of ICI therapy. Clinical findings included diffuse erythema, edema, and superficial ulcerations involving the gingiva, buccal mucosa, labial mucosa, and tongue. Histopathology demonstrated plasma-cell predominant inflammatory infiltrates without lichenoid features. Topical steroid therapy resulted in clinical improvement and symptom control in seven of the eight patients.

Despite systemic steroid therapy, one patient required ICI discontinuation due to oral irAE severity.

Conclusions

Plasma cell stomatitis-like inflammation represents a distinct and apparently uncommon oral mucosal irAE. Recognition of this entity is important for accurate diagnosis and appropriate management to reduce patient morbidity and optimize ICI therapy outcomes.

EMERG-044

SKELETAL EFFECTS OF TYROSINE KINASE INHIBITORS USED IN THE TREATMENT OF SOLID TUMOURS: A SCOPING REVIEW PROTOCOL

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Introduction

Cancer survival has improved substantially with the development of targeted anticancer therapies. Tyrosine kinase inhibitors (TKIs) are small-molecule targeted drugs that inhibit intracellular kinase signalling pathways and are widely used in solid tumours, including lung, renal, gastrointestinal, and breast cancers. While cancer treatment-induced bone loss is well described for endocrine therapy and chemotherapy, the skeletal effects of TKIs remain insufficiently characterised. Many signalling pathways targeted by TKIs are involved in the regulation of bone cell function and bone turnover, and disruption to bone health may increase fracture risk and negatively affect quality of life. This scoping review aims to summarise the current clinical evidence on the impact of TKI therapy on bone health in adults with solid tumours.

Methods

This scoping review follows the Joanna Briggs Institute methodology and the PRISMA-ScR framework. The protocol has been pre-registered on the Open Science Framework. A comprehensive search strategy based on the Population-Concept-Context framework is being applied to PubMed, Embase, Web of Science, and the Cochrane Library, with additional grey literature searches. Clinical interventional and observational studies involving adults with solid tumours treated with TKIs will be included if they report bone-related outcomes, such as bone mineral density, bone turnover markers, fractures, or skeletal-related events. Study screening and data extraction are being conducted using Covidence.

Results

Existing evidence will be summarised according to TKI class, cancer type, and skeletal outcome. Early screening suggests heterogeneity in reported bone outcomes and limited differentiation between TKI subclasses. Findings will be summarised narratively and presented in tables and figures to identify patterns in skeletal effects and gaps in the literature.

Conclusions

This scoping review will provide a comprehensive overview of clinical evidence examining the effects of TKIs on bone health across solid tumours. These findings will support understanding of bone-related adverse effects, inform bone health monitoring in patients receiving TKIs.

EMERG-045

A PATIENT CENTERED FRAMEWORK TO UTILIZE PHARMACOVIGILANCE RESOURCES TO IMPROVE SUPPORTIVE CARE IN CANCER TREATMENTS

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Research Advocate, and Consultant, ⁶The Lobular Breast Cancer Alliance (LBCA), ⁷The Patient-Centered Dosing Initiative, Board Secretary of METAvivor, ⁸The Patient-Centered Dosing Initiative, Board of Directors at METAvivor, ⁹Advocates for Universal DPD/DPYD Testing, ¹⁰The Inflammatory Breast Cancer Research Foundation (ibcRF), Executive Director, ¹¹Oncology Clinical Nurse Specialist/Consultant, Newark, DE, ¹²Hartford Healthcare, Cancer Institute CMIO, Hartford, CT, ¹³Weill Cornell Medicine and NewYork-Presbyterian Hospital, Department of Hematology/Oncology, New York, ¹⁴Yale University School of Medicine, Director Breast Center/Chief Breast Oncology, New Haven, CT

Introduction

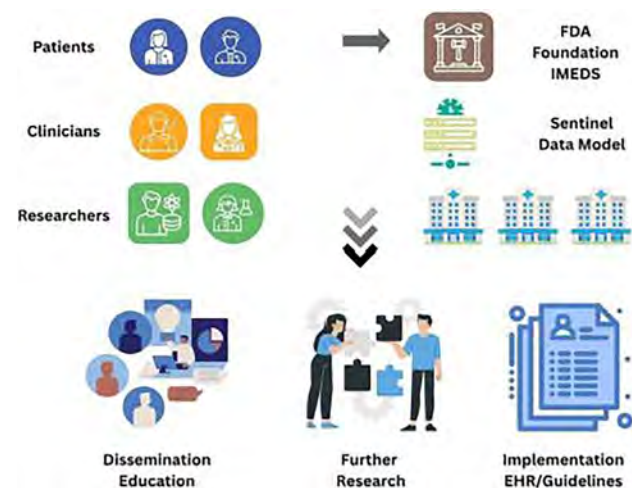
Cancer therapeutics have advanced significantly, with newer drugs extending patient survival. While standard clinical guidelines have adopted the use of immunotherapies, antibody drug conjugates, bispecifics, and cellular therapies, our understanding of their real-world impact on long-term toxicities remains limited. It is essential to understand whether these advances are helping patients live better, or just longer.

Methods

Inquiry with US FDA about access to the national resource for active monitoring cancer patients' toxicity events was responded by Oncology Center of Excellence. FDA encourages the public partnering with the Reagan-Udall Foundation for the FDA's Innovation in Medical Evidence Development and Surveillance (IMEDS) program with the Sentinel Initiative tools. Sentinel is the FDA's multisite, active pharmacovigilance system. IMEDS partners with a subset of the Sentinel investigators and data partners to leverage and expand Sentinel tools, including a common data model and standardized query tools. These tools enable standardized and reliable analysis of over 110 million patients, 30+ million annually with at least 6 months of follow-up, in the IMEDS network using a distributed framework powered by administrative claims data. A subset of IMEDS partners also have linked electronic health records and cancer registry data to claims. Stakeholders with diverse perspectives, including patient advocates, clinicians, and researchers, met to discuss a patient-centered framework that leverages the IMEDS Network to understand the burden of treatment toxicity on long-term survival in cancer patients.

Results

We agreed on a common goal would be to complement existing guidelines on symptoms management, patient-reported outcomes, and supportive care with real-world evidence. We identified potential research areas, implementation challenges to operationalizing the framework, and the need for active patient participants in pharmacovigilance.



Conclusions

This patient-centered initiative has raised awareness and mobilized stakeholders to promote systemic patient engagement in collaborating with IMEDS to inform the toxicity management of novel therapies and help patients live better.

EXERC-001

DOES PREHABILITATION IMPROVE PHYSICAL CAPACITY IN AUTOLOGOUS BONE MARROW TRANSPLANT?

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Introduction

Bone marrow transplant leads to deconditioning for people with blood cancer. Exercise prior to transplant, prehabilitation, has potential to ameliorate this, and shows promising outcomes in solid cancer though evidence is limited in blood cancer. This study aimed to compare physical capacity in patients treated with autologous bone marrow transplant for blood cancer who received prehabilitation compared to those who did not.

Methods

Baseline data of a sub-group of participants from a multi-site, assessor-blinded RCT. Adults 30-days following autologous bone marrow transplant completed the six-minute-walk test (6MWT), 30sec-sit-to-stand and grip strength tests. Differences between participants who received exercise prehabilitation were compared to those who did not receive prehabilitation using independent samples t-tests.

Results

108 participants (65% male; age 61 [53-67] yrs) who received autologous bone marrow transplant for myeloma (60%) or lymphoma (40%) were included. Participants who received prehabilitation (n=67) tended to present with higher physical capacity at 30-days post-transplant compared to those who did not (n=39, missing data n=2). Differences between groups were statistically significant for 30sec-sit-to-stand (MD (95% CI): 2.2 stands (0.4 to 4.0), p=0.02), however not for 6MWT, nor grip strength (MD (95% CI): 10.7m (-30.7 to 52.1), p=0.61; -1.3kg (-5.0 to 2.5), p=0.51, respectively).

Conclusions

Exercise prehabilitation may improve physical capacity at 30-days post-autologous bone marrow transplant. Lower body strength/physical capacity measured by 30-sec sit-to-stand demonstrated clinical significance based upon a minimum clinically important difference of ≥2 stands in other populations (Zanini et al., 2019, PMID: 31270178). Functional exercise capacity (6MWT) and strength/physical capacity measure different constructs of physical function. Results may be impacted by some heterogeneity such as participants from different hospitals, some missing data and different group sizes (n=67 vs n=39). Further analysis to understand the impact of specific elements of prehabilitation, for example exercise dosage, is required to maximise benefits and support service models.

EXERC-003**LIVE REMOTE EXERCISE FOR ADULTS WITH CANCER CACHEXIA: A PHASE II FEASIBILITY RANDOMIZED CONTROLLED TRIAL**

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Introduction

Cancer cachexia is a debilitating syndrome in advanced cancer, characterized by reduced physical function, high symptom burden, poor quality of life (QOL), and shortened survival. Despite its high prevalence, supportive care options remain limited. While exercise is endorsed in cancer guidelines, trials targeting adults with advanced cancer and cachexia remain rare.

Methods

The Advanced Cancer and Cachexia Exercise (ACE) Trial was a two-arm, phase II randomized controlled trial evaluating an 8-week, live remote, tailored aerobic and resistance exercise intervention (3 sessions/week, 30–45 minutes) combined with post-exercise protein supplementation (EX) versus usual care (UC). Adults with metastatic or locally advanced cancer meeting international criteria for cancer cachexia were enrolled. Primary outcomes were feasibility (recruitment, attrition, adherence, and safety) and acceptability. Secondary outcomes included physical function (e.g., 30-s sit-to-stand), body composition, physical activity, QOL, fatigue, cachexia-related symptoms, and psychological outcomes.

Results

Thirty-three participants were randomized (n=17 EX, n=16 UC; male n=17, 52%; age 63±12 years). All feasibility benchmarks were met. Recruitment was 45% (from n=107 screened) and attrition was 10% (n=3 withdrawals due to cancer symptoms). EX attendance for the live remote intervention was 77±22%, aerobic / resistance adherence 99±3% / 99±2% (of attended sessions; RPE 13±1, "somewhat hard"). One grade 1 adverse event (exacerbated bone pain) occurred, resolved with exercise modifications (0% serious adverse events). No significant between-group differences were found, but EX showed greater clinically meaningful improvements in several patient-reported outcomes and 30-s sit-to-stand test gains (Δ 3.1, 95%CI: 0.4–5.8).

Conclusions

Live remote, tailored exercise is feasible, acceptable, and safe for adults with advanced cancer and cachexia, exceeding predefined feasibility targets. The encouraging signals in physical function and patient-reported outcomes justify advancing to a phase III trial to establish efficacy within cachexia management.

EXERC-004**ENDOCANNABINOID SYSTEM AND MOOD RESPONSES TO ACUTE AEROBIC EXERCISE IN ADULT CANCER PATIENTS VERSUS HEALTHY CONTROLS: A PILOT STUDY**

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Birinder Cheema¹, Mitchell Low², Shelley Kay³, Justine Stehn⁴, Damian Hall⁵, Abha Gourshettwar⁶, Sara Wahlroos⁷, Michelle Harrison⁷, Judith Lacey⁸

¹University of Western Sydney, School of Health Sciences, Sydney, ²Translational Health Research Institute, Penrith, ³Chris O'Brien Lifehouse, Department of Supportive Care and Integrative Oncology, ⁴Chris O'Brien Lifehouse Department of Supportive Care and Integrative Oncology, ⁵Western Sydney University, National Institute of Complementary Medicine, ⁶Western Sydney University, School of Medicine, Penrith, ⁷Chris O'Brien Lifehouse, Department of Medical Oncology, Sydney, ⁸Chris O'Brien Lifehouse Department of Supportive Care and Integrative Oncology, Sydney

Introduction

The endocannabinoid system (ECS) regulates multiple physiological processes, including metabolism, immune function, cognition, appetite, pain, and mood. Emerging evidence suggests ECS dysfunction may be common in cancer patients and may arise from the disease itself, associated risk factors, or cancer treatments. In healthy populations, acute exercise alters circulating endocannabinoid concentrations and is associated with improvements in affective and symptom-related outcomes such as well-being, anxiety, fatigue, mood disturbance and pain. These effects may reflect biologically relevant modulation of ECS signalling rather than pleasurable affect alone. There is a strong clinical rationale to examine these responses in cancer patients, particularly those undergoing aggressive treatments associated with significant side effects. **Aim:** To investigate endocannabinoid and affective state responses to acute aerobic exercise in adult cancer patients compared with healthy peers.

Methods

Participants (n=20, 10 cancer, 10 control) engaged in 30mins of quiet rest followed by 30mins of exercise involving a 5min warm-up/cool-down and 20min of moderate-intensity training (64–76% of age-predicted maximal heart rate) on a treadmill or cycle. Blood samples and 10 Visual Analog Mood Scales (VAS) were collected before and after each condition and analysed.

Results

Cancer patients had lower circulating endocannabinoid levels versus controls across all timepoints ($p < 0.06$) but the total cohort increased ($p = 0.05$). Of 10 VAS scores, only *Happiness* increased with exercise in the total cohort ($p = 0.02$). There were no group x time effects or associations between endocannabinoids and VAS responses to exercise.

Conclusions

Cancer patients exhibited lower concentrations versus non-cancer peers indicating potential endocannabinoid dysfunction. However, exercise increased endocannabinoids in both groups. Different exercise modalities, doses and intensity require further investigation across a range of cancers to understand if exercise exerts effects on mood, fatigue and pain via the endocannabinoid system to inform optimal exercise dosing for benefit to cancer patients.

EXERC-005**THE EFFECTS OF ELECTRONIC MEDICAL RECORD IMPLEMENTATION ON EXERCISE PRESCRIPTION REPORTING FOR PREHABILITATION PATIENTS: A RETROSPECTIVE AUDIT**

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Introduction

The fidelity of intervention reporting is important to allow accurate exercise prescription and interpretation of service provision and outcomes. In 2019, an evaluation of a tertiary cancer centre prehabilitation program for haematological cancer patients planned for autologous stem cell transplant (AuSCT) highlighted that exercise prescription principles (e.g., frequency, intensity, time, type [FITT]) were not routinely documented (Crowe et al. 2022). In 2020, this cancer centre introduced an electronic medical record (EMR), hence this research evaluates the impact of implementation of an EMR system on the fidelity of exercise parameter reporting. A secondary aim examines intervention effectiveness.

Methods

A retrospective evaluation using data prospectively collected from February 2023 to February 2024 of haematologic patients undergoing prehabilitation prior to AuSCT. Aims were assessed using components of the RE-AIM framework: impact of EMR Implementation on exercise program reporting including FITT documentation, and Effectiveness of prehabilitation in terms of changes in physical outcomes from initial to pre-transplant assessments.

Results

Of the 115 prehabilitation participants, 89% (n=102) of patients were prescribed either resistance, aerobic, or both forms of exercise as per hospital protocol. Of the patients not prescribed exercise, 87% (n=13) had valid, clearly documented reasons. Eighty one percent of patients (n=83) prescribed exercise had all FITT parameters documented. This compares to 0% of 116 patients in the original evaluation. Among the 77 patients that proceeded to AuSCT (67%); 6-min walk test distances (n=45/77, 58%) improved from a median of 521.0 m (436.8–578.3 m) to 560.5 m (560.5–606.0m), $p < 0.001$, 30-second sit-to-stand scores (n=47/77, 61%) improved from a median of 13 stands (10–15) to 15 stands (14–17) $p < 0.001$.

Conclusions

Exercise parameter reporting was more comprehensively reported following EMR implementation. Clinically relevant improvements in physical function outcomes were noted, although gaps in data collection need to be addressed.

EXERC-006

WHAT DO EXERCISE PROFESSIONALS NEED TO ENGAGE IN EXERCISE ONCOLOGY? A COMMUNITY CONVERSATION

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Introduction

Global guidelines recommend that exercise discussions, recommendations and referrals should be integrated into the care of all people living with and beyond cancer. However, this is not consistently achieved in clinical practice. While barriers have been identified across multiple stakeholder groups, the perspectives of exercise professionals who actually provide exercise support to people with cancer are rarely included. Therefore, this qualitative study aimed to understand the perspectives and needs of exercise professionals delivering exercise to people with cancer.

Methods

Exercise professionals in Western Australia who have provided care to people receiving active cancer treatment were invited to participate in a facilitated in-person community conversation. They were asked about barriers and facilitators to delivering exercise services to people with cancer, and how this would be integrated in an ideal world. Conversations were recorded, transcribed, and analysed thematically.

Results

Fourteen exercise professionals participated (57% female, 79% exercise physiologists). Four themes were developed: 1) Communication, 2) Referrals, 3) Credentialing, and 4) Sustainability. First, participants described how better communication between oncologists, patients, and exercise professionals would benefit all parties. Second, participants believed that a more streamlined referral process would increase the rate of referrals, and more detailed referrals would help exercise professionals better utilise their often-limited time with patients. Third, participants acknowledged that formal credentialing would improve recognition of exercise professionals with oncology-specific training and increase the confidence of oncologists to refer to them. Fourth, participants discussed challenges in sustaining a viable oncology-focused business, driven largely by financial barriers limiting access to exercise services for cancer survivors.

Conclusions

Exercise professionals offer a unique perspective in understanding the challenges of integrating exercise into oncology care. Systemic issues hinder their ability to deliver a consistent and sustainable service for people with cancer. Future research needs to consider the needs of exercise professionals when designing models of care.

EXERC-007

UNDERUTILISATION OF EXERCISE ONCOLOGY IN REGIONAL VICTORIA: A RETROSPECTIVE ANALYSIS OF REHABILITATION UPTAKE

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Introduction

Exercise is a proven adjunct therapy in cancer care, improving treatment tolerance, physical function, and quality of life. The Clinical Oncology Society of Australia (COSA) and Cancer Council advocate for exercise to be embedded as standard practice. However, real-world uptake in regional settings remains unclear, limiting progress toward equitable survivorship care.

Methods

A retrospective observational study analysed Electronic Medical Records (EMRs) from five South West Victoria health services for adults (≥ 18 years) with reportable cancers who received surgery, chemotherapy/immunotherapy, or radiotherapy in 2023. Data on rehabilitation attendance, completion, timing, and treatment type were extracted, de-identified, and managed in REDCap.

Results

Of 1,658 identified patients, 898 met inclusion criteria. Only 52 patients (5.8%) attended oncology rehabilitation, and 32 (61.5%)

completed their program—well below best-practice expectations. Attendance was concentrated among chemotherapy/immunotherapy patients (90%), while those treated with surgery or radiotherapy alone rarely engaged. Most patients (77%) began rehabilitation during treatment; few (8%) accessed prehabilitation. Patients who completed their rehabilitation began their program on average 91 days after beginning their treatment compared to 33.5 days for patients who did not complete rehabilitation ($p=0.028$), suggesting greater rehabilitation completion when commenced later in a patient's treatment course.

Conclusions

Despite strong evidence and policy recommendations, exercise oncology remains underutilised in regional Victoria. These findings highlight a critical implementation gap and underscore the need for systemic change. Embedding exercise into cancer care pathways, standardising referral processes, and adopting innovative delivery models such as telehealth and prehabilitation are essential. Aligning these strategies with the Victorian Cancer Plan 2024–2028, which prioritises optimal access and equity across the cancer continuum, is vital to improving outcomes and ensuring exercise becomes a standard component of regional cancer care.

EXERC-008

'A NEW WORLD': A MIXED-METHODS EVALUATION OF A PHYSIOTHERAPY CANCER REHABILITATION TRAINING PROGRAM (PHYSIOCARE)

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Introduction

Many physiotherapists lack confidence providing cancer care. Currently, there are limited formal professional development opportunities to enable them to deliver evidence-based cancer rehabilitation services, including exercise. This study evaluated changes in physiotherapist knowledge, confidence and implementation behaviours following the PhysioCaRe training program.

Methods

A pre-post mixed methods study was conducted. Participants completed surveys based on the Theoretical Domains Framework at baseline, immediately post training and 6-months post training. Two focus groups conducted 3 months post training were also conducted to gain a deeper understanding of learner reactions and implementation behaviours. Quantitative data was described and changes in knowledge, confidence and skills measured using Mann-Whitney U tests. Focus groups were analysed using an interpretive description approach

Results

Thirty-eight physiotherapists attended the workshops. Participants were appropriately challenged by material ($n=29$, 76%) but just half ($n=20$) felt they could immediately apply their learnings. Knowledge [item 1: median 3.5, (IQR 2–4)], skills [item 6: median 4, (IQR 3–5)] and confidence [item 8: median 4, (IQR 3–5)] increased from baseline to follow-up (item 1: median 5, (IQR 4–6) item 6: median score 5.5, (IQR 5–6); item 8: median score 5, (IQR 5 to 6)] on a 1 to 7 Likert scale. Participants described cancer care as 'a whole new world' as most did not see cancer as the primary referral reason for physiotherapy. No

participants implemented the structured Physiocare exercise program within 6 months of training completion.

Conclusions

A hybrid training program for physiotherapists working with cancer survivors was well accepted and improved cancer care knowledge, skills and confidence. However, there were challenges to implementation of the structured patient program in clinical practice.

EXERC-009

IMPLEMENTATION OF THE TELECARE (TELEHEALTH CANCER REHABILITATION) PROGRAM IN A COMMUNITY HEALTH SETTING

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Introduction

Exercise is strongly recommended as part of cancer treatment but access is very poor. Telehealth may overcome challenges to accessing exercise rehabilitation but we don't yet know how whether positive results of telehealth exercise seen in clinical trials can be replicated when it is implemented as a routine health service. Therefore, the aim of this study is to co-design and deliver strategies to implement the TeleCaRe (Telehealth Cancer Rehabilitation) Program in a community health service and evaluate the implementation using the RE-AIM Framework.

Methods

A mixed methods approach drawing on experience-based co-design (EBCD) was conducted. In phase 1, a referral pathway and implementation strategies were co-designed using interactive workshops with clinicians and consumers. In phase 2, and evaluation of implementation outcomes was conducted using the RE-AIM Framework over 12 months. Qualitative data was analysed thematically and mapped to Expert Recommendations for Implementing Change (ERIC) strategies. Quantitative data was described.

Results

Twenty-one participants (10 consumers [breast cancer $n=5$], 12 clinicians [allied health professional $n=5$]) completed co-design workshops. Two main themes were identified: Centralising referrals using a coordinated approach; 2) improving awareness and promotion. The referral pathway included a blanket referral for rehabilitation for targeted groups (e.g. inpatients, breast cancer, surgical oncology) and an Electronic Medical Record (EMR) referral was developed and implemented. A coordinated program promotion strategy was facilitated by the network's communications team. The blanket referral system was not adopted. Referrals for TeleCaRe increased but there was low uptake as patients preferred in-person exercise. Outcome measures of effectiveness were rarely obtained in routine care. Data collection in process. Detailed results to be presented.

Conclusions

A co-designed referral pathway and strategies for exercise improved referrals but there was poor uptake of the TeleCaRe program. In-person exercise may be preferred as a first-line exercise option for cancer survivors.

EXERC-010

PHYSICAL FUNCTION, QUALITY OF LIFE, AND TUMOR RESPONSE TO SUPERVISED EXERCISE DURING NEOADJUVANT CHEMOTHERAPY: EARLY FINDINGS FROM THE KEYMOVE TRIAL

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Introduction

Exercise has been shown to mitigate decline in physical function and quality of life (QoL) during neoadjuvant chemotherapy (NACT), however, its potential to modulate tumor response remains largely unexplored. The KEYMOVE Trial was designed to address these questions, and this preliminary analysis reports findings on physical function, (QoL), and pathologic tumor response.

Methods

Women with breast cancer receiving NACT were randomized to usual care (UC) or usual care plus supervised exercise (SE). Physical function was assessed at baseline and post-NACT through maximal exercise stress test, handgrip and lower limb strength testing, 30s sit-to-stand and shuttle walk test. QoL was exploratorily evaluated using the EORTC QLQ-C30. Pathologic complete response (pCR), defined as absence of residual invasive tumor in breast and axillary lymph nodes at surgery, was evaluated as a treatment efficacy indicator.

Results

Sixty-nine women (stages IA–IIIC) completed the trial (UC: n=33, 53.5±11.3 years; SE: n=36, 51.4±11.8 years). The SE group showed significantly better results versus UC in estimated VO₂ peak (+2.17 vs. -2.75 mL O₂.kg⁻¹.min⁻¹, p<0.01), shuttle walk distance (-11.16 vs. -120.00 m, p=0.02), and 30s sit-to-stand (+4.42 vs. -0.85 reps, p<0.01). No between-group differences were observed in remaining strength measures. pCR did not differ between groups (UC: 16/33 vs. SE: 14/36, p=0.81). Greater preservation of VO₂ peak and 30s sit-to-stand capacity were correlated with less self-reported fatigue progression (r=-0.43, p=0.04) and smaller declines in physical functioning (r=0.45, p=0.02), respectively, suggesting that fitness gains may contribute to clinically meaningful improvements in QoL.

Conclusions

SE performed during NACT significantly preserved or improved aerobic fitness and functional performance compared with UC. Improvements in physical fitness and functional capacity were associated with attenuated fatigue progression and better maintenance of physical functioning. These findings highlight the importance of structured exercise as a key supportive care strategy during chemotherapy.

Funding: UID/04045/2025;2021.09879.BD;2023.15551.PEX

EXERC-011

A LONGITUDINAL RANDOMIZED CONTROLLED TRIAL OF AN EXERCISE ONCOLOGY PROGRAM ON CHEMORADIO-THERAPY- INDUCED COMPLICATIONS IN HEAD AND NECK CANCER

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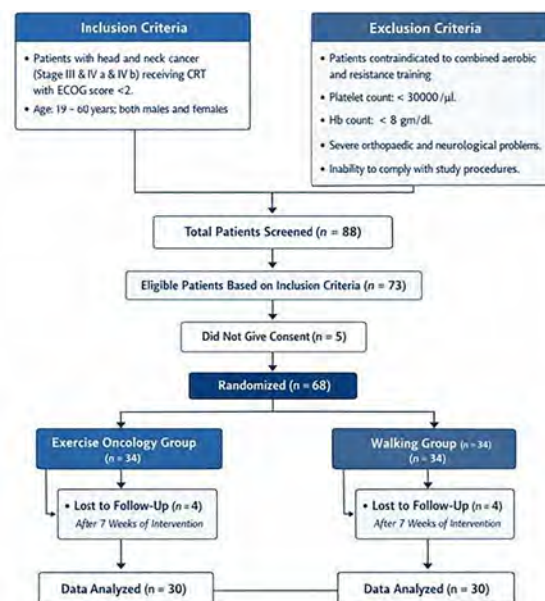
Introduction

Although Chemoradiotherapy in Head and Neck Cancer, (HNC) is effective, it frequently leads to long-term complications, including, sarcopenia, fatigue, sleep disturbances, inflammation and reduced quality of life. This longitudinal trial compared the long-term effects of an Exercise Oncology Program with National Comprehensive Cancer Network (NCCN)-recommended walking on these treatment-related complications.

Methods

Sixty adults with HNC undergoing chemoradiotherapy were randomized (1:1) to an Exercise Oncology group (combined aerobic + resistance training) or an NCCN-guided Walking group. Both interventions involved 30-minute sessions, 5 days per week, for 6 months. Sarcopenia was assessed per EWGSOP criteria using skeletal muscle mass (bioelectrical impedance analysis), physical performance (Timed Up and Go), muscle strength (handgrip dynamometry), and SARC-F. Additional outcomes included fatigue (BFI), quality of life (FACT-H&N), functional capacity (6MWD), sleep quality (PSQI), and inflammation (serum C-reactive protein). Assessments were performed at baseline, 7 weeks, and 6 months.

Group-by-time effects were analyzed using linear mixed-effects models, with causal g-computation sensitivity analyses adjusting for baseline values and key covariates.



CONSORT flow diagram of participant recruitment, randomization, follow-up, and analysis.

Results

At 6 months, Exercise Oncology group showed greater improvements across all outcomes compared with Walking group. Skeletal muscle mass +7.27 kg (95% CI 4.51–10.04), handgrip strength +6.72 kg (95% CI 4.82–8.61), and Timed Up and Go -2.86 s (95% CI -3.70 to -2.00), indicating reversal of sarcopenia. Decreased fatigue -3.16 points (95% CI -3.94 to -2.38), improved QOL +25.13 points (95% CI 20.35–29.92), increased 6MWD +96.03 m (95% CI 77.29–114.77), better sleep (PSQI -6.13; 95% CI -7.25 to -5.02), and reduced inflammation (CRP -26.07 mg/L; 95% CI -32.54 to -19.60). G-computation results were consistent.

Table 1. Baseline demographic and clinical characteristics of participants

Values are mean $\pm$ SD or n (%). p values compare groups at baseline.

Variable	Exercise Oncology Program (n=30)	Walking (n=30)	p value
Demographic and clinical characteristics			
Age, years	52.70 $\pm$ 7.83	54.90 $\pm$ 10.45	0.360
Male, n (%)	25 (83.3%)	25 (83.3%)	1.000
BMI, kg/m ²	20.53 $\pm$ 2.49	21.18 $\pm$ 2.14	0.279
TNM stage, n (%)			0.731
III	13 (43.3%)	16 (53.3%)	
IVA	8 (26.7%)	7 (23.3%)	
IVB	9 (30.0%)	7 (23.3%)	
Baseline functional measures			
Six-minute walk distance, m	428.50 $\pm$ 81.21	395.00 $\pm$ 70.26	0.093
Timed Up and Go, s	9.73 $\pm$ 1.30	10.14 $\pm$ 1.22	0.215
Baseline muscle measures			
Skeletal muscle mass, kg	32.77 $\pm$ 6.67	31.03 $\pm$ 4.97	0.258
Handgrip strength, kg	28.47 $\pm$ 2.78	29.00 $\pm$ 5.33	0.630
Baseline symptom and supportive care measures			
Brief Fatigue Inventory score	4.50 $\pm$ 1.55	5.03 $\pm$ 2.11	0.269
FACT-H&N score	60.93 $\pm$ 8.09	62.23 $\pm$ 9.29	0.311
Pittsburgh Sleep Quality Index (PSQI)	13.67 $\pm$ 1.77	12.97 $\pm$ 1.85	0.139
Serum C-reactive protein (CRP), mg/L	70.86 $\pm$ 10.73	65.83 $\pm$ 12.29	0.096

BMI = body mass index; CRP = C-reactive protein; FACT-H&N = Functional Assessment of Cancer Therapy-Head and Neck; PSQI = Pittsburgh Sleep Quality Index; SD = standard deviation; TNM = Tumour-Node-Metastasis; TUG = Timed Up and Go.

Table 2. Between-group differences in change from baseline using linear mixed-effects models: Exercise Oncology Program (EOP) vs Walking

Outcome	Contrast	Estimates are group-by-time interaction contrasts (EOP – Walking)			
		Time point	Estimate	SE	95% CI lower upper
Skeletal muscle mass (kg)	EOP – Walking	Month 6	5.54	0.9	3.75 7.52
Skeletal muscle mass (kg)	EOP – Walking	Week 7	7.23	0.8	5.47 8.98
Handgrip strength (kg)	EOP – Walking	Month 6	7.25	0.63	6.01 8.49
Handgrip strength (kg)	EOP – Walking	Week 7	7.72	0.63	6.48 8.95
Timed Up and Go (s)	EOP – Walking	Month 6	-2.46	0.35	-3.15 -1.76
Timed Up and Go (s)	EOP – Walking	Week 7	-2.19	0.35	-2.88 -1.49
Brief Fatigue Inventory score	EOP – Walking	Month 6	-2.63	0.26	-3.18 -2.08
Brief Fatigue Inventory score	EOP – Walking	Week 7	-2.6	0.28	-3.14 -2.06
FACT-H&N score	EOP – Walking	Month 6	27.43	1.07	25.27 31.3
FACT-H&N score	EOP – Walking	Week 7	20.3	1.97	16.43 24.17
Six-minute walk distance (m)	EOP – Walking	Month 6	91.5	0.65	72.52 110.48
Six-minute walk distance (m)	EOP – Walking	Week 7	25.83	0.65	6.80 44.81
Pittsburgh Sleep Quality Index (PSQI)	EOP – Walking	Month 6	-6.13	0.57	-7.25 -5.02
Pittsburgh Sleep Quality Index (PSQI)	EOP – Walking	Week 7	-7.8	0.57	-8.92 -6.68
Serum C-reactive protein (CRP), mg/L	EOP – Walking	Month 6	-26.07	3.3	-32.54 -19.6
Serum C-reactive protein (CRP), mg/L	EOP – Walking	Week 7	-13.15	3.3	-19.62 -6.68

Models include participant-level random intercepts. Confidence intervals are model-based. Positive estimates indicate improvement except for Timed Up and Go, fatigue, PSQI, and CRP, where negative estimates indicate improvement. EOP = Exercise Oncology Program; PSQI = Pittsburgh Sleep Quality Index; CRP = C-reactive protein; FACT-H&N = Functional Assessment of Cancer Therapy-Head & Neck.

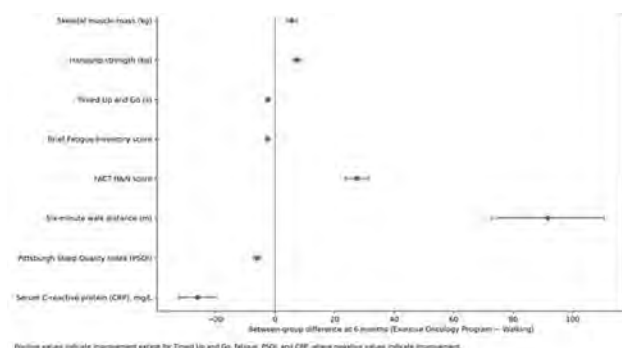


Figure 1. Forest plot of 6-month between-group effects (Exercise Oncology Program [EOP] – Walking). Points represent linear mixed-effects model estimates and horizontal lines represent 95% confidence intervals. Positive values indicate improvement except for Timed Up and Go, fatigue, PSQI, and CRP, where negative estimates indicate improvement. EOP = Exercise Oncology Program; PSQI = Pittsburgh Sleep Quality Index; CRP = C-reactive protein; FACT-H&N = Functional Assessment of Cancer Therapy-Head & Neck.

Conclusions

An Exercise Oncology Program combining aerobic and resistance training produced significantly greater long-term recovery and more effective mitigation of chemoradiotherapy induced complications than walking alone. These results highlight the ability of structured, sustained exercise to reverse treatment-related declines and address a major gap in supportive oncology care.

EXERC-012

REHABILITATION DURING IMMUNOTHERAPY FOR INOPERABLE LUNG CANCER: PRELIMINARY FINDINGS FROM A PILOT RANDOMISED CONTROLLED TRIAL

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Introduction

Immunotherapy is increasingly used for inoperable lung cancer, yet most rehabilitation trials have involved participants receiving chemotherapy, radiotherapy or targeted therapies. This trial aims to test the feasibility, safety and preliminary efficacy of a co-designed rehabilitation program during lung cancer immunotherapy. This abstract reports recruitment feasibility and baseline characteristics to date.

Methods

An assessor-blinded, single-site, pilot RCT with 2:1 randomisation (intervention:control) and concealed allocation, conducted according to CONSORT guidelines. Eligible participants had stage IV lung cancer and were receiving immunotherapy +/- chemotherapy. The control group received usual care. In addition to usual care, the intervention group received a 12-week hybrid rehabilitation program (centre or virtual). Measures at baseline and 13-weeks included exercise capacity (six-minute walk test [6MWT]), physical function (30 second sit-to-stand test [30STS]) and patient-reported outcomes including health-related quality of life (HRQoL; EORTC-QLQ-C30) and symptoms (ESAS-r).

Results

Forty-seven percent (17/36) of eligible patients were recruited over the first 15 months of screening. Common reasons for declining (n=14) were 'too much going on' (n=4) and 'feeling unable to participate' (n=4). Participants' mean (SD) age was 66.7 (5.3) years; 53% (9/17) were male. Eighty-two percent (14/17) of participants were receiving chemo-immunotherapy, which commenced a median (IQR) 2.0 (1.0 to 8.0) months before recruitment. Baseline 6MWT distance mean (SD) was 470.8m (93.2) (91% of predicted reference values). Eighty-one percent (13/16) of participants scored below age and gender-predicted values on the 30STS (10.3 [2.2] stands). HRQoL was 63.7/100 (14.7) for global health status and 87.1/100 (11.9) for physical functioning. Symptom burden was low (mean item scores between 0.29-2.6/10).

Conclusions

Recruitment proportions are comparable to previous inoperable lung cancer exercise trials. Participants showed well-preserved exercise capacity and low symptom burden at baseline, but reduced physical function and global health status.

EXERC-013

INNOVATIONS IN SUPPORTIVE CANCER CARE: COST-EFFECTIVE INTEGRATION OF EXERCISE ONCOLOGY INTO RADIOTHERAPY CARE

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Introduction

To evaluate the value and cost-effectiveness of two exercise oncology implementation models within radiotherapy care. The study aimed to determine whether embedding accredited exercise physiologists (AEPs) in cancer clinics improves patient quality of life and represents value for money compared to standard care.

Methods

A mixed-methods design was employed across eight GenesisCare sites in Western Australia. Patients undergoing radiotherapy engaged in one of the following exercise programs: 1) Co-located exercise model (i.e. onsite gym and AEP consult); 2) Home-based exercise model (i.e. AEP consult and home-based program design with follow-up); 3) Control (i.e. no structured exercise program). Qualitative data were collected via interviews and focus groups with patients and radiation oncologists to explore experiences and perceived value. A cost-effectiveness analysis from an Australian healthcare-payer perspective was conducted using patient-level data. The primary outcome was cost per quality-adjusted life-years (QALYs).

Results

Patients strongly valued exercise as part of routine cancer care, citing improved control, tailored support, and consistent messaging. Radiation oncologists endorsed exercise benefits but noted limited service availability as a barrier. Provider feedback highlighted enhanced patient engagement and satisfaction when exercise services were integrated into treatment pathways. Health-Related Quality of Life trends showed sustained improvement in the co-located group, modest gains in the home-based group, and decline in controls. Cost-effectiveness analysis demonstrated the co-located model was cost-effective at \$29,291 (AUD)/QALY gained.

Conclusions

Embedding AEP-led exercise programs within radiotherapy clinics improves patient quality of life and is cost-effective compared to standard care. Findings support scaling integrated exercise oncology services to enhance patient outcomes and deliver value for money. Broader implementation could inform policy and create employment opportunities for exercise professionals, advancing sustainable cancer care models.

EXERC-014

THE UTILITY OF HIGH-INTENSITY INTERVAL TRAINING IN CANCER SURVIVORS: RELATIONSHIPS BETWEEN THE ACUTE MYOKINE RESPONSE AND CHRONIC ADAPTATIONS TO HIIT

Morgan Farley¹, Alexander Boytar², Kirsten Adlard², Chloe Salisbury², Nicolas Hart², Mia Schaumberg², David Jenkins², Tina Skinner²

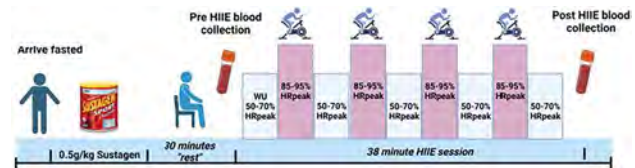
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Introduction

Exercise is associated with a reduced risk of cancer recurrence and mortality, partly thought due to the repeated acute perturbations in systemic and immune-related factors that drive favourable long-term risk reduction and physical adaptations. However, no study has examined the relationships between physiological adaptations to training and the acute immune response to exercise in cancer survivors. Therefore, this study aimed to: (1) examine the acute myokine response to high intensity interval exercise (HIIE) before and after 7-months of training; (2) Assess changes in inflammation, body composition, and cardiorespiratory fitness following 7-months of high intensity interval training (HIIT); and (3) explore relationships between acute and chronic responses to HIIT in cancer survivors.

Methods

Breast, prostate, and colorectal cancer survivors (n=14) completed 7-months of HIIT. Body composition, cardiorespiratory fitness, and fasted blood were measured at baseline and 7-months. Blood was sampled before and after an acute bout of HIIE at both timepoints. Post-HIIE myokine responses (IL-15, IL-6, IL-10, and IL-1ra) were compared to body composition and cardiorespiratory fitness at baseline and 7-months.

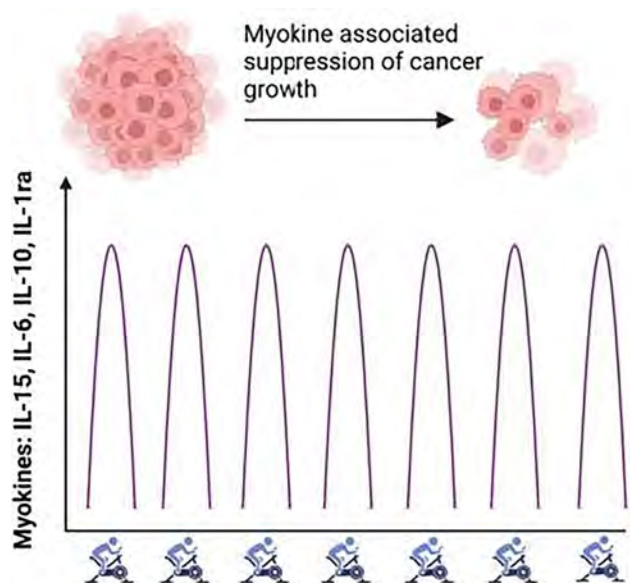


Results

Seven-months of HIIT reduced systemic inflammation (IL-6: $p=0.012$, IL-10: $p=0.008$, TNF- α : $p=0.012$) and fat mass ($p=0.036$), and increased leg lean mass (0.015) and cardiorespiratory fitness ($p=0.035$). A single bout of HIIE increased (35-100%) post-exercise myokines (IL-15, IL-6, IL-10, IL-1ra) at baseline and after training ($p<0.05$). Higher post-HIIE myokines were associated with greater lean mass ($p<0.05$), and lean mass gains correlated with stronger myokine responses ($r=0.618-0.867$, $p<0.05$).

Conclusions

Repeated exposure to HIIE improved factors associated with cancer recurrence. Each bout of HIIE increased myokine concentrations that have been associated with improved treatment efficacy (IL-15) and the suppression of cancer growth. This response was mediated, at least in part, by lean mass. These relationships a mechanistic underpinning to guide the design of more targeted exercise interventions aimed at optimising immune responses and improving treatment efficacy in cancer survivors.



A single bout of high intensity interval exercise elicits

↑ myokines associated with suppression of cancer growth *in vitro* & pre-clinical models

EXERC-015**STOMA STRONG – OSTOMY RESOURCES IN A REGIONAL SETTING**

Rachel Harris, **Aimee Ryan**, Tara Bewley, Anne McIntosh
Bendigo Regional Cancer Centre, Bendigo Health

Introduction

Ostomate surgery, whether temporary or permanent, is a common component of colorectal cancer management. With rising incidence in younger patients, postoperative rehabilitation and functional recovery are critical aspects of care. Despite advances in care, ostomates remain at high risk of parastomal herniation.

Physiotherapists and Exercise Physiologists are well placed to provide acute support post ostomate surgery, taking a holistic approach to identifying patients' physical needs and goals within the context of a breach of the abdominal wall, alongside the specific requirements for reversal and ongoing survivorship. At Bendigo Health, we identified a knowledge gap in exercise prescription within the context of ostomate surgery.

Aim: To develop patient education resources that supports safe return to activity following ostomate surgery, while minimising the risk of parastomal herniation.

Methods

- Education with local stomal therapy nurses and other health-care services' post-stoma exercise programs
- Develop an acute post-stoma education and exercise booklet to be provided to patients prior to, or soon after, ostomate surgery
- Consumer and healthcare worker feedback
- Data analysis – measure patient confidence in returning to exercise and daily activities before surgery and at 0, 6, and 12 weeks after surgery

Results

- Preliminary findings demonstrate increased confidence with return to exercise post stoma in those who were provided with the resources across the continuum
- Nil incidences of exercise-induced parastomal hernia within the number of patients who have started the guided exercise from day one post-surgery
- Facilitation of return to sport post stoma reversal

Conclusions

This project demonstrated and fulfilled a need for patient-focused education and early exercise guidance post ostomate surgery. Further projects establishing an early referral pathway for all stage IIB and III colorectal cancer patients for exercise input for improved survival rates and support post stoma formation and reversal has now commenced.

EXERC-016**IMPACT OF AN EXERCISE INTERVENTION TOOLKIT BASED ON THE INTERVENTION MAPPING FRAMEWORK IN LUNG CANCER PATIENTS UNDERGOING CHEMOTHERAPY**

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Introduction

To develop an exercise intervention toolkit integrating digital resources and practical materials, and explore its effect in alleviating cancer-related fatigue and improving exercise capacity among lung cancer patients undergoing chemotherapy.

Methods

The toolkit was developed through six stages: needs assessment, goal setting, theory selection, intervention design, implementation planning,

and effect evaluation. It ultimately includes digital resources (exercise teaching videos, mobile-based self-monitoring software, fatigue scoring mini-program) and practical materials (low-intensity exercise guidelines, resistance training illustrations, and simple equipment such as resistance bands). A total of 87 lung cancer patients receiving chemotherapy in a hospital from March to October 2025 were selected by convenience sampling and divided into the control group (38 cases) and the observation group (39 cases) using a random number table. The control group received routine health education, while the observation group was intervened with the aforementioned toolkit for 8 weeks on the basis of routine nursing. The Cancer-Related Fatigue Scale (CFS) scores and 6-Minute Walk Distance (6MWD) scores were compared between the two groups before and after intervention.

Results

After 8 weeks of intervention, the total CFS score of the observation group [(30.62±4.18) points] was significantly lower than that of the control group [(43.85±5.24) points], and the 6MWD [(385.76±34.32) meters] was significantly higher than that of the control group [(302.45±31.68) meters], with statistically significant differences (both $P < 0.05$). The compliance rate of toolkit use in the observation group reached 87.18%, and no exercise-related adverse events occurred.

Conclusions

The exercise intervention toolkit based on the Intervention Mapping framework, combining digital resources and practical materials, effectively alleviates cancer-related fatigue and improves exercise capacity in lung cancer patients undergoing chemotherapy. It transforms evidence-based evidence into clinical practice, offering a standardized rehabilitation option with high safety, good acceptance, and clinical promotion value.

EXERC-017**BARRIERS AND FACILITATORS TO EXERCISE MAINTENANCE AFTER CANCER TREATMENT: A COM-B SCOPING REVIEW**

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Introduction

Regular physical activity improves physical functioning, symptom burden, and quality of life in cancer survivorship (Campbell et al., 2019; Schmitz et al., 2019). However, exercise maintenance after cancer treatment remains challenging. Prior studies have identified barriers including treatment-related symptoms, reduced physical capacity, low self-efficacy, limited access to tailored programs, and competing life demands (van Putten et al., 2016; Romero et al., 2018; Shimizu et al., 2025). Evidence remains limited regarding how these determinants interact, particularly in home-based or remotely supported contexts. The Capability–Opportunity–Motivation–Behavior (COM-B) model integrates these behavioral determinants. This scoping review aimed to synthesize and map evidence on post-treatment exercise maintenance using COM-B, focusing on home-based and remote contexts.

Methods

Following PRISMA-ScR guidance, PubMed, CINAHL and Ichushi-Web were searched from inception to March 2025 for English quantitative, qualitative, and mixed-methods studies examining exercise maintenance or adherence after cancer treatment in home-based or remotely supported settings. COM-B was applied during charting and synthesis, mapping reported barriers and facilitators to Capability, Opportunity, and Motivation.

Results

Twenty-two records were identified, and eleven studies were included. Barriers were reported across all COM-B domains, often concurrently. Capability-related barriers were most frequent (9 studies) and included

symptom burden (e.g., fatigue and pain), functional limitations, and limited self-regulation. Opportunity-related barriers were identified in eight studies, including restricted access to tailored programs, geographical distance, time constraints, and inadequate referral pathways. Motivation-related barriers were reported in seven studies, including fear of symptom exacerbation and low confidence. Multi-domain facilitators—individualized education, structured coaching, routine follow-up, and telehealth-based support—were reported in seven studies.

Conclusions

Exercise maintenance after cancer treatment is shaped by interacting capability, opportunity, and motivation factors. COM-B-informed synthesis supports integrated, nurse-led behavioral strategies to enable sustainable exercise within survivorship care.

EXERC-018

COMPREHENSIVE CANCER REHABILITATION AND SURVIVAL IN PATIENTS RECEIVING CHEMO-IMMUNOTHERAPY FOR ADVANCED NSCLC: A REAL-WORLD COHORT STUDY

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Introduction

Immune checkpoint inhibitor (ICI)-based chemo-immunotherapy has improved survival in patients with advanced non-small cell lung cancer (NSCLC). As treatment duration increases, maintaining the patient's condition and functional status has become an important component of supportive cancer care. Exercise and rehabilitation interventions improve physical function and quality of life in patients with cancer; however, their impact on survival outcomes remains largely unexplored in the chemo-immunotherapy era. The purpose of this study was to evaluate whether multidisciplinary outpatient cancer rehabilitation was associated with overall survival (OS) in patients receiving initial chemo-immunotherapy for advanced NSCLC.

Methods

This single-center retrospective cohort study included consecutive patients with advanced or recurrent NSCLC who initiated chemo-immunotherapy between November 2020 and February 2024. The exposure was referral to a multidisciplinary outpatient cancer rehabilitation clinic providing individualized exercise guidance, education on physical activity and nutrition, and coordinated supportive care. The primary outcome was OS. To adjust for baseline differences, inverse probability of treatment weighting (IPTW) based on propensity scores was applied. Sensitivity analyses included multivariable Cox proportional hazards models and landmark analysis excluding deaths within 84 days after treatment initiation.

Results

Among 176 patients, 59 (33.5%) received rehabilitation intervention. In propensity score-based inverse probability of treatment weighting (IPTW) analysis, the rehabilitation group showed longer median overall survival (OS) than the non-rehabilitation group and was associated with improved OS (20.4 vs 10.6 months; HR 0.53, 95% CI 0.37–0.76; $p < 0.001$). This association remained consistent in multivariable Cox proportional hazards models and in landmark analysis at 84 days after

treatment initiation. Exploratory analyses suggested a stronger association among patients without baseline cachexia.

Conclusions

In this real-world cohort, multidisciplinary outpatient cancer rehabilitation was associated with improved survival in patients receiving chemo-immunotherapy for advanced NSCLC. These findings suggest supportive interventions targeting patient's condition may influence outcomes in modern lung cancer care and warrant prospective evaluation.

EXERC-019

IMPLEMENTATION OF A COMPREHENSIVE MUSCULO-SKELETAL SCREENING PROGRAM FOR PATIENTS WITH CANCER

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Introduction

Patients with cancer frequently develop musculoskeletal impairments, including muscle loss, gait disturbance, and osteoporosis, due to cancer treatment and aging. Although these conditions often coexist, a comprehensive approach that visualizes overall musculoskeletal function and facilitates timely referral to supportive care services has not been fully established. In cancer supportive care, helping patients understand their physical function and ensuring access to appropriate medical and rehabilitative resources are essential.

Methods

We evaluated 24 patients with cancer (7 men and 17 women; mean age, 70.1 years) who underwent a comprehensive musculoskeletal assessment termed "Cancer Locomotive Syndrome Screening" at our institution. Primary cancer sites included breast cancer ($n=6$), malignant lymphoma ($n=5$), prostate cancer ($n=2$), uterine cancer ($n=2$), ovarian cancer ($n=2$), and other malignancies ($n=1$ each). The screening program comprised locomotive syndrome assessments (Locomo 25 questionnaire, stand-up test, and two-step test), body composition analysis, bone mineral density measurement, and gait analysis. Individualized exercise advice and gait-related recommendations were provided, and referrals to osteoporosis or musculoskeletal outpatient clinics were made when appropriate.

Results

All patients met the diagnostic criteria for locomotive syndrome: 12 were classified as stage 1, 4 as stage 2, and 8 as stage 3, with no non-locomotive cases identified. The mean skeletal muscle index was 7.36 kg/m² in men and 6.07 kg/m² in women, with relatively few patients meeting diagnostic criteria for sarcopenia. In contrast, gait assessment revealed functional impairment, with a mean gait speed of 1.09 m/s and a mean step length of 60.8 cm, indicating mild gait dysfunction compared with age-matched reference values.

Conclusions

Cancer locomotive syndrome screening enables multidimensional assessment of musculoskeletal function beyond single parameters such as muscle mass. By visualizing functional impairment and identifying gait-related deficits, this approach may represent a practical and patient-centered component of cancer supportive care, facilitating appropriate exercise guidance and timely referral to specialized musculoskeletal services.

EXERC-021

INCREASING SUPERVISED EXERCISE FOR INPATIENTS AT A TERTIARY CANCER CENTRE, A QUALITY IMPROVEMENT INITIATIVE

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Introduction

Many health professionals do not prioritise inpatient physical activity or exercise during hospital admission. This can contribute to inpatient inactivity, which is associated with adverse outcomes including functional decline, loss of independence, and longer hospital length of stay. At the tertiary cancer centre, on average the physiotherapy department delivers over 900 inpatient consultations per month. This physiotherapy led quality improvement initiative aimed to increase inpatient supervised exercise for these patients from 44% in April 2025 to >80% in October 2025.

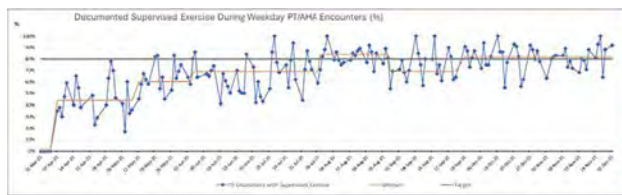
Methods

The project lead undertook a nine-month improvement coaching program, between April and December 2025, applying the Institute for Healthcare Improvement Model as a framework. Quality improvement tools, including cause-and-effect diagrams and driver diagrams guided problem analysis and prioritisation of change ideas. These ideas were tested using iterative Plan, Do, Study, Act cycles, and run charts tracked performance data to distinguish meaningful trends from random variation.

Results

Between April–October, the physiotherapy department had 6331 inpatient consultations in which inpatient supervised exercise could have been delivered. Change idea 1, implemented in April, involved introducing case report forms for exercise to electronic medical record documentation templates. Following this intervention, supervised exercise increased from 44% to 69% by June 2025 (Image 1). In September, Standard Therapy Exercise Programs were introduced as change idea 2, providing readily available, set programs to therapists. After the first month of implementation, supervised exercise was observed to increase to 82% (Image 1), this is a relative increase of 86.4% from baseline. The final change idea comprised of a ward-based group exercise class piloted in December, with result pending analysis.

Image 1



Conclusions

The interventions implemented have now been adopted as usual practice for the physiotherapy department. Further data analysis of initiative 3, available at the time of the conference, will establish if ward-based group exercise delivery increases supervised exercise rates.

EXERC-024

VOLUNTARY EXERCISE IMPROVES COGNITIVE FUNCTION IN A MOUSE MODEL OF RADIATION-INDUCED BRAIN INJURY

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Introduction

Radiation-induced brain injury (RBI) is a complication of radiotherapy for brain tumors and is associated with cognitive impairment, reduced quality of life, and poorer survival. Rehabilitation interventions such as exercise therapy and cognitive training are often prescribed as supportive care, but the mechanisms underlying their therapeutic and preventive effects on RBI remain unclear. Using a clinically relevant mouse model of RBI, we investigated whether rehabilitation-based voluntary exercise (VE) ameliorates cognitive dysfunction and explored related neurobiological mechanisms.

Methods

Adult male C57BL/6J mice (10–12 weeks old) were randomly assigned to sham control (Ctl) or fractionated whole-brain irradiation (WBI; 8 Gy, 4 Gy × 2) groups, each further divided into sedentary and VE subgroups. VE mice had 24-h access to a running wheel for 3 weeks starting 5 days after WBI. Cognitive function was assessed with the Barnes maze and Y-maze, focusing on spatial working memory, reference memory, and cognitive flexibility. Plasma mature brain-derived neurotrophic factor (BDNF), hippocampal neurogenesis in the dentate gyrus, and synaptic plasticity in the CA1 region were evaluated using biochemical, histological, and electrophysiological methods.

Results

Approximately 30 days after WBI, RBI model mice showed significant impairments in reference memory, cognitive flexibility, and spatial working memory compared with Ctl mice. VE markedly attenuated these WBI-induced cognitive deficits. VE increased plasma BDNF levels, which was accompanied by enhanced NeuroD1-positive cell density in the dentate gyrus and restoration of long-term potentiation of synaptic transmission in the CA1 region (Fig.1).

Effects of VE on BDNF, Neurogenesis, and CA1-LTP in an RBI Mouse Model

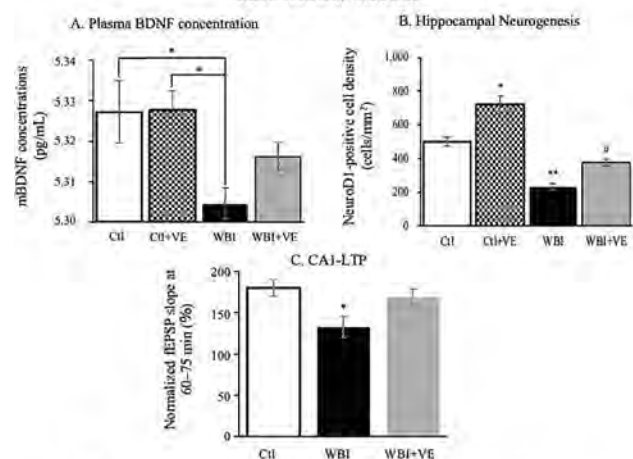


Fig. 1A& 1C: * $p < 0.05$, Fig. 1B: * $p < 0.05$ vs. Ctl, ** $p < 0.01$ vs. Ctl, # $p < 0.05$ vs. WBI, one-way ANOVA, Tukey's post hoc test.

Conclusions

RBI, an adverse effect of WBI, appears to have its detrimental cognitive effects mitigated when VE-induced increases in BDNF enhance hippocampal neurogenesis and synaptic plasticity, thereby improving cognitive function (Fig.2). Therefore, exercise-based rehabilitation may be a non-invasive and effective treatment for RBI.

Voluntary Exercise Improves Cognitive Function in a Mouse Model of Radiation-Induced Brain Injury

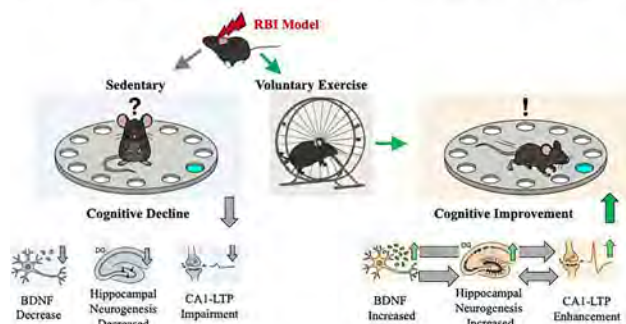


Fig. 2: Schematic Overview of the Study

EXERC-025

EXERCISE ENGAGEMENT BEFORE, DURING, AND AFTER TREATMENT AMONG ADULT DIAGNOSED WITH A HAEMATOLOGICAL MALIGNANCY: A QUALITATIVE SYSTEMATIC REVIEW

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Introduction

Individuals diagnosed with a haematological malignancy commonly experience significant declines in physical function resulting from both malignancy- and treatment-related factors. Although evidence supports the benefit of exercise across the cancer care continuum, exercise engagement among this population remains low. Understanding the factors that influence exercise engagement is critical to informing the implementation of effective exercise interventions in clinical practice.

Methods

A qualitative systematic review was conducted and reported according to the PRISMA guidelines. Electronic databases (MEDLINE (EBSCOhost), CINAHL, CENTRAL, ProQuest Central, Scopus, PsycINFO, and Web of Science) were searched from January 2010 –September 2024. Two reviewers independently screened and assessed against a pre-determined eligibility criteria. Methodological quality was evaluated using the Joanna Briggs Institute (JBI) critical appraisal checklist. Data was extracted in relation to exercise motivators, benefits, barriers, facilitators, and preferences across the continuum of care (Before, During, Post-treatment, and into survivorship). Findings were synthesised through JBI methodology for meta-aggregation and further interpreted using Integrating-Promoting Action on Research Implementation in Health Services (I-PARIHS) to inform future implementation recommendations.

Results

Twenty-three studies representing 461 unique participants with leukaemia, lymphoma, or multiple myeloma were included. A total of 336 qualitative findings were synthesised. Across the cancer care continuum, exercise engagement was shaped by a complex and dynamic interplay of factors that varied across treatment phases and were interconnected throughout care transitions. Exercise interventions varied widely across the continuum of care in duration, prescription, supervision, and timing. I-PARIHS mapping highlighted

facilitation as central to adapting exercise interventions to changing needs, supporting exercise engagement across care transitions.

Conclusions

The review provides new insights to inform the implementation of person-centred prehabilitation and rehabilitation exercise models for people living with a haematological malignancy.

EXERC-027

SCOPING REVIEW OF CARDIORESPIRATORY FITNESS IN ADOLESCENT AND YOUNG ADULT CANCER SURVIVORS

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Introduction

Advancements in cancer research, treatment protocols, and supportive care have led to a growing population of adolescent and young adult cancer survivors (AYA-CS). Impaired cardiorespiratory fitness is a key modifiable risk factor in this group and is associated with long-term health complications, particularly cardiovascular disease. This scoping review summarizes the existing evidence evaluating cardiorespiratory fitness in AYA-CS. Secondary aims were to synthesize the methods used to assess fitness and to explore whether exercise interventions can improve outcomes in this population.

Methods

A systematic search of CINAHL, EMBASE, MEDLINE and SPORT-Discus (28 February 2025) identified original peer-reviewed studies assessing objectively measured cardiorespiratory fitness in AYA-CS diagnosed between the ages 15–39 years.

Results

The search yielded 3049 articles, of which ten met inclusion criteria, representing 494 participants (59.7% female) with follow-up periods ranging from 1 month to 10 years post-treatment. Across studies, AYA-CS showed substantially reduced cardiorespiratory fitness, with VO₂peak values 20–47% lower than age- and sex-matched healthy controls. Submaximal measures, such as the six-minute walk test and Astrand cycle test, also demonstrated performance well below predicted norms. Assessment methods varied considerably, ranging from gold-standard cardiopulmonary exercise testing to field-based walk tests, reflecting feasibility challenges and the absence of standardized protocols for this group.

Seven studies examined exercise interventions, most involving personalized aerobic and/or resistance training delivered through supervised or hybrid models. All reported improvements in fitness, including VO₂peak increases of up to 23% and six-minute walk test gains of 63–92 meters. Some studies noted declines once structured programmes ended, underscoring the need for long-term maintenance strategies. Interventions were generally feasible and acceptable, though reporting of adherence and adverse events was inconsistent.

Conclusions

AYA-CS experience persistent impairments in cardiorespiratory fitness post-treatment. Standardized assessment approaches and targeted, sustainable exercise interventions are needed to improve fitness and long-term health outcomes in this population.

EXERC-028

UNDERSTANDING KNOWLEDGE, ATTITUDES, BARRIERS, AND FACILITATORS TOWARD PREHABILITATION IN CHINESE AND VIETNAMESE SPEAKING CANCER SURVIVORS IN AUSTRALIA

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Introduction

Prehabilitation represents interventions that support and optimise physical, nutritional, and psychological wellbeing before cancer treatment. However, there is little-to-no research exploring the implementation of prehabilitation interventions in culturally and linguistically diverse cancer survivors. As such, the purpose of this study is to understand knowledge of, and attitudes towards, prehabilitation, and barriers and facilitators to accessing and engaging in prehabilitation, in Chinese and Vietnamese cancer survivors in Australia.

Methods

This study employs a mixed methods design. Chinese or Vietnamese cancer survivors in Australia (n=100), who's preferred language spoken is Cantonese, Mandarin, or Vietnamese, will complete an online quantitative survey informed by the theory of planned behaviour, to understand their knowledge of, and attitudes towards, prehabilitation. In parallel, three focus groups, consisting of ~5-10 participants (one focus group per language) will be performed to understand barriers and facilitators to accessing and engaging with prehabilitation interventions. All research tools (i.e., participant information, online survey) will be translated into Cantonese, Mandarin, and Vietnamese, with focus groups facilitated alongside a language specific bi-lingual interpreter. Quantitative data will be summarised descriptively, with qualitative data thematically analysed.

Results

Online survey data collection is currently in progress (n=72 responses as of 17/12/25 – expected completion 02/2026), with three focus groups completed in Cantonese (n=8), Mandarin (n=7) and Vietnamese (n=10). Results will be presented at ESSA Activate 2026.

Conclusions

This work will foster the future development of co-designed prehabilitation interventions for Chinese and Vietnamese speaking cancer survivors in Australia. Future co-designed prehabilitation interventions arising from this research have the potential to improve physical and psychosocial health before and during anti-cancer treatment, which may contribute to reducing the care gap and inequity of health-related cancer outcomes between people of culturally and linguistically diverse and Anglo Australian backgrounds.

EXERC-029

OCCLUSION TRAINING IN EXERCISE ONCOLOGY – A NARRATIVE REVIEW OUTLINING OPPORTUNITIES, CHALLENGES, AND FUTURE DIRECTIONS

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Introduction

Cancer and its treatments are associated with a variety of acute and long-term side-effects that impact physical, psychosocial, and emotional function. Participation in structured, moderate-to-high intensity aerobic and resistance exercise during and after cancer treatment can prevent, attenuate, or reverse these side-effects, enhance treatment efficacy, and reduce mortality risk. However, participation in this type and intensity of exercise can be perceived as unachievable or unfeasible by people with cancer and their health professionals at various phases along the cancer continuum. Low-intensity blood flow restricted exercise (BFRE) may offer an alternative method of exercise for people with cancer who have limited capacity to perform moderate-to-high intensity exercise.

Methods

This narrative review, reported in line with the Scale for the Assessment of Narrative Review Articles (SANRA) guidelines, summarises literature that has investigated the use of BFRE in people with cancer, and discusses opportunities, challenges, and considerations for its future implementation in oncology settings.

Results

Original research demonstrates that BFRE may be safe and well perceived at different phases along the cancer continuum, although given the limited quantity, quality, and heterogeneity of data in this space, its effectiveness remains unclear. Future research directions, including the need to understand the safety, tolerability, and effectiveness of acute and chronic BFRE interventions across different types of cancer, treatments, and phases along the cancer continuum are discussed, and recommendations, including priority groups where BFRE interventions may be most suitable and/or beneficial are presented.

Conclusions

This work serves as an essential step in the future exploration and implementation of BFRE as an alternative method of exercise for people with cancer, guiding the design and delivery of future research and clinical interventions in this space.

EXERC-030

AN INDIVIDUALISED EXERCISE INTERVENTION IMPROVES HEALTH OUTCOMES FOR PEOPLE WITH MULTIPLE MYELOMA: THE MYEEX RANDOMISED WAITLIST-CONTROLLED TRIAL

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Introduction

People with multiple myeloma (MM) experience the lowest health-related quality of life (HRQoL) of all cancer populations. This study aimed to explore the short- and long-term effects of a 12-week individualised exercise intervention on HRQoL, MM symptoms, pain, fatigue, neuromuscular strength, and exploratory plasma omics in people with MM.

Methods

People at any stage of MM were randomised to exercise (EX) or waitlist control (CON). The 12-week individualised program included twice-weekly sessions supervised by an AEP, with one additional home-based session prescribed per week. Each 1h session consisted of HIIT, moderate-to-hard resistance and bone loading exercises. Outcomes were assessed before, immediately and 6- and 12-months following the program using validated surveys (EORTC QLQ-C30 with MY20 module, FACT-BP, FACIT-F), cardiopulmonary exercise testing, and dynamometry. Plasma omics (metabolomics, proteomics and extracellular vesicles (EV)) were analysed to explore potential biological mediators.

Results

Participants with MM (n=60; mean age 65±9 years; 78% male) presented with lytic lesions (78%) and other skeletal complications (13%; back pain, osteoporosis, osteoarthritis). The EX group experienced

increases in HRQoL (EORTC QLQ-C30 summary score: +6.3, 95%CI 0.8, 11.9, $p=0.03$), mediated through improved MM symptoms (EORTC QLQ-MY20: -7.4, 95%CI -15.2, 0.5, $p=0.07$), bone pain (FACT-BP: +4.4, 95%CI 0.5, 8.3, $p=0.03$) and cardiorespiratory fitness (VO_{2peak} : +3.1, 95%CI 1.4, 4.8, $p=0.001$) compared to CON; improvements were mostly maintained at follow-up (12 months). Exploratory plasma and plasma EV omics revealed potential biological mediators e.g. increasing primary bile acid biosynthesis pathway in bone pain improvement. No between-group differences ($p>0.05$) were observed in general pain, fatigue, or neuromuscular strength.

Conclusions

A 12-week individualised exercise intervention was effective at improving HRQoL, MM symptoms, bone pain and cardiorespiratory fitness, with potential biological mediators identified. The results support the inclusion of exercise as part of standard care to improve the quality of life and health of people with MM.

EXERC-031

FACTORS ASSOCIATED WITH SARCOPENIA AT 3 MONTHS AFTER PANCREATICOUDENECTOMY AND ITS IMPACT ON SYMPTOM BURDEN

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Introduction

Sarcopenia in patients with gastrointestinal cancer has been associated with adverse postoperative outcomes. However, it remains unclear whether sarcopenia at a specific postoperative time point is primarily driven by perioperative decline or reflects pre-existing physical vulnerability, and how it relates to symptom burden.

Methods

This prospective observational study included patients who underwent pancreaticoduodenectomy (PD). Physical function, body composition, nutritional status, and quality of life (EORTC QLQ-C30) were assessed preoperatively and at 1 and 3 months postoperatively. Sarcopenia at 3 months was defined according to AWGS 2019 criteria. Patients were classified by sarcopenia status at 3 months. Group comparisons and univariable logistic regression analyses were performed.

Results

Among 73 patients, 11 (15%) developed sarcopenia at 3 months. These patients were significantly older and had lower preoperative physical reserve, including shorter 6-minute walk distance (418 vs. 496 m), slower walking speed (1.00 vs. 1.19 m/s), weaker handgrip strength (26.0 vs. 31.7 kg), and lower skeletal muscle index (6.8 vs. 7.3 kg/m²), but nutritional indices were similar. From baseline to 1 month, both groups experienced declines in physical function and muscle mass; however, the magnitude of decline did not differ. In logistic regression, older age (OR 1.18 per year) and lower preoperative 6-minute walk distance (OR 0.90 per 10 m) were significant predictors of sarcopenia at 3 months, whereas early postoperative changes were not. Patients with sarcopenia reported significantly greater symptom burden at 3 months, including fatigue and dyspnea (shortness of breath), and showed significantly impaired cognitive functioning (EORTC QLQ-C30 cognitive domain) compared with those without sarcopenia.

Conclusions

Sarcopenia at 3 months after PD was primarily associated with pre-existing physical vulnerability rather than early postoperative decline and was accompanied by increased symptom burden and cognitive

impairment. Early identification of high-risk patients may facilitate timely exercise-based, multidisciplinary perioperative interventions to prevent postoperative sarcopenia.

EXERC-032

POSTOPERATIVE REHABILITATION OF PATIENTS WITH BREAST CANCER

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Introduction

Patients who undergo breast cancer surgery often experience restricted range of motion in the affected shoulder, which can limit activities of daily living. Although Japanese clinical guidelines strongly recommend initiating rehabilitation soon after surgery, the actual percentage of patients who receive rehabilitation remains unclear. This study aimed to determine the percentage and characteristics of female patients with breast cancer who received postoperative rehabilitation.

Methods

We used health-service utilization data linked to hospital-based cancer registries from 591 hospitals across Japan, covering more than 60% of newly diagnosed cancer cases. Female patients diagnosed with breast cancer in 2019 who underwent partial or total mastectomy were included. We examined the percentage of patients who received postoperative rehabilitation and the number of days from surgery to rehabilitation initiation. Multiple logistic regression analysis was performed to identify factors associated with receiving rehabilitation. The study was approved by the institutional ethical committee.

Results

A total of 50,419 patients were included. Overall, 14,208 of patients (28.2%) received postoperative rehabilitation. Among those who underwent lymph node dissection, only 40.1% of received rehabilitation. The median time from surgery to rehabilitation initiation was 4 days (interquartile range (IQR), 2-6 days). The median length of stay from surgery to discharge was 8 days (IQR, 6-10 days) for patients who received rehabilitation, compared with 6 days for those who did not. Logistic regression analysis showed that patients who underwent lymph node dissection had higher odds of receiving rehabilitation (OR=2.38), followed by those who underwent total mastectomy (OR=1.89).

Conclusions

This study found that fewer than 30% of patients received postoperative rehabilitation. In Japan, medical fees can be claimed for inpatient rehabilitation, but not for outpatient rehabilitation. Patients seeking early discharge may therefore face barriers to accessing postoperative rehabilitation.

EXERC-034

BODY COMPOSITION AND EXERCISE STATUS IN KOREAN BREAST AND OVARIAN CANCER PATIENTS WITH GERMLINE BRCA1/2 PATHOGENIC OR LIKELY PATHOGENIC VARIANTS

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Introduction

Appropriate exercise is strongly recommended for both high-risk individuals and cancer patients. Despite carriers with germline *BRCA1/2*

pathogenic or likely pathogenic variants (PV/LPVs) are representative of a high-risk group, data on their body composition and exercise status for developing and implementing personalized exercise programs remain limited.

Methods

This study included the female patients with germline *BRCA1/2* PV/LPVs who were enrolled in a prospective cohort at our clinic between 2014 and 2025 and underwent either a structured exercise questionnaire or bioelectrical impedance analysis (BIA). Key variables assessed included body mass index (BMI), skeletal muscle mass index (SMI, defined as total skeletal muscle mass divided by height squared), percent body fat, and adherence to exercise guidelines (defined as engaging in regular physical activity: ≥ 150 minutes/week of moderate or ≥ 75 minutes/week of vigorous aerobic activity, plus muscle-strengthening exercise).

Results

Among the 218 patients included, 112 (51.4%) were *BRCA1* PV/LPV carriers and 106 (48.6%) were *BRCA2* carriers. A total of 168 patients (77.1%) were diagnosed with breast cancer (median age at diagnosis, 44.8 years; range, 26–78), and 62 patients (28.4%) were diagnosed with ovarian cancer (median age, 53.5 years; range, 38.6–78.5). Bioelectrical impedance analysis (BIA) was performed in 140 patients, and 119 patients completed the exercise activity survey. The median BMI was 22.6 (range, 16.4–36.1), the median skeletal muscle mass index (SMI) was 8.25 kg/m² (range, 4.1–11.6), and the median percent body fat was 31.1% (range, 4.1–62.6%). Among 119 participants, 58.5% met the recommended exercise guidelines.

Conclusions

This study provided foundational data to inform the development of exercise programs for Korean female *BRCA1/2* PV/LPV carriers. Future studies will aim to evaluate the effectiveness of tailored exercise interventions through program development and implementation.

EXERC-035

CANCER-RELATED FATIGUE AND ITS INFLUENCE ON PERCEIVED PHYSICAL STATE BEFORE AND AFTER EXERCISE IN PEDIATRIC CANCER PATIENTS

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Introduction

Cancer-related fatigue (CRF) is a key symptom in pediatric oncology and affects physical functioning. Exercise interventions offer promising opportunities to improve physical well-being. This study examined associations between CRF and perceived physical state before and after a structured exercise intervention in children with cancer.

Methods

Twenty-nine children (mean age 11.3 ± 2.4 years) undergoing cancer treatment completed a single supervised exercise session. CRF was assessed before exercise using the PedsQL Multidimensional Fatigue Scale. Higher scores indicate lower CRF. Perceived physical state (activation, fitness, health, mobility, total score) were measured immediately before and after the intervention using the MoodMeter, where sixteen adjectives were rated on a six-point Likert scale ranging from 0 (“not at all”) to 5 (“totally”). Change scores (Δ) were calculated. Pearson correlations were used to examine the relationships between CRF, pre- and post-intervention values, and acute changes.

Results

Across the whole sample, children showed significant post-exercise improvements in fitness, mobility, and total score (all $p < .001$).

Children reporting lower CRF showed higher activation (pre: $r = .397$, $p = .033$; post: $r = .373$, $p = .046$), better fitness (post: $r = .381$, $p = .041$), better perceived health (pre: $r = .547$, $p = .002$; post: $r = .479$, $p = .009$), and higher overall total score (pre: $r = .423$, $p = .022$; post: $r = .450$, $p = .014$). CRF was not associated with the acute change in perceived physical state following exercise.

Conclusions

CRF is strongly associated with perceived physical state in pediatric oncology patients, with children experiencing less CRF reporting consistently better well-being before and after exercise. However, CRF levels did not influence the degree of improvement resulting from the session. These findings underscore the value of physical activity in supporting well-being in this population and support integrating exercise into pediatric oncology care.

EXERC-036

ASSOCIATIONS BETWEEN CANCER-RELATED FATIGUE AND ACUTE MOTIVATIONAL AND PSYCHOLOGICAL RESPONSES TO EXERCISE IN CHILDREN WITH CANCER

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Introduction

Exercise is increasingly recommended in pediatric oncology to enhance motivational and psychological well-being. However, children differ in how they respond, and cancer-related fatigue (CRF) may play a key role. This study aimed to examine whether short-term exercise-induced changes in motivation and psychological strain differ by CRF level.

Methods

Twenty-nine children (mean age 11.3 ± 2.4 years) undergoing cancer treatment completed a single supervised exercise session. CRF was assessed before exercise using the PedsQL Multidimensional Fatigue Scale. Higher scores indicate lower CRF. Motivation and psychological strain were assessed before and after the session using the MoodMeter, where sixteen adjectives were rated on a six-point Likert scale ranging from 0 (“not at all”) to 5 (“totally”). Change scores were calculated. Pearson correlations examined relationships between CRF, pre- and post-intervention values, and acute changes.

Results

Across the whole sample, children showed significant post-exercise improvements in motivation ($p < .001$) and psychological strain ($p = .024$). Children with lower CRF reported significantly better pre-exercise motivation ($r = .444$, $p = .016$) and better pre-exercise psychological strain ($r = .543$, $p = .002$). No significant associations were found between CRF and post-exercise motivation ($r = .231$, $p = .227$) or post-exercise psychological strain ($r = .351$, $p = .062$). However, lower baseline fatigue scores (indicating higher CRF) were associated with larger increases in motivation ($r = -.471$, $p = .010$) and greater improvements in psychological strain ($r = -.412$, $p = .026$).

Conclusions

CRF strongly influences motivational and psychological well-being in pediatric oncology patients. While children with less CRF reported better baseline motivation and psychological strain, those with higher CRF experienced the greatest psychological benefits from exercise. These findings highlight the dual role of exercise in stabilizing mood and mitigating CRF. Integrating structured physical activity into supportive care may be particularly beneficial for patients experiencing high CRF.

EXERC-037**'TAKING BACK CONTROL' THROUGH EXERCISE: A QUALITATIVE EXPLORATION OF SIDE EFFECTS AND PHYSICAL ACTIVITY DURING TREATMENT FOR OVARIAN CANCER**

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Introduction

Physical activity during treatment for cancer has been shown to improve function and reduce treatment-related side effects. However, existing evidence is largely derived from early-stage and more common cancers and may not reflect the experiences of women with ovarian cancer. This qualitative study explored treatment-related side effects associated with chemotherapy and experiences with physical activity across treatment stages among women with ovarian cancer enrolled in an exercise clinical trial.

Methods

Participants were drawn from the phase 3 ECHO trial, which was a 6-month telephone delivered exercise intervention during chemotherapy (exercise versus usual care). Eligible women were newly with diagnosed ovarian cancer, were aged ≥ 18 years, had ECOG score 0–2, and had completed the ECHO trial between June–December 2022. Guided by the socioecological framework, semi-structured interviews were conducted using a phenomenological approach. A pragmatic, inductive thematic analysis was undertaken to develop salient themes using the Braun & Clarke methodology.

Results

Seventy of 489 eligible ECHO participants were invited to participate; 26 returned consent forms, and 15 completed interviews (mean age 61.9 years). Most participants had stage III (53.3%) or stage IV (20%) disease; 53% were in the intervention group. Six themes were constructed: (1) side effects along the cancer continuum; (2) physical, mental, and emotional exhaustion; (3) fears related to uncertainty, long-term impacts, and recurrence; (4) “choosing what I can control”; (5) exercise to navigate side effects and daily living; and (6) participation in an exercise trial as “lifesaving”.

Conclusions

Women experienced significant symptom burden yet used physical activity and exercise to manage side effects, maintain normality, and regain control, supporting the need for exercise oncology education and tailored exercise programs across the ovarian cancer treatment continuum.

EXERC-038**THE EFFECT OF INTRA-INFUSION EXERCISE ON CHEMOTHERAPY SIDE EFFECTS: THE EX-FUSION STUDY**

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Introduction

Most people undergoing chemotherapy treatment do not meet exercise guidelines, despite known benefits in reducing side effects. Barriers include treatment-related side effects, time, and limited access

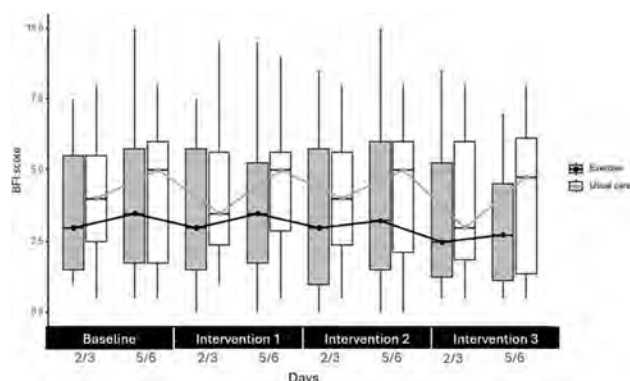
and education. Intra-infusion exercise - exercise whilst receiving chemotherapy infusion - may help overcome barriers to increase exercise during treatment. The EX-FUSION randomised controlled trial evaluated the effect of intra-infusion exercise on chemotherapy side effects and physical activity behaviour.

Methods

Forty-five participants with stage I-III breast, colorectal and ovarian cancer were randomised to intra-infusion exercise or usual care for a baseline and three intervention chemotherapy cycles. The exercise group cycled on a foot bike at moderate-intensity for 20-minutes whilst receiving chemotherapy infusion. Both groups received exercise education by a clinical exercise professional. Fatigue was the primary outcome measured by FACIT-Fatigue at baseline and post-intervention, and the Brief Fatigue Inventory for 7-days after each chemotherapy cycle. Secondary outcomes included other chemotherapy side effects such as peripheral neuropathy, physical activity, adherence quality of life and resting heart rate.

**Results**

Adherence to the exercise program was 100% with no adverse events related to exercise. As expected, fatigue (BFI score), resting heart rate and peripheral neuropathy increased in both groups with each chemotherapy cycle ($p < 0.05$). However, no overall effects of intervention nor difference between groups in change over chemotherapy cycles were observed ($p > 0.05$). There was also no difference between intervention groups in terms of physical activity or quality of life ($p > 0.05$).



	Exercise N=20 (%)		Usual care N=20 (%)	
	Baseline	Post intervention	Baseline	Post intervention
FACIT-Fatigue score	40.6±8.4	32.0±11.8	41.1±6.35	29.4±12.4
EORTC				
Global health status/QoL	69.2±15.3	51.3±21.2	69.2±16.0	48.3±24.3
Functional scales				
Physical	90.7±14.6	83.0±21.9	92.0±8.8	85.3±16.6
Role	79.2±19.4	60.0±25.0	83.3±16.2	55.0±28.7
Emotional	83.8±14.2	78.3±23.2	80.0±15.9	77.1±21.8
Cognitive	89.2±14.6	77.5±23.1	82.5±18.3	71.7±24.2
Social	65.0±27.5	64.2±32.1	64.2±23.1	54.2±22.2
Symptom scales				
Fatigue	32.8±29.4	55.6±23.9	29.4±16.2	56.7±21.9
Nausea and vomiting	10.0±13.7	20.0±16.8	5.8±9.8	15.0±14.2
Pain	7.5±11.4	20.0±30.9	17.5±19.8	25.0±23.9
Dyspnoea	21.7±22.4	23.3±21.9	10.0±15.7	18.3±22.9
Insomnia	31.7±31.5	40.0±33.5	41.7±32.2	40.0±29.8
Appetite loss	23.3±32.6	23.3±30.8	15.0±17.0	30.0±28.4
Constipation	18.3±22.9	25.0±30.3	18.3±22.9	20.0±25.1
Diarrhoea	18.3±29.6	11.7±19.6	15.0±17.0	15.0±20.2
Financial difficulties	18.3±15.0	18.3±31.5	15.0±27.5	28.3±29.2
Stage of Change				
Precontemplation	0 (0)	2 (10)	1 (5)	1 (5)
Contemplation	7 (35)	6 (30)	1 (5)	1 (5)
Preparation	5 (25)	4 (20)	6 (30)	8 (40)
Action	2 (10)	2 (10)	2 (10)	2 (10)
Maintenance	6 (30)	6 (30)	10 (50)	8 (40)
Bandura's Exercise Self-Efficacy	53.2 [38.5]	39.8 [26.8]	63.2 [32.1]	56.2 [27.2]
Actigraph				
Moderate-to-vigorous physical activity (minutes per day)	37.1±38.0	39.8±35.3	35.6±26.7	37.2±28.4
Steps (per day)	5888±4022	6429±4065	5866±2761	6352±2492

Conclusions

Intra-infusion exercise has excellent adherence and does not increase chemotherapy side effects compared to usual care. Although a brief 20-minute intra-infusion session did not independently change exercise behaviour or symptom trajectories, the model created a valuable, protected opportunity for patients to be active during treatment. These findings support further exploration of intra-infusion exercise as a patient-centred approach to enhancing supportive cancer care.

EXERC-039

THE IMPACT OF EMOTIONAL AND PHYSICAL SYMPTOMS ON ADHERENCE IN A PREHABILITATION PROGRAM

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Introduction

Cancer prehabilitation has grown substantially over the past three decades to improve physical function before treatment. Although pre-operative physical activity can enhance quality of life, adherence to prescribed programs remains challenging. This study examined how emotional and physical symptoms influence adherence to prehabilitation.

Methods

We conducted a retrospective chart review of patients referred to the Physical Medicine and Rehabilitation outpatient clinic for prehabilitation before surgery between September 1, 2015, and December

31, 2022. Follow-up phone calls within two weeks of consultation assessed symptom burden and adherence. Symptom distress was measured using the Edmonton Symptom Assessment Scale (ESAS). Adherence was scored from 0–4 based on participation in aerobic and strength training and categorized as none (0), low (1), moderate (2–3), or high (4).

Results

A total of 119 patients met inclusion criteria. Participants were predominantly white (75%), female (50%), and Christian (70%), with a mean age of 68.7 years (SD = 9.57). Most had early stage (52%) cancer, with gastrointestinal or hepatobiliary cancers most common (49%). Adherence was high in 67% of patients, moderate in 26%, low in 4%, and absent in 3%. Higher physical and emotional distress scores were statistically significantly associated with lower likelihood of high adherence ($p < .05$ and $p < .01$, respectively), while higher total distress scores were paradoxically associated with increased adherence ($p < .01$). Between 8–26% reported high spiritual or emotional distress, yet only two patients received counseling support.

Table 1. Sample Demographics

Variables	Frequency (n=119)
Mean Age (SD, years)	68.72 (9.58)
Sex	
Female	60
Male	59
Ethnicity	
White	89
Black or African American	7
Hispanic/Latino	15
American Indian or Native American	1
Asian	6
Religion	
Catholic	25
Christian	73
Other*	6
Diagnosis	
Gastrointestinal and Hepatobiliary	57
Thoracic and Head and Neck	13
Genitourinary and Gynecologic	28
Skin and Soft Tissue	19
Stage	
Early Stage	62
Advanced	54
Surgery	
Colectomy/Crystotomy/Esophagectomy/Gastrectomy/Hepatectomy	20
Cystectomy	8
Head & Neck Dissection/Resection	7
Hysterectomy/BSO	6
Mastectomy	9
Other**	11
Sacrocaudal Resection	15
Spine/Neurosurgery	8
Whipple/Pancrectomy	35
Adherence	
None/Low/Moderate	39
High	80

*Buddhist, Hindu, Jehovah's Witness, Jewish

** CRS/HIPEC, Nephrectomy, Hernia Repair, Adrenalectomy, Pneumonecctomy, Foot Amputation, Knee Replacement, Skin Cancer Excision

Table 2: Logistic Regression Predicting Adherence based on Edmonton Symptom Assessment Scale (ESAS) Physical, Emotional, Spiritual, and Total Symptoms Scores

	B	SE	Wald	df	p	Multivariate Regression		
						OR	95% CI for OR	
ESAS Physical	-.40	.16	6.18	1	.01	.67	.49	.92
ESAS Emotional	-.53	.18	8.65	1	.00	.59	.41	.84
ESAS Spiritual Pain	-.27	.18	2.24	1	.13	.76	.54	1.09
ESAS Total	.38	.15	6.82	1	.01	1.46	1.10	1.95
Constant	.32	.34	4.35	1	.04	1.04		

Conclusions

Adherence to prehabilitation was generally high, but physical and emotional distress negatively influenced participation. These findings highlight the importance of integrating psychological and interpersonal support into prehabilitation programs and increasing referrals for counseling. While physical and emotional distress improved over time, spiritual distress did not. Further research is needed to clarify how symptom burden affects engagement in prehabilitation.

EXERC-040**REMOTELY-MONITORED CARDIO-ONCOLOGY REHABILITATION IS SAFE, FEASIBLE AND CLINICALLY PROMISING FOR BREAST CANCER PATIENTS AT HIGH RISK**

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Introduction

Cardiovascular disease is now the leading cause of mortality among women treated for breast cancer. Exercise-based rehabilitation is effective in reducing cardiovascular risk; however, access remains limited, particularly for people living in regional and remote areas. Our team co-adapted a remotely supervised cardiac rehabilitation platform, previously shown to be non-inferior to face-to-face delivery, for use with breast cancer survivors. This study aimed to examine the feasibility and safety of delivering this adapted intervention among breast cancer patients at elevated cardiovascular risk.

Methods

Women with stage I–III breast cancer at risk of cardiovascular disease participated in an 8-week, smartphone-based exercise rehabilitation program (REMOTE-COR-B). The intervention integrated a wearable heart rate sensor with a custom-built smartphone app, enabling real-time remote supervision (in any internet connected location), individualized exercise prescription, and behaviour change support. Participants attended remotely supervised exercise sessions during scheduled operating hours, receiving live audio coaching and feedback from an accredited exercise professional. The primary feasibility outcome was adherence, defined as participation in ≥ 3 exercise sessions per week. Secondary outcomes included safety, satisfaction, and preliminary efficacy outcomes. Assessments were conducted at baseline, post-intervention (2 months), and follow-up (5 months)

Results

Key outcomes are presented in Table 1. Twenty participants initiated the intervention and 17 completed. Weekly participation was high, with 94% of participants engaging in at least one supervised session per week, while adherence to the three-sessions-per-week target was moderate. No serious adverse events were reported and participant satisfaction was high. Improvements were observed in physical activity and cardiorespiratory fitness at post-intervention, with physical activity gains largely sustained at follow-up (62% meeting guidelines vs 25% at Baseline).

Table 1: Feasibility, Acceptability and Preliminary Outcomes

Domain	Outcome
Recruitment and retention	21 recruited, 20 initiated; 17 completed
Adherence	94% completed weekly sessions; 47% met ≥ 3 sessions/week
Safety	No serious adverse events
Satisfaction (CSQ)	CSQ mean = 24.2 (≥ 24 acceptable)
Physical Activity (Godin)	Godin = +7.5 units ($p < 0.05$) post-intervention
Cardiorespiratory Fitness (ISWT)+	+64m (95%CI 6.3–122.3) post-intervention; minimal important difference (≥ 48 m)

CSQ= Client Satisfaction Questionnaire; Godin = Godin Leisure time physical activity index; ISWT = Incremental Shuttle Walk Test, assessed in subsample ($n = 7$).

Conclusions

REMOTE-COR-B is a feasible and safe digitally delivered exercise rehabilitation intervention for breast cancer survivors at risk of poor heart health. The findings support the acceptability of real-time remote supervision within a cardio-oncology setting.

EXERC-041**EXERCISE FOR PEOPLE RECEIVING IMMUNE CHECKPOINT INHIBITOR IMMUNOTHERAPY FOR CANCER: PERCEPTIONS AND PRACTICES OF HEALTHCARE PROFESSIONALS**

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Introduction

There is growing advocacy to incorporate exercise into routine cancer care. Healthcare professionals (HCPs) play an important role in promoting exercise. However, evidence regarding exercise during immune checkpoint inhibitor (ICI) treatment is limited, and HCPs perspectives on exercise in this context are unknown. This study investigated HCPs perceptions and practices regarding exercise for people receiving ICIs for cancer.

Methods

An online survey was distributed internationally through professional associations and networks. Eligible participants were HCPs involved in caring for people receiving ICIs for cancer. Perceived safety and efficacy of exercise during ICI treatment, as well as practices, confidence, and barriers regarding exercise recommendations and referrals, were assessed.

Results

A total of 110 HCPs completed the survey, including 28 exercise professionals and 82 non-exercise professionals (predominantly medical oncologists ($n=40$) and nurses ($n=19$)). Over 95% of HCPs completely or somewhat agreed with the statements that exercise is safe, important, and beneficial for people receiving ICIs. Additionally, 67% completely or somewhat agreed with the statement that exercise can enhance ICI effectiveness. While 55% of HCPs completely or somewhat disagreed with the statement that exercise can increase the frequency or severity of immune-related adverse events, 35% were undecided or did not know. Among non-exercise professionals, 96% reported recommending exercise, yet this advice was only provided to 64% of patients on average. Similarly, 88% of non-exercise HCPs reported making referrals to an exercise specialist, however referrals are only made for 41% of their patients. The predominant barriers to providing referrals were not knowing where, or to whom to refer (35.4% and 25.6%, respectively), and concerns about the person's ability to afford services (30.5%).

Conclusions

HCPs perceive exercise as safe, important, and beneficial for people receiving ICIs for cancer. Although HCPs consider exercise specialist referrals, a lack of standardised referral pathways contribute to inequitable access to supportive care interventions.

EXERC-043**ACCEPTABILITY AND BEHAVIOR CHANGE AMONG CANCER PATIENTS IN A PHYSICAL FITNESS ASSESSMENT PROGRAM: A QUESTIONNAIRE-BASED EVALUATION**

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Introduction

Patients with cancer are prone to declines in physical function and nutritional status due to treatment-related fatigue and reduced physical activity. Regular assessment of these domains is essential in survivorship care. Our institution has implemented a periodic “Physical Function and Nutrition Assessment Session,” combining functional tests and brief nutritional screening to identify high-risk patients and guide them toward appropriate supportive care. While previous work reported the characteristics of the physical measurements themselves, this study focused on patients’ perceptions and behavioral intentions based on questionnaire responses. To evaluate cancer patients’ understanding, satisfaction, and behavioral intentions related to physical activity and diet following a physical function and nutrition assessment session.

Methods

Cancer patients who participated in three assessment sessions held between 2024 and 2025 were included. Assessments consisted of handgrip strength, the five-times sit-to-stand test, skeletal muscle index, and a simple nutritional evaluation. Participants completed a self-administered questionnaire including eight items: awareness of the session, clarity of procedures, new insights, intention to increase physical activity, intention to improve dietary habits, overall satisfaction, preferred frequency of future sessions, and willingness to recommend the program to others. Responses were analyzed using Likert scales and descriptive methods, and free-text comments were reviewed qualitatively.

Results

A total of 41 patients participated (15 men, 26 women; mean age 63.4 years). Most respondents found the procedures easy to understand (97.6%) and reported gaining new insights (97.6%). Motivation to increase physical activity was noted in 97.6%, and 95.1% intended to improve dietary habits. Overall satisfaction was uniformly high, and the preferred reassessment interval was every 3–6 months. Recommendation intent reached 90.2%.

Conclusions

The assessment sessions were well accepted and appeared to promote awareness and motivation for behavior change. Regular implementation may support ongoing survivorship care, and future research should examine effects on clinical and quality-of-life outcomes.

EXERC-044**DEVELOPING CAN WALK CAN RUN: A WALKING AND RUNNING PROGRAM FOR PEOPLE AFFECTED BY CANCER.**

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Introduction

Finding new ways to promote physical activity after cancer diagnosis and treatment is an important challenge. This presentation reports on the development of a walking and running program that could support people affected by cancer to perform physical activity in community settings.

Methods

Mixed methods research that followed guidance for developing and evaluating complex interventions was conducted in two phases. Phase 1 included a review of published evidence, stakeholder consultation, and co-design workshops, which were used to develop an initial program protocol. Phase 2 included iterative piloting of the program, via delivery of it prior to three separately sponsored fun runs, to refine and optimise the protocol.

Results

In Phase 1, 38 reviews, identified via systematic search, 15 stakeholders, including potential program referrers, managers or sponsors, and 8 co-design participants, including people with lived experience of cancer, and program delivery staff contributed to the initial protocol development. Protocol elements generated included selection of location and delivery staff, tailoring of physical activity content, use of inclusive language, and strategies to support social connection. In Phase 2, 17 participants with lived experience of cancer participated in the program during iterative piloting. Protocol modifications included expansion of the program goals beyond fun run participation, as well as the development of remote support strategies to facilitate continued engagement and further opportunities for physical activity prescription.

Conclusions

Utilising an iterative methodological approach and being open to protocol change allowed us to address the preferences of diverse stakeholders and to optimise the practical program aspects prior to larger scale trials.

EXERC-045**PHYSICAL ACTIVITY, EXERCISE CAPACITY AND PHYSICAL FUNCTION AFTER BONE MARROW TRANSPLANT.**

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Introduction

This study examined free-living physical activity, measures of exercise capacity and physical function in people following bone marrow transplant (BMT) for haematological cancer. It additionally assessed the association between these outcome measures.

Methods

Adults 30±14 days post allogeneic or autologous BMT were recruited from three Australian tertiary hospitals following inpatient discharge. Participants completed the six-minute walk test (6MWT), 30 second

sit-to-stand (30secSTS) test and wore a Fitbit Charge 5 for one week. Physical activity variables included steps/day, and peak 30-minute cadence (the average steps/min for the highest non-consecutive 30 minutes in a day). Values are described using mean $\pm$ standard deviation and mean difference (MD) with 95% confidence intervals (95%CI). The strength of associations was classified according to Cohen.

Results

One hundred and thirty-six participants of 170 were included. Participant descriptive data, physical activity, and exercise capacity values are presented in **Table 1**.

Physical activity levels were below those previously reported for age-matched community-dwelling adults; $\sim$ 7,200 steps/day, $\sim$ 105 steps/min peak-1 minute cadence; $\sim$ 75 steps/min peak 30-minute cadence. Exercise capacity and physical function were reduced compared with healthy community-dwelling older adults; 6MWT 538 m [females] and 572 m [males]; 30secSTS 15 [females] and 17 [males]. Compared to participants who received an autologous BMT, allogeneic participants tended to perform fewer daily steps, had reduced peak cadence, exercise capacity and physical function. Steps/day ($\rho=0.63$), and peak 30-minute cadence ($\rho=0.56$) were moderately associated with 6MWT distance. Associations between 30secSTS performance and physical activity variables were fair (ρ range=0.40 to 0.41).

Table 1. Descriptive data, physical activity, exercise capacity, and physical function.

	Allo (n=47)	Auto (n=89)	MD (95% CI)
Age yrs	54 (13)	58 (12)	
Female n (%)	22 (47)	33 (37)	
BMI	25 (4.2)	27 (6.4)	
Steps/day	4069 (2616)	5361 (3036)	-1294 (-2370, -217)
Peak cadence	60 (23)	72 (27)	-11 (-21, -1.5)
6 min walk m	438 (95)	504 (81)	-66 (-100, -33)
30s STS (stands)	11 (3.2)	13 (4.4)	-1.6 (-3.0, -1.2)

Continuous variables reported with mean and standard deviation, categorical variables presented as frequency and percentage.

Conclusions

Daily steps, peak cadence, exercise capacity and physical function after BMT are low, especially in people who receive an allogeneic BMT. Rehabilitation programs for people with haematological cancers treated with BMT are warranted. The strength of associations indicates that clinical assessments do not capture all aspects of free-living physical activity measures.

EXERC-046
MOTIVATIONAL INTERVIEWING TO ENHANCE SELF-LEARNING AND PRACTICING OF TAI CHI IN ADVANCED LUNG CANCER PATIENTS: A PILOT RANDOMIZED CONTROLLED TRIAL

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Introduction

The majority of patients with lung cancer did not meet the physical activity recommendations. Tai Chi is a culturally appropriate, low-to-moderate intensity exercise suitable for self-learning in Chinese populations. Motivational interviewing (MI), a widely used behavioural-change counselling technique may help patients initiate and sustain Tai Chi practice. This study examined the feasibility and potential effectiveness of an MI-enhanced Tai Chi program among patients with advanced lung cancer compared with a video-only control group.

Methods

A mixed-method pilot two-arm randomized controlled trial was conducted in 2024-2025 with 56 participants assigned to either mindful yoga (n=28) or control group (n=28). Over 12 weeks, the MI group received two individualized, face-to-face MI sessions in the first two weeks plus access to a standardized series of Tai Chi instructional videos; the control group received the same videos without MI sessions. Assessments were conducted at baseline, immediately (T1), and three-month post-intervention (T2) using self-reported questionnaires and semi-structured interviews.



Results

Fifty-six participants, with a mean age of 58 years, were enrolled. The MI-enhanced Tai Chi program was feasible and acceptable, with high adherence to home practice (86%) and favourable ratings of acceptability, credibility, satisfaction, and safety. Compared with control, the MI group showed greater improvements in motivation to exercise (Effect Size [ES]: 2.28, $p=0.03$), Tai Chi self-efficacy (ES: -3.72, $p=0.04$), and self-perceived health status (ES: 11.47, $p=0.02$). Qualitative interviews revealed three themes: strengthening autonomous motivation and confidence, tailored strategies to overcome barriers, and psychosocial and cultural resonance.

Conclusions

An MI-enhanced Tai Chi program appears feasible, acceptable, and potentially effective in improving motivation, self-efficacy, and perceived health among patients with advanced lung cancer. Given MI's low time and resource demands, larger trials are warranted to confirm these findings and assess long-term clinical outcomes.

EXERC-047
WHEN SHOULD EXERCISE START AFTER A CANCER DIAGNOSIS? AN INTERNATIONAL DELPHI CONSENSUS TO INFORM SUPPORTIVE CARE PRACTICE

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Introduction

Exercise rehabilitation is a key component of cancer care, with benefits demonstrated across all phases of the cancer continuum. However, uncertainty remains regarding the optimal timing for initiating exercise following a cancer diagnosis, influenced by disease characteristics, treatment pathways, individual readiness, and health system factors. This study aimed to establish international expert consensus on when and how exercise should be initiated following a cancer diagnosis.

Methods

A modified Delphi study was conducted in accordance with Conducting and Reporting Delphi Studies guidelines. A multidisciplinary steering committee comprising people with lived experience of cancer, oncology clinicians and researchers developed initial survey statements addressing disease-, treatment-, person- and health service-related factors influencing exercise initiation. A three-round electronic Delphi process was then undertaken to gather expert perspectives, analyse and refine emerging themes, and rate statements on a 9-point Likert scale (1=Strongly Disagree to 9=Strongly Agree), with consensus predefined as $\geq 80\%$ agreement or disagreement.

Results

Eighty oncology experts from five continents participated in Round 1, including physiotherapists ($n=46$), exercise physiologists ($n=11$), nurses ($n=10$), oncologists ($n=8$), occupational therapists ($n=2$), a psychologist ($n=1$) and others ($n=2$). Retention rates were 80% and 77% in Rounds 2 and 3, respectively. By Round 3, consensus was achieved on 54 of 57 statements. Experts agreed that exercise should be initiated as early as possible following diagnosis, ideally prior to treatment commencement, while remaining responsive to individual clinical status, preferences, and readiness. Integration of exercise discussions into routine oncology consultations and availability of system-level referral pathways were identified as key enablers of timely access.

Conclusions

This international expert consensus supports early, individualised exercise prescription and support following a cancer diagnosis. The findings inform supportive care models and multidisciplinary oncology practice, providing a practical framework to guide timely, person-centred exercise pathways and priorities for service planning and future trials.

EXERC-048

LONGITUDINAL CHANGES IN PERIOPERATIVE PHYSICAL ACTIVITY AND IMPACT ON HRQOL IN CANCER PATIENTS

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Introduction

This study aimed to clarify longitudinal changes in physical activity (PA) from the preoperative period to 3 and 6 months postoperatively in colorectal and liver cancer patients, and to identify associations with health-related quality of life (HRQOL) and predictors of postoperative PA.

Methods

We included 69 patients (aged ≥ 18) who underwent surgery at University Hospital A (October 2023–November 2025), following institutional ethics approval. Daily light PA (LPA), moderate-to-vigorous PA (MVPA), sedentary behavior (SB), and steps were measured using a waist-worn accelerometer (ActiGraph GT3x-BT). HRQOL was assessed using physical Component Summary (PCS) and Mental Component Summary (MCS) scores from the SF-8. The generalized Linear Mixed Models were to analyze the associations between PA and QOL and to identify predictors of PA.

Results

Participants (50 colorectal, 19 liver) had a mean age of 67.6 ± 11.2 years; 39.1% received chemotherapy. No significant changes in PA were observed, however only 30.4% of participants met the international guideline recommending ≥ 150 min/week of MVPA preoperatively. MVPA and steps showed significant positive associations with both PCS ($\beta = .12$, $p < .001$; $\beta = .001$, $p \leq .001$) and MCS ($\beta = .089$,

$p < .001$, $\beta = 0.01$). SB tended to be negatively associated with PCS ($\beta = -.01$, $p = .054$). Predictors for PA varied by intensity: skeletal muscle mass (SMM) was significantly associated with MVPA ($\beta = -6.26$, $p = .037$) and the steps ($\beta = 4.84$, $p = .032$). Conversely, chemotherapy was the primary predictor for LPA and SB; chemotherapy patients showed decreased LPA ($\beta = -64.84$, $p = .020$).

Conclusions

No significant changes were observed in postoperative PA among patients with colorectal and liver cancer. To improve HRQOL, individualized support addressing low SMM and chemotherapy is essential to prevent intensity-specific PA declines.

EXERC-049

HOME-BASED, APP-DELIVERED HIGH-INTENSITY INTERVAL TRAINING IMPROVES CARDIORESPIRATORY FITNESS IN BREAST CANCER SURVIVORS: RANDOMIZED CONTROLLED TRIAL

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Introduction

Reduced cardiorespiratory fitness in breast cancer survivors negatively impacts prognosis. Although supervised exercise is effective, barriers such as distance and time limit accessibility. We evaluated a home-based, mobile app-supported high-intensity interval training (HIIT) intervention designed to improve fitness and physical activity in sedentary survivors.

Methods

This randomized controlled trial (UMIN000024092) enrolled 50 sedentary breast cancer survivors who were randomized to a 12-week home-based HIIT intervention ($n = 25$) or usual care ($n = 25$). The intervention utilized equipment-free bodyweight interval training with a progressive, weekly workload advancement. Participants used a custom mobile app that provided exercise guidance and self-monitoring capabilities. The primary outcome was cardiorespiratory fitness (VO_2 peak) at week 12. Secondary outcomes included self-reported physical activity (GPAQ) and patient-reported outcomes (PROs), which were assessed at Weeks 12, 24, and 36.

Results

At week 12, the intervention group had significantly improved VO_2 peak compared to the control group (between-group difference: $+1.7$ mL/kg/min, 95% CI: 0.8 to 2.6, $p < 0.001$), confirming the intervention's primary physiological efficacy. Regarding behavioral outcomes, the intervention group increased total physical activity by 220 (SD 520) minutes per week, while the control group increased by 115 (SD 239) minutes per week. The between-group difference was not statistically significant ($+105$ min/week; 95% CI: -130 to 340, $p = 0.37$). Consistent with this finding, long-term follow-up data from Weeks 24 and 36 showed no significant between-group differences in physical activity levels. No significant between-group differences were observed in any PROs at any time point.

Conclusions

The app-delivered home HIIT program successfully improved cardiorespiratory fitness in breast cancer survivors. Absence of significant changes in self-reported physical activity or patient-reported outcomes suggests physiological adaptations occurred independently of perceived behavioral changes. Practical interventions require enhanced personalized support strategies to translate fitness gains into sustained lifestyle modification.

EXERC-051

INTEGRATING EXERCISE INTO CHEMOTHERAPY: EXPERIENCES FROM THE EX-FUSION TRIAL

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Introduction

Exercise is effective for alleviating chemotherapy side-effects and improving clinical outcomes. However, many people with cancer struggle to engage in sufficient exercise due to barriers such as fear, limited access, and time constraints. Exercise during chemotherapy infusion (intra-infusion) offers a novel way to integrate supervised exercise into treatment while addressing many of these barriers. This qualitative study explored the acceptability and experiences of intra-infusion exercise within the EX-FUSION randomised clinical trial.

Methods

Adults aged <75 years receiving chemotherapy for stage I-III breast, colorectal or ovarian cancer were randomised to exercise or usual care. Participants in the EX-FUSION exercise group cycled for 20-minutes at moderate-intensity while receiving chemotherapy infusion in each of three cycles. All participants received exercise education. Following EX-FUSION, participants were invited to complete an optional semi-structured interview exploring their experiences of intra-infusion cycling (for those in the exercise group) and exercise education. Interviews were transcribed and analysed thematically.

Results

Sixteen participants completed interviews (median age 59y; female: 86%; colorectal: 36%, ovarian: 50%, breast: 14%). Two overarching themes captured their experiences of EX-FUSION: 1) EX-FUSION participation and exercise physiologist (EP) interaction; and 2) intra-infusion exercise in action. Participants described diverse motivations for enrolment, including altruism, curiosity, and perceived benefit. The EP's role was highly valued, especially their tailored exercise advice and assistance connecting participants to other services and support. Intra-infusion cycling intensity and duration were suitable, with many wanting to exercise longer/harder. Cycling was familiar and enjoyable, although positioning in the chemotherapy chair ($\pm$ ice mitts/booties) could be awkward.

Conclusions

This study demonstrates acceptability of intra-infusion exercise in the EX-FUSION trial. Participants found the experience enjoyable and highlighted the importance of the holistic support provided by the exercise physiologist. Intra-infusion exercise appears to be a promising strategy for integrating exercise into routine cancer care and warrants further investigation.

FATIG-002

REAL-WORLD SYMPTOM EXPERIENCE OVER THE COURSE OF CHEMOTHERAPY IN AN AUSTRALIAN CANCER TREATMENT UNIT

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Introduction

Existing literature on symptom burden during anti-cancer treatment primarily examines single diseases or treatment types, overlooking the diversity of patients seen in typical cancer centres. Limited longitudinal evidence describes symptom patterns across mixed diagnoses and chemotherapy regimens in real-world settings. This study aimed to characterise the common symptom experiences of a heterogeneous patient cohort undergoing chemotherapy in an Australian cancer treatment centre.

Methods

A prospective, longitudinal observational cohort study was conducted using data from a cancer treatment centre in Australia. Patient-reported symptom data were collected through monthly surveys over the first four months of chemotherapy treatment, using the Common Terminology Criteria for Adverse Events–Patient-Reported Outcomes (CTCAE-PRO) tool.

Results

A total of 252 participants completed the first survey. Most (65%) were female and had a breast cancer diagnosis (40%), and the mean age was 61 ± 12.3 years. Participants were screened for 54 symptoms during each survey and reported a mean of 22.5 ± 9.0 symptoms at baseline, with a statistically significant reduction in symptoms throughout the study period 21.9 ± 9.2 symptoms ($p=0.002$). The most prevalent symptoms reported at baseline and timepoint four were fatigue (93%), insomnia (80%) and pain (72%). The top three symptoms experienced at Grade 3 or higher severity at baseline were fatigue (25%), pain (15%) and constipation (15%), all of which reduced by timepoint four. Symptoms such as peripheral neuropathy and decreased sexual interest increased from baseline to timepoint four.

Conclusions

This study has produced valuable insights into the high number and various symptoms experienced during the initial four months of chemotherapy. Commonly used symptom screening tools used in clinical practice do not cover the breadth of symptoms experienced. The results emphasise the importance of using tailored symptom assessment and supportive care strategies to optimise outcomes for people undergoing chemotherapy.

FATIG-003

COMMUNICATING CANCER-RELATED FATIGUE: A QUALITATIVE STUDY OF CLINICIANS AND SURVIVORS

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Introduction

Cancer-related fatigue (CRF) is a common side effect of cancer and its treatment, characterized by persistent cognitive, emotional, and physical exhaustion. Although assessment guidelines exist, effective communication and personalized care remain challenging. Patients and clinicians may also use the same terms (e.g., “tired,” “weak”) to convey different meanings, contributing to misunderstandings. This qualitative study explored how clinicians and cancer survivors discuss CRF across a multi-site cancer system to identify gaps in language use, communication, and understanding that enable or constrain effective CRF discussions.

Methods

We conducted a qualitative study using semi-structured interviews with purposively sampled clinicians who treat individuals post-curative treatment and survivors who report CRF. Interviews were conducted by a trained qualitative researcher. Interview transcripts were analyzed by two experienced coders using a deductive thematic approach. Themes were compared across groups to examine differences in language use and communication, as well as facilitators and barriers in CRF discussions.

Results

Seventeen interviews were analyzed (Tables 1 and 2). Three analytic themes were identified: *language use, factors shaping communication, and facilitators and barriers to effective communication* (Table 3). Clinicians used indirect, function-focused language emphasizing energy or activity limitations, and characterized themselves as proactive in initiating conversations. Survivors used embodied, metaphor-rich narratives grounded in daily experience. Although clinicians and survivors were willing to discuss CRF, clinicians cited time constraints, and survivors noted discussions had limited impact due to financial barriers, limited clinician recognition, and infrequent reassessment. Both reported skepticism about available interventions. Clinicians identified practical communication tools but reported inconsistent training and survivor unpreparedness as ongoing barriers. Survivors normalized CRF, contributing to underreporting and frustration.

TABLE 1: Survivorship Clinician Demographics (n=10)

Participant ID	Provider Role	Years in practice	Sex	Race/ethnicity
1001	Medical Oncologist	5	M	White
1002	Advanced Practice Provider	24	F	White
1003	Nurse Practitioner	3	F	White
1004	Nurse Practitioner	13	F	White
1005	Nurse Practitioner	6	F	White
1006	Internal Medicine Physician	30	M	White
1007	Medical Oncologist	10	M	White
1009	Nurse Practitioner	10	F	White
1010	Psychiatry, Behavioral Health	10	M	White
1016	Surgical Oncologist	13	F	White

TABLE 2: Patient Demographics (n=7)

Participant ID	Diagnosis	CRF at study consent*	Age	Sex	Race/ethnicity
1008	Acute Lymphocytic Leukemia	7	28	F	White
1011	Trigeminal Schwannoma	8	81	M	White
1012	Pancreatic cancer (CMD)	7	73	F	White
1017	Pancreatic cancer (CMD)	7	70	F	White
1018	Rectal Adenocarcinoma	7	40	F	White
1022	Acute Lymphocytic Leukemia	5	48	M	White
1024	Breast cancer	7	55	F	Black

*CRF scored at time of consent to participate in the study using a Numerical Rating Scale: “On a 0 to 10 scale, where 0 means no fatigue and 10 means the worst fatigue imaginable. How would you rate your fatigue at its worst over the past 7 days?” A report of 4 or more is considered clinically significant and eligible for study participation.

TABLE 3: Themes and associated study participant quotes

Theme	Definition	Representative Quotes (Role: Participant ID)
Language use	The terms or concepts used by clinicians and cancer survivors when they are describing CRF.	“Whenever I talk to a patient, I ask ‘has your level of activity changed, can you still do the things you used to do?’ Because I can’t say [...] ‘are you fatigued?’” (Clinician: 1003) “I also describe it as feeling heavy, like I’m heavy...” (Survivor: 1008)
Factors Shaping Communication	The context of how CRF discussions are initiated in clinical encounters, including who initiates the conversation (the clinician or survivor).	“I feel like patients who are truly fatigued bring it up themselves.” (Clinician: 1005) “No, I mean, but usually they’re like in and out...” (Survivor: 1018)
Facilitators and barriers to effective communication	Clinicians’ and cancer survivors’ perceptions of what processes or tools would support effective communication during clinical encounters.	“I feel pretty comfortable about it, to a degree [...] But maybe if we could put it more in the forefront of people’s faces and [say] we can do something about fatigue.” (Clinician: 1003) “No, [discussing CRF is] not an issue... the last thing they want is hear me talk about, ‘I’m so tired,’ you know, ‘girl, you’re alive.’” (Survivor: 1017)

CRF=Cancer-related fatigue

Conclusions

Despite willingness to discuss CRF, differences in clinician and survivor language use and barriers limit shared understanding and perceived benefit of these conversations. Strategies that bridge clinical and survivor experiential perspectives may improve effective communication and personalized CRF care.

FATIG-004

DEVELOPMENT AND VALIDATION OF THE CANCER-RELATED FATIGUE MEANING SCALE.

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Introduction

Cancer-related fatigue affects approximately 50–100% of patients during cancer treatment but remains underrecognized and inadequately assessed in clinical practice. Most fatigue assessments focus on symptom severity, while patients' interpretations of fatigue which influence symptom appraisal and coping are often overlooked. There is still a lack of validated instruments designed to assess the meaning of the fatigue.

Methods

This study was conducted in two phases. In Phase I, scale items were generated from qualitative interviews, clinical experience, and a literature review. Content validity was evaluated by an expert panel, followed by cognitive interviews to refine item clarity. In Phase II, a cross-sectional psychometric validation was performed with 200 patients with gastrointestinal cancers undergoing active treatment at a medical center in Taiwan. Construct validity was examined using exploratory factor analysis (EFA). Convergent and discriminant validity were assessed using the Fatigue Symptom Inventory, Hospital Anxiety and Depression Scale, Symptom Distress Scale, and Herth Hope Index. Internal consistency reliability was assessed using Cronbach's alpha.

Results

Following expert's validation (I-CVI = .93–.96; S-CVI = .94), cognitive interviews, and item analysis, a 14-item Fatigue Meaning Scale was finalized from an initial 20-item pool. EFA demonstrated adequate sampling adequacy (KMO = .842), and Bartlett's test of sphericity was significant ($p < .001$). Two factors involving Threatening Meaning of Fatigue and Positive Meaning of Fatigue were identified, accounting for 51.43% of the total variance. The total scale score and the Threatening Meaning factor were positively correlated with fatigue severity, symptom distress, anxiety, and depression, and negatively correlated with hope. Internal consistency reliability was good (Cronbach's $\alpha = .804$).

Conclusions

The 14-item Fatigue Meaning Scale demonstrated good reliability and validity. This scale addresses an important gap in meaning based fatigue assessment and may support clinical practice and research.

FATIG-006

A META-ANALYSIS EVALUATING PHARMACOLOGICAL, NON-PHARMACOLOGICAL, AND PSYCHOLOGICAL INTERVENTIONS TO TREAT INSOMNIA IN PATIENTS WITH CANCER

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Introduction

Insomnia is a common and distressing symptom among patients with cancer, yet optimal management strategies remain unclear. Psychological and other non-pharmacologic interventions are increasingly recommended as alternatives or complements to pharmacologic approaches. However, few meta-analyses have rigorously evaluated interventions for insomnia across psychological, pharmacologic, and non-pharmacologic domains.

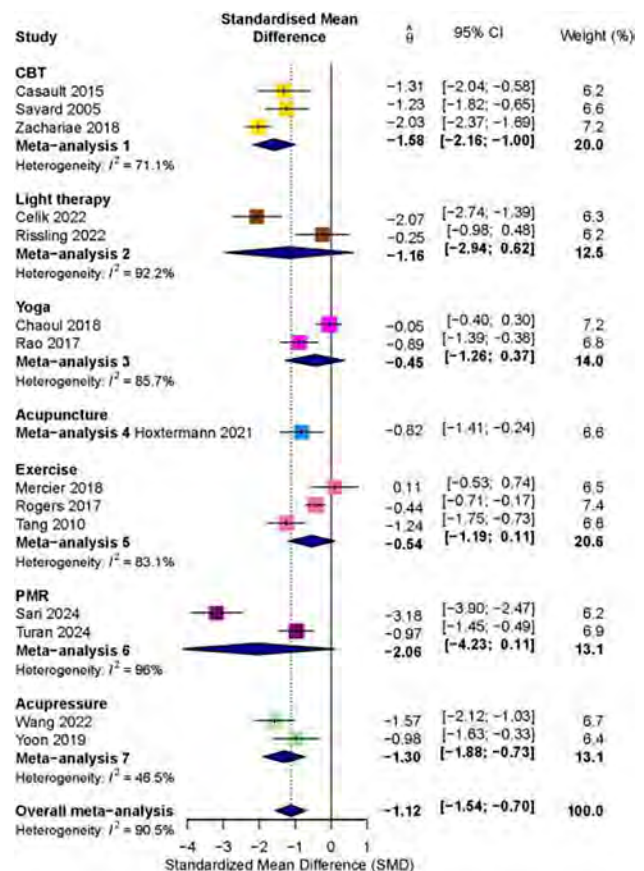
Methods

We conducted a meta-analysis of randomized controlled trials assessing interventions for insomnia in cancer patients. We included randomized controlled trials published in English from major databases (Ovid MEDLINE, Embase, PsycINFO, CINAHL, Cochrane) evaluating psychological, non-pharmacological and pharmacological interventions for insomnia among cancer survivors. Eligible studies enrolled ≥ 30 participants, identified insomnia as the primary outcome, used validated sleep measures (e.g., PSQI, ISI), and compared interventions

lasting ≥ 1 week to placebo, standard care, or another control. Studies were excluded if published before year 2000, enrolled < 30 participants, assessed sleep only via toxicity measures, or use of combined multiple interventions for insomnia. Standardized mean differences (SMD) were calculated for insomnia severity and sleep quality outcomes. Risk of bias was assessed using Cochrane's tool.

Results

Of 274 studies screened, 105 underwent full-text review; 21 met eligibility criteria, and 15 were included in the meta-analysis. Psychological and non-pharmacologic interventions demonstrated significant improvement in insomnia (pooled SMD = -1.12). CBT-I was the most effective (SMD = -1.58), with sustained benefits at 3–12 months. Non-pharmacological interventions showed positive effects: progressive muscle relaxation (SMD = -2.06), bright light therapy (SMD = -1.16), auricular acupressure (SMD = -1.30), acupuncture (SMD = -0.82), exercise (SMD = -0.54), and yoga (SMD = -0.45). No pharmacologic studies met inclusion criteria. Heterogeneity was moderate-to-high; Egger's test was non-significant ($p = 0.28$), providing no statistically significant evidence of small-study effects.



Conclusions

Psychological and non-pharmacologic interventions, particularly CBT-I, are effective for managing insomnia in cancer patients. Future research should prioritize standardized protocols, multimodal strategies targeting underlying mechanisms to optimize care.

FATIG-010

DETERMINING CHANGES OF TRANSCRIPTIONAL DIVERGENCE, BIOENERGETICS, AND FATIGUE AMONG INDIVIDUALS WITH BREAST CANCER RECEIVING CHEMOTHERAPY

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Introduction

Anthracycline (AC) - based chemotherapy (CT) is one of the most widely used classes of CT drugs in the treatment of breast cancer but is associated with systemic toxicities, including fatigue and mitochondrial dysfunction. Our study aimed to reveal the link between mitochondrial bioenergetics and CT-induced fatigue and to characterize transcriptional differences associated with treatment regimens in breast cancer patients receiving CT.

Methods

This was prospective hypothesis-testing with a longitudinal study design. Fatigue was measured by the revised Piper Fatigue Scale (PFS), Patient-Reported Outcomes Measurement Information System (PROMIS), and Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT-F). Transcriptome profiling and bioenergetics were measured using RNA Sequencing and high-resolution respirometry. Data were collected from each patient (N = 60) prior, during, and at the completion of CT. Differential expression and longitudinal analyses were conducted to identify treatment-specific and temporal transcriptional changes. Longitudinal changes in fatigue and bioenergetics were evaluated using linear mixed-effects models with random intercept.

Results

Fatigue severity increased substantially from baseline to midpoint and remained elevated at endpoint across all three measures. Eighteen differentially expressed genes were identified between AC and non-AC groups (e.g., Taxotere/Cyclophosphamide/Carboplatin, Herceptin/Pertuzumab). Temporal analyses demonstrated minimal baseline differences across treatment groups; however, transcriptional divergence increased over time, with the greatest number of differentially expressed genes observed at endpoint. Integration with clinical phenotypes revealed 227 genes significantly correlated with fatigue-related measures, with consistent directional agreement across metrics. Focused analysis of mitochondrial and bioenergetic pathways identified 17 genes dysregulated across treatment and timepoint comparisons, supporting a role for metabolic reprogramming in chemotherapy response.

Conclusions

Our findings demonstrate that transcriptional changes associated with chemotherapy are predominantly driven by longitudinal effects rather than baseline differences and highlight mitochondrial and immune-related pathways as key contributors to treatment-associated fatigue and systemic response. Understanding mechanisms underpinning fatigue will enable the design of targeted interventions.

FATIG-011

TIME-RESTRICTED EATING TO ADDRESS FATIGUE AND FRAILTY AMONG OLDER ADULTS LIVING WITH CANCER: A FEASIBILITY TRIAL

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Introduction

Treatments for advanced and metastatic cancer can cause fatigue and accelerate the progression to frailty, a syndrome that increases vulnerabilities to stressors. Time-restricted eating (TRE) entails consuming food within a defined, consistent window every day. We present findings in a pilot study designed to assess the feasibility of a larger clinical trial to test that TRE, when aligned with the daytime hours, can help regulate circadian rhythms and improve physiological energy regulation, thereby reducing fatigue and preventing frailty.

Methods

We recruited people ≥ 55 years old with prostate cancer on androgen deprivation therapy (ADT) or metastatic breast cancer on CDK4/6 inhibitors+aromatase inhibitor. All participants met with a licensed dietitian/nutritionist and were provided with personalized nutrition counseling fortnightly for 12 weeks; those randomized (1:1) to TRE self-selected a 10-hour eating window. The primary outcomes were retention and adherence. Secondary outcomes included fatigue (FACIT-F fatigue subscale), frailty (Fried's frailty criteria), rest-activity rhythms using actigraphy, and 24-hour urinary hormone fluctuations (e.g., norepinephrine). Effect of group was assessed using linear regression; correlations between outcomes were assessed using linear mixed models.

Results

Participants ($n=30$, 93% male) were 68.8 ± 6.4 years old; 24 were randomized and 21 completed the intervention (87.5% retention). The average eating window was 11.6 ± 2.4 hours at baseline (all participants) and, for the TRE group, 8.8 ± 0.8 hours at week 6 and 8.9 ± 1.7 hours at week 12 (Fig. 1). There were no group effects for fatigue, frailty, or rhythm measures ($p > 0.05$). However, relative amplitude of rest-activity rhythms was associated with less fatigue (Fig. 2). Also, frailty was negatively associated with the range in urinary norepinephrine (Fig. 3).

Conclusions

TRE is a feasible nutritional program for older adults living with cancer. A greater dynamic range of several circadian rhythm parameters was associated with better supportive care outcomes, suggesting that entrainment of circadian rhythms may help alleviate fatigue and frailty.

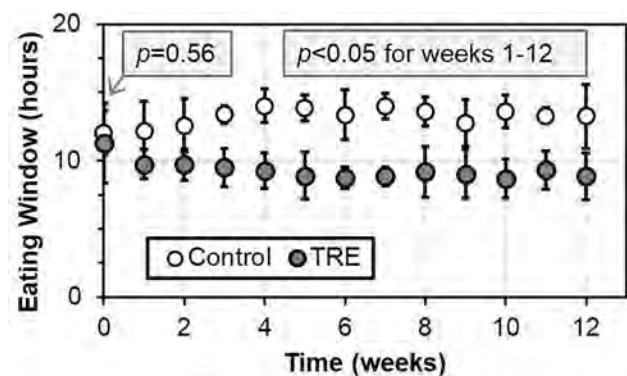


Fig. 1. People living with advanced prostate cancer and metastatic breast cancer can adhere to the 10-hour eating window.

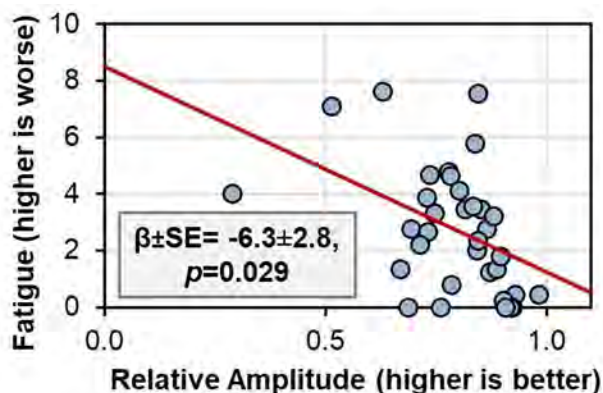


Fig. 2. Higher quality of life/lower fatigue was associated with stronger rest-activity rhythms, as measured by fitting ambulatory movement curves to a cosinor curve and extracting the amplitude. Mixed models account for repeated measures ($n=34$ observations).

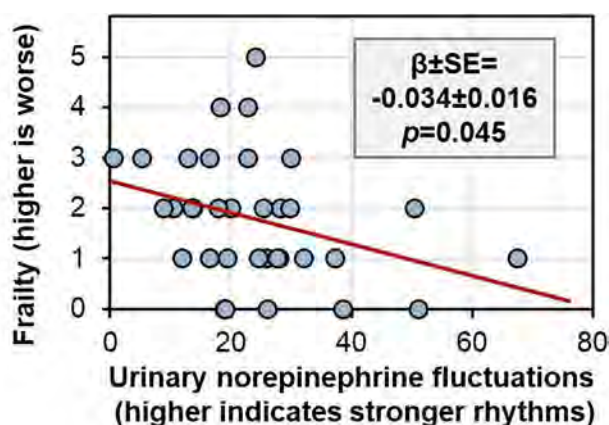


Fig. 3. Frailty is inversely correlated with fluctuations in urinary norepinephrine concentrations. Mixed models account for repeated measures ($n=34$ observations).

FATIG-012

FATIGUE IN THE LATE PERIOD AFTER ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION: DYNAMICS AND THE IMPACT OF GVHD

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Introduction

Fatigue is a common and persistent symptom after allogeneic hematopoietic stem cell transplantation (allo-HSCT) and may continue to affect patients long after the early recovery phase. In the late post-transplant period, chronic complications, prolonged immunosuppressive therapy, and graft-versus-host disease (GVHD) are considered key contributors to sustained fatigue. However, data on the long-term dynamics of fatigue and the impact of GVHD remain limited.

Methods

Fatigue was assessed in 28 patients in the late period following allo-HSCT using the validated FACIT-Fatigue scale and the Brief Fatigue Inventory (BFI). Evaluations were conducted at three time points: one year, 1.5 years, and two years after transplantation. Questionnaires were completed independently by patients. Based on GVHD status and response to therapy, participants were categorized into three groups: (1) patients with GVHD achieving complete or partial response, (2) patients with GVHD without clinical regression, and (3) patients without GVHD. Statistical analyses compared fatigue severity across time points and between groups to evaluate fatigue dynamics and the influence of GVHD.

Results

Patients with GVHD reported higher fatigue levels compared with patients without GVHD throughout the late post-transplant period. The greatest fatigue burden was observed in patients with persistent GVHD lacking response to therapy. Although patients with complete or partial GVHD regression demonstrated lower fatigue scores, fatigue remained more pronounced than in the control group. Longitudinal analysis indicated that fatigue persisted in a substantial proportion of patients, with only limited improvement up to two years after allo-HSCT.

Conclusions

Fatigue remains a significant long-term problem after allo-HSCT, particularly in patients with active or persistent GVHD. Regular long-term assessment of fatigue and individualized management strategies based on GVHD status should be integrated into post-transplant survivorship care.

FATIG-013

FROM EFFICACY TO PRECISION PRESCRIPTION: A META-ANALYSIS AND COMPONENT-BASED DISMANTLING OF MINDFULNESS INTERVENTIONS FOR CANCER-RELATED FATIGUE

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Introduction

Cancer-related fatigue (CRF) is a multidimensional symptom involving inflammatory and psychological mechanisms. While Mindfulness-Based Interventions (MBIs) are proven effective, the "active

ingredients" driving these outcomes remain unclear. This study aims to (1) evaluate the overall efficacy of MBIs on CRF through a systematic review and meta-analysis, and (2) deconstruct intervention components (e.g., dosage, modality, specific practices) to identify the optimal therapeutic modules for a precision prescription framework.

Methods

Following PRISMA guidelines, we searched major databases through June 2024, identifying 11 high-quality RCTs (N=1189). We conducted a random-effects meta-analysis and a "Component-Moderator Analysis" to cross-reference specific intervention features with fatigue outcomes. Key moderators included cancer type, dosage (duration), supervision format, and specific mindfulness components (Yoga vs. Cognitive vs. Body Scan).

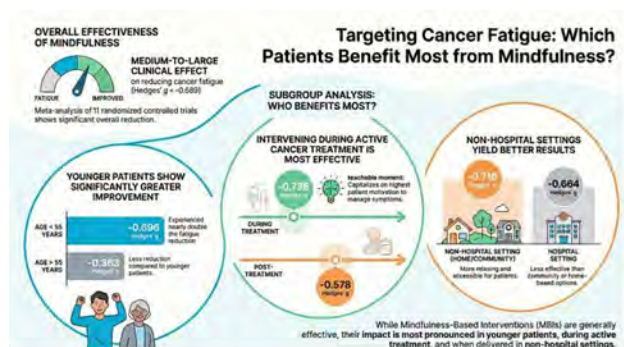
Results

Pooled analysis demonstrated that MBIs significantly reduced CRF with a robust effect size (SMD = -0.626, 95% CI: -0.865 to -0.387, $p < 0.001$). Moderator analysis revealed three critical findings for clinical optimization:

1. **Dosage & Efficiency:** Short-term interventions (≤ 6 weeks) (SMD = -0.672) were as effective as standard 8-week programs, supporting the feasibility of streamlined curricula.
2. **The Necessity of Supervision:** Interventions with "supervised homework" (SMD = -0.655) significantly outperformed self-directed formats, highlighting the role of professional guidance.
3. **Active Ingredients:** Component analysis identified **Mindful Yoga** as a key driver for physiological activation (breaking the lethargy cycle), while **Cognitive Defusion** techniques were essential for minimizing psychological energy depletion. Conversely, for patients with high arousal (anxiety), **Body Scan** modules offered the most effective de-escalation.

Conclusions

MBIs are not a monolithic treatment but a modular toolkit. Our findings support a shift from generic interventions to "**Precision Mindfulness Prescription**" framework (Figure 1). Clinicians are recommended to prioritize **supervised, 6-week modular programs** integrating **Gentle Yoga** (for behavioral activation) and **Cognitive Techniques** (for energy conservation). This evidence-based approach maximizes clinical efficacy while enhancing cost-effectiveness and patient adherence.



FATIG-015

DIFFERENTIATING CANCER-RELATED FATIGUE AND DEPRESSION: A SUPPORTIVE ONCOLOGY-CARE SOLUTION FOR DIAGNOSIS AND EFFECTIVE TREATMENT

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Introduction

Depression and cancer-related fatigue (CRF) are two highly prevalent and burdensome cancer treatment-related comorbidities. Because overlapping somatic symptoms obscure their distinction, conventional screening tools frequently misclassify diagnoses, resulting in under-treatment of CRF and over-treatment of depression. To support clinicians' ability for differential diagnoses and apply guideline-concordant National Comprehensive Cancer Network (NCCN) pathways, we examined the utility of electronic patient-reported outcomes (ePROs) within a supportive cancer care clinical pathway.

Methods

Cancer patients received guideline-concordant multidisciplinary cancer survivorship care (N=310) and completed ePROs at baseline and follow-up (average: 2 months). Baseline stratification used cutoff scores to classify vitality (VT: a CRF proxy) and mental health (MH: a depression proxy). Paired assessments (n=191) provided longitudinal data. Change scores were categorized as clinically significant improvement, clinical stability, or clinical decline. Cross-domain distributions were summarized.

Results

The cohort had a mean age of 53.5 years; 79% were female. At baseline, 73.8% scored below clinically normal thresholds on VT and MH. Baseline stratification revealed 32.3% had only one of the two conditions, either CRF or depression (15.5% normal VT/abnormal MH; 16.8% normal MH/abnormal VT). This discordance indicates high potential for diagnostic misclassification. Longitudinally, VT clinically improved for 34.8%, remained stable for 47.3%, and declined for 17.9%; whereas MH improved for 51.1%, remained stable for 29.9%, and declined for 19%.

Conclusions

Overlapping somatic symptoms of CRF and depression present complex diagnostic challenges, increasing misdiagnosis risk as 32.3% of patients experience either condition. Given that NCCN clinical pathways for MH and CRF are different, distinct symptom patterns highlight the importance of separately monitoring and diagnosing CRF and depression. Integrating ePROs for confirmatory diagnostics enables differential diagnosis between these comorbidities, supporting precise treatment planning. Applying condition-specific guideline-concordant pathways advances patient-centered care and delivers measurable value by ensuring clinicians possess the necessary tools for accurate diagnosis and surveillance of all cancer survivors.

FATIG-018

DOUBLING DOWN ON FATIGUE: A SCOPING REVIEW OF CANCER-RELATED FATIGUE OUTCOME MEASURE TOOLS USED IN CLINICAL TRIALS

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Introduction

A lack of consensus on standardised outcome measure tools used to assess the impact of cancer-related fatigue (CRF) poses challenges for both research and practice. Previously CRF reviews were limited, excluding people living with advanced (stage 4) cancer, and children & adolescents. Therefore, this review will describe: 1) what outcome measures tools have been used to assess CRF across different age groups, cancer types and stage of the care continuum; and (2) trials using CRF screening for eligibility criteria.

Methods

PRISMA scoping review guidelines were followed. Web of Science Core Collection, MEDLINE, and the Cochrane Library Central were searched for randomised controlled trials published since 2021, that included CRF outcomes. Data extraction was conducted by two independent researchers. Reported outcome measures were classified using the conceptual framework of the International Society for Pharmacoeconomics and Outcomes Research.

Results

Ninety-five out of 840 articles were included. Twenty-three different measurement tools were identified. Most trials ($n=93$, 98%) included adults, breast cancer-only ($n=32$, 34%) or multiple cancer types ($n=33$, 35%). Disease stage was infrequently reported or mixed. Measures occurred predominantly before ($n=72$, 76%) and during treatment ($n=23$, 24%). Fatigue-specific measures were used for trial eligibility in only 11 (12%) trials. The Functional Assessment of Chronic Illness Therapy -Fatigue scale was most used ($n=23$, 24%), followed by Brief Fatigue Inventory Scale ($n=15$, 15.8%), and the Piper Fatigue Scale ($n=11$, 11.6%).

Conclusions

There is high variability in CRF measures used in clinical trials. Before determining a core outcome set, more research is needed to understand preferred measures for consumers, health professionals and researchers. Specifically, tools used for under-represented populations paediatrics, young adults and people with advanced (stage 4) cancer. The underutilisation of fatigue-specific measures for trial eligibility screening also demands attention to ensure we are recruiting the target population for interventional trials.

FATIG-020

INCIDENCE OF CANCER-RELATED FATIGUE DURING TREATMENT WITH NEOADJUVANT AND ADJUVANT IMMUNE CHECKPOINT INHIBITORS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Immune checkpoint inhibitors (ICIs) have transformed cancer therapy, yet cancer-related fatigue (CRF) remains a common but under characterized adverse effect. We evaluated CRF incidence during ICI treatment in neoadjuvant and adjuvant settings.

Methods

We conducted a systematic review of prospective cohort studies and phase 2 or higher trials investigating FDA-approved ICIs in adjuvant and/or neoadjuvant settings, reporting fatigue as an investigator recorded adverse event or via patient-reported outcomes (PROs). Searches spanned four databases and ClinicalTrials.gov through September 2024 using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Studies not in English, lacking full text, or insufficient for meta-analysis were excluded. CRF incidence and quality-of-life data were extracted. Risk of bias was assessed using the Cochrane tool, and certainty of evidence was graded using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework. Meta-analysis was performed on all eligible studies.

Results

Forty-three studies met inclusion criteria, primarily involving melanoma, breast, lung, renal, and gastroesophageal cancers. Commonly evaluated ICIs included nivolumab, pembrolizumab, ipilimumab, and durvalumab. CRF occurred more frequently with ICIs versus placebo (risk ratio [RR] 1.21; 95% CI, 1.08–1.35), and PROs indicated slightly higher fatigue levels (standardized mean difference, 0.12; 95% CI, 0.01–0.23). No significant CRF difference was observed between ICIs and chemotherapy (RR, 0.81; 95% CI, 0.36–1.82). Global health status/quality-of-life did not differ significantly between ICI and placebo/no-treatment groups, except for ipilimumab, which was associated with lower scores (mean difference, -4.98 ; 95% CI, -9.16 to -0.80). Risk of bias was high due to inadequate allocation concealment and open-label designs.

Conclusions

ICI monotherapy is associated with a modest increase in CRF compared with placebo. These findings highlight the need for patient counseling and early symptom recognition in curative-intent immunotherapy settings. Incorporating supportive interventions may mitigate CRF and improve perioperative recovery and long-term quality-of-life.

FATIG-022

EFFECTS OF ACTIVITY PACING ON CANCER-RELATED FATIGUE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Although physical activity is recommended for managing cancer-related fatigue (CRF), activity pacing (AP) and energy conservation are also employed to balance activity and rest. This systematic review evaluated the effectiveness of AP in managing CRF.

Methods

The PubMed, CINAHL, CENTRAL, and Ichu-shi databases were searched for articles published up to September 30, 2024, using the keywords listed in the attached table. Based on the selection criteria, studies were independently screened for titles and abstracts, and then the full-text articles were reviewed independently by two reviewers. Any disagreements were discussed and agreed upon by all researchers, including reviewers. After assessing the risk of bias, we performed meta-analyses for quantitative synthesis.

Table. Details of terms for systematical literature search

#1	(Conservation of Energy Resources) OR (Energy Conservation Technique) OR (Energy Conservation Therapy) OR (Activity pacing)
#2	(((((fatigue) OR (tired*)) OR (exhaustion)) OR (lethargy)) OR (asthenia))
#3	#1 and #2

Results

Among the 1,122 identified studies, 10 (7 RCTs and 3 non-RCTs) met the inclusion criteria. All studies were conducted during or after the active cancer treatment period. Four RCTs had a high overall risk of bias, and three RCTs had some concerns of bias. All three non-RCTs had a critical or serious overall risk of bias. We performed a meta-analysis on the primary outcomes of only five RCTs, as detailed results could not be obtained from two RCTs. The effect size was small but not significant (standardized mean differences (SMD) = -0.36 ; 95% confidence intervals (CI): -0.73 to -0.00 ; 5 studies; 617 participants). Compared to the controls, the effect size of the intervention was moderate with statistical significance in the subgroup of patients undergoing chemotherapy (SMD = -0.58 ; 95% CI: -0.87 to -0.29 ; three studies; 197 participants).

Conclusions

AP may effectively improve CRF, particularly during chemotherapy. However, the current evidence is insufficient to draw robust conclusions due to the high risk of bias and limited number of studies. Although AP can be considered as a potentially useful approach, future high-quality RCTs are necessary.

FATIG-023

PHYSIOLOGICAL PREDICTORS FOR FATIGUE AND CHEMOTHERAPY INDUCED NAUSEA IN PATIENTS WITH BREAST CANCER – A MULTI-OMICS PILOT STUDY

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Introduction

Up to 50% of patients with breast cancer experience chemotherapy-induced nausea (CIN) and 95% experience fatigue. A comprehensive understanding of biological mechanisms remains elusive. Herein, we evaluated the association of CIN and fatigue with clinical and multi-omics features, including serum and stool metabolites before (T1) to after chemotherapy (T2).

Methods

Patients with breast cancer (n=36) who were to receive chemotherapy, provided symptom assessment using the Memorial Symptom Assessment Scale, stool and blood samples at T1 and T2. Patients provided dietary intake data using a Dietary Screener Questionnaire at T1. Descriptive and univariate analyses evaluated associations of co-occurring symptoms and diet with CIN and fatigue at T2. Gut microbiome was sequenced using shotgun metagenomics. Targeted metabolomics was performed on stool and serum. Shift in the abundance of

taxonomic groups and metabolite levels from T1 to T2 were evaluated in association with CIN and fatigue.

Results

Approximately 64% of the patients experienced CIN and 94% experienced fatigue at T2. Dry mouth, diarrhea, and change in food tastes were associated with CIN and fatigue. An increase in relative abundance of *B. thetaiotaomicron* was associated with CIN ($p=0.027$) and fatigue ($p=0.012$) and a decrease in relative abundance of *Ruminococcaceae* was associated with fatigue ($p=0.034$). Levels of sphingolipids and phosphatidylcholine were perturbed in the no nausea, nausea and fatigue groups ($p<0.05$). In the gut, perturbed metabolic pathway from T1 to T2 common to no nausea and fatigue groups was valine, leucine and isoleucine synthesis ($p<0.001$) and one common to nausea and fatigue groups was pyrimidine metabolism ($p<0.001$).

Conclusions

Perturbed metabolic pathways identified in the three groups were associated with gluconeogenesis, lipogenesis, and inflammation. These pathways impact functions in the gut-brain axis that include apoptosis. Confirmatory studies are warranted to support the development of interventions to alleviate CIN and fatigue in patients with breast cancer.

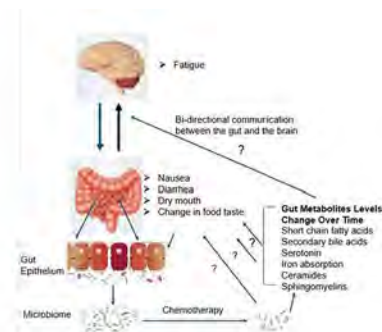


Figure: Associations Between Chemotherapy-Induced Changes in the Gut-brain Axis and Fatigue

FATIG-024

FATIGUE CHANGE IN CANCER PATIENTS PRESCRIBED MEDICINAL CANNABIS

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Introduction

Over the past five years, the Australian Therapeutic Goods Administration approved 11,000 Special Access Scheme applications to prescribe medicinal cannabis (MC) for cancer-related pain and symptoms. When addressing patient-reported outcomes of cancer and its treatment, fatigue management takes high priority due to its prevalence across cancer types and influence on other symptoms. We aimed to evaluate fatigue in cancer patients prescribed MC for symptom relief.

Methods

This sub-study included patients undergoing treatment for any cancer recruited to QUEST; a prospective study of adults prescribed MC oil in Australia between Nov2020-Dec2022. PROMIS Fatigue 13a questionnaire was completed at baseline (pre-MC therapy), monthly for 3-months, then bi-monthly up to 12-months post-therapy. Prescribed products included: CBD-only (>98% CBD); CBD-dominant (60-98% CBD); CBD:THC-balanced (60-40% CBD:THC); and THC-dominant (>60% THC). Mean differences of T-scores from baseline to follow-up was analysed using linear mixed models adjusting for age and sex. Individual responder threshold of 5 T-score points followed

questionnaire interpretation guidelines for clinically meaningful improvement.

Results

Of 145 cancer patients recruited to QUEST, 90 completed baseline and at least one follow-up questionnaire (Table 1). Main cancer types included Breast (n=26, 29%), Prostate (n=16, 18%), and Blood cancers (n=13, 14%). Predominantly, patients were prescribed MC for chronic pain (n=75, 83%), anxiety +/- depression (n=21, 23%), and insomnia (n=19, 21%). Questionnaire completion rates dropped to 76/90 (84%) at one month, 51/90 (57%) at 5-months, and 26/90 (29%) by 1-year follow-up. Compared with baseline, mean follow-up fatigue t-scores improved after commencing MC ($t_{(400)}=2.91$; 95%CI: 0.85 to 4.40; $p=0.004$; Figure 1). Clinically meaningful improvement in fatigue was observed in 28/90 patients (31%).

Table 1. Characteristics of 90 cancer patients prescribed medicinal cannabis (MC).

Characteristic	N=90	%
Sex		
Male	40	44
Female	50	56
Type of Cancer		
Breast	26	28.9
Prostate	16	17.8
Melanoma (skin)	5	5.6
Non-Hodgkin Lymphoma	5	5.6
Multiple Myeloma	3	3.3
Other Blood Cancer	5	5.6
Brain	5	3.3
Colorectal	4	4.4
Lung	4	4.4
Head & Neck	3	3.3
Thyroid	2	2.2
Ovarian	2	2.2
Liver	2	2.2
Other Cancers	8	8.9
Condition(s) treated with MC (may be more than one)		
Pain – Chronic musculoskeletal	33	36.7
Pain – Chronic cancer pain	25	27.8
Pain – Chronic neuropathic	22	24.4
Pain – Chronic widespread	5	5.6
Pain – Chronic headache	3	3.3
Chronic insomnia	19	21.1
Generalised anxiety disorder	13	14.4
Mixed depression & anxiety	8	8.9
Nausea & vomiting	5	5.6
Cachexia	1	1.1
Epilepsy or seizure	1	1.1
Post-traumatic stress disorder	1	1.1
Marital status		
Married	53	58.9
Divorced	12	13.3
Cohabiting	9	10.0
Single	10	11.1
Separated	3	3.3
Widowed	3	3.3
Highest education level		
University Degree or higher	31	34.4
Certificate or Diplomas	30	33.3
High School	28	31.1
Primary School	1	1.1
Living arrangements		
Live with partner	63	70.0
Live alone	17	18.9
Live with other	10	11.1

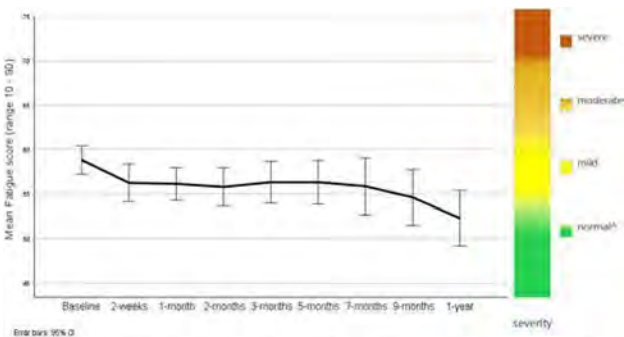


Figure 1. Mean PROMIS Fatigue 13a scores over 12-months for 90 cancer patients prescribed medicinal cannabis.

Conclusions

Findings suggest that prescribing MC in clinical practice may alleviate cancer-related symptoms and reduce fatigue. Loss to follow-up and lack of control group limit interpretation of results.

FATIG-025
COMPARING FACIT-FATIGUE AND EORTC QLQ-FA12 FOR ASSESSING THE QUALITY OF LIFE IN PEOPLE WITH CANCER-RELATED FATIGUE

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Introduction

Two common quality of life (QoL) questionnaires for cancer-related fatigue (CRF) are the European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire Fatigue 12 (QLQ-FA12) and Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT-Fatigue). This systematic review compared their content, validity, and psychometric properties.

Methods

MEDLINE, Embase, CINAHL, and Web of Science were searched from inception to 17 July 2025 for primary studies on the development, psychometric properties, and use of the EORTC QLQ-FA12 and FACIT-Fatigue. Studies using these tools only as outcome measures and systematic reviews and meta-analyses were excluded.

Results

Twenty-four studies were included. The QLQ-FA12 (12 items) provides physical, emotional, and cognitive subscales, while the FACIT-Fatigue (13 items) captures self-reported fatigue and its impact on daily function. Both instruments demonstrated validity, internal consistency, test-retest reliability, and sensitivity. Construct validity was supported by correlations with QoL and physical-function measures, and confirmatory factor

analyses upheld their intended dimensional structures. The QLQ-FA12's 4-point question format offers distinct domain scores, whereas the FACIT-Fatigue's 5-point statement format yields a single total score. The QLQ-FA12 is preferred when a multidimensional profile is needed, such as in trials addressing specific fatigue drivers or pairing with QLQ-C30 domains. The FACIT-Fatigue suits brief screening or large-scale studies where efficiency and a single total fatigue score are priorities.

Conclusions

The EORTC QLQ-FA12 and FACIT-Fatigue are both sufficiently validated for assessing CRF-related QoL. The QLQ-FA12 is more appropriate when a multidimensional profile is required, whereas FACIT-Fatigue suits contexts needing a unidimensional total severity score.

GERIA-002

G8 SCREENING AT INITIAL VISIT ENHANCES EFFICIENCY OF PREOPERATIVE ASSESSMENT IN ELDERLY CANCER PATIENTS

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Introduction

Treatment opportunities for elderly cancer patients have expanded, while healthcare workstyle reforms in Japan demand reduced staff burden. Since April 2020, our center has conducted multidisciplinary preoperative screening—by dietitians, dental hygienists, physical therapists, and speech therapists—for patients aged ≥ 75 years scheduled for surgery. In January 2025, G8 screening was introduced at the initial visit for all patients aged ≥ 75 . As physiological reserve varies widely among older adults, an efficient and selective screening strategy is required.

Methods

We analyzed 442 patients aged ≥ 75 who underwent both G8 screening and multidisciplinary assessment between January and December 2025.

(1) Patients were divided by G8 score (≤ 14 vs. > 14) and compared for grip strength, gait speed, SPPB score, and frailty status.

(2) G8 scores were compared across subgroups defined by low grip strength, slow gait speed, frailty, SPPB ≤ 9 , and positive physical therapy (PT) screening, defined as SPPB ≤ 9 or frailty (revised J-CHS criteria) and other predefined risk factors.

Results

Patients with G8 ≤ 14 were older and had lower grip strength, slower gait speed, higher frailty prevalence, lower SPPB scores, and more PT-positive findings. In males, all parameters differed significantly, whereas in females, differences in gait speed and SPPB were not significant. Median G8 scores were significantly lower in patients with slow gait (13 vs. 14), low grip strength (12 vs. 14), frailty (13 vs. 14.5), SPPB ≤ 9 (12 vs. 14), and PT-positive status (13 vs. 14). No patients with G8 ≥ 16 had SPPB ≤ 9 , and all with G8 =17 had preserved grip strength.

Conclusions

Initial G8 screening enables tailored preoperative assessment. Patients with G8 =17 may not require grip strength testing, those with G8 ≥ 16 may omit SPPB assessment, and G8 < 9 may justify early intervention without full multidisciplinary screening.

GERIA-003

FALLS AMONG THE OLDER PATIENTS TREATED FOR CANCER IN NORMANDY'S OUTCLINICS: SCREENING AND PREVENTION (CHUPACHOUP STUDY)

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Introduction

International guidelines on fall prevention (2022) recommend an annual fall risk (FR) screening in adult aged 65 and above. Older cancer patients face additional FRs due to cancer symptoms and adverse drug reactions related to oncological treatments. Falls may impact on cancer care pathway and increase mortality in this population.

Our objective was to determine the prevalence of fallers, describe the repartition of FR levels, and assess the feasibility of applying fall prevention recommendations in older cancer adults in usual care. Secondary objectives included identifying factors associated with high FR.

Methods

This exploratory, multicenter, cross-sectional prospective study enrolled patients aged ≥ 65 yrs treated for cancer in the ten participating oncology outclinics recruited during the WHO Patients Safety week in September 2024 (NCT06504628). The FR screening and preventive recommendations followed the International guidelines. A follow-up at 3 months evaluated the implementation of preventive interventions in the high FR subgroup.

Results

Out of 386 eligible patients, 328 were included, of whom 53% were male, mean age 73 ± 6 , with various cancers, 21% reported at least one fall in the past year, and 15% were classified at high FR.

Age (75 ± 7 vs 73 ± 6 , OR=1.33 per 5-year increase, $p=0.028$), receiving taxanes (OR=3.74, $p<0.01$), and ≥ 2 fall-risk increasing drugs (FRIDs) (OR=2.19, $p=0.008$) were independently associated with being in the high FR. Polypharmacy (61%) was not related to high FR. At 3 months, only 24% of high FR patients fully implemented fall prevention recommendations. Biological dosages (60%), medication review (48%) and cardiovascular assessment (43%) have been the most implemented.

Conclusions

This first real life study in older patients treated for cancer identified potentially reversible significant pharmaceutical factors associated with high FR: receiving taxanes and ≥ 2 FRIDs.

In usual care, preventive recommendations are insufficiently applied, which underlines the need to integrate a multidisciplinary approach, including pharmaceuticals, to optimize fall prevention in oncology.

GERIA-004**WHICH TOOL SHOULD BE USED TO SCREEN FOR COGNITIVE IMPAIRMENT IN OLDER PATIENTS BEFORE CANCER TREATMENT INITIATION? A MULTICENTRE CROSS-SECTIONAL STUDY**

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Introduction

Cognition screening is included in pre-treatment geriatric assessments in older patients diagnosed with cancer. However, there is no consensus on the most appropriate cognitive screening test. Furthermore, cancer treatments can subsequently induce or increase pre-existing cognitive impairment. The objective of this study was to determine which tool should be used to screen for cognitive impairment before cancer treatment initiation.

Methods

This study targeted patients aged 70 or older diagnosed with cancer referred to a pre-treatment geriatric assessment. Patients with brain tumours were not eligible. We analysed the sensitivity and specificity of four cognitive screening tests: Montreal Cognitive Assessment (MoCA), Mini Mental State Examination (MMSE), Mini-Cog®, and Cognitive Disorders Examination (CODEX), compared to the gold standard neuropsychological assessment (four cognitive domains: episodic memory, short-term and working memory, executive functions, processing speed). Overall cognitive impairment was defined as impairment in at least one cognitive domain.

Results

Eighty-seven patients (mean age: 82.9±5.1) were included in the statistical analysis. Fifty-three patients (60.9%) had an overall cognitive impairment. Impaired screening scores were observed in 63 patients (72.4%) with MoCA, 40 (46%) with MMSE, 40 (46.5%) with CODEX and 67 (77.9%) with MiniCog®. One-third (n=27, 31%) of patients had an impaired MoCA score and a normal MMSE one. The tests with the highest sensitivity were MoCA (0.87) and MiniCog® (0.85). Compared with MMSE, MoCA had significantly better sensitivity (p=0.015) but lower specificity (p=0.003).

Conclusions

The MoCA offers the best compromise in terms of psychometric properties, with higher sensitivity than MMSE and a moderate specificity. It is recommended that MoCA be used in geriatric assessment to detect cognitive impairment in older patients prior to cancer treatment initiation.

GERIA-005**CANCER SELF-MANAGEMENT AMONG SOUTH ASIAN OLDER ADULTS AND THEIR CAREGIVERS: A COMMUNITY-ENGAGED QUALITATIVE STUDY**

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Introduction

South Asian (SA) older adults are one of Canada's fastest-growing ethnocultural aging populations and face cultural, linguistic, and system-level barriers that shape their cancer care and self-management. Yet little is known about how SA older adults and their caregivers navigate these challenges. This presentation shares emerging findings, identifies barriers and facilitators, and highlights gaps to inform the development of culturally tailored interventions.

Methods

We conducted a community-engaged qualitative study of SA older adults (age ≥65) diagnosed with cancer, and their caregivers. Recruitment occurred in partnership with SA-serving community organizations and grassroots social networks. Semi-structured interviews were conducted in participants' preferred language (English, Punjabi, or Hindi) and explored self-management practices, cultural beliefs, caregiving dynamics, stigma, and system navigation. Data are being analyzed using Braun and Clarke's thematic analysis, with attention to cultural variation, gendered dynamics, and caregiving contexts.

Results

16 participants have been interviewed (10 older adults and 6 caregivers), with recruitment ongoing. Preliminary findings indicate that internal and external factors shape how SA older adults define and engage in cancer self-management. Internally, participants relied on personal resilience, a positive mindset, and spiritual grounding, often striving to be low-burden or "good" patients. Externally, family relationships played a central role in coordinating appointments, interpreting medical information, and supporting decision-making. Simultaneously, cultural stigma surrounding cancer, language barriers, and complex care pathways constrained autonomy and delayed help-seeking. Despite these challenges, spiritual practices and family support emerged as key facilitators of self-management and emotional well-being.

Conclusions

Our preliminary findings provide a foundation for the co-development of culturally grounded, family-centred self-management supports for SA older adults with cancer. Building on this work, the next phase of the project will involve community organizations and family caregivers as partners in the design and delivery of culturally responsive navigation and self-management resources within supportive cancer care.

GERIA-006**UTILITY OF EPRO AND CLINICAL OUTCOMES IN JAPANESE OLDER CANCER PATIENTS**

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Introduction

A registry study of electronic Patient Reported Outcome (ePRO) called RegiPRO study in cancer patients (pts) is conducted to evaluate the usefulness of symptom monitoring in Japan. Some older pts with Geriatric Assessment (GA) domain impairments have trouble that can relate to serious adverse events (SAEs) and poor prognosis. Because the utility of ePRO in older cancer pts are less known, additional analysis of older cancer pts is planned.

Methods

This is a sub-group analysis regarding older pts of the RegiPRO study that is prospective multicenter observational study. We registered older cancer pts aged ≥ 65 years with PS 0-2 who plan to receive chemotherapy for the first time. We collected geriatric 8 (G8), Instrumental Activities of Daily Living (IADL), Mini-COG, and MoCA-J as GA data before treatment. We also collected clinical data of AEs using NCI-CTCAE v5.0 and PRO-CTCAE v1.0. The endpoints are the utility of ePRO, the rate of SAE which was defined as non-hematological AE $\geq$ grade3, the difference between CTCAE and PRO-CTCAE, and the association with GA data.

Results

A total of 47 pts were evaluable: median age of 73 years (range, 65-84), 28 males (60%), 45 with PS 0/1 (96%), 29 with stage 4 (62%). The median G8 score was 10.5 (range, 6-15), and four pts (8.5%) had a normal score. The rates of normal IADL, Mini-COG, and MoCA-J were 79%, 96% and 34%, respectively. There are only two pts with normal function of all GA. 70% of pts required support and only one patient discontinued ePRO due to difficulty in operation. Non-hematological SAE rate of PRO-CTCAE was quite higher than CTCAE (87% vs 16%).

Conclusions

Most older cancer pts with functional impairment can regularly report their symptoms using ePRO. The SAEs are reported from more pts than clinicians, which indicates clinicians might overlook SAEs without AE assessment by PRO.

GERIA-008

PROVEN FIT – ENHANCED SUPPORTIVE CARE VIA IMPLEMENTATION OF A GERIATRIC ONCOLOGY MODEL OF CARE

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Introduction

Older people face increased risk of complications and poorer quality of life during cancer treatment due to pre-existing co-morbidities and age-related vulnerabilities. Geriatric assessment (GA) offers critical insights into domains often overlooked in routine cancer care, enabling clinicians to rapidly determine needs and initiate tailored treatment and support. Frailty Informed Treatment (FIT) aimed to capture vulnerability, inform treatment decisions and improve supportive care and outcomes for older cancer patients.

Methods

This quality improvement pilot ran over 10 months, utilising ASCO's Practical Geriatric Assessment (PGA) for newly diagnosed gastrointestinal (GI) cancer patients aged ≥ 65 years considered for systemic therapy. Prior to first oncology visit, medical notes and PGA results were discussed at a weekly geriatric oncology MDM (geriatric oncologist, geriatrician, nurse practitioner and nurse navigator). Recommendations were made available to the GI team for consideration when treatment planning. Outcome measures included vulnerabilities, referrals generated, treatment related complications (up to 12 weeks) and staff and patient feedback. A retrospective cohort of patients ≥ 65 years receiving treatment in 2023 (usual care) was used for comparison.

Results

64 PGAs were completed and 363 vulnerabilities were identified (table 1). 39 patients were included in FIT with 90% discussed at an MDM. Key findings included increased cancer supportive care screening, almost double the referrals to supportive care services and shorter average hospital LOS despite similar admission rates (table 2).

Table 1. Vulnerabilities identified from GA

PGA Domains & Measures of Impairment	n=64	%
Physical Function/Performance		
Falls (≥ 1)	8	13%
Walking one block (any limitation)	23	36%
Walking stairs (any limitation)	19	30%
4 metre Gait Speed (time >4 secs)	31	48%
Functional Status		
OARS Instrumental/ADL's (needs some help/unable)	40	63%
Social Supports		
MOS social supports (none, a little, some of the time)	13	20%
Psychological		
PROMIS anxiety 4 items (raw score ≥ 11)	24	38%
Geriatric Depression Scale 5 (score ≥ 2)	26	41%
Nutrition/ Weight Loss		
MNA Score (Score 0 = ≥ 3 kg wt loss)	32	50%
Comorbidity		
Comorbidities (≥ 3)	43	67%
Vision (fair /poor/ blind)	11	17%
Hearing (fair /poor/ deaf)	18	28%
Cognitive Function (n=37)		
Mini-cog (≤ 2)	3	8%
Risk of Chemotherapy Toxicity (n=51)		
Chemo toxicity prediction model (mod-high risk ≥ 6)	43	84%
Polypharmacy		
(≥ 5 medications)	29	45%
Total	363	na
Other Measures		
ECOG Score (≥ 1)	43	67%
NCCN Distress Score (≥ 4)	34	53%

Table 2. Supportive Care and Outcomes Comparison

	FIT n=39	%	2023 n=39 ^a	%
Demographics				
Patient Characteristics				
Age (years)	71 (65–80)		72 (65–82)	
Male	23	59%	25	64%
English speaking	28	72%	27	69%
Cancer Type				
Colorectal	17	44%	20	51%
Upper GI	22	56%	19	49%
Cancer Stage				
1	0	0%	0	0%
2	7	18%	6	15%
3	14	36%	12	31%
4	16	41%	20	51%
Unknown	2	5%	1	3%
Supportive Care & Risks				
Oncology Supportive Care Screening Tool completed	35	90%	29	74%
Supportive care & AH referrals generated	98	n/a	54	n/a
Chemo toxicity prediction model completed	37	95%	0	0
Treatment Outcomes (within first 12 weeks of Treatment)				
Treatment intent				
Adjuvant	7	18%	14	36%
Curative	12	31%	8	20%
Palliative	20	51%	17	44%
Prescribed dose				
reduced dose	14	36%	9	23%
Standard	25	64%	30	77%
Dose reductions				
No	23	59%	25	64%
Yes	16	41%	14	36%
Treatment delays				
No	21	54%	22	56%
Yes	18	46%	17	44%
Treatment ceased				
No	29	74%	29	74%
Yes	10	26%	10	26%
Hospital presentations				
SURC calls	2	5%	6	15%
ED	13	33%	7	18%
Unplanned Admissions	15	38%	15	38%
Average LOS (days) Range	8 days (1–33 days)		15 days (1–43 days)	

^a Monash Health VAED & medical record audit

Conclusions

FIT successfully demonstrated the value of geriatric assessment in identifying vulnerabilities, improved supportive care screening, enhanced referrals and reduced hospital length of stay. Financial viability and staff support further reinforce potential for sustainable integration of this model into routine care in oncology outpatient services.

GERIA-010

REMOTE PRACTICAL GERIATRIC ASSESSMENT FOR SURVIVORSHIP PLANNING AND NAVIGATION IN OLDER ADULTS WITH CANCER: FEASIBILITY AND PRELIMINARY EFFICACY

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Introduction

By 2040, there will be 25 million cancer survivors in the United States, 74% of whom are expected to be age 65+. Curative treatments

can increase risks of aging-related vulnerabilities including functional decline, falls, cognitive impairment, and depression. Supportive oncology lacks a gold-standard intervention to mitigate treatment-associated, aging-related vulnerabilities. We evaluated the feasibility and preliminary efficacy of a tailored geriatric assessment (GA) and navigation intervention “TANGOS” for older adults with locally advanced to regional solid tumors.

Methods

Primary endpoint (feasibility) was retention rate $\geq 65\%$ at 6-month follow-up. Secondary endpoints were patient-reported psychosocial outcomes (PROMIS anxiety, depression, self-efficacy, emotional support), quality of life domains (EORTC-ELD14 scales), and survivorship care goals established from the GA. We screened participants with a validated geriatric syndrome instrument (G8 score). Participants were considered ineligible if they screened positive for moderate-to-severe cognitive impairment (6CIT score > 8). The interventionist was a community health worker trained in GA, social support, and aging resources in the local setting. Analyses of endpoints were bivariate tests with intention-to-treat. The trial was registered on ClinicalTrials.gov (NCT#06125145).

Results

We enrolled 28 participants (mean age 72.4, range 67–83) from April 2024 to November 2024 at a single comprehensive cancer center. The intervention was feasible (82% retention rate, 23 / 28). Retained participants completed 100% of the protocol. Most participants reported less anxiety (52%, $N = 12$), greater self-efficacy (52%, $N = 12$), and no change in depression (43%, $N = 9$) or emotional support ($N = 10$). Anxiety decreased by a clinically meaningful threshold in 43% ($N = 10$) while depression decreased meaningfully in 17% ($N = 4$).

Conclusions

The supportive oncology intervention “TANGOS” is feasible to evaluate aging-related vulnerabilities in older adults with solid tumors. Future steps include testing with a controlled design and larger sample for efficacy evaluation.

GERIA-011

HIDDEN VULNERABILITY IDENTIFIED BY G8 AND EQ-5D-5L IS ASSOCIATED WITH TELEPHONE CONTACTS AND UNPLANNED OUTPATIENT VISITS IN OLDER PATIENTS WITH CANCER

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Introduction

We routinely used Geriatric 8 (G8) screening for patients with cancer aged 75 years and older; however, approximately 70% of patients score ≤ 14 , making it difficult to identify those who truly require additional assessment and supportive care. This study examined the association between patient stratification using the G8 combined with EQ-5D-5L (EQ) and telephone contacts and unplanned outpatient visits within 6 months.

Methods

We conducted a retrospective study of outpatients with cancer aged ≥ 75 years who underwent G8 and EQ at the initial visit across all oncology departments. Patients were classified into four groups using G8 (cutoff 14) and the median EQ utility value (0.95): HH (high G8 and EQ), HL: (high G8 / low EQ), LH (low G8 / high EQ), and LL (low G8 and EQ). Telephone contacts and unplanned outpatient visits within 6 months were evaluated and compared across groups.

Results

A total of 667 patients were included. The four groups comprised LL 346 patients (51.9%), LH 145 patients (21.7%), HH 118 patients (17.7%) and HL, 58 patients (8.7%).

Telephone contacts occurred in 30.3% of patients and differed significantly across groups ($p < 0.01$). The HL had a higher proportion than those in HH (38.2% vs. 16.5%), and a frequency comparable to that in LL (43.2%).

Unplanned outpatient visits occurred in 13.2% of patients and also differed significantly among groups ($p < 0.01$). HL showed more unplanned visits than HH (16.4% vs. 4.6%), rates similar to LL (21.1%).

Conclusions

Patients classified as HL, despite preserved G8 scores, demonstrated patterns of telephone contacts and unplanned outpatient visits comparable to LL patients, indicating the presence of hidden vulnerability not apparent on G8 screening alone. These findings suggest that combining EQ-5D-5L with G8 may help identify patients with supportive care needs that would otherwise remain unrecognized.

GERIA-012

PAIN MANAGEMENT FOR PEOPLE WITH DEMENTIA AND COMORBID CANCER: PERSPECTIVES OF PHYSICIANS AND NURSES

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Introduction

Older people with dementia and comorbid cancer often face challenges in conveying their pain. As a result, cancer pain may be underestimated in this population, leading to delay or insufficient pain management. Although clinicians face substantial uncertainty when managing pain in these patients, little is known about how physicians and nurses assess pain and manage cancer-related pain for this population in this context. The purpose of the current study was to understand how physicians and nurses working in palliative care assess cancer pain and make management decisions for patients with comorbid cancer and dementia.

Methods

Semi-structured interviews were conducted with 20 physicians and nurses working in settings including hospital and home-based palliative care. Qualitative data were analyzed using thematic analysis. This study was approved by the international review board of Keio University in Japan.

Results

Physicians and nurses described “reconstructing” patients’ pain by integrating multiple sources of information based on tumor location and disease progression, changes in daily activities and functional status, and family-derived knowledge of patients’ usual patterns of behavior in their daily lives. When initiating or adjusting opioid administration, participants experienced persistent dilemmas between the need to relieve cancer-related pain and concerns about adverse effects such as delirium, falls, and oversedation. This pain management strategy differed across care settings, including hospitals and home-based palliative care, and were influenced by care environments, available resources, and staffing constraints.

Conclusions

Pain management for patients with cancer and dementia was supported by physicians’ and nurses’ multifaceted interpretations and interprofessional coordination. In supportive care, there is a need for frameworks that facilitate interdisciplinary assessment and management of cancer pain.

GERIA-013

IMPACT OF FRAILTY PROFILES ON CANCER COPING AND QUALITY OF LIFE IN OLDER ADULTS WITH CANCER: A LATENT PROFILE ANALYSIS

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Introduction

Frailty in older adults with cancer is a multidimensional syndrome encompassing physical, psychological, and social domains. Identifying distinct frailty profiles is essential for developing tailored supportive care. This study aimed to classify latent subgroups based on these frailty dimensions and examine their predictors and impact on cancer coping and quality of life (QoL).

Methods

Data from 308 older adults with cancer were analyzed. Latent profile analysis was conducted in Mplus 8.0 using standardized scores of physical, psychological, and social frailty. A 3-step approach was used to identify predictors via multinomial logistic regression and to compare cancer coping and QoL across classes.

Results

A four-class model best fit the data: All-Healthy (57.1%), Physical Frailty Only (7.5%), Psycho-Social Frailty (22.1%), and All-Frailty (13.3%). Compared with the All-Healthy group (class 1), the All-Frailty group (class 4) was predicted by living without a spouse (OR=4.01), lower income (OR=0.55), having comorbidities (OR $\geq$ 100), recent weight loss (OR=2.17), and subjective memory decline (OR=5.93), while Psycho-Social Frailty (class 3) was associated with being without a spouse and having comorbidities. Cancer coping adaptation was substantially higher in the All-Healthy groups than in the Physical Frailty Only and All-Frailty groups ($p < .001$). QoL scores were highest in the All-Healthy group and significantly lower in the Psycho-Social Frailty and All-Frailty groups ($p < .001$), with the lowest scores in the All-Frailty group.

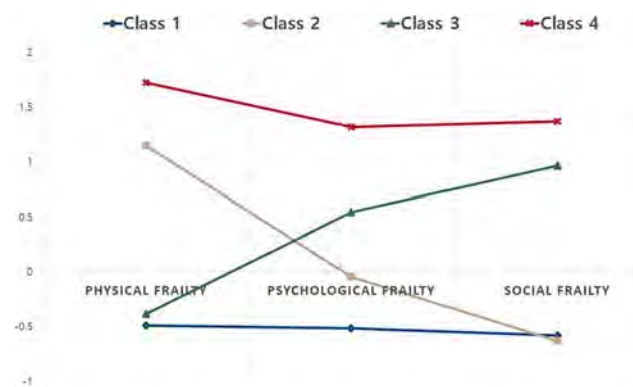


Figure 1. Comparison of Physical, Psychological, and Social Frailty Across Four Latent Classes.
Note. Class 1 All-Healthy; Class 2 Physical Frailty Only; Class 3 Psycho-social Frailty; Class 4 All-Frailty

Table 1. Predictors of Latent Class Membership (Reference: Class 1) (n=308)

Covariates	Class 2 (OR)	Class 3 (OR)	Class 4 (OR)
Without spouse (Ref: With spouse)	1.98	2.95*	4.01*
Monthly income (Higher)	0.70	1.02	0.55*
Comorbidities (Ref: None)			
- 1~2 conditions	>100***	4.44*	>100***
- 3 or more conditions	>100***	7.50*	>100***
Weight loss (Last 1 month)	0.99	1.47	2.17*
Subjective memory decline	2.21	1.82	5.93**

* p < .05, ** p < .01, *** p < .001. OR: Odds Ratio.

Note. **Class 1** All-Healthy; **Class 2** Physical Frailty Only;
Class 3 Psycho-social Frailty; **Class 4** All-Frailty**Table 2.** Differences in Cancer Coping and Quality of Life Across Latent Classes (n=308)

Latent Class	Cancer Coping (Mean ± SE)	Quality of Life (Mean ± SE)
Class 1	40.53 ± 0.53	16.90 ± 0.44
Class 2	36.78 ± 0.88	13.98 ± 3.01
Class 3	38.54 ± 0.98	14.08 ± 0.57
Class 4	33.85 ± 1.20	8.93 ± 1.25
χ^2	32.85***	79.09***
Results of Post Hoc Analyses ^a	Class 1>2,4 & 3>4	Class 1 > 3 > 4

*** p < .001

Note. **Class 1** All-Healthy; **Class 2** Physical Frailty Only;
Class 3 Psycho-social Frailty; **Class 4** All-Frailty

Conclusions

Frailty among older adults with cancer is heterogeneous, and a substantial proportion experience psycho-social or multidimensional frailty rather than physical frailty alone. Targeted supportive care interventions should prioritize high-risk groups, such as those living without a spouse and those with multiple comorbidities, to strengthen coping resources and improve quality of life.

GERIA-014

MEDIATING ROLE OF FRAILTY IN THE IMPACT OF CANCER COPING AND ADAPTATION ON QUALITY OF LIFE IN OLDER ADULTS WITH CANCER: A STRUCTURAL EQUATION MODEL

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Introduction

Effective coping and adaptation are vital for the well-being of older cancer patients, yet the mechanisms influencing their quality of life

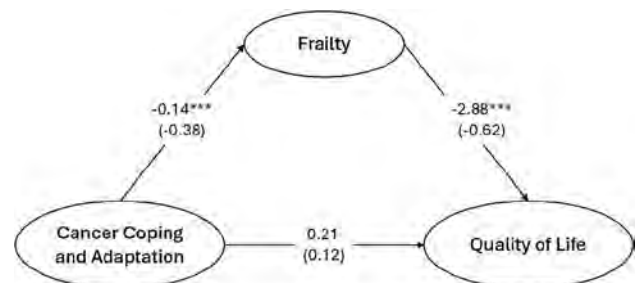
(QoL) remain unclear. This study investigated the mediating effect of multidimensional frailty on the relationship between cancer coping and adaptation and QoL in this population.

Methods

This cross-sectional study included 308 older adults with cancer. Data were analyzed using structural equation modeling in Mplus 8.0. To enhance model parsimony, item parceling was applied to cancer coping and QoL constructs. Frailty was modeled as a latent variable comprising three dimensions: physical, psychological, and social. The mediation effect was validated using bootstrapping with 10,000 resamples.

Results

The structural model demonstrated an acceptable fit to the data (CFI=0.94, RMSEA=0.09, SRMR=0.06). Cancer coping and adaptation were significantly associated with lower levels of frailty ($\beta = -0.38$, $p < .001$), which in turn was a strong predictor of poorer QoL ($\beta = -0.62$, $p < .001$). While the direct effect of cancer coping on QoL was not significant ($\beta = 0.12$, $p = .12$), the indirect effect via frailty was significant ($B = 0.41$, 95% CI [0.205, 0.686]). These results indicate that frailty fully mediates the relationship between coping/adaptation and QoL.

**Figure 1.** Model estimation results (standardized estimates in parentheses).

***p < .001

Table 1. Mediating Effect of Cancer Coping and Adaptation on Quality of Life (n=308)

	B (SE)	β	95% CI
Direct Effect			
Cancer Coping and Adaptation → Quality of Life	0.21 (0.14)	0.12	[-0.058, 0.474]
Indirect Effect			
Cancer Coping and Adaptation → Frailty → Quality of Life	0.41 (0.12)	0.24	[0.205, 0.686]
Total Effect			
Cancer Coping and Adaptation → Quality of Life	0.62 (0.15)	0.36	[0.332, 0.918]

Abbreviations. CI Confidence Interval; SE Standard Error; QoL Quality of Life
Note. 95% CI does not include zero, indicating statistical significance.

Conclusions

The findings suggest that enhancing coping strategies alone may not suffice to improve QoL unless these strategies effectively mitigate frailty. Supportive care interventions for older cancer patients should prioritize multidimensional frailty management—integrating physical, psychological, and social support—to maximize the impact of coping resources on overall quality of life.

GERIA-016**ASSESSMENTS AND INTERVENTIONS TO ENHANCE PATIENT-CENTERED COMMUNICATION IN OLDER ADULTS WITH CANCER: A SCOPING REVIEW**

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Introduction

Older adults represent a growing proportion of individuals with cancer but remain underrepresented in clinical research, limiting evidence to support individualized care. Patient-centered communication (PCC) is essential to high-quality cancer care and is particularly relevant for older adults, given heterogeneity in health status, preferences, and goals of care. The National Cancer Institute (NCI) defines PCC through six core functions: fostering healing relationships, exchanging information, responding to emotions, managing uncertainty, making decisions, and enabling patient self-management. Prior reviews have focused on selected aspects of PCC, such as shared decision-making, leaving gaps in understanding how PCC is comprehensively assessed and addressed. This scoping review aims to map existing evidence on PCC in this population and identify key research gaps.

Methods

This scoping review follows the Arksey and O'Malley framework and PRISMA-ScR guidelines and is registered on Open Science Framework. A systematic search was conducted in PubMed, Embase, and PsycINFO for studies published up to April 30, 2025. Eligible studies include quantitative, qualitative, or mixed-methods research involving older adults with cancer that assess or target at least one NCI-defined PCC function. Study selection and data extraction are performed independently by paired reviewers from the MASCC Geriatrics Study Group using Covidence. Extracted data include study characteristics, PCC domains, cancer care phase, assessment tools, and interventions.

Results

Of 15,019 identified references, 3,145 duplicates were removed and 8,883 references were excluded at Title and Abstract screening. Full-text screening is ongoing for 2,991 articles, with 81 studies ready for data extraction. The review synthesizes existing PCC assessment tools and interventions for older adults with cancer and identifies key gaps

across the cancer care continuum. Complete results will be presented at the conference.

Conclusions

This scoping review will clarify how PCC is conceptualized and operationalized in older adults with cancer and inform future research and strategies to enhance patient-centered cancer care.

GERIA-017**THE OAC-D: DEVELOPMENT AND VALIDATION OF A NOVEL DEPRESSION MEASURE FOR OLDER ADULTS WITH CANCER**

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Introduction

Depression in older adults with cancer (OACs) is often inadequately captured by standard patient-reported outcomes (PROs), as traditional DSM criteria may overlook symptoms unique to aging and cancer. Using the US Food and Drug Administration Guidance for Industry on PRO development, we reconceptualized depression in OACs and developed the Older Adults with Cancer–Depression Scale (OAC-D). This study evaluates the psychometric properties of this novel measure.

Methods

Based on a refined conceptual model informed by literature reviews, and qualitative work with patients and experts in geriatric oncology and psychiatry, a 35-item draft PRO was developed. The draft, alongside legacy measures, was administered to OACs >70 years of age at a comprehensive cancer center and across the US. Exploratory Graph Analysis (EGA) identified relevant items and novel factors. Classical Test Theory was applied to assess internal consistency, validity, and test-retest reliability (7–14 days post-baseline).

Results

Participants (N = 155) had a mean age of 76 ± 4.7 years; 48% were female, 93% White, 91% non-Hispanic, and 67% college educated. EGA yielded an 18-item scale with five domains: (1) Interest and Enjoyment, (2) Purpose and Meaning, (3) Loneliness, (4) Social Withdrawal, and (5) Guilt and Regrets. Internal consistency was strong ($\alpha = 0.85–0.93$), as was test–retest reliability (ICC = 0.74–0.80; Social Withdrawal = 0.61). Convergent validity was supported by correlations with the PHQ-9 ($r = 0.81$), PROMIS-Anxiety ($r = 0.68$), and PROMIS-Physical ($r = -0.41$). Known-groups analyses demonstrated higher scores among participants with a history of depression ($p < 0.001$).

Conclusions

The OAC-D captures five distinct domains of depression, only one of which overlaps substantially with DSM criteria. It demonstrates robust psychometric performance and offers a clinically meaningful alternative to traditional measures by addressing depression as experienced at the intersection of cancer and aging.

GERIA-019**GERIATRIC SYNDROMES IN ONCOLOGY: FRAILITY AND SARCOPENIA AS KEY PREDICTORS OF DYSPHAGIA IN HEAD AND NECK CANCER**

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Introduction

Head and neck cancer (HNC) incidence among older adults in Australia is rising, with the highest rates in those aged 80 to 84 years. Given this, frailty and sarcopenia frequently co-exist in HNC and are associated with surgical complications, greater treatment toxicity, and poorer quality life. The focus of the current scoping review was to examine the current evidence exploring the relationship between frailty and/or sarcopenia with dysphagia, a common toxicity associated with HNC and its management.

Methods

A systematic search strategy was implemented across PubMed, MEDLINE, EMBASE, and CINAHL. Studies were included if they involved adults with HNC, reported frailty and/or sarcopenia, and examined dysphagia outcomes.

Results

Database search identified 3,342 studies with 17 studies (sarcopenia: n=12; frailty: n=5) eligible for inclusion. Few studies adhered to diagnostic guidelines for sarcopenia and frailty, limiting the ability to draw comparisons across findings. Sarcopenia was most often assessed using CT-derived muscle mass; however, diagnostic cut-offs varied between studies. Frailty measurement was inconsistent, ranging from screeners such as the Geriatric 8 to tools like the Fried Frailty Index. Dysphagia assessment also lacked uniformity, employing FOIS, EAT-10, and CTCAE. These methodological inconsistencies restrict comparability and underscore the need for consistent diagnostic criteria. Despite this variability, 11 of 12 sarcopenia studies and 4 of 5 frailty studies identified associations with dysphagia at baseline and post-treatment. Baseline sarcopenia and frailty were associated with higher dysphagia toxicity, increased risk of aspiration pneumonia, and dependence on feeding tubes. Dysphagia prevalence ranged from 4.8% to 74% among patients with sarcopenia and from 67% to 77% among those with frailty.

Conclusions

Emerging evidence suggests frailty and sarcopenia are significant predictors of dysphagia in HNC, with these findings particularly relevant for older head and neck patients. Further research using standardised diagnostic criteria and robust prospective studies is needed to inform prognostic planning and targeted rehabilitation.

GERIA-020

HYDRATION MATTERS: A FEASIBILITY STUDY OF A MOBILE APP FOR DEHYDRATION PREVENTION IN GERIATRIC CANCER CARE

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Introduction

Dehydration is a prevalent and underrecognized complication among older adults undergoing cancer treatment. Age-related physiological changes, multimorbidity, cognitive vulnerability, and polypharmacy can impair thirst perception and fluid regulation, increasing susceptibility to dehydration. Antineoplastic therapies and supportive medications further exacerbate fluid imbalance, contributing to functional decline, treatment intolerance, and preventable emergency department utilization. Despite its clinical significance, systematic hydration monitoring is rarely integrated into geriatric oncology care. Mobile health (mHealth) technologies offer a novel approach to support hydration self-management and early risk identification in this vulnerable population.

Methods

This mixed-method study is evaluating the usability and acceptability of a mobile hydration application designed to prevent dehydration in older adults receiving cancer treatment. User perceptions of usefulness, ease of use, and satisfaction are being examined to inform implementation. Participants are engaging with the hydration app during a structured testing period. Quantitative usability data are being collected using the System Usability Scale (SUS). Qualitative semi-structured interviews explore user experiences, perceived benefits, barriers, and facilitators, including age-related and caregiving considerations. Descriptive statistics will summarize SUS scores, and content analysis will analyze qualitative data.

Results

Findings will provide actionable insight into the feasibility and usability of an mHealth hydration intervention tailored to geriatric oncology care. Results are expected to highlight user-driven design considerations and implementation strategies relevant to older adults and caregivers. [results available by conference]

Conclusions

Study outcomes will provide actionable insight into the feasibility and usability of an mHealth hydration intervention tailored to geriatric oncology care. Results are expected to highlight user-driven design considerations and implementation strategies relevant to older adults/caregivers. This intervention has the potential to improve hydration adherence, mitigate dehydration-related complications, and reduce unplanned healthcare utilization during cancer treatment. These findings will inform iterative app refinement and guide future phase II effectiveness studies aimed at integrating hydration monitoring into comprehensive oncology symptom management workflows.

GERIA-022

EFFECT OF PALLIATIVE CARE CONSULTATION IN ELDERLY PATIENTS WITH ADVANCED CANCER IN A LOW-MIDDLE-INCOME SETTING: A PROSPECTIVE OBSERVATIONAL STUDY

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Introduction

The growing elderly population in India is accompanied by an increase in cancer incidence among older adults, necessitating specialized care approaches. Geriatric palliative care (GPC) addresses the complex medical, functional, and psychosocial needs of elderly cancer patients. Despite its proven benefits, specialist palliative care (SPC) services remain underutilized in LMICs. This study aimed to evaluate the effect of SPC consultations on the quality of life (QoL), symptom burden, and social support of elderly patients with advanced cancer.

Methods

This prospective observational study enrolled 180 patients aged ≥60 years with advanced cancer referred to palliative care services. Patients were assessed at baseline, day 15, and day 30 post-SPC consultation using the following validated tools: SCOPE-C Version-1 (functional status, affect, cognition, nutrition, comorbidities, polypharmacy, social support, QoL), ESAS-r, and EORTC QLQ-C15 PAL. Statistical analysis was conducted using nonparametric tests because the data were not normally distributed.

Results

Significant improvements were noted in functional status ($p<0.001$) and social support ($p=0.003$) by day 30. Symptom burden decreased across ESAS-r domains—including pain, fatigue, nausea, dyspnea, depression, and anxiety (all $p<0.001$)—indicating effective symptom control. However, cognitive and nutritional scores declined ($p<0.001$), and depression worsened over time on SCOPE-C ($p<0.001$), highlighting gaps in long-term psychological care. The EORTC QLQ-C15-PAL

showed a paradoxical decline in overall QoL ($p < 0.001$), likely reflecting cumulative disease burden. Demographic variables such as sex, marital status, education, and comorbidities were significantly linked to differences in symptom burden and functional decline.

Conclusions

SPC consultations significantly reduced the symptom burden and enhanced functional outcomes and social support in elderly patients with advanced cancer. However, persistent cognitive and psychological challenges highlight the need for targeted mental health and nutritional intervention. The findings highlight the importance of the early integration of SPC in geriatric oncology settings within LMICs and guide the development of future GPC models.

GERIA-025

A REVIEW OF GERIATRIC ONCOLOGY PRACTICE GUIDELINES: SIOG 2014, SIOG UPDATE 2014, SEOM 2018, NCCN 2025, ASCO 2023, ESMO/SIOG 2025, & ASCO GLOBAL 2025

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Introduction

This review systematically examines geriatric oncology guidelines, including the International Association of Geriatric Oncology (SIOG) 2014 and Update 2014, Spanish Society for Medical Oncology (SEOM) 2018, National Comprehensive Cancer Network (NCCN) 2025, American Society of Clinical Oncology (ASCO) 2023 and Global 25, and European Society for Medical Oncology (ESMO)/SIOG 2025. The study identifies convergence and divergence in geriatric assessment (GA) recommendations and highlights inconsistencies that may inform guideline harmonization. Although GA is universally endorsed for optimizing geriatric cancer care, heterogeneity persists in assessment tools and implementation frameworks, with implications for feasibility, decision-making, and patient outcomes.

Methods

Clinical guidelines published up to October 31, 2025 were identified from major databases and repositories. Included guidelines addressed multidomain GA in older adults (≥ 65 years) and provided recommendations on clinical implementation. Two reviewers extracted and compared guideline content including GA domains, screening and assessment tools, and supporting evidence, with discrepancies resolved by consensus.

Results

All included guidelines emphasize the importance of a multidomain GA, encompassing functional status, cognition, nutrition, psychological health, social support, polypharmacy, and treatment-related risk. However, variations exist in recommended screening approaches, tools, and integration

models. Recent guidelines prioritize physical performance measures (Timed Up and Go, Short Physical Performance Battery) and cognitive instruments (Montreal Cognitive Assessment, Mini-Cog). GA-guided interventions supported by randomized trials (GAP70+, GAIN, GERICO, and INTEGRATE), have demonstrated reductions in chemotherapy toxicity and preserved functional outcomes. However, evidence remains limited regarding immunotherapy and targeted therapy applications. To enhance real-world applicability, resource-stratified frameworks and integrated care models are advocated in settings with limited geriatric expertise.

Conclusions

While all major organizations underscore the role of GA in individualized geriatric oncological care, heterogeneity in recommended tools, predictive models, and intervention strategies contributes to variable practice. Future efforts should prioritize GA framework harmonization, coupled with resource-adapted intervention models, supporting equitable, feasible, and evidence-based care across diverse environments.

HEMAT-001

VALUE OF RISK-DIRECTED THROMBOPROPHYLAXIS IN AMBULATORY LUNG AND GASTROINTESTINAL CANCER CARE: ECONOMIC EVALUATION OF THE TARGET-TP RANDOMIZED TRIAL

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Introduction

Thromboembolism (TE) is a major and preventable hematological complication in patients with cancer, contributing to substantial adverse health impacts for patients and the health system. Targeted Thromboprophylaxis in Ambulatory Patients Receiving Anticancer Therapies (TARGET-TP) was an Australian phase III randomized trial of biomarker risk-directed enoxaparin thromboprophylaxis. The TARGET-TP intervention reduced TE (HR 0.31, $p = 0.005$) and six-month mortality (HR 0.48, $p = 0.03$) versus usual care (no prophylaxis). This study evaluated the value for money of the TARGET-TP intervention versus usual care.

Methods

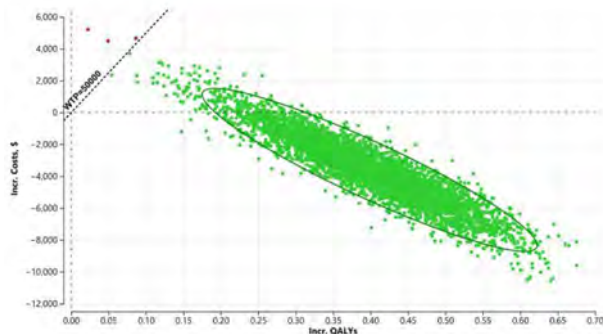
A within-trial and modelled economic evaluation was conducted from the Australian health system perspective. Resource use collected within the trial reflected risk stratification, thromboprophylaxis, side-effect management, and treatment of TE events. Health benefits were quantified as quality-adjusted life years (QALYs), utilities derived from SF-12v2 data. Bootstrapping was used to evaluate sampling uncertainty. A Markov model estimated long-term costs and outcomes over a 5-year horizon. Scenarios assessed the use of oral anticoagulants and stewardship, while probabilistic sensitivity analysis (PSA) tested parameter uncertainty.

Results

Within-trial analysis showed the TARGET-TP intervention was associated with lower costs, while being more effective (i.e., dominant), reducing costs by \$1,095 per patient and generating an additional 0.0097 QALYs, driven mainly by fewer hospitalizations. The TARGET-TP intervention was dominant in $>83\%$ of bootstrap iterations. Modelled analyses supported these findings, with cost savings of \$3,551 per patient and a gain of 0.4 QALYs. PSA demonstrated dominance in $>95\%$ of iterations (Figure 1). The oral anticoagulant and

stewardship scenarios remained dominant for rivaroxaban, while apixaban was highly cost-effective, driven by bleeding events and drug costs.

Figure: Economic model cost-effectiveness plane.



Conclusions

Biomarker-driven primary thromboprophylaxis in patients with lung and gastrointestinal cancer was less costly and more effective from the health-care system perspective, supporting its implementation in routine care.

HEMAT-003

ANTIFUNGAL PROPHYLAXIS PATTERNS AND INVASIVE FUNGAL INFECTION OUTCOMES IN PAEDIATRIC ALLOGENEIC HCT: A MULTICENTRE COHORT STUDY

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Introduction

Invasive fungal infections (IFIs) are significant complications after paediatric haematopoietic stem cell transplant (HCT). Evidence guiding antifungal prophylaxis in children remains limited, particularly regarding optimal mould-active strategies. We examined prophylaxis use and associated IFI incidence across a multicentre paediatric HCT cohort.

Methods

We retrospectively reviewed children undergoing first allogeneic HCT at two Australian paediatric transplant centres: The Royal Children's Hospital (RCH) and Perth Children's Hospital (PCH) (2016–2022). Patients receiving second HCTs were excluded. Prophylaxis was analysed across pre-engraftment (conditioning–Day 30) and post-engraftment (Day 31–100) periods. Agents were classified as non-mould-active (fluconazole), mould-active (micafungin, liposomal amphotericin B, voriconazole, posaconazole), or mixed regimens. IFIs were defined as proven/probable/possible.

Results

We analysed 239 HCT episodes (RCH 84%, PCH 16%). Median age at day 0 was 6.9 years and 59% were male. Twenty-five (10.5%) had prior IFI pre-HCT; these patients were older and more frequently had malignant disease, particularly AML.

Among children without prior IFI pre-HCT, pre-engraftment prophylaxis most commonly used was fluconazole (72%, 154/214), followed by mould-active (22%, 47/214) and mixed regimens (6%, 13/214). Prior-IFI pre-HCT patients mostly received mould-active secondary prophylaxis (60%, 15/25), and fluconazole monotherapy was rarely prescribed (8%, 2/25). Post-engraftment, the no-prior-IFI pre-HCT group received mainly fluconazole (45%, 96/214), mould-active (29%, 62/214) or mixed regimens (26%, 56/214). Prior-IFI pre-HCT patients continued to favour mould-active (64%, 16/25) or mixed regimens (24%, 6/25).

IFI incidence was 10.5% overall (25/239), lower in prior-IFI pre-HCT versus no-prior-IFI pre-HCT patients (8% vs 10.8% respectively). All

IFIs in prior-IFI pre-HCT patients occurred pre-engraftment. In the no-prior-IFI pre-HCT group, most IFIs occurred post-engraftment (61%, 14/23). All proven IFIs (n=2) occurred on fluconazole monotherapy and probable IFIs occurred across different regimens.

Conclusions

Prophylaxis was strongly risk-adapted. IFIs occurred across all strategies, with proven IFIs seen only with fluconazole. Most IFIs arose post-engraftment, supporting risk-based escalation to mould-active prophylaxis in immunosuppressed children.

HEMAT-005

AVOIDING PROPHYLACTIC GROWTH FACTORS DURING THE DOSE-DENSE PACLITAXEL PHASE OF PERIOPERATIVE CHEMOTHERAPY IN BREAST CANCER

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Introduction

Dose-dense anthracycline with cyclophosphamide followed by paclitaxel is the standard of care in the perioperative setting as per the CALGB 9741 study. It has been questioned whether filgrastim support is required in the paclitaxel phase. Hence, we planned this study to evaluate the feasibility and safety of delivering dose-dense paclitaxel without routine prophylactic G-CSF in early breast cancer patients, aiming to reduce treatment burden without compromising chemotherapy completion or patient safety in Indian patients

Methods

This single-arm phase II study will evaluate the omission of prophylactic growth factors during the dose-dense paclitaxel chemotherapy in patients with breast cancer. We will enroll 118 subjects who have tolerated dose-dense anthracycline without febrile neutropenia and give paclitaxel without filgrastim support, while the proportion of patients completing paclitaxel within 7 weeks is the primary study endpoint. The study applies a Simon two-stage design, where if 10 or fewer out of 46 evaluable patients receive paclitaxel in 7 weeks, the study will proceed to stage II.

Results

For stage I analysis, between October 2023 and March 2025, 46 patients with breast cancer have been enrolled, with a median age of 41 (range: 25–51) years. 44 (95.65%) patients completed four cycles of dose-dense paclitaxel within 7 weeks, meeting the predefined criteria to proceed to stage II. No cases of febrile neutropenia were observed. Grade 3 chemotherapy-induced peripheral neuropathy occurred in 2 patients.

Conclusions

Omitting pegfilgrastim appears to be safe and feasible, allowing for the effective delivery of dose-dense paclitaxel; hence, the study will continue to enroll patients in stage II of Simon's two-stage design.

HEMAT-006

FEBRILE NEUTROPENIA IN PATIENTS TREATED WITH CHEMOTHERAPY/IMMUNE CHECKPOINT INHIBITION: A MASCC EXPERT PANEL

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Introduction

Chemotherapy/immune checkpoint inhibitor (ICI) therapy is increasingly standard of care for a range of cancers. Increasing numbers of emergency cancer presentations means alternative pathways are required to ensure sustainable services and improve outcomes. Febrile neutropenia (FN) is a common in patients treated with chemotherapy/ICI therapy. Risk stratifying patients with FN is essential to personalise acute management and optimise use of healthcare resources. Management of patients with low-risk FN in an outpatient setting is proven to be safe and effective. The MASCC score is well validated for risk stratification in FN and patients with a score ≥ 21 are likely to be suitable for outpatient management. It has not been validated in patients treated with combined chemotherapy/ICI regimens. This MASCC position paper outlines an approach for acute ambulatory management of low-risk FN in this cohort and produces 10 position points.

Methods

A literature search was performed up to the 31st May 2025 for outpatient management of FN in patients treated with chemotherapy/ICI therapy. Only one paper met the criteria highlighting the need for prospective and real-world data.

Results

Patients treated with a MASCC score < 21 are high risk and require standard neutropenic sepsis management. Usage of high dose steroids in patients presenting with FN on chemo/ICI therapy with grade ≥ 3 diarrhoea and/or transaminitis should be carefully balanced.

Conclusions

Patients treated with chemotherapy/ICI therapy with low-risk FN should be treated on the same pathway as those treated with chemotherapy alone with inclusion criteria adapted to recognise their eligibility (see figure 1). ICI mediated neutropenia should be considered in patients receiving combined chemotherapy/ICI therapy when the timing of presentation is unanticipated or there is a failure of neutrophil recovery with persistent grade 3/4 neutropenia 10 days following SACT administration. Initial treatment of suspected ICI mediated neutropenia is to commence high dose steroids and short-acting G-CSF.

HEMAT-007

PREVALENCE AND FACTORS ASSOCIATED WITH CHEMOTHERAPY INDUCED ANEMIA IN EARLY AND LOCALLY ADVANCED BREAST CANCER : A PROSPECTIVE STUDY FROM INDIA

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Introduction

Chemotherapy-induced anemia (CIA) affects up to 89% of non-anemic cancer patients undergoing chemotherapy. CIA significantly impacts treatment outcomes and quality of life. This prospective study investigated the prevalence, associated factors, and quality-of-life implications of CIA in early and locally advanced breast cancer patients undergoing neoadjuvant or adjuvant chemotherapy at a tertiary cancer centre in Kerala, India.

Methods

This prospective study enrolled 200 eligible patients with Stage I–III breast cancer receiving chemotherapy at a tertiary cancer centre in Kerala (September 2023–June 2025). Baseline haemoglobin ≥ 12 g/dL was required. Patients were monitored pre-chemotherapy for anemia development and classified by WHO criteria. Quality of life was assessed using the Functional Assessment of Cancer Therapy-Anemia (FACT-An) tool.

Results

All 200 patients (100% female, median age 56 years) developed CIA. Anemia severity distribution: mild 36.5% (n=73), moderate 48.5%

(n=97), severe 15% (n=30). Statistically significant factors associated with severe anemia included: younger age ≤ 50 years ($p=0.004$), premenopausal status ($p=0.005$), dose-dense chemotherapy ($p<0.001$, OR=6.60), and neoadjuvant treatment sequence ($p=0.001$, OR=4.13). Quality-of-life scores decreased significantly with increasing anemia severity across all FACT-An domains like physical well being, emotional well being, functional well being, anemia subscale, FACT An total score ($p<0.001$). Post-treatment quality of life improved substantially in severe CIA patients.

Conclusions

This study establishes CIA as a universal hematologic toxicity warranting proactive surveillance and early intervention protocols in breast cancer populations, particularly in younger patients receiving intensive chemotherapy. Integration of CIA assessment into routine supportive care monitoring represents an actionable quality improvement opportunity to optimise treatment tolerance, preserve functional capacity and enhance patient-reported outcomes throughout the cancer trajectory.

HEMAT-008

PREDICTING THROMBOTIC RISK IN INDIAN CANCER PATIENTS: HOW WELL DO ESTABLISHED MODELS PERFORM

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Introduction

Venous thromboembolism (VTE), including deep vein thrombosis and pulmonary embolism, is a significant cause of morbidity and mortality in patients with cancer, with an approximately six-fold higher risk compared to the general population. The Khorana Score is the most widely used risk assessment model for predicting chemotherapy-associated thrombosis in ambulatory cancer patients. However, it was developed primarily in Western populations and may not accurately reflect VTE risk in Indian patients. Differences in ethnicity, cancer patterns, nutritional status, and treatment practices necessitate evaluation of existing VTE risk models in the Indian oncology population.

Methods

We retrospectively validated two VTE risk assessment models using data from Homi Bhabha Cancer Hospital, Punjab, collected between 2020 and 2024. A total of 2,714 patients meeting inclusion and exclusion criteria were analyzed, of whom 246 (9.97%) developed VTE within six months. Model performance was evaluated using linear predictor values derived from published odds ratios and assessed through ROC analysis with C-statistics. Patients were stratified into low- (≤ 2) and high-risk (≥ 3) groups based on individual risk scores.

Results

Using the RAM model, 1,706 patients were classified as low risk, with 137 (8%) developing VTE at 6 months, while 1,008 high-risk patients had 109 (10.8%) VTE events. The Khorana Score (KS) classified 2,390 patients as low risk and 324 as high risk; VTE occurred in 206 (8.6%)

and 40 (12.3%) patients, respectively. The C-statistic for the RAM model was 0.58, compared with reported derivation and validation values of 0.71 and 0.68, indicating reduced discrimination. The KS model showed a C-statistic of 0.535 versus a reported value of 0.70, also demonstrating poor discriminatory performance in our cohort.

Conclusions

A more robust population-specific VTE risk assessment model is required for our population.

HEMAT-010

STANDARDIZED SURVEILLANCE FOR TRANSPLANT-ASSOCIATED THROMBOTIC MICROANGIOPATHY IN PEDIATRIC HEMATOPOIETIC CELL TRANSPLANT RECIPIENTS

Stephanie Heidemann¹, Timothy Olson¹, Benjamin Laskin², Jason Freedman¹

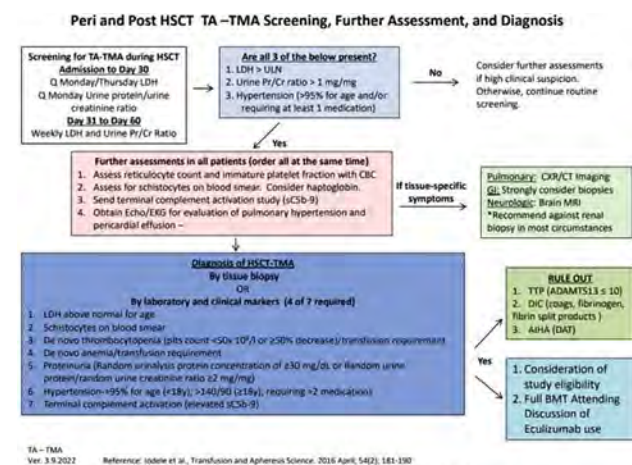
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Introduction

Transplant-associated thrombotic microangiopathy (TA-TMA) is a serious complication following pediatric hematopoietic cell transplantation (HCT), associated with significant morbidity and mortality. Delayed recognition and variability in diagnosis can lead to progression to multi-organ dysfunction syndrome (MODS). We implemented a standardized surveillance and early-intervention pathway, based on prior work at CCHMC, to improve consistency and timeliness of TA-TMA diagnosis.

Methods

A quality improvement initiative was conducted at a single pediatric transplant center. A standardized TA-TMA screening and diagnostic algorithm, informed by prior work at CCHMC, was implemented as standard of care in April 2019. All pediatric allogeneic and autologous HCT recipients from April 2019 to December 2023 were included and compared with a historical cohort from January 2016 to March 2019. Data were collected through chart review and analyzed using descriptive statistics, including medians with inter-quartile ranges and comparative proportions.

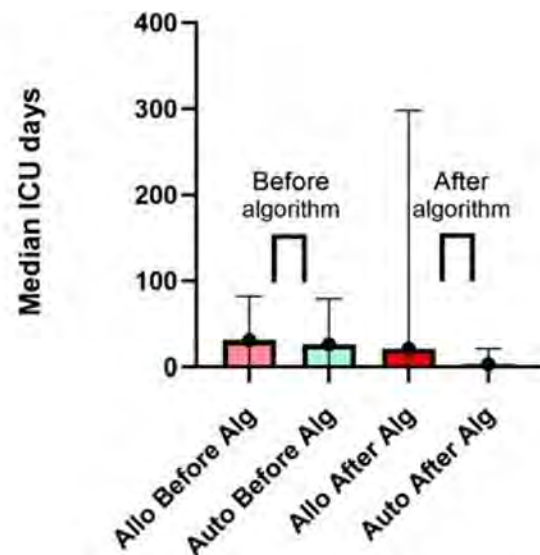


Standardized screening and diagnostic algorithm for transplant-associated thrombotic microangiopathy (TA-TMA), informed by prior work at CCHMC, used for routine surveillance in pediatric hematopoietic cell transplant recipients.

Results

Implementation of surveillance pathway improved consistency in TA-TMA evaluation and clinical decision-making. Proportion of TA-TMA diagnoses made prior to development of MODS increased

modestly among allogeneic recipients from 2/6 (33%) before implementation to 6/17 (35%) afterward and were similar before and after screening implementation (50% [2/4] vs. 40% [2/5]) among autologous recipients. There were favorable trends for one-year overall survival after TMA diagnosis. Survival among allogeneic recipients increased from 33% (2/6) before implementation to 53% (9/17) afterward, and among autologous recipients, survival improved from 75% (3/4) to 100% (5/5). Importantly, median ICU length of stay decreased from 31 to 21 days among allogeneic recipients and from 26 days to 3 days among autologous recipients following screening implementation.



Median intensive care unit (ICU) days among autologous and allogeneic transplant recipients diagnosed with TA-TMA before and after implementation of the standardized screening algorithm.

Conclusions

While improvements in patient outcomes from TMA were not statistically significant before and after implementation of a standardized TA-TMA surveillance pathway, consistent screening supported earlier recognition and more structured management. Ongoing refinement and larger cohorts are needed to further evaluate clinical impact.

HEMAT-011

CARBOPLATIN DOSING WITH BSA-ADJUSTED ESTIMATED GLOMERULAR FILTRATION RATE COMPARED TO CREATININE CLEARANCE REDUCES TREATMENT-RELATED TOXICITIES

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Introduction

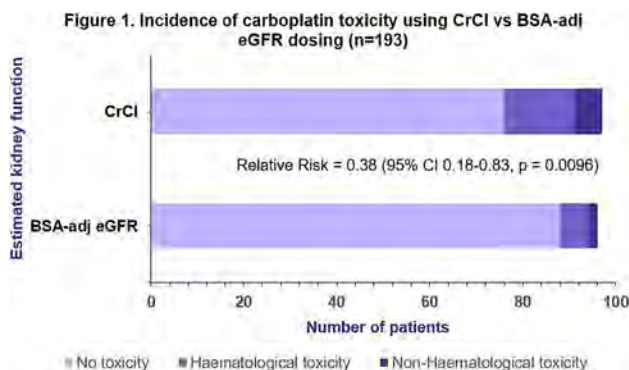
In 2022, The International Consensus Guideline for Anticancer Drug Dosing in Kidney Dysfunction (ADDIKD) recommended utilising body surface area-adjusted estimated glomerular filtration rate (BSA-adjusted eGFR) when measured glomerular filtration is unavailable instead of creatinine clearance (CrCl) for carboplatin dosing.¹ We aimed to compare the toxicity outcomes in patients that received carboplatin doses using BSA-adjusted eGFR and CrCl.

Methods

A retrospective analysis was conducted on adult patients (n=193) who received at least 2 cycles of carboplatin at a tertiary referral hospital between May 2021 to March 2024. Type of toxicity and incidence was compared between CrCl (n=97) and BSA-adjusted eGFR (n=96) cohorts. Statistical analyses included chi-square and Fisher's exact.

Results

Compared to CrCl, BSA-adjusted eGFR dosing significantly reduced overall toxicity by 61.5% (RR 0.38, 95% CI: 0.18–0.83, $p=0.0096$) (Figure 1). Patients dosed using CrCl were 2.6 times more likely to experience haematological toxicity and 2.7 times more likely to experience non-haematological toxicity. There was a trend of reducing grade 3 to 4 (CTCAE v5)² haematological toxicities from 11.5% to 4.1% by using BSA-adjusted eGFR. Types of treatment regimens were not statistically significant in contributing to toxicity reduction.



Conclusions

Toxicity reduction using BSA-adjusted eGFR was likely due to changes in carboplatin dosing methodology. Findings support using BSA-adjusted eGFR as standard for carboplatin dosing. However, larger multi-centre studies are needed to further expand on these initial toxicity findings.

HEMAT-012

UTILITY OF A RISK-STRATIFIED SCREENING STRATEGY FOR LONG-TERM COMPLICATIONS IN AYA LEUKEMIA AND LYMPHOMA SURVIVORS

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Introduction

Survival outcomes in hematological malignancies have improved with modern multimodality therapy, however survivors continue to

experience long-term complications. Based on the Children's Oncology Group guidelines, we developed a risk-based screening strategy for adolescent and adult survivors.

Methods

A single-center, prospective, observational study accrued patients from August 2020 to April 2023 with a three-year follow-up; follow-up remains ongoing for a subset. Survivors aged ≥ 15 years with acute leukaemia or lymphoma in complete remission, either ≥ 2 years off therapy or on maintenance treatment, were enrolled. A predefined risk-adapted panel of tests was administered, tailored to individual risk based on prior anticancer treatment. The primary endpoint was the proportion of patients with any abnormal screening test. Secondary endpoints included test yield, classified as low ($<1\%$), intermediate ($\geq 1\% - \leq 10\%$), or high ($\geq 10\%$), and the prevalence of late complications. Accrual began after IEC approval, national registry registration (CTRI/2019/06/019880), and enrollment after obtaining informed consent/assent.

Results

A total of 491 survivors were enrolled, with a median age of 38 (28–51) years, and male predominance (70.87%). Table 1 describes survivors' clinico-demographic details. Of the 491 survivors, 403 (82.1%) had at least one positive screening test. Table 2 describes the proportion of patients who tested positive for any screening test during follow-up. Subset analysis showed higher yields in pulmonary, bone mineral density, gonadal, thyroid, and cardiac function tests (Table 3). Among treatment exposures, pulmonary function test abnormalities were prevalent in patients who received the ABVD regimen (26/115, 22.61%), and metabolic syndrome secondary to abdominal radiation was observed (473/3727; 12.69%).

Table 1: Demographic Details

Parameters	n (%)
Sex	Male 348 (70%)
	Female 143 (29%)
Diagnosis	Leukaemia Survivors 160 (32%)
	ALL 86 (53%)
	AML 24 (15%)
	APML 50 (30%)
	Lymphoma Survivors 331 (67%)
	Hodgkin 93 (28%)
	Non-Hodgkin 238 (73%)

Table 2: Proportion of Patients testing positive for screening tests at any point of study period

Test	Number of tests Performed	Tested Abnormalities	Proportion
DLCO	16	8	50%
FEV1	43	16	37%
DEXA Scan	446	134	30%
Triglycerides	896	238	27%
Sperm Count	90	24	27%
HDL-C	896	172	19%
LH	50	9	18%
TSH	181	32	18%
FSH	162	21	13%
Platelets	1935	246	13%
HBcAg	346	40	12%
WBC	1935	125	7%
Haemoglobin	1935	106	6%

Table 3: Subset Analysis

Complication	No. of test performed	Number of patients tested positive	Total Proportion	Yield
Pulmonary Dysfunction	59	24	40	High
Bone Mineral Density	446	134	30	High
Gonadal Dysfunction	302	54	18	High
Thyroid Dysfunction	353	40	11	High
Cardiac Dysfunction	1798	140	7	Intermediate
Haematological Dysfunction	5805	477	8	Intermediate
Electrolytes Dysfunction	926	62	6	Intermediate
Oral Dysfunction	38	2	5	Intermediate
Renal Dysfunction	5268	267	5	Intermediate
Viral Reactivation	1417	46	3	Intermediate

Conclusions

A structured risk-based screening test effectively identified clinically significant long-term effects in AYA leukemia and lymphoma survivors. The high yield of organ-specific tests highlights the need for targeted, resource-appropriate surveillance models in long-term follow-up guidelines.

HEMAT-013

HEMATOLOGICAL IMMUNE-RELATED ADVERSE EVENTS ASSOCIATED WITH CHECKPOINT INHIBITORS

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Introduction

The use of immune checkpoint inhibitors (ICIs) has expanded substantially across tumor types, establishing them as a cornerstone of modern oncology. However, the frequency and severity of immune-related adverse events (irAEs) remain underestimated, particularly hematologic toxicities, which can be life-threatening and require distinct management approaches compared to cytotoxic or targeted therapies.

Methods

We performed literature reviews using PubMed to identify and analyze reported cases of the most frequent hematologic irAEs; autoimmune hemolytic anemia (AIHA), immune thrombocytopenia (ITP), and pure red cell aplasia (PRCA), in patients with solid tumors. In parallel, we report three illustrative cases from our institution to highlight diagnostic pitfalls and management strategies.

Results

The median onset of hematologic irAEs occurs after approximately 3 cycles of ICI therapy for AIHA and ITP, and after 4 cycles for PRCA. Most patients achieved remission with corticosteroid therapy; however, 10–15% were steroid-refractory or relapsed, requiring second-line immunosuppressive agents. Rechallenge with ICIs remains controversial due to a recurrence rate of irAE, although it may be feasible and clinically beneficial in carefully selected patients.

Conclusions

As the use of ICIs continues to rise, prompt recognition and management of hematologic irAEs are critical to minimize morbidity and to avoid premature discontinuation of immunotherapy. Increased clinician awareness and standardized diagnostic algorithms are essential to preserve both safety and efficacy.

HEMAT-015

FEBRILE NEUTROPENIA IN SOLID TUMOURS : FROM CRISIS TO CLARITY - A TERTIARY CANCER CARE COHORT

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Introduction

Febrile neutropenia (FN) is one of the leading causes of morbidity and mortality in cancer treatment-related complications that is considered a medical emergency. And it can adversely affect outcomes during cancer treatment, leading to delays in the subsequent chemotherapy cycles, increased hospital stays, and dose reductions of further chemotherapy. But there is also a lack of data on FN, especially in the Indian population with solid tumors.

Methods

This is a single-center, prospective, non-interventional, observational study involving consecutive solid cancer patients who met the definition of febrile neutropenia between September 2022 and February 2024, with data censored as of July 2024. The patients who were on tyrosine kinase inhibitors (TKI), oral metronomic chemotherapy, immunotherapy only/targeted therapy only, or chemoradiation (CTRT) were excluded. The primary outcome measures were i) treatment-related mortality. ii) Duration of hospital stay. STATA/SE 13.0 (Stata-Corp) was used for statistical analysis.

Results

A total of 234 patients were screened, among whom 219 FN episodes in 202 patients were documented. Breast carcinoma was the most common malignancy. Febrile neutropenia occurred in 71% of patients despite prophylactic administration of growth factors. Bacteremia was identified in 27.3% of FN episodes, with gram-negative organisms predominating. The mean duration of hospitalization was 6.88 days (SD 6.93), with a median stay of 5 days; Chemotherapy was permanently discontinued in 30.1% (n = 66), while the remaining 69.9% (n = 153) required treatment modifications. Overall, in-hospital mortality attributable to febrile neutropenia was 12.32% (n = 27). Chemotherapy regimens form one of the major risk factors for worse outcomes of febrile neutropenia, along with blood culture positivity and ICU stay.

Conclusions

Febrile neutropenia continues to be a significant cause of morbidity and mortality in cancer care, underscoring the need for a more comprehensive, multidisciplinary approach to improve patient outcomes.

HEMAT-016

HSCT-BIOME STUDY – A PHASE 0/1 TRIAL EVALUATING ENCAPSULATED FMT IN REDUCING THE SIDE EFFECTS OF HSCT: INTERIM RESULTS FROM OPEN-LABEL SAFETY RUN IN

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Introduction

The gut microbiota is strongly linked to a variety of complications related to haematopoietic stem cell transplantation (HSCT). Hence, faecal microbiota transplantation (FMT), a method of delivering a healthy gut microbiota to a recipient, is rapidly emerging as promising

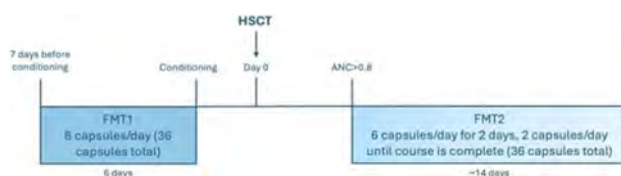
supportive care intervention for HSCT recipients. The HSCT-BIOME study aims to determine the tolerability and safety of orally-administered, encapsulated FMT in HSCT recipients, and evaluate its clinical efficacy in reducing HSCT complications.

Methods

FMT, prepared under strict GCP conditions at the TGA-approved FMT provider BiomeBank, is encapsulated as a lyophilised product and administered to eligible participants (Table 1) prior to conditioning chemotherapy and following immune recovery (ANC>0.8, Figure 1). The primary outcome is the proportion of participants that develop severe gastrointestinal toxicity defined as 3 consecutive days of the diarrhea (Bristol Stool Chart 6+) at a frequency of four times daily. Safety is defined as the incidence of treatment-emergent adverse events (TE-AEs). Tolerability is defined as adherence to FMT. Prior to commencing the randomised component of the trial (N=51), an open-label safety run-in cohort was performed (N=5) to confirm safety, optimize protocols and evaluate FMT colonization using shotgun metagenomic sequencing.

Table 1: Inclusion and exclusion criteria

Inclusion	Exclusion
1. Adult (≥18 years) 2. Diagnosed with multiple myeloma, leukaemia, lymphoma or another haematological malignancy to be treated with auto-HSCT 3. Scheduled to receive conditioning chemotherapy (+/- TBI) prior to auto-HSCT 4. Able to provide written informed consent and follow all clinical trial related procedures (translator to be provided for people of culturally and linguistically diverse (CALD) backgrounds)	1. Pre-existing gastrointestinal disease including Crohn's disease, ulcerative colitis 2. Unable to swallow capsules 3. Pregnancy 4. Nut allergy or anaphylactic food allergy 5. Uncontrolled vomiting or oral mucositis that may impact swallowing (determined by participant) 6. Fever (body temp >37.8oC)



Results

Adherence to FMT in the safety run-in cohort was high (FMT1: 93%, FMT2: 83%), with non-adherence related to logistical barriers (i.e. access to capsules) and nausea. Participants commenced FMT2 on day +12 to +15, ANC= 0.98-7.31, with delays in commencing FMT2 related to persistent fevers. All participants met the primary outcome prior to commencing FMT2, but this resolved after starting FMT2. There were no TE-AEs identified during the safety trial. Shotgun metagenomic data are currently being processed with anticipated results by March 2026.

Conclusions

The delivery of peri-HSCT FMT is feasible, safe and well tolerated by participants. HSCT-BIOME is actively recruiting for stage 2 (RCT) for 2026.

HEMAT-017

EVALUATING THE OCCUPATIONAL THERAPY MODEL OF CARE DELIVERED TO CAR-T PATIENTS ACROSS THE HOSPITAL AND HOME SETTING: A RETROSPECTIVE AUDIT.

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Peter MacCallum Cancer Centre, Occupational Therapy, Melbourne

Introduction

Chimeric antigen receptor (CAR) T-cell therapy is an emerging treatment for haematological malignancies but is associated with significant toxicities affecting physical and cognitive function. At an Australian specialist cancer centre, occupational therapists implemented a novel model of care to address these needs across hospital and home settings. This study aimed to describe the occupational therapy model of care and the characteristics and functional outcomes of patients receiving occupational therapy.

Methods

A retrospective audit of electronic medical records included patients receiving CAR-T who were seen by occupational therapy over a 10-month period. Occupational therapy assessment and intervention addressed functional and cognitive needs during hospitalisation and post-discharge. Data on demographics, patient outcomes, and service utilisation were collected and analysed descriptively.

Results

Of the 62 patients included, most had Diffuse Large B-Cell Lymphoma (DLBCL) (70%). Mild cognitive impairment (determined by Montreal Cognitive Assessment (MoCA) screening tool) was common during admission (65% at 10–14 days post-CAR-T) but less frequent at one-month post-discharge (28%). Most patients managed their personal care tasks with minimal support and were discharged home. Sixteen were re-hospitalised within 30 days. During admission, patients received an average of 3.7 occupational therapy consultations, largely focused on discharge planning, fatigue management, equipment provision, and cognitive retraining. After discharge, occupational therapy input was less (mean 0.8 consultations) and centred on fatigue management, cognitive retraining, and referral to external rehabilitation services.

Conclusions

This study is the first to describe occupational therapy interventions for patients following CAR-T. Occupational therapists supported patients across hospital and home settings, addressing discharge barriers, cancer-related fatigue, and cognitive impairment. These findings highlight the important role of occupational therapy in CAR-T models of care and support its inclusion within multidisciplinary teams. Data will also inform future research evaluating the implementation of rehabilitation models for CAR-T patients across different contexts.

HEMAT-018

ASSESSMENT OF PATIENT PERCEPTIONS, RESOURCE UTILISATION AND UTILITY OF TRAMADOL AS PRE-PROCEDURAL ANALGESIA IN BONE MARROW ASPIRATION AND BIOPSY

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Introduction

Bone marrow aspiration and biopsy (BMAB) is an essential diagnostic and risk-stratification tool in the evaluation of various haematological malignancies. However, BMAB remains considerably

painful procedure, associated with substantial pain, discomfort, and procedural anxiety with wide inter-individual variability and limited standardization of analgesic approaches. This study aims to address these gaps and broader discussion on patient-perceptions and experiences.

Methods

A single-center, prospective-observational study, followed by a randomized (1:1) controlled trial was conducted after obtaining IEC approval. Patients ≥ 15 -years undergoing first-time BMAB were included, while those premedicated with sedatives, analgesics, with opioid dependence, with known drug hypersensitivity were excluded. Randomized patients will receive tramadol 50 mg with local-lignocaine infiltration or local-lignocaine alone. The primary observational outcome was the assessment of post-procedural pain in these patients and assessment of anxiety at two-time-frame using VAS-scale, procedural duration, complication within the first-24-hours. In the interventional phase, study aimed to evaluate pain-scores with oral tramadol + local lignocaine, factors influencing pain, proportion of patients requiring analgesics within 24 hours, and adverse events.

Results

An interim analysis of our study was performed, which included 49 participants, with a male predominance (63.82%). 31% of patients reported a score of 3 immediately after the procedure, whereas 29% scored 1 on the pain scale post 24 hours, Mean anxiety score was found to be 4.12%, mean time required for procedure was 15.17 mins, and 1 patient experienced serous discharge. 55% of the patients did not require any additional analgesic, whereas 6.38% of the patients required at least 2 doses of analgesic post-procedure. Till date, none of the patients have reached the randomizations phase.

Conclusions

Our interim findings from the observational phase demonstrated that BAMB is associated with variable pain and anxiety, with a substantial proportion of patients experiencing measurable discomfort despite standard local anesthesia, necessitating need for standardization of analgesics in Indian setting.

HEMAT-021

HEMOGLOBIN TRAJECTORIES, ANEMIA EVALUATIONS, AND SUPPORTIVE INTERVENTIONS IN EARLY BREAST CANCER UNDERGOING CURATIVE SURGERY: A REAL-WORLD PERSPECTIVE

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Introduction

Anemia is a frequent but often overlooked and underrecognised medical morbidity among women with early breast cancer (EBC), usually developing insidiously alongside cancer-related fatigue. Real-world data describing hemoglobin (Hb) dynamics through active therapy in EBC remain limited, particularly regarding the timing of Hb nadir, physician evaluation practices, and supportive interventions.

Methods

We evaluated hemoglobin trajectories and anemia management practices in consecutive patients with EBC undergoing curative-intent surgery at a tertiary cancer hospital, between Jan'24 and Oct'25. Hemoglobin values were recorded at diagnosis, at surgery, and at nadir, with assessment of time to nadir. Demographic and clinico-pathological variables, physician-documented anemia evaluations, and supportive

interventions were captured. The primary objectives were to determine the prevalence of baseline anemia and track Hb dynamics across the active treatment period.

Results

During the study period, 1257 women had undergone curative-intent surgery for EBC. The median age of the cohort was 53 years (SD 11.2, range 23 - 89), with 71.4% postmenopausal. Baseline anemia was observed in 45.8% of patients, predominantly mild (23.3%) to moderate (20.1%). Mean Hb declined from 11.6 g/dL (SD 1.6) at diagnosis to 10.7 g/dL (SD 1.3) at surgery among those receiving perioperative therapy, reaching a mean nadir of 9.7 g/dL (SD 1.3). Physician-documented anemia evaluation occurred in 2.2% of cases. Mean time to Hb nadir was 15 weeks (SD 5.5) overall and differed by baseline anemia status. Transfusion support was required in 27.4% of the overall cohort, most frequently among those with severe (83.3%) and moderate anemia (35.6%).

Conclusions

In this large real-world EBC cohort, anemia was common, variably evaluated at diagnosis, and associated with heterogeneous trajectories. These findings reveal a critical gap between early anemia risk and routine clinical assessment, underscoring the need for strategies to support earlier recognition with proactive physician engagement to acknowledge and bridge the care gap.

HEMAT-025

FEVER IN ACUTE LEUKAEMIA AND CELLULAR THERAPIES: A PROTOCOL FOR A PRAGMATIC ELECTRONIC MEDICAL RECORD-EMBEDDED TRIAL OF EARLY ANTI-BIOTIC CESSATION

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Introduction

Neutropenic fever (NF) is a common complication of chemotherapy for acute leukaemia and/or cellular therapy. Small, randomised trials from the 1970's still inform current empiric NF antibiotic management with many patients treated until neutrophil recovery, resulting in prolonged antibiotic exposure. It is increasingly recognised that antibiotic use is associated with harms including antimicrobial resistance, *C. difficile* infection and gastrointestinal microbiome dysbiosis. While evidence suggests that early antibiotic cessation (prior to neutrophil recovery) is safe in certain patients (afebrile ≥ 72 hours, clinically stable), this practice has not been widely adopted locally partly due to underrepresentation of high-risk patients managed without fluoroquinolone prophylaxis.

Furthermore, pre-neutropenic fever (fever post chemotherapy/conditioning but before neutropenia onset) is mostly non-infective but associated with similar prescribing to NF.

The Early vs Late Stopping of Antibiotics in Adults with high-risk haematological malignancies/receiving cellular therapies and fever (ELSA-Adult) study was designed to address these evidence gaps.

Methods

ELSA-Adult is a multi-centre (Peter MacCallum Cancer Centre and Royal Melbourne Hospital (Melbourne, Australia)), electronic medical record (EMR)-embedded randomised controlled trial of early antibiotic cessation (after 48-96 hours afebrile) compared to standard-of-care, stratified by NF or pre-neutropenic fever.

Trial workflows including inclusion and exclusion criteria are in Figure 1, with the primary outcome of Empiric Antimicrobial Free Days (EAFD) within 28 days. A sample size of 214 episodes of NF was calculated to have 80% power to detect a minimum difference in means of three EAFDs.

The EMR will generate alerts to (Figure 2):

- identify eligible patients for screening/consent,
- flag participants eligible for randomisation,
- prompt early antibiotic cessation in those randomised to the intervention arm.

ELSA-Adult has ethics approval (HREC/113654/PMCC) and is registered (NCT07051525). Recruitment commenced in December 2025.

Figure 1. ELSA-Adult workflow

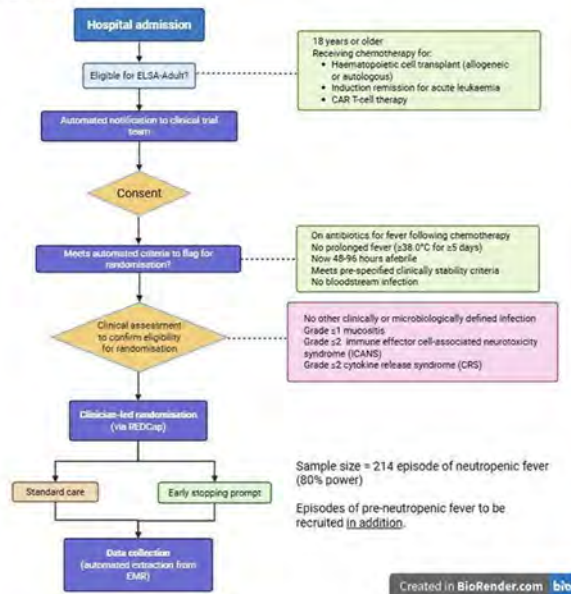


Figure 2. Electronic medical record alerts (© 2025 Epic Systems Corporation)

Results

Conclusions

Using a novel and pragmatic design, ELSA-Adult will address knowledge gaps in the management of fever in high-risk adult haematology cohorts.

HEMAT-030

STUDY OF TELPEGFILGRASTIM EFFICACY/SAFETY FOR NEUTROPENIA PREVENTION DURING BIWEEKLY CHEMOTHERAPY IN NEOADJUVANT BREAST CANCER

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Introduction

Telpegfilgrastim, a long-acting rhG-CSF conjugated with 40kD Y-shaped PEG, has been predominantly studied in three-week chemotherapy cycles. This real-world study evaluates its efficacy and safety for preventing neutropenia in breast cancer patients undergoing neoadjuvant biweekly chemotherapy.

Methods

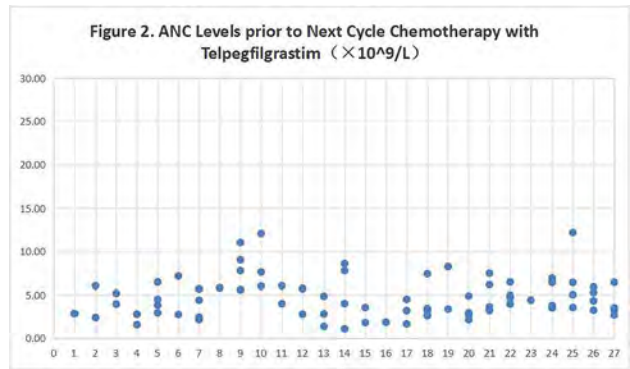
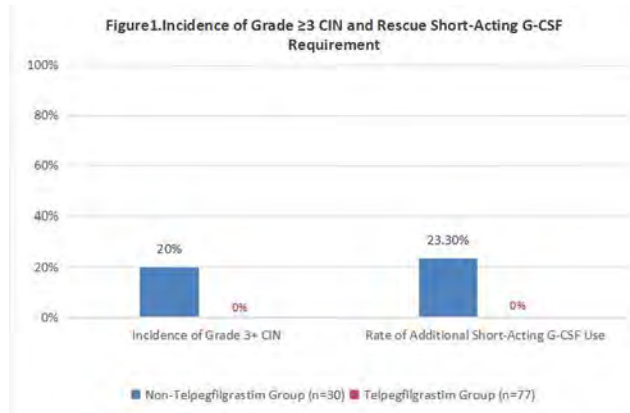
A retrospective analysis was conducted on 27 breast cancer patients receiving neoadjuvant chemotherapy (median age: 53 years, with 85.2% ≤60 years; 55.6% primary prevention). These patients underwent a total of 107 dose-dense EC-based chemotherapy cycles. Telpegfilgrastim was administered in 77 cycles for the prevention of chemotherapy-induced neutropenia (CIN), while 30 cycles received no prophylaxis; outcomes were compared between these groups. The drug was administered 24–36 hours after chemotherapy. The primary endpoint was the incidence of grade 3/4 neutropenia per cycle.

Table1.Baseline characteristics		
Variable	n	%
Gender	-	-
Female	27	100%
Age	-	-
< 60 years	23	85.20%
≥ 60 years	4	14.80%
TNM Stage	-	-
Stage I	12	44.40%
Stage II	12	44.40%
Stage III	3	11.10%
KPS Score	-	-
100	27	100.00%
Metastatic Sites	-	-
Axilla	19	70.40%
Axilla + Clavicle	8	29.60%
Primary Prophylaxis	-	-
Yes	15	55.60%
No	12	44.40%

Results

In the control group (30 cycles without prophylaxis), the incidence of grade ≥3 CIN was 20% (6/30), and 23.3% (7/30) required rescue short-acting G-CSF (figure 1). By contrast, no grade ≥3 CIN, febrile neutropenia (FN), or serious adverse events (e.g., bone pain or fatigue) occurred in the 77 cycles receiving telpegfilgrastim prophylaxis. Subgroup analysis showed that among 15 patients receiving primary prophylaxis (59 cycles), only one cycle was complicated by grade ≥3 CIN. Conversely, among 12 patients in the secondary prophylaxis group (48 cycles), five cycles developed grade ≥3 CIN. All 12 patients who received four consecutive cycles of telpegfilgrastim remained free from grade ≥3 CIN, FN, or serious adverse events. Furthermore, in every telpegfilgrastim-treated cycle, absolute neutrophil count (ANC) recovered to the normal range before subsequent

chemotherapy(figure 2, with no evidence of excessive bone marrow stimulation.



Conclusions

Telpegfilgrastim shows excellent efficacy and a reassuring safety profile for preventing neutropenia in breast-cancer patients receiving dd-EC based (bi-weekly) chemotherapy; subgroup analysis indicates even better outcomes when used as primary prophylaxis.

HEMAT-031
A REAL-WORLD, RETROSPECTIVE, OBSERVATIONAL STUDY ON THE EFFICACY AND SAFETY OF TELPEGFILGRASTIM FOR PROPHYLACTIC USE IN ONCOLOGY PATIENTS

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Introduction

Telpegfilgrastim, a long-acting rhG-CSF modified with 40kD Y-type PEG, has demonstrated efficacy in preventing chemotherapy-induced neutropenia (CIN) in lung cancer and breast cancer studies. This study aimed to explore the efficacy and safety of telpegfilgrastim for prophylactic use in oncology patients in the real-world.

Methods

We retrospectively analyzed 143 cancer patients (388 cycles) receiving prophylactic telpegfilgrastim (2mg sc 24-48h post-chemo) at Jiangsu Cancer Hospital (11/2023-1/2025), assessing grade III/IV

neutropenia/FN incidence (primary), ANC dynamics, subgroup analyses, and safety (secondary). (Ethics approval: KY-2025-118).

Results

The study population demonstrated excellent treatment adherence, with 90.9% (130/143) of patients receiving their first telpegfilgrastim dose at 24 hours post-chemotherapy (Table 1). The overall incidence of FN was remarkably low at 0.8%, with grade III/IV neutropenia occurring in only 1.5% of chemotherapy cycles (Figure 1). The ANC levels showed a significant increase from baseline ($p < 0.001$), with ANC counts consistently maintained within the range of $3.8 \times 10^9/L$ to $15.4 \times 10^9/L$ (Figure 2). Subgroup analyses revealed several important findings: (1) Elderly patients (≥ 65 years) maintained comparable safety and efficacy profiles to the overall population (FN: 0.7%; grade III/IV neutropenia: 1.4%) (Figure 3); (2) Primary prevention demonstrated superior ANC response compared to secondary prevention ($p = 0.019$) (Figure 4); (3) Hematologic malignancy patients exhibited greater ANC elevation than solid tumor patients ($p < 0.001$) (Figure 5); (4) Within solid tumors, metastatic disease correlated with enhanced ANC response versus non-metastatic cases ($p = 0.009$) (Figure 6). The safety profile was exceptional, with only one documented case of mild, self-limiting grade 1 rash. Notably, all nine patients with prior intolerance to conventional PEG-rhG-CSFs (manifesting as bone pain/fatigue) experienced complete resolution of these symptoms after switching to telpegfilgrastim (Figure 7).

Figure 1. The overall incidence of FN and grade III/IV CIN.

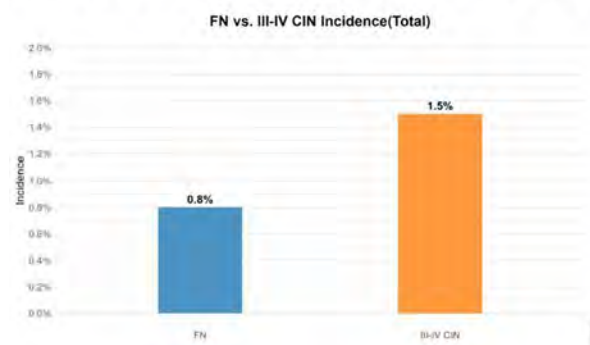


Figure 2. The ANC counts were significantly elevated from baseline.

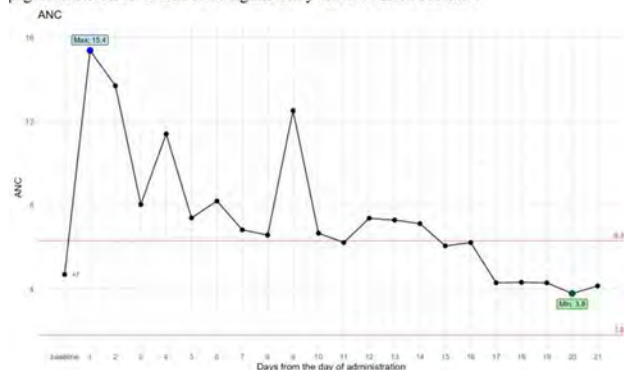
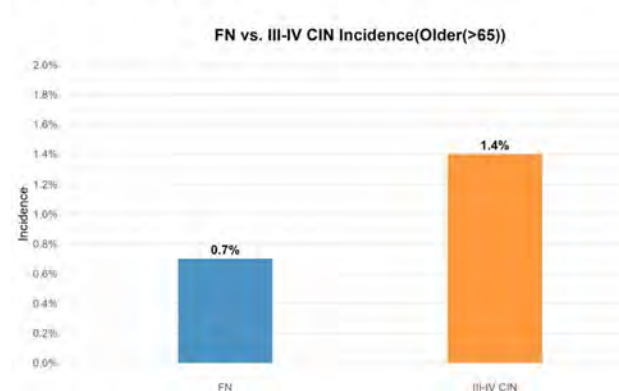


Figure 3. Elderly patients (> 65 years) maintained comparable safety and efficacy profiles to the overall population.



Conclusions

Real-world study confirms telpegfilgrastim effective and well-tolerated for CIN/FN prophylaxis, especially benefiting elderly and PEG-rhG-CSF-intolerant patients; larger trials needed to assess long-term ANC prognostic value.

LIFES-002

BRIDGING BOTANICALS AND CHEMOTHERAPY: SUPPLEMENT USE IN A GYNECOLOGIC INTEGRATIVE ONCOLOGY PROGRAM

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Introduction

Many patients with gynecologic malignancies take dietary supplements (DS) during treatment and do not disclose use to their oncology teams. This may be potentially harmful for several reasons: (1) interactions with chemotherapy may increase toxicity; (2) interactions with chemotherapy may lead to decreased efficacy, and (3) there may be direct toxicity from the supplement itself. This project evaluates DS use in patients with gynecologic malignancies referred to an integrative oncology program. The frequency and reasons for stopping dietary supplements were reported.

Methods

Patient data ($N = 104$) was retrospectively collected from the Dana-Farber Cancer Institute (DFCI) Zakim Integrative Oncology Center. The number and type of DS was documented. Using the Zakim Center Integrative Medicine Questionnaire, we determined whether supplements interact with patients' cancer therapies, specifically focusing on patients receiving platinum-based chemotherapy. We calculated the percentage of patients recommended to discontinue (DC) DS use, along with supporting rationale.

Results

Here, we report on patients evaluated in an integrative oncology center from 01/01/2025 to 12/31/2025. Of $N = 104$ unique gynecologic oncology encounters, we reviewed 361 supplements. Recommendations regarding further supplement use included: "no intervention" for 238 (66%) supplements, "use with caution" for 35 supplements (10%), and "avoid" for 88 supplements (24%). Reasons for advising to avoid supplements included: "drug-drug interactions" (e.g., CYP interactions) for 14 supplements (16%), "antioxidant effect" for 45 supplements (51%), "safety/adverse effect" for 18

supplements (20%), "repurposed pharmaceutical" for 5 supplements (6%) and "potential hormonal effects" for 6 supplements (7%).

Conclusions

Patients with gynecologic malignancies referred to an integrative oncology clinic consume high amounts of DS with the potential for adverse effects and/or decreasing efficacy of treatments. This study evaluates the prevalence of DS use in patients with gynecologic cancers referred to an integrative oncology clinic and underscores the need for counseling about safety in DS use.

LIFES-004

SUCCESSFUL UTILISATION OF MEDICINAL CANNABIS AND INTEGRATIVE ONCOLOGY CARE FOR COMPLEX NEURPATHIC CANCER-RELATED PAIN IN AN OPIOID-INTOERLANT PATIENT

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Introduction

While opioids are the mainstay of cancer pain management, intolerance can make opioid-based regimens unacceptable for some patients. Integrative Oncology services provide coordinated, multimodal symptom management and may enable opioid-sparing approaches in complex cases.

Methods

To describe a clinical case illustrating multidisciplinary Palliative and Supportive Care (PSC) and Integrative Oncology opioid-sparing pathway incorporating medicinal cannabis alongside non-pharmacological and supportive interventions in management of neuropathic cancer pain.

Results

We describe the case of a man with hormone-sensitive metastatic prostate cancer, initially diagnosed in 2014, who declined conventional treatment until escalating bony pain prompted initiation of androgen-deprivation therapy with Zoladex in 2018, resulting in a marked PSA response. Early cancer-related pain was managed with increasing transdermal fentanyl, but subsequent development of high-grade bladder cancer required complex surgical management, including cystoprostatectomy and ileal conduit formation. Post-operative hyperactive delirium, attributed to opioid use, led the patient to strongly avoid opioids thereafter. Over the following five years, despite progressive skeletal metastases and severe lymphoedema, he successfully maintained function and independence using a predominantly non-opioid regimen consisting of paracetamol, ibuprofen, and structured medicinal cannabis (CBD-dominant by day, balanced THC:CBD at night), supported by exercise physiology, lymphoedema care and meditation-based interventions. Disease progression in 2024, including new hepatic metastases and sciatic neuropathic pain, prompted consideration of further oncologic therapy, which the patient declined in favour of continued non-opioid analgesics, with openness only to selected interventional pain procedures.

Conclusions

This case highlights an uncommon long-term trajectory of advanced cancer pain management centred on intentional opioid avoidance, structured use of medicinal cannabis, anti-inflammatories, and integrative therapies, illustrating both the potential benefits and limitations of non-opioid-focused approaches in complex metastatic disease. These strategies were championed by a multidisciplinary Palliative and Supportive Care and Integrative Oncology teams, a novel approach to outpatient care in a quaternary cancer centre with dedicated Integrative Oncology services.

LIFES-005

EVALUATION OF AN INNOVATIVE SHARED MEDICAL APPOINTMENT AND HEALTH COACHING MODEL FOR CANCER SURVIVORS: THE TAKE CHARGE PROGRAM

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Chris O'Brien Lifehouse, Supportive Care - The Living Room, Sydney

Introduction

New models of care are required to provide quality survivorship care. Shared Medical Appointments (SMAs) are consecutive medical consultations in a group setting, providing an evidence-based and cost-effective model of care that may improve self-efficacy in people with cancer. Health coaching (HC) is a non-directive and patient-centred practice whereby a trained coach helps people identify and achieve health-related goals. We aimed to evaluate the impact of a novel model of care combining SMAs and HC for cancer survivors on self-efficacy, symptom burden and health behaviours (the "Take Charge" program) at a comprehensive cancer centre in Sydney, Australia.

Methods

Patients who completed initial disease-modifying treatment for any cancer stream at Chris O'Brien Lifehouse were invited to enrol in the eight-week program. Sessions comprised 60 minutes of consecutive individual medical consultations (SMAs) with a GP with expertise in cancer-survivorship and integrative oncology, followed by 60 minutes of group HC by an accredited health coach, delivered face-to-face in groups of 4-6 fortnightly for 4 sessions. Patients were then invited to participate in semi-structured one-on-one interviews. The interviews were recorded, transcribed, and then analysed thematically using NVivo. Evaluation of the program used the RE-AIM framework.

Results

Six programs were delivered in 2023-4 to 22 participants. On average, participants attended 3.5 sessions per program. Twenty-one participants completed the program (95% retention). Preliminary qualitative analysis suggested that the program improved self-efficacy and that participants found benefit in both the group and individual sessions as an opportunity to share experiences, build confidence and keep goals to account. All made practical changes toward their health goals and would recommend the program to a friend with cancer. Further findings will be presented after full analysis.

Conclusions

SMAs together with group health coaching is a novel and highly acceptable cancer survivorship intervention that may improve self-efficacy.

LIFES-007

DIETARY PATTERNS OF BREAST CANCER SURVIVORS IN SINGAPORE: IMPLICATIONS FOR LIFESTYLE MEDICINE BASED NUTRITION CARE

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Introduction

Survival for breast cancer has improved globally, and survivors are often motivated to adopt healthier lifestyles. However, survivor-specific dietary data in Singapore remain sparse, limiting development

of targeted, culturally-tailored lifestyle interventions. We aimed to describe dietary habits of breast cancer survivors (BCS) to inform survivorship programs aligned with lifestyle medicine principles.

Methods

We conducted a cross-sectional survey among BCS diagnosed from 1998–2024 and on outpatient follow-up at the National Cancer Centre Singapore. Participants completed a 59-item questionnaire capturing lifestyle practices and dietary recall. Associations between dietary patterns, tumour stage, and treatment status were tested using χ^2 and Mann–Whitney U ($\alpha = 0.05$).

Results

Eighty-nine BCS participated (mean age 63, range 40–86). Most had invasive ductal carcinoma (83.1%). Tumour stages were 0 (6.0%), 1 (34%), 2 (49%), 3 (10%), and 4 (1%). 48% were receiving systemic therapy comprising various possible combinations of hormonal therapy (39.0%), chemotherapy (7%), and targeted therapy (2%). Compared with stage 0–1 survivors, those with stage ≥ 2 disease recalled lower intake of deep-fried ($P = 0.02$), stir-fried ($P = 0.002$) foods, non-green vegetables ($P = 0.002$), soy milk ($P = 0.04$), sweet drinks ($P = 0.002$) and chicken with skin ($P = 0.009$). Survivors on systemic therapy recalled consuming more vegetables ($P = 0.006$) and malted drinks ($P = 0.03$). Survivors on hormonal therapy recalled consuming more green leafy vegetables ($P = 0.026$), carrots ($P = 0.035$), non-green vegetables ($P = 0.006$), and lower alcohol use ($P = 0.022$), compared to those who have completed or never received hormonal therapy.

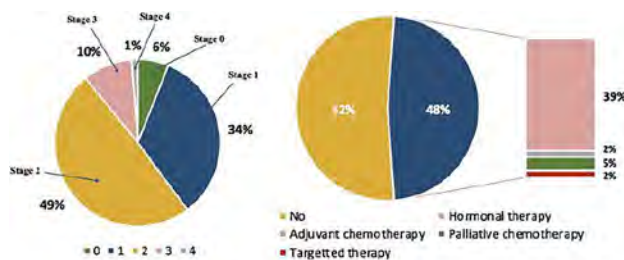


Figure 1: Stage distribution of patients

Figure 2: Patients currently on systemic therapy

	Likert scale score (median) ¹		P-value
	Stage 2 or higher (60%, N=50)	Less than stage 2 (40%, N=33)	
Deep fried food	2	3	.02
Stir fried food	5	7	.002
Non-green vegetables ²	5	6	.002
Soy milk	1	2	.04
Sweet drinks	1 (mean=1.4)	1 (mean=2.21)	.002
Chicken with skin	1.5	2	.009

Table 1: Dietary habits of BCS with early versus advanced disease

¹The median Likert scale score used to measure each dietary preference was calculated for each group

²Non-green vegetables: tomato, mushrooms, brinjal, capsicum, ladies fingers

	Likert scale score (median) ¹		P-value
	Completed or never received hormonal therapy (59%, N=49)	Still on hormonal therapy (41%, N=34)	
Green leafy vegetables ²	6	7	.026
Carrots	5 (mean=4.24)	5 (mean=4.85)	.035
Non-green vegetables ³	5	6	.006
Alcohol	1 (mean=1.22)	1 (mean=1.00)	.022

Table 2: Dietary habits of BCS who completed / never received hormonal therapy versus still on hormonal therapy

¹The median Likert scale score used to measure each dietary preference was calculated for each group

²Green leafy vegetables: kailan, kang kong, cabbage, spinach

³Non-green vegetables: tomato, mushrooms, brinjal, capsicum, ladies fingers

Conclusions

BCS with higher-stage disease (≥ 2) and those on active systemic therapy reported healthier dietary habits than those diagnosed at earlier stages (0–1) and those not on systemic therapy.

Further research is needed to prioritise early-stage survivors, who appear more prone to less healthy diet and may derive the greatest benefit from culturally-tailored dietary programs incorporating lifestyle medicine.

LIFES-008

ONLINE YOGA FOR DEPRESSION AND ANXIETY SYMPTOMS IN FEMALE CANCER SURVIVORS: A MIXED-METHODS FEASIBILITY STUDY COMPARING GROUP AND INDIVIDUAL DELIVERY

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Introduction

Depression and anxiety are common among women cancer survivors and negatively affect quality of life and recovery. While yoga is recommended as a supportive intervention, evidence for online yoga (particularly comparing group and individual delivery formats and targeting clinically elevated distress) is limited. This study evaluated the feasibility, acceptability, and exploratory changes in outcomes of a 6-week online yoga intervention comparing group-based and individualized yoga for women with breast or gynecological cancers experiencing elevated depression and/or anxiety symptoms.

Methods

Twenty-eight participants were randomized to group or individual sessions delivered via Zoom by a yoga therapist. The intervention consisted of weekly 60-minute live sessions and supplementary pre-recorded practices. Feasibility metrics included recruitment rates ($\geq 50\%$ consent), session adherence ($\geq 60\%$ attending half the yoga sessions), and follow-up completion ($\geq 60\%$). Depression, anxiety, overall health, stress, fatigue and quality of life were assessed at baseline, 4 weeks, and 6 weeks, complemented by post-intervention qualitative interviews analyzed via reflexive thematic analysis.

Results

The intervention met all feasibility thresholds in the overall sample. Depression and anxiety scores, measured using the Hospital Anxiety and Depression Scale (HADS), showed significant improvements over the intervention period in the overall sample for depression (difference -0.4; 95% confidence interval -0.2 to -0.6; $p = 0.002$) and anxiety (difference -0.7; 95% confidence interval -0.4 to -1; $p < 0.001$). There were no significant differences between the group and individual formats for

these outcomes. Additionally, significant improvements were observed across all secondary outcomes in the total sample. Qualitative themes highlighted participants' positive experiences, noting the intervention's accessibility, perceived benefits, and overall acceptability.

Conclusions

In this preliminary feasibility study, online yoga (whether in group or individual format) was feasible, well-accepted, and showed potential for improving mental health outcomes. Future randomized controlled trials are warranted to confirm online efficacy and optimized implementation in supportive care.

LIFES-009

RESET-C: RESTORING SLEEP & ENERGY IN ADVANCED CANCER

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Introduction

Sleep disturbance, fatigue and circadian disruption are common in people with advanced cancer, affecting up to 70%, with an associated increased symptomatology, poorer quality of life and shorter survival. Pharmacological treatments provide limited benefit whilst carry significant side effects. Non-pharmacological interventions (i.e. Cognitive Behavioural Therapy for Insomnia (CBT-I), bright light therapy (BLT), and exercise) have demonstrated potential, but their combined use has not been rigorously tested in people with advanced cancer. This study assessed the feasibility, and preliminary effectiveness, of a novel multi-modal, non-pharmacological intervention for improving circadian rhythmicity and symptom burden (sleep disturbance and fatigue) in advanced cancer.

Methods

A prospective, single-arm, feasibility study of outpatients with locally advanced or metastatic cancer, and a circadian rest-activity rhythm disorder (table 1), took place over 12-months. Participants completed the novel intervention (daily BLT, an online CBT-I course, and individualised physical activity plan) over 8 weeks. Patient reported outcome measures (PROMs) of symptoms and quality of life (MSAS-SF, EORTC-QLQ-C30, ISI, ESS) and objective accelerometry assessments of sleep, physical activity and circadian rhythms were assessed pre- and post-intervention.

Table 1. Diagnostic criteria for circadian rest-activity rhythm disorders (CARDs) in patients with cancer.

Criteria	Description
1.	Patients exhibit relatively less daytime physical activity and more night-time physical activity; OR Rest and physical activity spread across the 24-hour period, rather than distinct rest and active periods; OR A lack of regularity in rest and active periods between days
2.	The altered physical activity pattern A. has been present for at least 1 month B. has a clinical impact on the patient C. is demonstrable by objective and subjective measures
3.	The altered rest-activity rhythm is not primarily due to another cause

Results

Twenty participants (median age 59; 80% female) were enrolled (figure 1). Participants repeated PROMs (80%) and accelerometry (75%), demonstrated high levels of engagement (CBT-I course (100%); physical activity plan (100%); BLT (80%)) and reported acceptability (100%) and usability (93-100%) of the interventions. Interests and barriers to physical activity were identified (table 2). No intervention-related

adverse events were noted. Significant improvements were demonstrated in fatigue ($p=0.003$) and insomnia ($p=0.021$) scores. Psychological ($p<0.001$), physical ($p=0.01$), and global ($p=0.02$) distress improved, alongside improved social ($p=0.001$), cognitive ($p=0.006$), emotional ($p=0.012$), and physical ($p=0.046$) functioning. Objectively, daytime physical activity improved ($p=0.045$).

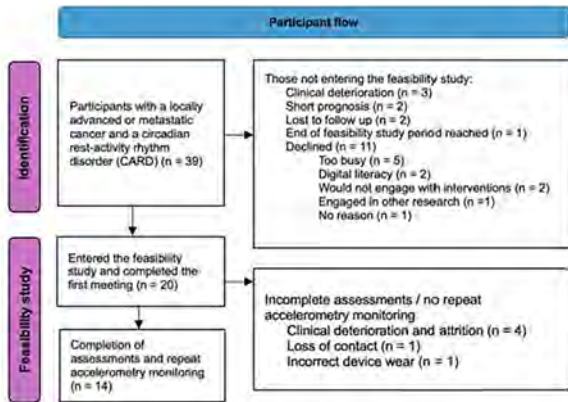


Figure 1. Flow chart of potential participants identified in a related observational study.

Table 2. Participant reported interests and barriers in relation to physical activity

Interests		Barriers		
Physical	Psychological	Physical	Psychological	Social
Walking (16) Cooking / baking (4) Gardening (4) Reading (4) Housework (3) Yoga (3) Baking (2) Swimming (2) Dancing DIY Drawing Dress making Jigsaws Knitting Light jogging Listening to music Model airplanes Physiotherapy Playing the piano	Meeting up with friends (5) Going out for a meal / coffee (4) Going shopping (3) Going to the cinema, gallery, museum or theatre (3) Spending time with partner	Physical fatigue / energy levels (16) Pain (5) Being unwell (2) Breathlessness (2) Chemotherapy symptoms Constipation Dizziness Low immune system Numbness in feet Sweats / hot flushes Vaginal discharge	Motivation (5) Fear of falling (3) Cognitive fatigue (2) Anxiety Poor concentration	Social isolation The weather Unable to drive Work-related e.g. having to take equipment to work

Conclusions

This study demonstrated acceptability, usability and preliminary efficacy of the multimodal intervention. Further investigation with a definitive randomised controlled trial, assessing the intervention against the standard of care, is warranted.

LIFES-010

PSILOCYBIN-ASSISTED THERAPY IN ONCOLOGY: CLINICIAN, PATIENT, AND RESEARCH LEADER PERSPECTIVES ON MODELS OF CARE

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Introduction

Psilocybin-assisted therapy (PAT) is being investigated as an intervention for existential distress in people with cancer, a domain that remains

challenging to address within current psychosocial and pharmacological care. While clinical interest is increasing, there is limited guidance on how PAT might be delivered within oncology and supportive care settings. Perspectives from multiple stakeholder groups are required to inform acceptable and feasible models of care.

Methods

Three qualitative studies were conducted in parallel and are considered together: interviews with oncology healthcare professionals ($n = 11$), people living with advanced cancer ($n = 17$), and international academic and research leaders ($n = 16$). Each study used reflexive thematic analysis to examine perspectives on safety, support, ethics, and implementation of PAT in cancer contexts.

Results

Across studies, existential distress was described as an area of unmet need within existing care. Clinicians had cautious openness toward PAT and emphasised the importance of multidisciplinary delivery, specialised training, and ethical and governance frameworks, typically viewing psilocybin as a non-first-line intervention.

Patients emphasised trust in the therapeutic relationship, and calm, non-clinical environments, with a preference for one-to-one dosing. Group-based preparation or integration was viewed as potentially acceptable by some participants to improve accessibility.

Research leaders identified challenges related to standardisation, workforce readiness, scalability, and health-system integration, and highlighted the importance of preparation, integration, and contextual factors.

Common concerns included cost, equity, stigma, infrastructure requirements, and regulatory constraints.

Conclusions

Taken together, these studies identify priorities relevant to the delivery of psilocybin-assisted therapy in oncology settings. The findings indicate a need for multidisciplinary, carefully governed, and context-sensitive approaches. The findings may inform the design of future research and consideration of delivery models for psilocybin-assisted therapy within supportive and palliative cancer care.

LIFES-011

MECHANISMS OF ACTION FOR PHYSICAL ACTIVITY AND NUTRITION BEHAVIOR CHANGE IN COLORECTAL CANCER: A SCOPING REVIEW OF HOW AND WHY INTERVENTIONS WORK

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Introduction

Colon cancer remains the second most diagnosed cancer in New Zealand, with high rates of delayed diagnosis leading to significantly poorer cancer outcomes for Māori and Pacific peoples. Health loss attributed to colorectal cancer can be reduced by addressing lifestyle factors such as physical activity and diet. Despite intervention evidence, there is limited attention placed on identifying what behavior change techniques (BCTs) and mechanisms contribute to lifestyle behavior change in colon cancer patients, particularly in the Australasian region. The aim was to identify BCTs and mechanisms of action within physical activity and nutrition interventions for colorectal cancer and within the Australasian region.

Methods

A scoping review was conducted to identify the BCTs, their mechanisms of action (MOA) and theoretical frameworks used across physical activity and nutrition interventions using search engines such as PubMed, PsycINFO and CINAHL. After identifying interventions, information on BCTs was extracted and coded using the CALO-RE taxonomy, calculating frequency and ratio of BCTs. The presence or

absence of theory was noted; links between BCT and their MOA was identified by following Carey and colleagues' (2019) methods.

Results

Twelve RCTs had utilized BCTs and 19 BCTs were identified using the CALO-RE taxonomy. The lowest number of BCTs used was two, whilst the highest was 12, with the average being 6.6. '*Prompts/cues*' were most common (0.90 ratio), and associated with MOAs of *memory, attention and decision processes; behavioral cueing; and environmental context/resources* to elicit a behavior change. Only five studies explicitly mentioned theory to underpin the interventions (Self-Regulation Theory, Theory of Planned Behavior, Health Action Process Model, Self-Determination Theory, Transtheoretical theory, Social-Cognitive Theory).

Conclusions

Identifying what *mechanisms of action* makes an intervention successful enables seeing how behavior change can be made and sustained. Employing key mechanisms presents a significant opportunity to improve colorectal cancer care through more effective lifestyle interventions.

LIFES-012

PHASE 2 STUDY OF SELF-ACUPRESSURE FOR AROMATASE INHIBITOR (AI)-ASSOCIATED MUSCULOSKELETAL SYMPTOMS (AIMSS)

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Introduction

Up to 50% of patients discontinue AI therapy early, primarily because of AIMSS. Acupuncture reduces AIMSS, although uptake is limited by provider availability and cost. Prior studies in patients with breast cancer have demonstrated reduction in pain with relaxation acupressure. We conducted this trial of acupressure as a potentially accessible option for treating AIMSS.

Methods

Patients receiving AI therapy for >3 weeks and <2 years who were experiencing $\geq 4/10$ new or worsening pain since starting AI therapy were eligible. Receipt of acupuncture in the past year was prohibited. Patients were randomized 1:1 to true acupressure (relaxation acupoints, TA) vs sham acupressure (non-acupoints, SA) for 12 weeks, and provided with the MeTime acupressure app containing blinded, arm-specific instructions for stimulating all 9 points for 3 minutes daily. Symptoms were assessed using the Brief Pain Inventory (BPI) at baseline and after 6 and 12 weeks. Primary endpoint was change in BPI worst pain by 12 weeks. Paired t tests were used to assess inpatient changes over time. Randomized group comparisons were performed using unpaired t tests.

Results

Of 50 enrolled patients, 25 were randomized to TA and 25 to SA. Median age at enrollment was 52.4 (IQR: 43.2,57.4), 83% white, 56% had chemotherapy, and 62% were currently taking anastrozole. The only adverse event was grade 1 bruising ($n=1$). Change in worst joint pain at 12 weeks compared to baseline was -1.22 (SD 2.12; $p=0.026$) for the TA group ($n=18$) and -0.65 (SD 2.45; $p=0.29$) for the SA group ($n=18$); the difference by group was not significant ($p=0.47$). Results for average pain and pain interference were similar (Table).

	True Acupressure Mean (SD), p value			Sham Acupressure Mean (SD), p value			P-value (between groups)
	Baseline	12 weeks	Change (12 weeks - baseline)	Baseline	12 weeks	Change (12 weeks - baseline)	
Worst pain	5.22 (1.11) n=18	4.00 (2.03)	-1.22 (2.12), p=0.026	6.00 (1.87) n=17	5.35 (2.42)	-0.65 (2.45), p=0.292	0.47
Average pain	4.05 (1.31) n=19	2.47 (1.50)	-1.58 (1.50), p<0.001	4.06 (1.25) n=17	3.53 (1.87)	-0.53 (1.59), p=0.188	0.81
Pain interference	3.27 (2.13) n=18	1.71 (1.46)	-1.57 (1.90), p=0.003	4.18 (1.98) n=15	2.70 (2.26)	-1.47 (1.78), p=0.006	0.82

Conclusions

Although pain numerically improved with true acupressure, the improvements were not greater than that seen with sham acupressure. Acupressure does not appear to be as effective as acupuncture for treatment of AIMSS.

LIFES-013

PAVING THE WAY TO INTEGRATIVE ONCOLOGY (IO): ESSENTIALS FOR INTEGRATION INTO CLINICAL PRACTICE - RESULTS OF AN EDUCATIONAL WORKSHOP

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Introduction

IO combines conventional treatments with evidence-informed complementary therapies to improve the well-being and outcomes for individuals with cancer. Significant growth over the past two decades has led to a critical need for training resources to support developing programs. Building upon published work "Establishing an Integrative Oncology Service: Essential Aspects of Program Development" the Society for Integrative Oncology's (SIO) Clinical Practice Committee (CPC) developed a workshop to address this need, focused on the IO clinical consult, with follow up planned to assess impact and future educational content.¹

Methods

The case-based workshop included presentation of three IO consultations. A globally diverse panel of 4 providers (academic and community-based) focused on 3 learning objectives: 1. Elements involved in developing an IO care plan from globally diverse perspectives, anchored in the SIO CPC's publication; 2. Core components of the IO consult, incorporating established guidelines to create a framework for a multidisciplinary care plan; 3. Approaches to developing an IO consult and comprehensive plan through academic and community-based perspectives. Time was provided for audience participation and feedback for each case presentation and at conclusion.

Results

34 participants representing diverse professional backgrounds from US and global practices (Table 1). Central themes included a focus on the patient's unique goals, use of patient reported outcomes (PROs), financial barriers to access, the role of ancillary services (i.e. pharmacists), and collaboration with community organizations for resource expansion. A 4-month follow-up quantitative/qualitative

survey is underway to assess sustained knowledge, identify knowledge gaps and guide future resource development.

Characteristics of Participants and Organizers

Characteristics	Participants (n=34)	Organizers (n=10)
Professional *		
Physician	14 (42.4%)	5 (50%)
Integrative medicine specialist	8 (24.2%)	3 (30%)
Nurse or nurse practitioner	7 (21.2%)	
Others	4 (12.1%)	2 (20%)
Country of practice *		
United States	24 (72.3%)	6 (60%)
Global #	9 (27.3%)	4 (40%)

* Missing information.

* Other professionals include healthcare administrators, pharmacists and allied healthcare providers

Global participants and organizers were from Australia, Belgium, Brazil, Chile, Chinese Mainland, Hong Kong SAR, India, Poland, Singapore, Spain, and Switzerland.

Conclusions

The SIO-CPC developed a case-based interactive workshop centered around the IO consult. Future workshop themes will focus on financial challenges of program development and collaborative approaches with community and ancillary providers for resource limited locations. Post-workshop survey review will help guide future workshop programming.

¹Lacey et al, *Current Oncology Reports*, Feb 2024.

LIFES-014

REGIONAL VULNERABILITY CLASSIFICATION TO GUIDE INTEGRATIVE RESOURCE EXPANSION AT A COMPREHENSIVE CANCER CENTER

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Introduction

Integrative oncology (IO) is the coordinated use of evidence-based complementary therapies alongside conventional cancer care. The Pluta Integrative Oncology & Wellness Center (IOWC) provides IO services within the 27-region catchment area of the Wilmot Cancer Institute (26 with higher poverty levels than the US average). Higher Social Vulnerability Index (SVI) has been linked to worse health outcomes; however, access to most IO resources are limited within the region. Our aim was to identify WCI regional sites with greatest vulnerability to target expansion of supportive, lifestyle and integrative services.

Methods

A quantitative survey of 9 regional WCI sites was performed, and secondary purposive sampling of 14 patients completed for qualitative analysis (7 of 9 sites). Rural-Urban Continuum Codes (RUCC) and SVI were applied and correlated with a prospective patient survey (qualitative and quantitative). RUCC codes and SVI were identified for each of the counties represented. Data from each was mapped to patient need for IO services and qualitative results.

Results

137 patients participated in the survey (Table 1). Median age 65.4 years, 56.2 % female and majority were white (90.5 %). Table 2 lists RUCC codes for the 7 counties (4 metro and 3 non-metro) reflecting WCI regional sites. Total and select sub-categories of the SVI are

shown with 2 counties classified as medium-high (0.5-0.75) and 2 high (>0.75) (higher numbers correlated with higher vulnerability).

Table 1.

Characteristic	Descriptive Statistic
Total Sample Size	137
Age	
Mean (SD)	65.4 (11.8)
Median (min, max)	67 (21, 89)
Missing, n (%)	6 (4.4)
Gender, n(%)	
Male	60 (43.8)
Female	77 (56.2)
Other	0
Race, n(%)	
White	124 (90.5)
Black	8 (5.8)
Asian	1 (0.7)
Missing	4 (2.9)
Hispanic, n(%)	
Yes	3 (2.2)
No	113 (82.5)
Missing	21 (15.3)

Table 2.

County	RUCC		SVI	Housing/Transportation	SES
Monroe	1	Metro	0.6557	0.4918	0.459
Ontario	1	Metro	0.1145	0.2295	0.0164
Seneca	6	Nonmetro	0.6393	0.4098	0.7541
Cattaraugus	4	Nonmetro	0.8689	0.6393	0.8033
Chemung	3	Metro	0.7705	0.4426	0.7889
Genesee	4	Nonmetro	0.0984	0.1967	0.082
Livingston	1	Metro	0.082	0.337	0.0984

RUCC: 1- Counties in metro areas of 1 million population or more; 3-Counties in metro areas of fewer than 250,000 population; 4- Urban population of 20,000 or more, adjacent to a metro area; 6- Urban population of 5,000 to 20,000, adjacent to a metro area.

Conclusions

Vulnerability indices can provide important information to tailor supportive care services for cancer patients at greatest risk. To address this need we developed alternative models of IO care delivery (hybrid programs, video resource library and App) and leveraged community partnerships (Cancer Support Community and the YMCA) to bring programs locally at low/no cost. Future directions focus on further understanding of resource limitations at the high-risk sites, educational training for on-site providers and mobile services (regional group IO programs).

LIFES-015

METABOLIC SYNDROME IS ASSOCIATED WITH INCREASED MORTALITY IN PATIENTS WITH BREAST OR PROSTATE CANCER

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Introduction

Breast cancer and prostate cancer are influenced by estrogen and androgens, respectively, and these hormonal pathways intersect with metabolic processes involved in metabolic syndrome (MetS). We investigated the association of MetS with mortality in patients with breast and prostate cancer.

Methods

Breast and prostate cancer cohorts were created retrospectively using the Surveillance, Epidemiology, and End Results (SEER)–Medicare database. Patients with first primary breast or prostate cancer diagnosed in 2008–2019 were identified using ICD-O-3 site and histology codes. Among those, patients with MetS were identified using ICD-9/10-CM diagnosis codes, CPT/HCPCS procedure codes, and prescription drug use from Medicare claims files. We used multivariable Cox regression to assess the association of MetS with overall, cancer-specific, cardiovascular-specific, and liver-failure-specific mortality, adjusted for age at diagnosis, race/ethnicity, marital status, socioeconomic status, diagnosis year, cancer stage, SEER region, and metropolitan area.

Results

We identified 104,599 breast cancer patients, 28% of whom had MetS, and 96,005 prostate cancer patients, 31% of whom had MetS. In both cohorts, MetS was associated with increased overall mortality (breast cancer: hazard ratio [HR] 1.60; 95% CI 1.56–1.64; prostate cancer: HR 1.79; 95% CI 1.74–1.83), increased cardiovascular-specific mortality (breast cancer: HR 1.93; 95% CI 1.81–2.07; prostate cancer: HR 2.08; 95% CI 1.93–2.23), and increased liver-failure-specific mortality (breast cancer: HR 2.32; 95% CI 1.42–3.79; prostate cancer: HR 2.57; 95% CI 1.52–4.35). Breast-cancer-specific and prostate-cancer-specific mortality did not differ between patients with and without MetS.

Conclusions

Breast or prostate cancer patients with MetS had a higher risk of overall mortality and specifically, a higher risk of death from cardiovascular disease or liver failure compared to those without MetS. Therapeutic and lifestyle interventions are needed to reduce mortality risk in breast and prostate cancer patients with MetS.

LIFES-016

EDUCATIONAL EXPOSURE TO KAMPO MEDICINE INCREASES CREDIBILITY AND EXPECTATIONS AMONG HEALTHCARE PROFESSIONALS IN CANCER CARE

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Introduction

Kampo medicine, a traditional Japanese medical system, has been covered by national health insurance since 1967, and 148 extract formulations are currently available for prescription, like Western medicine. Traditionally used for chronic disease management and women's health, Kampo medicine has recently been applied to mitigate adverse effects of cancer treatment, with growing evidence leading to increased inclusion in clinical guidelines. However, healthcare professionals' credibility toward Kampo medicine and expectations regarding its role in modern medical care are not uniform, and educational exposure may influence these perceptions. This study aimed to examine whether educational exposure to Kampo medicine is associated with higher credibility and expectation levels among healthcare professionals involved in cancer care.

Methods

An online survey, the KAMPUS Study (Kampo Use Survey, 2024), was conducted among healthcare professionals involved in cancer care, yielding 617 valid responses. Educational exposure to Kampo medicine, credibility toward Kampo medicine, and expectations regarding its role in cancer supportive care were assessed using five-point ordinal scales. Descriptive statistics and ordinal logistic regression analyses were performed to evaluate the association between educational exposure and both credibility and expectation levels.

Results

Among respondents, 67.7% reported educational exposure to Kampo medicine, 61.2% expressed credibility toward Kampo medicine, and 73.9% reported expectations regarding its role in cancer supportive care. Educational exposure was significantly associated with higher levels of both credibility and expectation, with odds ratios of 2.98 (95% CI 2.14–4.18, $p < 0.001$) and 1.78 (95% CI 1.26–2.52, $p = 0.001$), respectively.

Conclusions

Educational exposure to Kampo medicine is an important factor associated with higher credibility and expectation among healthcare professionals. These findings suggest that structured and continuous educational opportunities are crucial to promote appropriate understanding and utilization of Kampo medicine in cancer supportive care.

LIFES-017

FROM PRESCRIPTION TO PICKUP: REAL-WORLD DISPENSING PATTERNS OF A TOPICAL HERBAL PAIN-RELIEVING PLASTER IN INTEGRATIVE ONCOLOGY CARE

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Introduction

Pain is common during and after cancer treatment, yet it is often undertreated. Pharmacologic management, including opioids, may be limited by adverse effects. Interest in natural products for pain relief is growing, yet little is known about patient acceptance of these products and whether disparities exist in uptake. At the Memorial Sloan Kettering Cancer Center, clinicians may prescribe topical herbal pain-relieving plaster as part of integrative pain management.

Examining whether patients fill these prescriptions can provide insight into real-world utilization and barriers to access. We evaluated prescription patterns of this product and rates of patient pickup.

Methods

We conducted a retrospective cohort study of patients prescribed Tibetree pain-relieving plaster (contains camphor and six different herbs) at our center between April 2019 and November 2024. Pharmacy dispensing records were linked with demographic and clinical data from the electronic medical record. Patient characteristics were summarized for the overall prescription cohort and stratified by dispensing status. Multivariable logistic regression was used to identify factors associated with prescription pickup.

Results

Among 3,051 prescribed herbal medicine/supplement during the study period, 629 (20.6%) were prescribed herbal pain-relieving plaster (mean age=61 years, 76% female) (Table 1). Median time since cancer diagnosis was 2 years, and approximately 30% were on active cancer treatment or had recent surgery. Breast (33.4%) and gastrointestinal (9.2%) malignancies were the most common, and 28% had multiple cancer diagnoses. Overall, 70% ($n=438/629$) of patients picked up their prescriptions. In multivariable analysis, Black race (adjusted odds ratio [aOR]=0.54, 95%CI= 0.30–0.99, $p=0.046$) and active treatment (aOR=0.63, 95%CI=0.42–0.93, $p=0.02$) were associated with lower odds of pick-up.(Table 2).

Table 1 Characteristics of patients prescribed Tibetree pain-relieving plaster, stratified by pickup status

Characteristic	Overall n (%)	Picked up n (%)	Not picked up n (%)
Overall	629	438 (69.6%)	191 (30.4%)
Age [mean (SD)]	61 (14)	62 (13)	60 (14)
≤39	38 (6.0%)	24 (63.2%)	14 (36.8%)
40–64	316 (50.2%)	214 (67.7%)	102 (32.3%)
≥65	275 (43.7%)	200 (72.7%)	75 (27.3%)
Gender			
Female	476 (75.7%)	330 (69.3%)	146 (30.7%)
Male	153 (24.3%)	108 (70.6%)	45 (29.4%)
Race			
White	429 (68.2%)	301 (70.2%)	128 (29.8%)
Asian-Far East/Indian Subcontinent	86 (13.7%)	66 (76.7%)	20 (23.3%)
Black	53 (8.4%)	30 (56.6%)	23 (43.4%)
Other	22 (3.5%)	14 (63.6%)	8 (36.4%)
Unknown	39 (6.2%)	27 (69.2%)	12 (30.8%)
Years since diagnosis [median (IQR)]	2 (1, 7)	2 (1, 7)	2 (1, 6)
<1 year	166 (26.4%)	119 (71.7%)	47 (28.3%)
1–5 years	244 (38.8%)	169 (69.3%)	75 (30.7%)
>5 years	219 (34.8%)	150 (68.5%)	69 (31.5%)
Cancer treatment			
Chemotherapy	456 (72.5%)	316 (69.3%)	140 (30.7%)
Radiation	337 (53.6%)	241 (71.5%)	96 (28.5%)
Surgery	590 (93.8%)	409 (69.3%)	181 (30.7%)
Treatment status			
Active treatment	190 (30.2%)	122 (64.2%)	68 (35.8%)
Completed/Not on active treatment	439 (69.8%)	316 (72.0%)	123 (28.0%)
Cancer diagnosis			
Breast	210 (33.4%)	151 (71.9%)	59 (28.1%)
Genitourinary	53 (8.4%)	36 (67.9%)	17 (32.1%)
Gastrointestinal	58 (9.2%)	41 (70.7%)	17 (29.3%)
Gynecologic	44 (7.0%)	27 (61.4%)	17 (38.6%)
Hematologic	33 (5.2%)	20 (60.6%)	13 (39.4%)
Lung/Respiratory	28 (4.5%)	18 (64.3%)	10 (35.7%)
Multiple primaries	176 (28.0%)	126 (71.6%)	50 (28.4%)
Other	27 (4.3%)	19 (70.4%)	8 (29.6%)

* Including active chemotherapy, radiation therapy or recent surgery

Table 2 Multivariable logistic regression of factors associated with pickup of Tiberree pain-relieving plaster following prescription

Characteristic	Adjusted OR	95% CI	P-value
Age			
≤39	Ref		
40–64	1.22	0.59, 2.53	0.59
≥65	1.61	0.77, 3.39	0.21
Gender			
Female	Ref		
Male	1.17	0.70, 1.95	0.56
Race			
White	Ref		
Asian-Far East/Indian Subcontinent	1.54	0.87, 2.760	0.14
Black	0.54	0.30, 0.99	0.046
Other	0.81	0.33, 2.02	0.65
Years since diagnosis			
<1 year	Ref		
1–5 years	0.74	0.47, 1.18	0.21
>5 years	0.66	0.40, 1.08	0.09
Treatment status			
No active treatment	Ref		
Active treatment*	0.63	0.42, 0.93	0.02
Cancer Diagnosis			
Breast	Ref		
Genitourinary	0.69	0.31, 1.55	0.36
Gastrointestinal	0.84	0.41, 1.69	0.62
Gynecologic	0.52	0.26, 1.05	0.07
Hematologic	0.55	0.24, 1.24	0.15
Lung/Respiratory	0.53	0.23, 1.27	0.16
Multiple primaries	0.97	0.60, 1.58	0.90

* Including active chemotherapy, radiation therapy or recent surgery

Conclusions

Topical herbal pain-relieving plaster demonstrated substantial prescription pickup in integrative oncology care, indicating high acceptability. However, lower pickup rates in certain subgroups suggest barriers to access, highlighting the need to address inequities in integrative pain management.

LIFES-018

IMPACT OF EARLIER BEDTIME MISALIGNMENT ON THE SEVERITY OF CHEMOTHERAPY-INDUCED HOT FLASHES IN PREMENOPAUSAL WOMEN WITH BREAST CANCER

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Introduction

Chemotherapy-induced hot flashes (CIHF), a vasomotor symptom that has been demonstrated to impair the quality of life in breast cancer patients, have been associated with circadian rhythms. While circadian misalignment has been shown to contribute to the adverse effects of chemotherapy, the link between bedtime misalignment (BM) and these effects remains unclear. The objective of this study was to evaluate BM based on objective

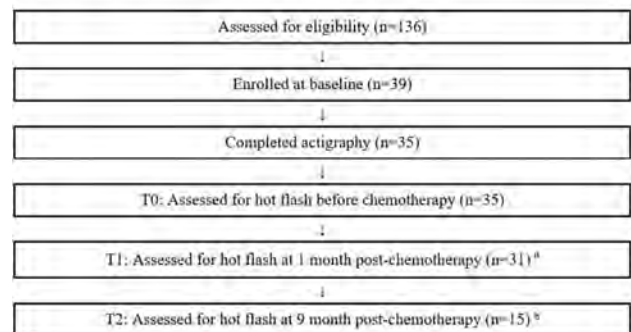
measurements and determine whether CIHF severity differs according to BM.

Methods

A total of 35 premenopausal women with breast cancer awaiting chemotherapy were evaluated for BM using actigraphy. Participants were categorized into the earlier misaligned group (“going to bed earlier than preferred bedtime”) and the aligned/later misaligned group (“going to bed at or later than preferred bedtime”). CIHF was assessed using 7-day diaries at baseline, at one month post-chemotherapy (T1), and at nine months post-chemotherapy.

Results

The habitual bedtime ($p=0.032$) and the degree of BM ($p<0.001$) measured by actigraphy differed between the earlier misaligned group and the aligned/later misaligned group. The earlier misaligned group reported significantly higher burden of CIHF, including total hot flash score ($p=0.004$), daytime and nighttime sweating scores (both $p<0.001$), and daytime hot flash frequency ($p=0.007$) compared with the aligned/later misaligned group at T1.

Figure 1. Study flowchart

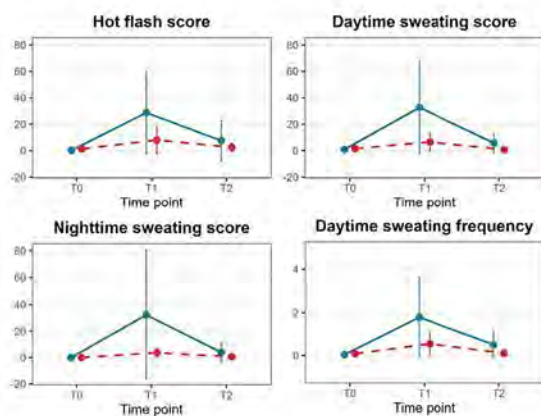
* One patient declined to participate in the follow-up.

^b As a consequence of the enrollment delays that were precipitated by the COVID-19 pandemic, it proved impossible to obtain data from 10 participants for the T2 time points within the approved study timeline.

Table 1. Group × Time interaction effects on hot flash diary-derived outcomes (square-root transformed)

Variables	Group × Time (p Value)
Hot flash score	0.039
Night sweating score	0.016
Daytime sweating score	0.020
Mean daytime hot flash frequency	0.048

Linear mixed-effects analyses were conducted using square-root transformed hot flash scores as the dependent variable. Bedtime misalignment group (earlier misaligned vs. aligned/late misaligned), time point, and their interaction were included as fixed effects, with chemotherapy regimen and age entered as covariates.

Figure 2. Hot flashes by bedtime misalignment group

The data represent raw scores from the hot flash diary (earlier misaligned group: blue solid line; aligned/late misaligned group: red dashed line).

Units: Hot flash score, daytime sweating score, and nighttime sweating score = episodes $\times$ severity/day; daytime sweating frequency = episodes/day.

Conclusions

Premenopausal women whose habitual bedtime was earlier than their preferred bedtime experienced greater burden of CIHF. Our findings indicate the potential for BM to contribute to vasomotor vulnerability in patients with breast cancer. Further studies are needed to elucidate the mechanisms by which BM contributes to CIHF.

LIFES-021

CANNABIDIOL UTILIZATION PATTERNS AMONG COMMUNITY AND SURVIVORS OF CANCER: A SURVEY

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Introduction

Interest in CBD has increased, yet public perceptions remain insufficiently characterized in the literature. Clinicians in supportive oncology often encounter patient questions about CBD use. This study sought to describe CBD product use, estimate prevalence, and examine demographic correlates.

Methods

An online survey was distributed through SherryStrong Foundation's (NC, USA) social media sites (Facebook, Instagram, Twitter). Respondents consented before the survey and were allowed to skip questions. The 22-item survey included questions about personal usage (costs, duration, frequency, and side effects), and perspectives on safety and efficacy. Responses were analyzed descriptively. Correlative analyses of CBD use and respondent characteristics were described using Fisher's Exact tests. Statistical significance was defined as $p < 0.001$.

Results

After excluding incomplete surveys, 295 responses were analyzed. Most were female (87%), White (97%), and non-Hispanic/Latinx (95%). Over one-third (37%) had cancer diagnoses. Majority (97%) resided in the US. 36% had a high school education and nearly half a college

degree. Most (64%) were employed, 17% retired, and 12% unable to work. 76% reported CBD current use. The most common reasons were for anxiety (50%), pain (66%), sleep (50%), and stress (43%), with 84% reporting benefit. Main formulations included liquid drops (58%) and topical (21%), with 53% used daily and 64% short-term (< 6 months). Most (84%) reported no side effects. When compared with other reasons for CBD use, respondents more often chose drops for mental health (72% vs 34%), topicals for pain (31% vs 7%), and edibles for medical conditions (32% vs 9%; $p < 0.001$). No associations were found between duration or frequency of CBD use, and age group or side effect occurrence ($p > 0.001$).

Conclusions

CBD use was highly prevalent among respondents. Most used CBD daily without side effects but reported benefits for improving anxiety, pain, sleep, and stress. These exploratory findings warrant confirmation in large population-based surveys.

LIFES-022

"KAMPO UTILIZATION GUIDE FOR CANCER SUPPORTIVE CARE": FROM EVIDENCE TO PRACTICAL USE

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Introduction

Kampo, traditional Japanese medicine, has been integrated into cancer supportive care and is covered by Japan's national health insurance. Although evidence from randomized controlled trials has been accumulating, the development of clinical practice guidelines dedicated to Kampo remains limited due to insufficient high-level evidence. However, the clinical need for a practical, evidence-based guide for oncology professionals is growing rapidly.

Methods

To meet this demand, "Kampo Utility Guide for Cancer Supportive Care" was first published in November 2020, followed by the second edition in December 2025. The guide was developed collaboratively by oncologists, pharmacists, and Kampo specialists, emphasizing the integration of Kampo into multidisciplinary supportive care settings.

Results

The guide consists of (1) General Section, describing the history, characteristics, significance, action mechanisms, technical terms, safety, and future perspectives of Kampo medicine; (2) Specific Section 1: Symptoms, covering 12 major supportive care domains: general malaise/fatigue, anorexia/nausea & vomiting, psychiatric symptoms,

bone marrow suppression, oral mucositis, taste disorder, diarrhea, constipation, peripheral neuropathy, skin & nail disorder, menopausal symptoms, and edema; (3) Specific Section 2: Kampo formulas, covering 14 representative Kampo formulas: bakumondoto, daiken-chuto, goreisan, goshajinkigan, hangeshashinto, hochuekkito, juzen-taihoto, kamikihito, keishibukuryogan, mashiningan, ninjin'yoeito, rikkunshito, shakuyakukanzoto, and yokukansan. These formulas are explained with corresponding evidence summaries and case presentations. A summary of how to choose Kampo formula is presented in a flowchart at the beginning of each symptom section. In addition, this guide contains 24 topics inserted as columns in appropriate places. The columns include how to learn Kampo medicine, characteristics of various crude drugs, and Evidence Reports of Kampo Treatments, and Kampo in clinical practice guidelines.

Conclusions

"Kampo Utility Guide for Cancer Supportive Care" provides a bridge between evidence and real-world clinical practice, serving as a practical reference for oncologists and multidisciplinary care teams to deliver personalized integrative supportive care.

LIFES-023

ELECTROACUPUNCTURE IS COST-EFFECTIVE FOR MANAGING NEUROPSYCHIATRIC SYMPTOMS AMONG BREAST CANCER SURVIVORS: EVIDENCE FROM A CLINICAL TRIAL

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Introduction

Neuropsychiatric symptoms significantly impair the quality of life for breast cancer survivors (BCS). While electroacupuncture (EA) shows clinical promise, the lack of cost-effectiveness data in the United States remains a critical barrier to Medicare coverage. We conducted an economic evaluation of two distinct EA regimens, neuropsychiatric-specific (nEA) and non-specific (sEA), against "no-treatment" to determine their value in breast cancer survivorship.

Methods

Using data from our clinical trial (NCT05283577), we compared two 10-week EA regimens (nEA and sEA) against a hypothetical "no-treatment" baseline representing the clinical status quo (constant health utility). We utilized a Markov model with a 10-week horizon to project EA costs (Medicare reimbursement rates) and health utilities (trial-derived EQ-5D). The primary outcome was the incremental cost-effectiveness ratio (ICER), calculated as cost per quality-adjusted life year (QALY) gained. Sensitivity analyses were conducted to identify the treatment adherence threshold required for nEA to remain cost-effective across accepted willingness-to-pay levels.

Results

Among 35 BCS (nEA: 18; sEA: 17), baseline EQ-5D indices were similar and improved post-treatment (Table 1). Completion rates were 77.8% for nEA and 94.1% for sEA; negative experiences, specifically treatment-related pain and discomfort, were cited as key reasons for non-adherence. Compared to "no-treatment", both regimens remained

cost-effective at a \$100k/QALY threshold (ICERs: nEA \$58k/QALY; sEA \$59k/QALY) (Table 2). In a head-to-head comparison, sEA is the preferred strategy over nEA (ICER: \$73k/QALY). However, nEA would become the superior intervention (versus sEA) if its completion rate increased above 85.9%.

Table 1: Markov model inputs and distributions

	Neuropsychiatric-specific EA (nEA)		Non-specific EA (sEA)		Hypothetical "no treatment" baseline	
	Base case values	Distributions	Base case values	Distributions	Base case values	Distributions
Medicare rate per 30-min EA session ¹ (2025 USD)	80.22	Fixed	80.22	Fixed	N/A	N/A
EQ5D index, mean						
Pre-treatment	0.751	β (SE=0.068)	0.775	β (SE=0.049)	0.763	β (SE=0.042)
Post-treatment	0.912	β (SE=0.030)	0.882	β (SE=0.039)	0.763	β (SE=0.042)
Discontinuation rate, n (%)	4/18 (22.2%)	β (4, 14)	1/17 (5.9%)	β (1, 16)	N/A	N/A

Abbreviations: EA, electroacupuncture; n, count; N/A, not applicable; SE, standard error; USD, United States dollar.
¹ Calculations based on 2025 Medicare Physician Fee Schedule rates for CPT codes 97813 and 97814. As of 2025, acupuncture is reimbursable by Medicare only for chronic low back pain.

Table 2: Base-case analysis for electroacupuncture (EA) versus "no treatment"

Strategy	Cost (USD)	Incremental Cost ¹ (USD)	Effectiveness (QALYs)	Incremental Effectiveness ¹ (QALYs)	ICER ² (USD/QALY)
"No treatment"	0	---	0.146	---	---
nEA	717	717	0.158	0.012	58,000
sEA	779	779	0.169	0.013	59,000

Abbreviations: EA, electroacupuncture; ICER, incremental cost-effectiveness ratio; nEA, neuropsychiatric-specific EA; QALY, quality-adjusted life years; sEA, non-specific EA; SOC, standard-of-care; USD, United States dollar.
¹ Calculated for nEA or sEA, compared to "no treatment".
² The cost per additional QALY gained. Values below \$50k/150k/QALY (willingness-to-pay thresholds) are typically considered cost-effective in the United States.

Conclusions

Electroacupuncture is cost-effective for managing neuropsychiatric symptoms among breast cancer survivors. While sEA is currently the preferred regimen due to higher adherence, nEA offers superior value if retention is optimized. To maximize treatment value, clinical implementation should prioritize patient-centered retention strategies to minimize discomfort and improve treatment adherence.

LIFES-024

BREATHING BEYOND DISEASE: FEASIBILITY OF YOGA THERAPY FOR PEOPLE WITH LUNG CANCER – A PILOT RANDOMISED CONTROLLED TRIAL

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Introduction

Dyspnoea is the most prevalent and distressing symptom in people with lung cancer, often inadequately managed by pharmacological interventions, which underscores the need for supportive therapies. Yoga, a low-impact mind-body intervention focusing on breath control, may offer potential benefits; however, evidence for its efficacy in this population remains limited. This study aimed to assess the feasibility of an

8-week yoga therapy program and evaluate its preliminary effects on dyspnoea, quality of life and mental health in people with lung cancer.

Methods

A prospective, pilot randomised controlled trial was conducted in accordance with CONSORT guidelines. People with lung cancer experiencing dyspnoea were randomised to an 8-week yoga intervention or usual care. The yoga program included two 60-minute group sessions per week, either in-person or online, along with encouragement for home practice. Feasibility outcomes—recruitment, retention, adherence, assessment completion, and adverse events—were monitored throughout the study. Effectiveness was evaluated at baseline and at week 9 using the Cancer Dyspnoea Scale, 6-minute walk test, the Depression Anxiety Stress Scale-21, and the EORTC QLQ-C30 and QLQ-LC13.

Results

Out of 14 eligible people, nine were randomised (64.3%), with seven completing follow-up (attrition 22.2%) (see Figure 1). Among intervention completers, mean attendance was 85.9%, and all predefined feasibility criteria were met (see Table 1). Preliminary changes were observed across dyspnoea, quality of life, mental health, and exercise capacity (see Table 2). The intervention group showed improvements in global health status (+6.3) and physical functioning (+6.7), with reductions in dyspnoea (−16.7). Both groups improved in depression, anxiety, stress levels and the 6-minute walk distance.

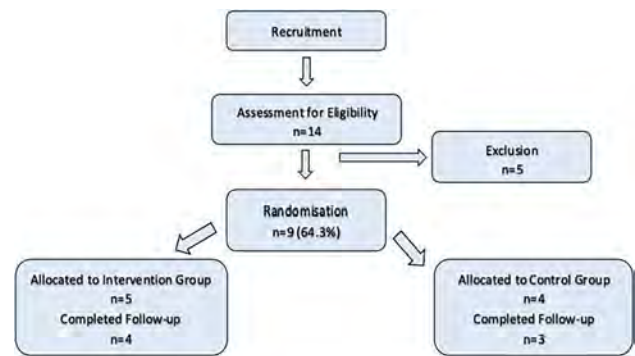


Figure 1. Study flow diagram of the pilot randomised controlled study

Conclusions

Findings demonstrate that yoga may be feasible for people with lung cancer experiencing dyspnoea. Preliminary findings suggest potential benefits for dyspnoea, quality of life, and mental health, supporting the need for a larger, adequately powered randomised controlled trial.

LIFES-025

NON-PHARMACOLOGICAL SELF-MANAGEMENT OF CHEMOTHERAPY-INDUCED DIARRHOEA AND CONSTIPATION AMONG VIETNAMESE PATIENTS WITH CANCER

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Introduction

Chemotherapy-induced diarrhoea (CID) and constipation (CIC) are common toxicities that significantly impair quality of life for patients with cancer. Non-pharmacological strategies can support symptom relief, yet little is known about how patients independently use these approaches in low-resource and culturally diverse settings such as Vietnam. This study examined the prevalence, types, and perceived effectiveness of patient-led non-pharmacological strategies for managing CID and CIC, and explored factors associated with their use.

Methods

A cross-sectional survey was conducted with 193 adults receiving chemotherapy at a public general hospital in Vietnam. A structured questionnaire captured sociodemographic and clinical data, types and perceived effectiveness of non-pharmacological strategies, and sources of information. Binary logistic regression identified factors associated with strategy use.

Table 1. Feasibility Outcomes

Feasibility Outcome	Results
Participants screened for eligibility	14
Participants consented and randomised	9 (64.3%)
Allocation	Intervention n = 5; Control n = 4
Participants completing follow-up	7 (Intervention n = 4; Control n = 3)
Overall attrition rate	22.2%
Reasons for attrition	Intervention: clinical deterioration and hospitalisation (n = 1, deceased); Control: withdrawal due to group allocation (n = 1)
Intervention dose	8 weeks, 2 sessions/week (16 sessions total)
Mean session attendance (intervention group)	85.9% (range 75–100%)
Missed sessions	Primarily due to chemotherapy and medical appointments
Feasibility criteria met	Yes
Intervention-related adverse events	None reported

Note: Feasibility criteria were predefined as ≥50% consent rate, ≥60% attendance of at least half of the sessions, and ≥60% completion of at least one session per week.

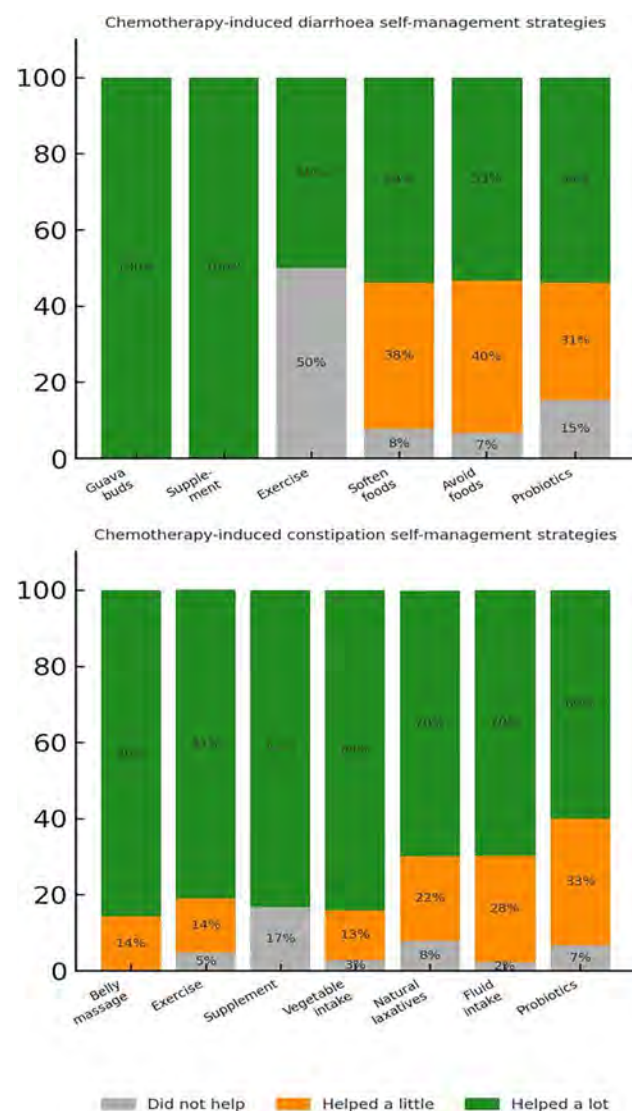
Table 2. Preliminary changes in clinical outcomes (Secondary)

Outcome	Intervention (Δ mean ± SD)	Control (Δ mean ± SD)
CDS (total)	−1.5 ± 9.6	−9.3 ± 4.9
EORTC QLQ-C30:		
global health status	+6.25 ± 18.06	+16.67 ± 8.33
physical functioning	+6.67 ± 15.28	−4.44 ± 10.19
dyspnoea (c30)	−16.67 ± 31.18	0.00 ± 33.33
fatigue	−8.81 ± 33.91	−7.41 ± 23.10
pain	−16.67 ± 47.14	−11.11 ± 25.46
EORTC QLQ-LC13:		
coughing	−8.33 ± 16.67	−11.11 ± 19.25
dyspnoea (resting)	+8.33 ± 28.87	+11.11 ± 19.25
dyspnoea (walking)	−8.33 ± 28.87	0.00 ± 33.33
dyspnoea (stairs)	−33.33 ± 28.87	0.00 ± 33.33
DASS-21:		
depression	−7.25 ± 6.29	−1.00 ± 1.00
anxiety	−4.00 ± 3.74	−7.33 ± 5.50
stress	−6.50 ± 8.70	−8.33 ± 2.89
6 MWT distance (m)	+32.50 ± 46.33	+60.33 ± 59.50

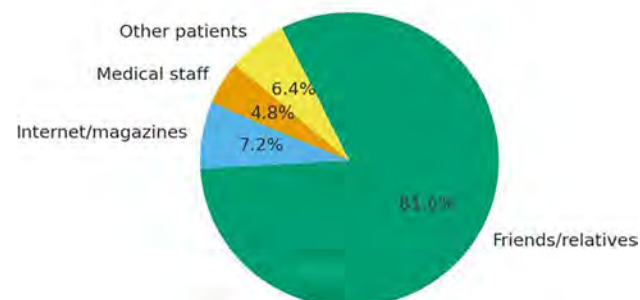
CDS, Cancer Dyspnoea Scale; EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30; EORTC QLQ-LC13, Lung Cancer-Specific Module; DASS-21, Depression Anxiety Stress Scale 21; 6MWT, 6-minute walk test; SD, standard deviation.

Note: Values are mean change from baseline to follow-up (Δ = post − baseline). Results are descriptive due to the pilot design.

Results



Sources of Information for Non-pharmacological Strategies



Participants were predominantly < 65 years old (63.2%), with balanced gender distribution. Most had gastrointestinal cancers (64.2%). Among

those experiencing CIC (n = 106), 84.9% used non-pharmacological strategies, compared with 26.7% of patients with CID (n = 120). Dietary modification was the most common approach for both conditions (CID: 92.3%; CIC: 85.8%). For CIC, strategies included increasing vegetable intake, using natural dietary laxatives, and herbal teas. For CID, patients often adopted soft diets, avoided specific foods, or used guava leaves. Most respondents (70%–84%) reported meaningful symptom relief. Information was mostly sourced informally (81.6% from family or friends). Higher strategy use was associated with education > 12 years (OR = 2.01, p = 0.03), employment (OR = 3.15, p = 0.02), or being a freelancer/homemaker (OR = 6.77, p = 0.02). Patients with CIC only were more likely to use non-pharmacological approaches (OR = 0.17, p < 0.001). No adverse effects were reported.

Conclusions

Non-pharmacological self-management of CID and CIC is common and perceived as beneficial among Vietnamese cancer patients. However, reliance on informal advice highlights the need for accessible, evidence-based, culturally tailored supportive-care guidance.

LIFES-027

THE SUPPORTIVE CANCER CARE CO-DESIGN FRAMEWORK: FINDINGS OF A SCOPING REVIEW

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Introduction

Co-design may improve the uptake of and adherence to supportive care interventions. This scoping review examines the steps taken to co-design supportive care interventions for people with cancer and their whānau (te reo Māori word for extended family and friends). It also explores co-design terminology and research partners involved in the co-design process.

Methods

Five databases (CINAHL, EMBASE, MEDLINE, PsycINFO, Scopus) were searched to September 1, 2025, for citations related to the terms ‘cancer’, ‘supportive care’, and ‘co-design’. Results were imported into Covidence for screening and full-text assessment by six reviewers. At least two reviewers screened each publication, and disagreements were resolved through discussion to reach consensus. Data extraction was completed in Microsoft Excel by five reviewers and included co-design steps, partners involved, and terminology used. MRE oversaw the process, resolving discrepancies through discussion.

Results

Overall, 5,907 citations were screened, and 257 citations reporting on 110 unique interventions were included. We synthesised the co-design steps into the Supportive Cancer Care Co-Design framework. This framework outlines five main co-design steps: setting the research agenda, preliminary work, intervention development, evaluation, and dissemination. Descriptions of co-design partner involvement in setting the research agenda were limited in the included studies. Instead, preliminary work fell into three main categories: literature reviews, stakeholder engagement, and conceptualising the problem and how to address it. Intervention development involved three interconnected phases: content development, prototyping, and user testing and refinement. Two main types of evaluation emerged: evaluation of the intervention and the co-design process. Few studies involved co-design partners in disseminating study findings. Researchers were involved in co-designing all interventions, with the majority also involving

people with cancer and healthcare professionals. Community partners, whānau, and policymakers were also engaged in some interventions.

Conclusions

We present the Supportive Cancer Care Co-Design framework to guide the development of future interventions.

LIFES-028

REDUCTION OF ACCELERATED AGING MEASURES WAS OBSERVED IN BREAST CANCER SURVIVORS TREATED WITH ELECTROACUPUNCTURE: A RANDOMIZED, CONTROLLED TRIAL

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Introduction

We have observed the efficacy of neuropsychiatric-specific electroacupuncture (EA) in managing symptoms in breast cancer survivors. To understand the mechanisms underlying the symptom improvement, we evaluated whether EA treatments and subsequent therapeutic response were associated with a reduction in biological aging.

Methods

This is a secondary analysis of a randomized, controlled, clinical trial (NCT05283577). Breast cancer survivors who self-reported cognitive impairment, fatigue, insomnia, or psychological distress were recruited and randomized (1:1) to ten weekly EA sessions of either neuropsychiatric-specific (nEA) or non-disease-related (sham EA, sEA) acupoints. Patient-reported outcome tools and blood samples for DNA methylation measurements were collected prior to treatment, 5 weeks-, and 10 weeks-post treatment initiation. DNA was extracted and methylation was measured on Illumina Infinium Methylation Screening Arrays. Linear mixed models were utilized to evaluate the association of treatment response and accelerated ageing measures (Horvath, Hannum, Horvath2, PhenoAge, GrimAge, DunedinPACE). Positive treatment response was characterized based on improvement in symptom score, meeting the minimal clinically important difference.

Results

Data of thirty patients were analyzed, with the average ($\pm$ SD) age being 58.2 ($\pm$ 12.2) years, and 86% reported ≥ 2 neuropsychiatric symptoms at baseline. DunedinPACE showed significant decreases in age acceleration within the nEA treatment arm pre- and post-treatment (coef: -0.033, $p = 0.04$, ref= sEA, T1). Furthermore, patients with positive treatment response relative to global symptom score (c30 global) experienced significant decreases in PhenoAge relative to those that did not (Coef: -2.07, $p = 0.04$, ref= non-response).

Conclusions

Our study demonstrates that targeted acupuncture regimens and response to therapy are associated with reductions in accelerated ageing. Biological ageing measures can provide mechanistic insights and may become a valuable tool to assess interventions in supportive care. While significant age deceleration wasn't observed across specific symptom domains, future studies emphasizing larger cohorts having more specific symptom clusters can provide more nuanced results.

LIFES-029

HIGH-DOSE INTRAVENOUS VITAMIN C IN CANCER CARE: A SYSTEMATIC REVIEW OF RANDOMIZED CONTROLLED TRIALS

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Introduction

High-dose intravenous vitamin C (IVC) has been proposed to improve survival and reduce cancer-related symptoms and treatment-associated toxicities. Given increasing clinical interest, we conducted a systematic review of randomized controlled trials (RCTs) to evaluate the effects of IVC on survival outcomes, quality of life, and cancer treatment-related side effects.

Methods

A literature search was conducted in Scopus, MEDLINE, the Cochrane Central Register of Controlled Trials, and CINAHL from database inception to March 2025. Eligible studies were RCTs that evaluated the effect of IVC vs. a valid control on outcomes related to survival, treatment toxicity, and/or quality of life in cancer populations. Risk of bias was assessed using RevMan version 5.3.

Results

Seven RCTs involving 872 adult patients across multiple cancer types were included, with overall risk of bias assessed as moderate to low. Five studies assessed survival outcomes, three evaluated quality of life, and all reported treatment-related toxicity. Survival results were mixed, with two trials showing that overall survival and progression-free survival were significantly extended in IVC plus standard chemotherapy vs. chemotherapy alone. In contrast, three studies found no difference in OS and PFS between IVC plus standard chemotherapy and either chemotherapy alone or with placebo. Quality of life measures showed no significant difference either in pre- vs. post-IVC, or in IVC treatment vs. the control. For treatment toxicity, while IVC was associated with reduced incidence rate and severity for some adverse events (e.g. fatigue, intestinal obstruction, infection) and increased rate and severity for others (e.g. neutropenia, anorexia), most differences were not statistically significant.

Conclusions

Current evidence does not conclusively support a survival benefit of high-dose IVC in cancer patients and suggests minimal impact on quality of life. It may attenuate certain treatment-related symptoms. More rigorous RCTs are needed to better define IVC's efficacy as a cancer therapeutic.

LIFES-030

IMPACT OF ORAL VITAMIN C AND ZINC SUPPLEMENTATION ON POST-CHEMOTHERAPY TOXICITIES—A SINGLE-CENTRE RETROSPECTIVE OBSERVATIONAL STUDY FROM INDIA

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Introduction

Chemotherapy-induced toxicities remain a major barrier to optimal cancer treatment delivery, contributing to treatment interruptions, dose reductions, and compromised quality of life. Micronutrients such as Vitamin C and Zinc play a crucial role in antioxidant defense, immune support, and tissue repair. However, real-world Indian data evaluating their role in reducing post-chemotherapy toxicities are limited.

Methods

This single-centre retrospective observational study was conducted at a tertiary care oncology hospital in India. Medical records of 150 adult cancer patients who received standard chemotherapy between April

2025 and October 2025 were reviewed. Patients were divided into two groups: those who received oral Vitamin C and Zinc supplementation during the immediate post-chemotherapy period, and those who did not receive supplementation. Data collected included demographics, cancer type, chemotherapy regimen, incidence and severity of toxicities (CTCAE v5.0), unplanned hospital visits, treatment delays, and chemotherapy dose modifications.

Results

Among the 150 patients, 72 received Vitamin C and Zinc supplementation, while 78 formed the control group. Supplemented patients showed a notable reduction in grade 2–3 mucositis, fatigue, neutropenia, diarrhea, and nausea/vomiting compared to controls. They also had fewer unplanned supportive care visits and lower rates of chemotherapy delays or dose reductions. No supplementation-related adverse events were detected.

Conclusions

Oral Vitamin C and Zinc supplementation during post-chemotherapy recovery appears to reduce treatment-related toxicities and enhance chemotherapy tolerance in real-world clinical practice. As a low-cost and accessible intervention, micronutrient-based supportive care may be a valuable adjunct in oncology. Larger prospective randomized trials are recommended to validate these findings.

LIFES-031

EVALUATING AN ONLINE YOGA INTERVENTION FOR BREAST CANCER-RELATED LYMPHOEDEMA: A FEASIBILITY STUDY

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Introduction

Breast cancer-related lymphedema (BCRL) is a chronic disease characterised by swelling, discomfort, and functional impairment. Yoga may offer physical and psychosocial benefits but evidence for online delivery remains limited. We developed a 12-week online program based on earlier research for upper limb lymphoedema. The intervention focused on movement and fascial stretching to encourage lymph flow and resilience in the soft tissues mimicking the effect of manual lymphatic drainage. The aim of this study was to assess the feasibility, acceptability, and preliminary effects on symptoms, quality of life and coping of an online yoga intervention for BCRL.

Methods

This single-arm feasibility study enrolled 28 women with post-treatment BCRL. Participants attended 12x60-minute weekly sessions. Feasibility outcomes included recruitment, retention, session attendance, and adherence. Acceptability was measured using the Acceptability of Intervention Measure (AIM), Intervention Appropriateness Measure (IAM), and Feasibility of Intervention Measure (FIM). Secondary outcomes included shoulder range of motion (ROM), bioimpedance (L-Dex), relative arm volume increase (RAVI), symptom burden (LSIDS-A), quality of life (LYMQOL), and self-efficacy (CBI-B).

Results

Participants attended an average of 9.6 sessions. Implementation scores indicated strong acceptability, appropriateness, and feasibility (mean >4.2/5). Improvements were observed in shoulder ROM and symptom burden. Range of motion improved in the affected arm for flexion (149.2° to 160.5°), extension (48.5° to 56.2°), and abduction (134.0°

to 153.0°). Symptom prevalence decreased in 16 of 18 domains, particularly for achiness, heaviness, and numbness. LYMQOL scores improved for symptoms, appearance, and overall quality of life. Gains were also seen in coping self-efficacy.

Conclusions

A 12-week online yoga program for women with BCRL was feasible, acceptable, and associated with improvements in physical function, symptom burden, quality of life and coping. Findings support progression to a randomised controlled trial.

LIFES-032

REAL-WORLD IMPACT OF ROUTINE EXERCISE ON HEALTH-RELATED QUALITY OF LIFE DURING CHEMOTHERAPY: A RETROSPECTIVE AUDIT

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Introduction

People with cancer often experience symptoms and cancer treatment-related side effects that reduce health-related quality of life (HRQoL). Randomised controlled trials have consistently shown that tailored exercise training, including aerobic and resistance training modalities, improves HRQoL; however, real-world effectiveness within routine oncology care remains less well understood. This retrospective audit evaluated the impact of exercise training on HRQoL among patients with cancer undergoing chemotherapy who attended an exercise oncology program at a tertiary-level hospital.

Methods

A retrospective audit of patients with cancer undergoing chemotherapy who participated in an outpatient exercise oncology service at a tertiary-level hospital between 2023 and 2024 was included. Forty-seven patients underwent twice-weekly exercise training, including moderate-to-vigorous aerobic and resistance training, for eight weeks. Prior to and following the eight-week exercise program, health-related quality of life was assessed by the European Organisation for Research and Treatment of Cancer Quality of Life Core questionnaire. Cancer diagnoses, treatment type and exercise session attendance were extracted from electronic medical records.

Results

Forty-seven patients (55±12.6 years; 66% female) completed pre- and post-exercise program HRQoL questionnaires following an eight-week exercise oncology program. Primary cancer diagnoses were breast (49%), colorectal (15%) and haematological cancers (13%). Significant improvements were observed in global health status (mean difference [MD], +14.8; 95% CI, 10.4–19.2; $p<0.001$) and in functional domains, including role, physical, emotional, and social functioning (all $p<0.01$), except for cognitive functioning ($p=0.19$). Multiple HRQoL symptom scales improved, including fatigue (MD, -15.2; 95% CI, -22.4 to -7.8; $p<0.001$), nausea, appetite loss, diarrhoea, and constipation (all $p<0.01$), whereas other symptoms showed no significant change.

Conclusions

This retrospective audit found that an eight-week exercise oncology program was associated with significant improvements in HRQoL, including global health status, functioning, and symptoms such as fatigue. Despite limitations of the pre/post design and a heterogeneous cohort, the results appear clinically meaningful across multiple HRQoL domains.

LIFES-033

TRADITIONAL CHINESE MEDICINE NON-PHARMACOLOGIC INTERVENTIONS FOR METABOLIC HEALTH IN CANCER: A SYSTEMATIC REVIEW

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Introduction

Metabolic disorders can exacerbate cancer care by impairing treatment tolerance and survival. Non-pharmacological traditional Chinese medicine (TCM) is widely used, yet its effects on metabolic health in oncology remain uncertain. We systematically reviewed randomized controlled trials evaluating such interventions on metabolic outcomes.

Methods

PubMed, Embase, and Cochrane CENTRAL were searched from inception to June 13, 2025. Eligible RCTs tested acupuncture, acupressure, Tuina/massage, Tai Chi, or Qigong on clinical metabolic endpoints or metabolomic signatures. Two reviewers independently screened, extracted, and assessed risk of bias (RevMan 5.4) following PRISMA.

Results

Nine RCTs involving 592 participants were included, comprising 228 cancer survivors and 12 patients with advanced cancer, across breast (n=264), prostate (n=166), lung (n=85), and thyroid (n=14) cancers. Most trials exhibited moderate to high risk of bias due to inadequate blinding. Among breast cancer survivors, TCQ versus psychosocial therapy significantly improved BMI and insulin levels but not body weight or fat mass. TCQ also significantly reduced IGF-1, IL-2, and IFN- γ , while increasing IGFBP-1, IGFBP-3, and IL-6 from pre- to post-treatment. In contrast, real versus sham acupuncture did not significantly affect BMI, body weight, fat-free mass percentage, or metabolic-related hormones (insulin, leptin, ghrelin, cortisol) in patients with cancer-related cachexia or anorexia. However, compared with standard care, acupuncture significantly reduced serum ghrelin, gastric inhibitory polypeptide, leptin, and insulin (all $p < 0.05$). In patients with lung cancer undergoing thoracoscopic surgery, transcutaneous electrical acupoint stimulation significantly improved blood oxygenation and reduced hypoxemia from pre- to post-treatment, with no significant between-group differences versus sham control. Additionally, TCQ versus supportive therapy significantly increased the bone remodeling index ($p = 0.04$), with correlations observed with IGFBP-1, IL-8, and IL-6. All studies reported no significant between-group differences in adverse events.

Conclusions

Non-pharmacological TCM shows promise for metabolic health, but larger, standardized RCTs are needed to confirm effects, with mechanistic biomarkers, valid endpoints, longer-term follow-up, and generalizability.

LIFES-034

CHINESE HERBAL MEDICINE FOR METABOLIC HEALTH IN CANCER POPULATIONS: A SYSTEMATIC REVIEW

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Introduction

Metabolic disorders increase cancer risk and worsen prognosis. Oncologic therapies such as chemotherapy, steroids, and endocrine therapy can further disrupt metabolism. Chinese herbal medicine (CHM) is used to support metabolism, but its role in cancer-related metabolic disorders remains unclear. This review summarizes CHM efficacy and safety for metabolic outcomes in people with cancer.

Methods

We searched PubMed, Embase, and Cochrane CENTRAL from inception to June 13, 2025, for randomized controlled trials comparing CHM with placebo, usual care, no treatment, or waitlist. Eligible studies reported clinical or biomarker metabolic outcomes (e.g., BMI, insulin resistance, metabolites) in any cancer type/stage. Four reviewers screened records, extracted data, and assessed bias using RevMan 5.4 following PRISMA.

Results

From 324 records, four RCTs (n=289) met criteria. Formulas were Rikunshito, Modified Banxiixixin decoction (MBD), Sipjeondaebotang (SJDBT), and Weifuchun. Rikunshito significantly reduced body-weight loss and increased acyl-ghrelin. MBD, with chemotherapy, improved overall and progression-free survival, quality of life, and symptoms; mechanisms implicated apoptosis and regulation of p53, AKT, and MAPK. SJDBT increased ghrelin and contributed to weight stabilization in cancer-related anorexia. Weifuchun modulated AMPK/NF- κ B, promoted tumor-cell apoptosis, and with chemotherapy reduced two-year recurrence and metastasis. Overall risk of bias was moderate–high, particularly for selection and performance domains. Safety reporting was incomplete: no adverse events with Rikunshito; MBD reduced chemotherapy-related diarrhea, nausea, vomiting; data were insufficient for SJDBT and Weifuchun.

Conclusions

Evidence remains limited but suggests that CHM—especially when combined with chemotherapy—may mitigate weight loss, upregulate acyl-ghrelin, and modulate tumor-related metabolic pathways, with acceptable tolerability. Given small samples, heterogeneity of interventions, and inconsistent safety reporting, rigorously designed RCTs using standardized metabolic endpoints, prespecified safety monitoring, and systematic evaluation of herb–drug interactions are needed to clarify efficacy and define CHM's role in metabolic health across cancer care. Future work should also address the standardization of dosing and the quality control of formulations.

LIFES-035

POTENTIAL HERB-DRUG INTERACTIONS IN CANCER PATIENTS USING INTEGRATIVE THERAPIES: A POPULATION-BASED DATA MINING STUDY

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Introduction

Traditional, Complementary, and Integrative Medicine, particularly Traditional Chinese Medicine (TCM), is increasingly popular among cancer patients. However, these integrative approaches may result in potentially harmful herb–drug interactions (HDIs) leading to adverse health outcomes. Due to limited real-world evidence on the frequency and significance of HDIs, this study

leveraged a pharmaco-epidemiological approach to investigate co-prescribing patterns and identify potential HDIs associated with concomitant use.

Methods

This study utilized data from the public hospital system and two major TCM centers in Hong Kong. In this pilot phase, 348 cancer patients who were prescribed both TCM and Western medications were analyzed. Co-prescribing patterns were examined using a data mining approach with the *Apriori* algorithm to identify significant non-random associations. These associations were evaluated using support, confidence, and lift metrics. Potential HDIs were subsequently identified through established tertiary HDI databases (Table 1 footnote).

Results

We analyzed 22,997 drug prescriptions and 195,336 single-herb prescriptions in 348 patients (62.33±11.81 years). Breast (30.8%) and lung (15.8%) cancers were most common. Tamoxifen showed strong associations with *Liquorice Root (Glycyrrhizae Radix)* (confidence=0.72, lift=1.17), *Chinese Thorawax Root (Bupleuri Radix)* (confidence=0.73, lift=1.74), and *White Peony Root (Paeoniae Radix Alba)* (confidence=0.76, lift=1.61). Amlodipine and entecavir were also frequently co-prescribed with herbs (Figure 1). Among 60 high-frequency herb-drug combinations in 127 patients, 12 potential HDIs were identified, occurring in 709 prescriptions across 89 (70.1%) patients. These interactions ranged from mild to moderate in severity, involving drugs such as amlodipine and tamoxifen, and herbs including *Liquorice Root* and *Chinese Thorawax Root* (Table 1). Most HDIs were supported only by low-level evidence from animal or *in vitro* studies.

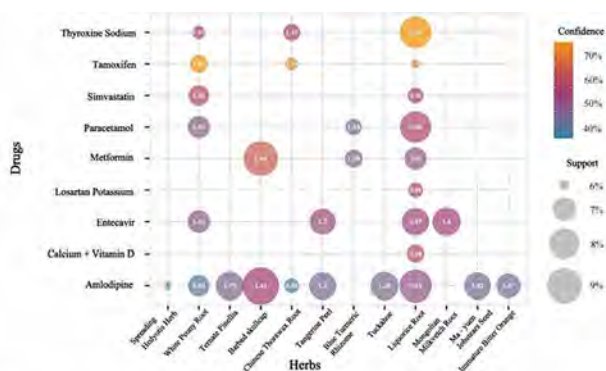


Figure 1. Patterns of Herb-Drug Co-prescribing Revealed by Association Rule Analysis

Notes: The bubble size corresponds to the support of the rule, which refers to how frequently the combinations occur in the dataset. The color gradient represents the confidence level, which shows the likelihood of one item being prescribed with another, with orange indicating the highest confidence and blue the lowest. The numeric value displayed within each bubble denotes the lift which represents the ratio of observed support to the targeted one when the two items are independent. A rule with the lift value > 1 implies that these two occurrences are dependent on one another.

Conclusions

Our real-world data reveal potential HDIs in cancer patients receiving integrative therapies, although their clinical relevance remains uncertain. Future studies will assess downstream clinical outcomes in patients exposed to potential HDIs using passive and active surveillance.

LIFES-036

KNOWLEDGE, ATTITUDES, AND PRACTICES OF TRADITIONAL CHINESE MEDICINE PRACTITIONERS ON THE USE OF INTEGRATIVE MEDICINES IN PATIENTS WITH CANCER

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Introduction

Traditional Chinese medicine (TCM) is commonly used as a complementary approach among cancer patients, especially in Asian cultures. However, using TCM herbs with anticancer drugs may lead to harmful herb-drug interactions (HDIs). TCM practitioners' prescribing habits can directly influence the risk of HDIs, while evidence on their knowledge, attitudes, and practices (KAP) toward integrative approaches remain limited. This study aims to investigate practitioners' KAP on Western-Chinese integrative approaches in cancer care, and to identify factors associated with their KAP.

Methods

A cross-sectional questionnaire survey was conducted among registered TCM practitioners providing cancer care in Hong Kong. They were recruited through a local professional society. Univariate analyses and multivariate logistic regression were conducted to evaluate associations between TCM practitioners' characteristics and three predefined outcomes: (a) perceived difficulty in accessing HDI information, (b) level of caution exercised when an HDI is suspected, and (c) whether HDI-related decision-making was experience-driven or guided by literature/HDI-compendiums.

Results

A total of 126 were analyzed (response 86.9%). Nearly all practitioners (97.6%) reported prescribing TCM herbs to patients who were concurrently taking Western medicines. A quarter (25.8%) reported that their HDI-related decision-making was primarily driven by their own experience, while the majority reported referring to literature/HDI-compendiums (74.2%). However, half (54.0%) acknowledged difficulty in accessing HDI information, with younger practitioners perceiving greater difficulty than older practitioners (OR=1.05, 95% CI 1.01-1.10; Table 1). Most (86.3%) reported that they would exercise caution for HDI by modifying the TCM prescriptions. Senior/experienced practitioners tended to exercise less caution toward modification of treatment plan (OR=0.92, 95% CI 0.85-0.99).

Table 1. Association and Potential Herb-Drug Interaction Rating and Severity

[illegible]

ALT, alanine aminotransferase; PD, pharmacokinetics; PK, pharmacokinetics; RCT, randomized controlled trials; TC, total cholesterol; TG, triglycerides; T_{max}, the time point at which a drug reaches its highest concentration in the bloodstream after being absorbed.

Notes: * High drug concentrations in the bloodstream after being absorbed

Table 1. Factors Associated with Surveyed TCM Practitioners' Perceived Difficulty in Accessing HDI Information - Univariate Analyses*

TCM Practitioners' Characteristics	Easy n=14 (11.1%)	Moderate n=44 (34.9%)	Difficult n=68 (54.0%)	P value
Gender				0.23
Male	3 (6.1%)	17 (34.7%)	29 (59.2%)	
Female	11 (14.3%)	27 (35.1%)	39 (50.6%)	
Age (years) mean ± SD	40.6 ± 14.0	46.4 ± 16.1	36.9 ± 12.0	0.009
Highest education attainment				0.36
Completed secondary school/Apprenticeship	4 (12.9%)	6 (25.8%)	19 (61.3%)	
Completed university degree	8 (10.4%)	26 (33.8%)	43 (55.8%)	
Master degree or above	1 (7.7%)	7 (33.8%)	5 (38.9%)	
Practice status				0.32
Solo private practice	9 (13.8%)	24 (36.9%)	32 (49.2%)	
Group private practice	3 (7.7%)	13 (28.3%)	21 (53.8%)	
Government or NGO-funded	2 (9.1%)	5 (22.7%)	15 (68.2%)	
Years of practice mean ± SD	11.8 ± 10.4	14.7 ± 10.8	9.3 ± 8.9	0.019
Annual number of cancer patients treated				0.90
1 - 5	6 (12.5%)	16 (33.3%)	26 (54.2%)	
6 - 10	1 (3.6%)	11 (39.3%)	16 (57.1%)	
11 - 50	6 (16.7%)	12 (33.3%)	18 (50.0%)	
> 50	1 (7.1%)	5 (35.7%)	8 (57.1%)	

Note: HDI herb-drug interaction; NGO: non-governmental organization; SD: standard deviation; TCM: traditional Chinese medicine.
*The research is supported by Hong Kong SAR Chinese Medicine Development Fund 2003-000A_R1.

Conclusions

The use of Western-Chinese integrative approaches is common in Hong Kong. However, TCM practitioners, particularly those who are younger/less experienced, face barriers in accessing HDI information. Future efforts should prioritize developing and disseminating user-friendly HDI guidelines, and supporting its implementation in clinical practice.

MUCOS-002 MAKING THE GRADE: IMPLEMENTATION OF A NURSE-DRIVEN PROGRAM FOR ORAL MUCOSITIS GRADING

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Introduction

Oral mucositis is a common debilitating adverse event of hematopoietic stem cell transplant (HSCT); severe mucositis correlates with total parental nutrition use, opioid use, sepsis, and longer length of stay. The National Cancer Institute has created standardized grading for oral mucositis through the Common Terminology Criteria for Adverse Events (CTCAE) that allows for quantification to improve supportive care. Nurses, as clinicians who perform physical assessments and are intimately familiar with data about patients' pain and oral intake required for CTCAE scoring, are poised to perform this assessment. The SMARTIE aim of this initiative was to improve oral mucositis grading documentation in patients admitted for HSCT from 0.05% to 50% utilizing a new nurse-driven process by December 31, 2025.

Methods

Our quality improvement initiative was performed with patients admitted for HSCT at a 51-bed inpatient pediatric oncology unit at our large, urban academic hospital. Our team included physicians, nurses, and a dentist. Plan-do-study-act (PDSA) cycles were performed to address key drivers: role clarity, logistical barriers, educational gaps, and a standardized measurement. CTCAE oral mucositis scoring was embedded within nursing flowsheets in the electronic health record. Our primary outcome measure was the proportion of oral mucositis cases assigned a grade out of all mucositis cases.

Results

An informational program about oral mucositis was created with multidisciplinary input and given to 87.5% (n=84) of HSCT nurses. During the initial PDSA cycle, 25 patients were included who were admitted for HSCT. Of those with oral mucositis documented, 94.7% had an associated grade. Future PDSA cycles will focus on assessing the accuracy of oral mucositis grading, assessing balancing measures related to changes in nursing workload, and sustaining this novel process.

Conclusions

By utilizing quality improvement strategies, we built a novel process that leverages nurses' expertise of their own patients to quantify an important adverse event in pediatric oncology.

MUCOS-004 LAPATINIB-INDUCED ALTERATIONS IN INTESTINAL BARRIER FUNCTION IN A CACO-2 MONOLAYER MODEL

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Introduction

Lapatinib, a dual ErbB1/ErbB2 tyrosine kinase inhibitor (TKI), is an effective therapy for solid tumours but is often associated with diarrhoea, which can negatively impact quality of life and treatment adherence. Increasing evidence suggests that TKI-induced diarrhoea is partly mediated by disruption of intestinal epithelial tight junctions, leading to increased paracellular permeability. This study aimed to investigate the effect of lapatinib on intestinal barrier integrity using an *in vitro* epithelial model.

Methods

Caco-2 cell viability was evaluated using a WST-based assay at 24, 48, 72 and 96 h to optimise Triton X-100 concentrations (0.5-10%) as a barrier-disrupting positive control and to compare their effects with lapatinib treatment (28 µM). Differentiated Caco-2 monolayers with transepithelial electrical resistance (TEER) values >800 Ω·cm² were treated apically with lapatinib (28 µM) or Triton X-100 (1-10%). TEER measurements were recorded at baseline and after 24, 48, 72 and 96 h to assess barrier integrity. Paracellular permeability was assessed using Lucifer yellow transport across transwell-grown monolayers at corresponding timepoints, quantified by UV spectroscopy. Experiments were conducted in triplicate and independently repeated three times.

Results

At 28 µM, lapatinib reduced Caco-2 cell viability to approximately 50% at 96 h, indicating partial growth inhibition, whereas Triton X-100 (10%) reduced viability to below 50%. Lapatinib reduced TEER at 48 h (2916 ± 373 Ω·cm²) and 96 h (1496 ± 282 Ω·cm²) and increased paracellular permeability, with a 3.42 ± 0.79% increase in Lucifer yellow transport at 96 h compared with untreated monolayers. These effects were less pronounced than those observed with 10% Triton X-100.

Conclusions

Lapatinib induced partial epithelial growth inhibition and impaired intestinal barrier integrity, evidenced by reduced TEER and increased paracellular permeability in an *in vitro* Caco-2 model. These findings support epithelial barrier disruption as a contributing mechanism underlying lapatinib-associated diarrhoea.

MUCOS-005 VITAMIN D DEFICIENCY EXACERBATES CHEMOTHERAPY-INDUCED GASTROINTESTINAL MUCOSITIS: PROTECTIVE EFFECTS OF 25(OH)D AND VD1-6 IN THE DUODENUM AND COLON

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Introduction

Gastrointestinal mucositis (GM) is a severe, dose-limiting toxic intestinal complication to cancer treatments, such as chemotherapy (CT),

leading to treatment delays/reductions, impacting survival. Vitamin (Vit)D deficiency is associated with cancer incidence, and inflammatory GI conditions. We aimed to investigate the effect of VitD deficiency on GM in mice.

Methods

Male C57BL/6 mice were maintained on either a VitD-replete (1000 IU/kg) or VitD-deficient (0 IU/kg) diet for five weeks. Mice received daily subcutaneous injections of 25-hydroxyvitamin D (25(OH)D; 6.25 mg/kg), VD1-6 (500 ng/kg), both agents, or vehicle control. On day five, 5-fluorouracil (5-FU) (300 mg/kg) or saline was administered intraperitoneally. Tissues were collected 48 hours post-CT for histological and molecular analysis.

Results

VitD deficiency significantly reduced epithelial proliferation ($p < 0.01$) and crypt architecture ($p < 0.05$) in both the duodenum and colon. In the duodenum, 5-FU induced villus atrophy and crypt loss ($p < 0.001$), which were more pronounced in VitD-deficient mice. Treatment with 25(OH)D and/or VD1-6 significantly preserved crypt depth ($p < 0.01$) and enhanced epithelial regeneration ($p < 0.01$), though villus height remained significantly reduced across all 5-FU-treated groups ($p > 0.05$). In the colon, VitD deficiency worsened 5-FU-induced crypt damage, goblet cell cavitation, and reduced proliferation ($p < 0.01$). Treatment with 25(OH)D and/or VD1-6 preserved crypt structure ($p < 0.01$), maintained Ki-67+ cell counts ($p < 0.01$), and normalised tight junction gene expression (ZO-1, claudin-3; $p < 0.05$). Downregulation of TLR4, NF- κ B, and VDR by 5-FU was significantly prevented by VitD therapies ($p < 0.05$ – 0.01), with combination therapy showing additive benefit.

Conclusions

VitD deficiency exacerbates CT-induced GM in both the duodenum and colon. While villus height was not restored, VitD-related treatments show potential to alleviate GM. These findings support further evaluation of VitD pathway interventions to mitigate CT-associated intestinal toxicity and improve cancer treatment outcomes.

MUCOS-006

EFFECTS OF LAPATINIB ON BIFIDOBACTERIUM BIFIDUM AND INTESTINAL EPITHELIAL BARRIER FUNCTION IN A CACO-2 CO-CULTURE MODEL

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Introduction

Lapatinib (LAP), a tyrosine kinase inhibitor used in ErbB2-positive breast cancer, is commonly associated with gastrointestinal toxicity, with diarrhoea reported in up to 78% of patients. Increasing evidence suggests that gut microbiota alterations, particularly reduced *Bifidobacterium spp.*, may contribute to this effect, although the mechanisms remain unclear. This study developed an *in vitro* co-culture model using Caco-2 cells and *Bifidobacterium bifidum* (BB) to investigate the effects of LAP on epithelial and bacterial viability, bacterial adhesion, and intestinal barrier integrity, assessed by transepithelial electrical resistance (TEER).

Methods

BB morphology was confirmed by Gram staining and scanning electron microscopy. Differentiated Caco-2 monolayers were co-cultured with varying BB concentrations and treated with LAP. Caco-2 cell viability was assessed using the MTS assay, BB viability using a bacterial viability assay, and bacterial adhesion by colony-forming unit (CFU) enumeration. Barrier integrity was evaluated by measuring TEER in Caco-2 monolayers cultured on Transwell inserts.

Results

LAP reduced Caco-2 cell viability across all BB concentrations ($p > 0.05$). Notably, a higher BB concentration (1×10^8 CFU/ml) improved cell viability ($86.60\% \pm 2.73$) compared with a lower concentration (1×10^7 CFU/ml, $62.68\% \pm 1.98$), suggesting a supportive effect on epithelial survival. BB growth was initially inhibited by LAP but recovered by 96 h, reaching $115.66\% \pm 6.25$. Viable BB remained adherent to Caco-2 cells following treatment, indicating sustained host-bacteria interactions. TEER was significantly lower in the Caco-2+BB+LAP group compared with the untreated Caco-2+BB group ($p < 0.001$), while Caco-2+BB exhibited significantly higher TEER compared with LAP-treated monolayers ($p < 0.05$).

Conclusions

Lapatinib impairs intestinal epithelial viability and barrier function while temporarily affecting *Bifidobacterium bifidum* growth. Although *Bifidobacterium bifidum* supports epithelial survival and maintains bacterial adhesion, it does not fully preserve epithelial barrier integrity following lapatinib exposure, highlighting the involvement of both epithelial and microbiota-associated mechanisms in lapatinib-induced gut toxicity.

MUCOS-008

PROLONGED ICE CREAM-BASED ORAL CRYOTHERAPY IN REDUCING SEVERE ORAL MUCOSITIS AND SUPPORTIVE CARE NEEDS AFTER HIGH-DOSE MELPHALAN IN ASCT

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Introduction

Oral mucositis is a major toxicity of high dose melphalan conditioning in autologous stem cell transplantation (ASCT), leading to severe pain, infections, prolonged hospitalization, increased total parenteral nutrition (TPN) use, and higher treatment costs. Oral cryotherapy decreases mucosal chemotherapy exposure through local vasoconstriction. While ice chips are traditionally used, their poor palatability limits adherence. Ice cream offers a more acceptable alternative, potentially improving compliance during prolonged melphalan infusion.

Methods

This retrospective observational study included 30 patients who underwent ASCT with high-dose melphalan at a regional cancer center. Cryotherapy consisted of patient-preferred ice cream administered 15–30 minutes before, during, and 40–60 minutes after melphalan infusion. Oral mucositis was graded using the WHO scale. Outcomes assessed included mucositis incidence, severity, duration, TPN requirements, opioid use, and cost impact. Cost analysis was performed by calculating direct expenditure related to: (1) TPN days avoided, based on institutional per-day TPN cost; (2) opioid consumption, using mean cost of transdermal patches; and (3) reduction in hospitalization days, using standard per-day inpatient charges. Net cost savings per patient were estimated by comparing observed supportive-care utilization with expected utilization derived from historical cohorts without cryotherapy.

Results

No patient developed severe (grade 3/4) mucositis. Severity distribution was 20% grade 0, approximately 30% grade 1, and 47% grade 2. Median onset occurred on day +4, with median duration of 6 days and resolution by day +10. Six patients (20%) required TPN for a mean of 3.5 days (range 1–8). Eleven patients required opioids, all via transdermal patches; none required intravenous opioids. Cost modeling estimated mean savings of ~₹75,000 per patient due to reduced TPN use, lower opioid requirements, and decreased hospitalization days.

Conclusions

Prolonged ice-cream-based cryotherapy eliminated severe mucositis, reduced supportive-care needs, and produced significant cost savings.

This simple, well-tolerated intervention is highly suitable for resource-limited transplant settings.

MUCOS-011

DAILY LED-BASED PHOTOBIMODULATION AS SUPPORTIVE CARE TO REDUCE FEEDING TUBE PLACEMENT DURING IMRT IN HEAD AND NECK CANCER PATIENTS

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Introduction

Oral mucositis (OM) is a common, debilitating, and costly toxicity of head and neck cancer treatment that can impair nutrition, cause weight loss, and lead to treatment interruptions. Feeding tubes are often placed in high-risk patients to maintain nutrition but are associated with complications, prolonged dependence, and increased healthcare utilization. This analysis evaluated whether daily photobiomodulation (PBM) therapy could reduce OM severity and need for feeding tube placement.

Methods

This analysis used data from a previously completed prospective, randomized (1:1), double-blind, sham-controlled trial (NCT03972527) across 12 U.S. cancer centers. Patients with head and neck cancer received intensity-modulated radiation therapy (IMRT) over 6–8 weeks, with or without concurrent chemotherapy, and daily 10-minute intraoral LED-based PBM or sham treatment prior to radiation therapy. This retrospective subgroup analysis included only patients who initiated treatment without a feeding tube. OM severity, patient-reported symptoms, feeding tube placement, and safety were assessed from treatment initiation through 2-weeks post-treatment.

Results

Sixty patients initiated IMRT without a feeding tube (PBM, n=33; sham, n=27). PBM treatment significantly reduced severe OM (WHO Grade ≥3) incidence from IMRT initiation through two-weeks post-treatment (33% vs. 65%; p=0.0187), duration from IMRT initiation through two-weeks post-treatment (13% vs. 26%; p=0.029), and incidence at 2 weeks post-treatment (9% vs. 38%; p=0.0116). After six weeks of IMRT, PBM-treated patients reported greater taste preservation (59% vs. 30%; p=0.0355) and smaller increases in oral and throat pain (all p≤0.003). Feeding tube placement during IMRT was reduced in the PBM group (15.2% vs. 37%; p=0.073), with no OM-related cancer treatment interruptions. No device-related adverse events occurred and PBM treatment was well-tolerated (>99% tolerability).

Conclusions

Intraoral LED-based PBM therapy reduced OM severity, symptom burden, and need for feeding tube placement in patients undergoing IMRT. PBM may represent a safe and effective alternative to prophylactic feeding tube placement in selected patients.

MUCOS-013

COMPARATIVE ORAL TOXICITY OF PROTON THERAPY AND INTENSITY MODULATED RADIATION THERAPY IN HEAD AND NECK SQUAMOUS CELL CARCINOMA

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Introduction

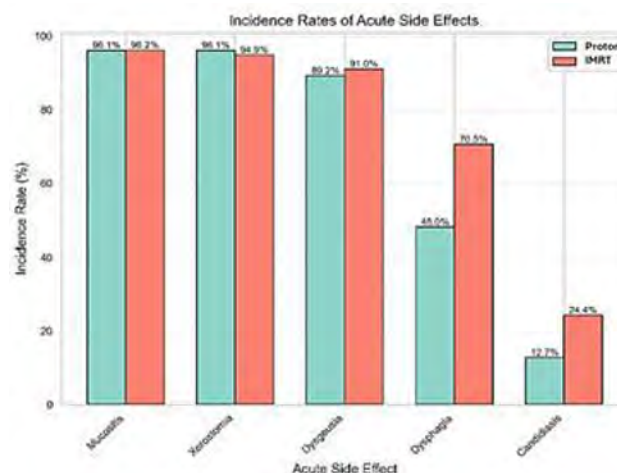
Proton therapy (PT) offers dosimetric advantages over photon-based radiation for head and neck cancer (HNC), but comparative oral toxicity data remain limited. This study compared acute and late oral toxicities between PT and intensity modulated radiation therapy (IMRT) in patients with HNC.

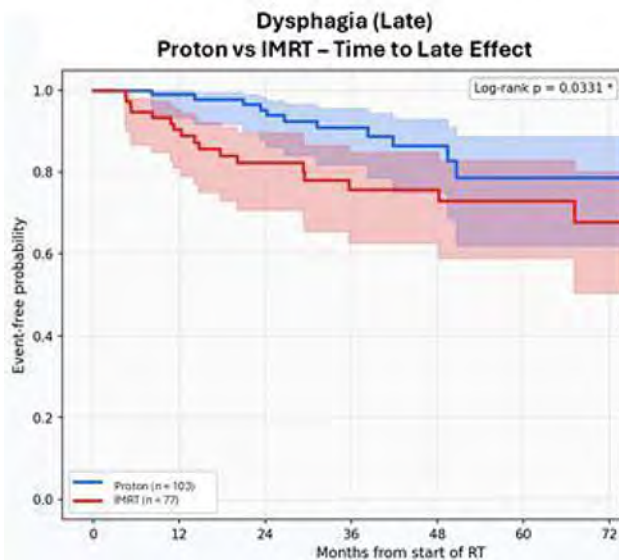
Methods

We retrospectively analyzed 180 patients (102 PT, 78 IMRT) treated with definitive or adjuvant radiotherapy between 2018-2025. Demographics and tumor characteristics were collected. Acute and late toxicities were graded using CTCAE v5.0 criteria.

Results

While overall rates of any-grade mucositis (96.1% vs 96.2%), xerostomia (96.1% vs 94.9%), and dysgeusia (89.2% vs 91.0%) were similar between PT and IMRT (Figure 1), IMRT was associated with significantly higher rates of acute dysphagia (70.5% vs 48.0%, p=0.004) and grade 3 dysphagia (14.1% vs 2.9%, p=0.013). The median time to first acute oral toxicity (mucositis, xerostomia, dysgeusia, and dysphagia) were similar in the two groups (all p>0.05). Among patients who developed grade 3 mucositis, duration until resolution was similar between PT and IMRT (median 15.5 vs 12.0 days; p=0.567). Feeding tube placement was higher in the IMRT group (17.9% vs 2.9%, p=0.002). On multivariable analysis, IMRT independently predicted acute dysphagia (OR 3.04, 95% CI 1.55-5.95, p=0.001). Late oral toxicity profiles were comparable between modalities, with no significant differences in xerostomia (73.1% vs 69.6%), dysgeusia (30.8% vs 19.6%), or dysphagia (23.1% vs 12.7%). Time-to-event analysis showed statistically significant differences only for late dysphagia (log-rank p=0.033) (Figure 2). Oncologic outcomes showed no significant differences in survival or recurrence rates between PT and IMRT.





Conclusions

PT demonstrated significantly reduced acute dysphagia and feeding tube dependence compared to IMRT while maintaining comparable disease control and late oral toxicity profiles. Prospective studies with longer follow-up are needed to validate these results and assess cost-effectiveness.

MUCOS-014

CONDITIONING REGIMENS INFLUENCE ORAL MUCOSITIS IN CORD BLOOD TRANSPLANTATION WITHOUT METHOTREXATE: CONSISTENT WITH PTCY HAPLOIDENTICAL TRANSPLANTATION

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Introduction

Oral mucositis is a frequent complication of hematopoietic stem cell transplantation that adversely affects quality of life and supportive care needs. Although conditioning regimens may influence mucosal toxicity, their specific contribution remains uncertain. We previously reported that busulfan (Bu) dose-dependently exacerbates oral mucositis in post-transplant cyclophosphamide (PTCy) haploidentical transplantation, whereas the impact of low-dose melphalan (Mel) appears limited (Ogura et al., Support Care Cancer 2025). Because methotrexate (MTX), a known contributor to mucosal toxicity, is not used in this setting, the direct effects of conditioning regimens can be more clearly evaluated. We investigated whether similar regimen-related differences occur in cord blood transplantation (CBT) without post-transplant MTX.

Methods

We retrospectively analyzed 33 patients who underwent CBT between January 2021 and December 2025. GVHD prophylaxis consisted of tacrolimus and mycophenolate mofetil without MTX. Conditioning regimens were: (1) fludarabine/Bu4/Mel80 (n = 17), (2) fludarabine/Bu4/total body irradiation (TBI) 4 Gy (n = 7), and (3) fludarabine/Mel80–100/TBI 4 Gy (n = 9). Oral cryotherapy was performed during

Mel administration. Oral mucositis was assessed from day –7 to day 20 using CTCAE version 3.0 (clinical exam).

Results

Ulcerative oral mucositis (Grade ≥ 2) occurred in 29.4% of group 1, 85.7% of group 2, and 0% of group 3, with a significant difference between groups 2 and 3 ($P < 0.05$). Severe mucositis (Grade ≥ 3) occurred only in group 2 (71.4%) ($P < 0.05$). These findings indicate that Bu4 combined with TBI substantially increases mucosal toxicity in CBT without MTX, consistent with our previous findings in PTCy haploidentical transplantation.

Conclusions

Bu-containing conditioning regimens, particularly with TBI, may increase the risk of oral mucositis in CBT without MTX and may help identify patients who would benefit from intensified oral supportive care.

MUCOS-019

EFFICACY OF TRANSDERMAL BUPRENORPHINE FOR ORAL MUCOSITIS PAIN IN POSTOP ORAL CANCER PATIENTS ON RADIOTHERAPY WITH OR W/O CHEMOTHERAPY: A PILOT STUDY

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Introduction

Pain from radiation-induced oral mucositis (OM) is a major issue in patients with oral cavity cancers (OCC) receiving post-operative radiotherapy (PORT), with or without concurrent chemotherapy and poorly controlled pain can worsen outcomes. Transdermal buprenorphine (Td-BN) is underused among analgesics. This study assesses the safety and pain-relief effectiveness of Td-BN for OM pain in OCC patients undergoing PORT.

Methods

This pilot study enrolled 50 opioid-naïve OCC patients receiving PORT who had inadequate pain relief from non-opioid/topical treatments, CTCAE v4.0 oral mucositis grade ≥ 2 , and a VAS pain score $\geq 4/10$. Baseline ECGs were done for QTc, and patients received structured Td-BN counselling. Treatment began with Td-BN 10 mcg/h plus rescue paracetamol (650 mg QID) with/without tramadol (50 mg 2–4 times daily). Td-BN could be increased every 72 hours to 15 mcg/h and up to 20 mcg/h based on response. Pain (VAS and CTCAE) was measured twice weekly; sedation, respiration, QTc, oral intake, and weight were monitored weekly.

Results

Median age was 52 years (34–62) with male predominance (42:8). Tumour subsites were oral tongue (56%), buccal mucosa (36%), and alveolus (8%). Median PORT dose was 60 Gy (56–66), and 28% had weekly cisplatin. At Td-BN start, 43% had grade 2 and 57% grade 3 mucositis, with 38% and 62% reporting corresponding pain. Median baseline VAS was 7 (6–9). After Td-BN, pain improved on VAS and CTCAE, with 74% achieving VAS $< 5/10$. Dose increases to 15 mcg/h and 20 mcg/h were needed in 22% and 16%. Mild sedation, nausea, and constipation were rare ($< 10\%$), and no significant QTc prolongation occurred.

Conclusions

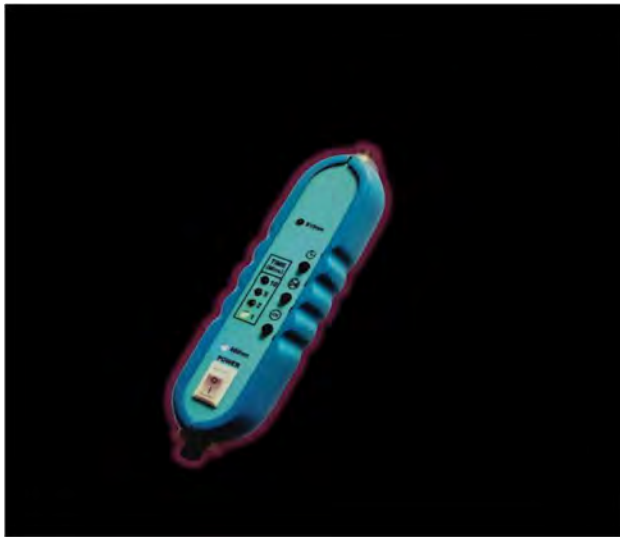
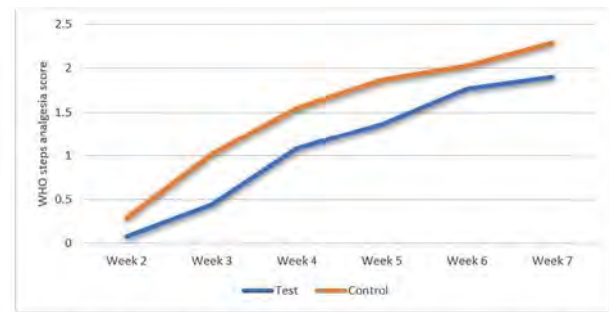
Transdermal buprenorphine provided effective and sustained analgesia for radiation-induced OM pain in patients with OCC undergoing PORT, with a favourable safety profile and minimal systemic toxicity. These findings support its use as a practical opioid strategy when oral analgesic administration is limited.

MUCOS-020**LIGHT AGAINST PAIN: PHOTOBIOMODULATION REDUCES MUCOSITIS-RELATED PAIN DURING RADIOTHERAPY FOR ORAL CAVITY CANCER****Swaroop Madhuri Rath**, Siddhartha Nanda*All India institute of medical sciences, Department of Radiation Oncology, Raipur***Introduction**

Pain due to radiation-induced oral mucositis is a major cause of morbidity in patients receiving radiotherapy for oral cavity squamous cell carcinoma (SCC), often necessitating escalating analgesic use and treatment interruptions. Photobiomodulation (PBM) has demonstrated anti-inflammatory and analgesic effects, but its role in reducing pain intensity during radiotherapy remains under-evaluated in routine clinical practice.

Methods

Eighty-two patients with histologically confirmed oral cavity SCC planned for adjuvant or radical radiotherapy (60–70 Gy) were randomized into two groups: PBM with standard conservative management (n=41) and standard conservative management alone (n=41). PBM was initiated after the appearance of grade 2 mucositis and delivered five days per week until completion of radiotherapy. Pain was assessed weekly using a visual analog scale. The analgesic requirement was compared according to their use, as per the WHO stepwise analgesic ladder. Treatment interruptions were documented. Statistical analysis was performed using the Mann–Whitney U test.

**Results**

▲ Figure : Comparison of WHO steps analgesia between the laser and the placebo

Pain scores were comparable between groups during weeks 1 and 2. From week 3 onwards, the PBM group demonstrated significantly lower pain scores compared to controls at weeks 3 (3.59 ± 0.95 vs 4.32 ± 1.08 ; $p=0.002$), week 4 (4.37 ± 1.18 vs 4.88 ± 1.20 ; $p=0.046$), week 6 (5.28 ± 1.20 vs 5.97 ± 1.05 ; $p=0.01$), and week 7 (5.52 ± 1.33 vs 6.76 ± 1.48 ; $p=0.016$). Analgesic requirements were significantly lower in the PBM group across most weeks, with reduced WHO step escalation from week 2 to week 7 ($p < 0.05$). Radiotherapy interruptions were fewer in the PBM group (12.2% vs 29.3%), although this did not reach statistical significance ($p=0.057$).

Conclusions

Photobiomodulation significantly reduces pain intensity during peak mucositis and lowers analgesic requirements in patients undergoing radiotherapy for oral cavity cancer. PBM offers a safe, non-invasive, analgesic-sparing supportive care strategy that improves treatment tolerance and continuity.

MUCOS-021**DRUG REPURPOSING OF REBAMIPIDE TO MANAGE IMMUNOTHERAPY-INDUCED MUCOSAL TOXICITIES: A CASE REPORT****Rahul Ravind**, Varun Rajan*Medical Trust Hospital***Introduction**

Oral mucositis (OM) is a painful complication of cancer therapy, with an incidence of 22.9–89.7%. According to MASCC/ISOO guidelines, benzydamine hydrochloride mouthwash is the only intervention with level II evidence for preventing radiotherapy or chemoradiotherapy induced OM. Rebamipide, a quinolinone derivative used for gastritis and ulcers, has shown efficacy in OM. It provides mucosal protection through anti-inflammatory, antioxidant, and immunomodulatory effects—reducing cytokine production, enhancing epithelial integrity, increasing prostaglandin synthesis and mucosal blood flow, stimulating mucus secretion, and scavenging free radicals—thereby strengthening mucosal defense and modulating immune responses in therapy-induced mucosal injury. Herein, we present a case where rebamipide was repurposed into a dispersible oral formulation for the treatment of immunotherapy-induced OM.

Methods

We present a case of a 50-year-old woman with early-stage triple-negative breast cancer completed neoadjuvant chemoimmunotherapy, surgery, adjuvant radiotherapy, and one year of pembrolizumab. Two weeks after completing therapy, she developed severe oral mucositis and esophagitis, confirmed by endoscopy and biopsy. novel dispersible formulation of rebamipide was developed using Kyron T-114 for taste masking, microcrystalline cellulose powder, film coating pre

mix with hydroxy propyl methyl cellulose for rapid disintegration, with isopropyl alcohol and methylene dichloride as coating solvents.

Results

The patient showed a suboptimal response to corticosteroid therapy. Subsequently, she was initiated on a dispersible oral formulation of Rebamipide 100 mg, administered three times daily. Remarkably, her odynophagia improved within three days, and she achieved complete resolution of symptoms within two weeks, suggesting a potential therapeutic role for Rebamipide in managing immunotherapy-induced mucosal toxicity.

Conclusions

This case demonstrates the potential efficacy of a novel dispersible rebamipide formulation in managing immunotherapy-induced oral mucositis and esophagitis. The rapid and complete symptom resolution supports its mucosal protective role and serves as a proof of concept for conducting larger prospective clinical trials to validate its therapeutic benefits in this setting.

MUCOS-022

THERAPEUTIC POTENTIAL OF VITAMIN D TREATMENTS ON MUCIN SECRETION IN CHEMOTHERAPY-INDUCED GASTROINTESTINAL MUCOSITIS

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Introduction

Mucositis is a debilitating side effect of cancer treatment, marked by inflammation and ulceration of mucosal tissues, significantly impairing quality of life. Goblet cells are specialised intestinal epithelial cells that secrete mucins, forming a protective mucus layer. Emerging evidence suggests that vitamin D, through immunomodulatory and barrier-protective effects, may enhance mucosal repair, support goblet cell function, and mitigate gastrointestinal injury during chemotherapy. We investigated effects of vitamin D therapies on goblet cells and mucins following chemotherapy.

Methods

Seven-week-old male C57Bl6 mice were fed a 0.2% calcium diet and gavaged daily for seven days with either control (0.5% Carboxymethylcellulose), 1,25(OH)2D3 (active vitamin D; 50pg/gBW), 19-nor-dihydroxy-vitamin D2 (Paricalcitol; 1000pg/gBW), or VD1-6 (CYP24A1 inhibitor; 500ng/gBW) either alone or in combination with 1,25(OH)2D3 or 19-nor-dihydroxyvitamin D2. On day 5, mice received 5-FU intraperitoneally. Mice were humanely killed 48 hours following 5-FU, and colon tissue was collected for histology. Alcian blue/PAS staining was used to assess mucin content in goblet cells of the ascending colon. Intact and cavitated (representing recent mucin exocytosis) goblet cells were counted across 15 crypts/section, and expressed per µm of crypt perimeter.

Results

Total goblet cell numbers per crypt did not differ between treatment groups. However, 5-FU significantly increased the total number and percentage of cavitated goblet cells compared with saline controls ($p < 0.05$), indicating enhanced and dysregulated mucin release or goblet cell degranulation. All vitamin D treatments (calcitriol, paricalcitol, and VD1-6) significantly reduced (all $p < 0.0001$) the number and proportion of cavitated goblet cells in 5-FU-treated mice compared with the 5-FU control group.

Conclusions

Vitamin D-based treatments attenuated 5-FU-induced goblet cell cavitation, suggesting partial preservation of goblet cell integrity and mucosal barrier function, supporting further investigation of secretory regulation pathways in goblet cells and vitamin D signalling pathways during chemotherapy-induced mucositis to promote protective function.

MUCOS-025

MAPPING THE RESEARCH LANDSCAPE OF TARGETED THERAPY-GUT MICROBIOTA INTERACTIONS: A BIBLIOMETRIC ANALYSIS OF MECHANISTIC AND TRANSLATIONAL THEMES

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Introduction

Targeted anticancer therapies have been linked to changes in the gut microbiota, which may affect gastrointestinal side effects and supportive care. However, how research in this area has evolved and clustered over time remains unclear. This study aimed to map research on targeted therapy-gut microbiota interactions and to identify current research trends as well as emerging directions in this field.

Methods

A descriptive bibliometric analysis was carried out using the Scopus database. English-language original articles and reviews related to targeted therapies and the gut microbiota were included. Bibliographic data from 115 publications were analysed using VOSviewer to examine publication trends, bibliographic coupling and keyword co-occurrence. Overlay visualisation was used to assess changes in research focus over time.

Results

Bibliographic coupling analysis identified eight distinct clusters, indicating that the literature is distributed across several research groups studied in isolation. These clusters covered clinical characterisation of gastrointestinal toxicities, gut microbiota research, preclinical and mechanistic studies, supportive care approaches, descriptive microbiota profiling, translational studies, review-based literature and emerging exploratory research. Keyword co-occurrence analysis revealed five major thematic clusters. Current research trends were predominantly focused on clinical reporting of diarrhoea and descriptive analyses of microbiota changes. In contrast, emerging trends showed increasing emphasis on microbiota-related mechanisms, intestinal barrier function, preclinical and translational models, microbiota-modulating interventions and early exploration of biomarkers.

Conclusions

Research on targeted therapy gut microbiota interactions has expanded but remains fragmented across multiple thematic areas. While existing studies largely describe clinical toxicities and microbiota alterations, recent trends suggest a shift toward mechanistic and translational research. These findings highlight opportunities for developing future supportive care strategies that integrate gut microbiota biology and intestinal barrier function to improve the management of targeted therapy-associated gastrointestinal toxicities.

MUCOS-026

STREPTOCOCCUS DENTISANI ALLEVIATES SEVERE RADIATION INDUCED ORAL MUCOSITIS IN RATS

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Introduction

The burden of OM remains profound and multifaceted, affecting almost 100% of HNC patients undergoing radiotherapy. With a

growing understanding of the role the oral microbiome plays in the pathogenesis of (OM), its manipulation continues to gain interest as a viable therapeutic approach. *Streptococcus (S.) dentisani*, a novel species of bacteria commonly found in the dental plaque of cavity-free individuals, has been shown to displace known oral pathogens, and reduce inflammation in the oral cavity, therefore exposing it as promising candidate in the context of OM. The aim of this study was to determine the mucoprotective potency of *S. dentisani* in a preclinical rat model of OM.

Methods

Sprague Dawley rats (N=9/group, 4:1 M:F) were treated with 20 Gy x-ray radiation (Rx) delivered directly to the snout, with or without twice daily oral application of inactivated *S. dentisani* (Figure 1). OM severity and animal welfare (body weight/composition using echoMRI) were assessed daily and mucosal tissue was collected at days 10 (peak OM) and 21 (complete OM recovery) post radiation for assessment of tissue injury and inflammatory markers. 16s rRNA sequencing will be used to define *S. dentisani* colonisation and associated microbiome dynamics.

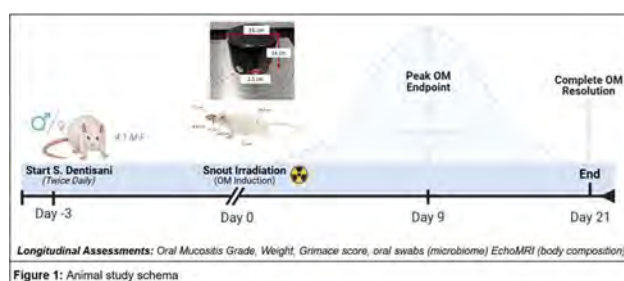


Figure 1: Animal study schema

Results

OM peaked at day 10 post Rx, with *S. dentisani* significantly reducing the overall severity of OM and accelerating its recovery ($P < 0.05$). Similarly, *S. dentisani* significantly reduced the duration of severe (Grade III+) OM compared with vehicle control (0.56 days and 3.13 days respectively; $p = 0.0003$). No differences in body weight or composition were identified between the groups. Histopathological assessments of the oral mucosa and 16s rRNA sequencing are ongoing, with anticipated results by June 2026.

Conclusions

S. dentisani protects the oral mucosal from radiation-induced damage, and thus represents a viable probiotic candidate in reducing the burden of OM. We now aim to optimise its dosing schedule to enhance mucoprotective efficacy.

MUCOS-027

STAKEHOLDER PERSPECTIVES ON EMBEDDING RISK PREDICTION TOOLS IN CANCER CARE: AN INTERNATIONAL SURVEY OF HEALTHCARE PROFESSIONALS AND PATIENTS

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Introduction

Prediction of cancer treatment-related toxicities has the potential to improve anticipatory supportive care; however, real-world perspectives on such predictive tools among healthcare professionals and patients remain limited. This study examined global attitudes, experiences, and priorities regarding cancer toxicity risk prediction, with a particular focus on mucositis.

Methods

An international cross-sectional survey was conducted among healthcare professionals and patients/care partners, via the MASCC SurveyMonkey platform. Data captured clinical experience, awareness, and use of predictive tools, perceived value of toxicity prediction, priorities for specific side effects, and preferences for communication and decision-making.

Results

In total, 302 healthcare professionals and 84 patients/care partners participated. Professionals were globally represented, highly experienced, and largely academic, while patients reported substantial treatment and symptom burden. Both groups strongly valued predicting treatment-related toxicities, but priorities differed: professionals emphasized oral mucositis and pain, whereas patients prioritized fatigue, pain, neuropathy, and cognitive effects, with many viewing all toxicities as equally important. Predicting mucositis risk was expected to change practice for 79% of professionals; 39% would consider dose reduction in high-risk patients, while 55% of patients would not want treatment changes. Half of professionals felt some patients would not cope well with knowing their risk, yet only 20% of patients anticipated increased worry. Shared decision-making was strongly supported, with professionals anticipating the use of predictive information to guide collaborative care and patients preferring face-to-face discussions. Despite high perceived value, awareness (44%), and use (31%) of toxicity prediction tools among professionals were low, highlighting a gap between perceived need and implementation.

Conclusions

Both healthcare professionals and patients view toxicity risk prediction as highly valuable. However, differing priorities and limited clinical uptake highlight the need for patient-centered, implementable predictive tools that facilitate shared decision-making in routine oncology care.

MUCOS-028

INTERNATIONAL ADAPTATION OF AN ORAL CARE EDUCATION PROGRAM FOR PHARMACISTS: A QUESTIONNAIRE-BASED STUDY IN FRANCE

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Introduction

A pharmacist-led oral care education program developed in Japan has shown effectiveness in reducing oral mucositis in patients with head and neck cancer undergoing chemoradiotherapy. However, its external validity in international settings remains unverified. This study aimed

to adapt the program into French and assess its impact on the knowledge and attitudes of pharmacy-related professionals in France.

Methods

The program was delivered as a 45-minute session using 48 PowerPoint slides to 27 participants, including hospital pharmacists, pharmacy students, interns, and compounding technicians. A 14-item questionnaire was administered before and after the session. Each item was self-rated on a 0–10 scale. Changes in knowledge and attitudes regarding oral mucositis were analyzed.

Results

The response rate was 100% (27/27). Scores improved across all items post-intervention. Overall correct response rates for knowledge-related items increased from 37.4% to 73.1%. Notably, the item “Do you know the common sites where oral mucositis tends to occur?” increased from a mean score of 3 to 9, and “Are you able to recommend prescription medications for oral mucositis?” improved from 4 to 8. Meanwhile, items on attitudes toward oral care, such as its necessity and participants’ interest in learning more, showed consistently high median scores (9–10) even before the session.

Conclusions

The French adaptation of the program effectively enhanced knowledge and sustained high levels of interest in oral care. These results highlight the global relevance of pharmacist education and support further international implementation, including the use of innovative tools such as virtual reality to enhance learning.

NEURO-001

RANDOMIZED DOUBLE-BLIND PLACEBO-CONTROLLED STUDY OF DULOXETINE IN PREVENTION OF ACUTE PAIN SYNDROME IN PATIENTS RECEIVING PACLITAXEL

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Introduction

Paclitaxel-associated acute pain syndrome (P-APS) is a common debilitating toxicity that adversely affects quality of life and there is no established preventive strategy. Duloxetine, effective in diabetic neuropathic pain, may attenuate nociceptive signaling and can prevent P-APS.

Methods

This is a randomized, double-blind, placebo-controlled trial conducted at two tertiary centers (AIIMS New Delhi and Tata Memorial Hospital, Mumbai). Breast cancer patients receiving paclitaxel (175 mg/m²), with or without carboplatin, in the adjuvant or neoadjuvant setting were randomized 1:1 (N=205) to oral duloxetine 30 mg at bedtime or a matched placebo from day 1–7 for four cycles. The primary endpoint was the incidence and duration of P-APS across cycles C1–C4 assessed using the Brief Pain Inventory–Short Form (BPI-SF). Peripheral neuropathy assessed by EORTC QLQ-CIPN20 and nerve conduction study (NCS) at baseline and at end of study were key secondary endpoints.

Results

From January to November 2025, 205 were randomized (duloxetine, 102; placebo, 103). Baseline characteristics were balanced between experimental and control groups (Table 1). Any grade acute pain occurred in 98.0% (100/102) and 99.0% (102/103) in duloxetine and placebo groups, respectively (P=0.56). Severe pain in any cycle was reported in 86.3% (88/102) and 83.5% (86/103), respectively (P=0.32). Median duration of acute pain across all cycles was similar between duloxetine and placebo (25 vs 24 days; P=0.56), as was the duration of severe pain (13 vs 9.5 days; p=0.36). Total CIPN scores (p=0.79) and sensory CIPN scores (p=0.82) did not differ between the two groups. There was no difference in peripheral neuropathy assessed by NCS in the two groups.

Table 1: Baseline Characteristics

Characteristic	Duloxetine (n=102)	Placebo (n=103)	P value
Age, years			
Median (IQR)	45 (38–51)	45 (39.5–52)	0.57
Sex, n (%)			
Male	1 (1.0)	1 (1.0)	—
Female	101 (99.0)	102 (99.0)	—
ECOG performance status, n (%)			0.29
0	11 (10.8)	0	
1	92 (90.2)	92 (89.3)	
2	0	0	
Comorbidities, n (%)			
Diabetes mellitus	6 (5.9)	6 (5.8)	—
Hypertension	7 (6.9)	7 (6.8)	—
HbA1c, %			
Mean (95% CI)	5.87 (5.62–6.11)	6.10 (5.89–6.32)	0.26
Vitamin B12, pg/mL			
Median (IQR)	1060 (637–1484)	1150 (788–1512)	0.49
Body mass index, kg/m²			
Median (IQR)	24.2 (22.7–36.6)	26.4 (24.5–28.7)	0.09
Body surface area, m²			
Median (IQR)	1.5 (1.4–1.7)	1.6 (1.5–1.7)	0.38
Paclitaxel regimen, n (%)			
Monotherapy	85	85	0.87
Combination (with carboplatin)	18	18	
Prior anthracycline regimen, n (%)			
EC	97	101	0.24
AC	5	2	
Paclitaxel schedule, n (%)			
3-weekly	49	49	0.94
2-weekly	54	54	

Table 2: Outcomes

Outcome	Duloxetine (n = 102)	Placebo (n = 103)	P value
Acute pain syndrome (BPI-SF)			
Any pain in any cycle, n (%)	100 (98.0)	102 (99.0)	0.56
Duration of any pain across all cycles, median (IQR), days	25 (19–28)	24 (19–28)	0.56
Severe pain in any cycle, n (%)	88 (86.3)	86 (83.5)	0.32
Duration of severe pain across all cycles, median (IQR), days	13 (4–18.8)	9.5 (4–18.8)	0.36
Chemotherapy-induced peripheral neuropathy (EORTC CIPN-20)			
Total score change (C4 – baseline), median (IQR)	14.8 (3.7–33.3)	18.5 (3.7–33.3)	0.79
Sensory score change (C4 – baseline), median (IQR)	22.2 (3.7–42.6)	22.2 (7.4–42.6)	0.82
Motor score change (C4 – baseline), median (IQR)	14.3 (0–42.9)	14.3 (0–42.9)	0.81
Autonomic score change (C4 – baseline), median (IQR)	0 (–16.7–16.7)	0 (–8.3–16.7)	0.89

Conclusions

Duloxetine did not prevent paclitaxel-associated acute pain or neuropathy in patients with breast cancer. P-APS affects most patients receiving paclitaxel, and there is an urgent unmet need to explore P-APS preventative strategies.

NEURO-002

CHEMOTHERAPY ALTERS BRAIN ENDOCANNABINOID SYSTEM SIGNALLING IN A PRECLINICAL MODEL

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Introduction

The endocannabinoid system (ECS) is a complex signalling network that is increasingly implicated in the aetiology of many neuropsychological disorders. In line with this evidence base, we have previously identified changes in systemic ECS signalling in a cohort of women with chemotherapy-induced cognitive impairment. Whether these changes reflect in the central nervous system remains unclear. As such, we aimed to investigate if chemotherapy alters the ECS in the brain using a preclinical model.

Methods

Female C57BL/6 mice (12 weeks) were treated with a single intraperitoneal dose of 5-fluorouracil (5-FU; 400mg/kg) or vehicle control (VC). Mice were culled 1 day (N=20), 2 days (N=20) and 16 days (N=20) after treatment. Mice in the 16-day cohort were housed in Promethion metabolic cages 12 days after treatment for 4 days/ nights to monitor habitual behaviour. Expression levels of multiple target genes involved with the ECS were quantified in the hippocampus and prefrontal cortex using RT-PCR, including *Cnr1*, *Cnr2*, *Napepld*, *Faah*, *Dagla* and *Mgll*.

Results

Metabolic cage results demonstrated significant changes ($p < 0.001$) in body weight, sleep, movement, food intake, energy expenditure and respiratory exchange ratio, strongly suggesting systemic toxicity. *Napepld* ($p = 0.0022$), *Cnr1* ($p = 0.0077$), *Cnr2* ($p = 0.0106$), *Faah* ($p = 0.0009$), *Dagla* ($p = 0.0013$), and *Mgll* (0.0005) were all downregulated in the hippocampus at 1 day (*Napepld* only) and 2 days after 5-FU. Changes remained significant at 16 days for *Cnr1* ($p = 0.0014$), *Napepld* (0.0006), and *Mgll* ($p = 0.0007$) in the prefrontal cortex.

Conclusions

Chemotherapy causes dysregulation of ECS-associated genes in the hippocampus and prefrontal cortex, aligning with the development of metabolic and behavioural deficits. Together, these findings suggest that brain specific alternations in the ECS may contribute to the neuropsychological effects of chemotherapy and warrant further investigation to determine the causality of these observations.

NEURO-003

CHEMOTHERAPY-INDUCED COGNITIVE IMPAIRMENT AND ITS ASSOCIATION WITH ENDOCANNABINOID SYSTEM DYNAMICS IN BREAST CANCER

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Introduction

The endocannabinoid system (ECS) is a complex signalling network that is increasingly implicated in a variety of neuropsychological disorders, including impaired cognition. The role of the ECS in chemotherapy-induced cognitive impairment (CICI) remains unclear. As such, we aimed to explore ECS changes after chemotherapy and their association with perceived cognitive function and neurogenesis.

Methods

Treatment-naïve women with breast cancer (stage I-IV, N=55) were recruited across South Australia and cognition was longitudinally assessed using FACT-Cog. Cognitive impairment (CI) severity at each timepoint was scored from 0-4 using distribution-based thresholds derived from baseline FACT-Cog scores. Participants with a cumulative score ≥ 4 and CI at more than one timepoint were classified as CI; all others were classified as non-cognitively impaired (NCI). Circulating endocannabinoids (2-arachidonylglycerol, anandamide) and related metabolites (arachidonic acid, ethanolamine, linoleic acid, glycerol) were quantified by LC-MS, and brain-derived neurotrophic factor (BDNF) by ELISA. Temporal changes and associations were analysed using linear mixed-effects models accounting for repeated measures and adjusted for age and BMI.

Results

CICI was confirmed in the study cohort, indicated by a decline in FACT-Cog at each study time point ($p < 0.001$). 41.8% of the participants were categorised as cognitively impaired. Serum BDNF was significantly reduced indicating impaired neurogenesis ($p = 0.013$). Although the temporal dynamics of the ECS remained largely stable, their interaction with one another was disrupted and circulating AEA was significantly reduced ($p = 0.045$). When stratified by cognitive status, there were no significant differences between groups for circulating ECS components.

Conclusions

Although most metabolites remained stable over time, reductions in circulating BDNF and AEA during chemotherapy, and alterations in associations with one-another, suggest potential disruptions to neuroplasticity and endocannabinoid signalling. These observations highlight the importance of further investigation of brain-specific ECS alternations to better understand the causal basis of these observations, and the potential for therapeutic exploitation.

NEURO-004

NEUROTOXICITY OF IMMUNE CHECKPOINT INHIBITORS: A RETROSPECTIVE COHORT STUDY LEVERAGING US FOOD AND DRUG ADMINISTRATION ADVERSE EVENT REPORTING SYSTEM

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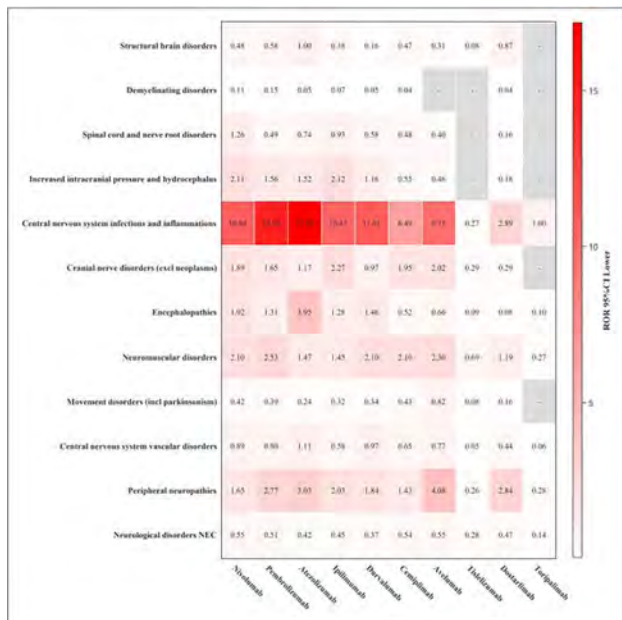
Introduction

Immune checkpoint inhibitors (ICIs), an antitumor therapeutic strategy, have shown great potential for cancer treatment. With the widespread use of ICIs, immune-related adverse events (irAEs) have increased gradually. Neurotoxicity, as an irAE, has a low incidence rate, but high disability and mortality rates, warranting clinical attention.

Methods

This study aimed to quantify the association between neurological adverse events and ICI treatment and describe the characteristics of ICI-related neurological complications in real-world practice. Data were sourced from the FDA Adverse Event Reporting System (FAERS) database from the first quarter of 2004 to the first quarter of 2025. Data mining was performed using the Reporting Odds Ratio (ROR) method. Classification and statistics were conducted using the System Organ Class (SOC), high-level group term (HLGT), and Preferred Term (PT)

Results



were the primary reporters (43.23%) and the United States had the highest number of reports (35.78%). The median time to the onset of adverse events was 30 days. Serious reports accounted for a high proportion of the patients (91.23%).

Pharmacovigilance analysis indicated that ICI-induced neurological immune-related adverse events mainly involved central nervous system inflammation and neuromuscular junction dysfunction. Different ICI immunotherapies can result in distinct neurological disease characteristics, and combination therapies affect the occurrence of neurotoxicity. In clinical practice, the early recognition and management of ICI-related n-irAEs are critical.

A RANDOMISED SHAM-CONTROLLED TRIAL OF ELECTROACUPUNCTURE FOR CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY DURING TAXANE TREATMENT FOR BREAST CANCER

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Chemotherapy induced peripheral neuropathy (CIPN) is a dose-limiting side-effect of neurotoxic chemotherapy lacking effective treatments. The aim of this single-centre, randomised, sham-controlled trial was to assess the feasibility, acceptability, and preliminary signal of activity of early EA intervention for CIPN during taxane treatment.

Patients with early breast cancer receiving weekly or 3-weekly taxanes were eligible and screened weekly using a CIPN screening tool (PNQ, NCI-PRO-CTCAE, EviQ). At CIPN onset, patients were randomised to either EA or sham-EA once weekly for 10 consecutive weeks, followed by 8- and 24-week follow-up post-chemotherapy. Primary outcome assessed feasibility and acceptability including recruitment, adherence rates, and follow-up compliance. Secondary outcomes compared mean change in CIPN from randomisation to week 12 of chemotherapy between EA and sham-EA arms measured by EORTC-QLQ-CIPN20, assessed CIPN-related dose modifications, and chemotherapy dose intensity. A sample size of $n=40$ (20 per arm) aimed to detect a very large effect with 80% power ($\alpha=0.05$).

Of 69 patients screened (June 2022–Nov 2023), 34 were randomised. Median recruitment rate was 3/month. Adherence to all 10 treatments was 84% (EA) and 94% (sham-EA). Follow-up adherence was 91% at 8 weeks and 85% at 24 weeks. No significant difference in mean deterioration of CIPN was observed at week 12 between groups: 3.6 (CI -0.2, 7.4) for EA, 2.4 (CI -2.9, 7.7) for Sham-EA, converted 100-point scale, $p=0.58$. CIPN-related dose modification was 7% for EA vs 4% Sham-EA, $p=0.34$. Mean chemotherapy dose intensity was lower for EA (84% vs 94%, $p=0.042$).

This study demonstrated feasible recruitment and adherence across both arms, with strong follow-up to 24 weeks post-chemotherapy. No significant group differences were seen in CIPN progression and CIPN-related dose modifications; chemotherapy dose intensity was significantly less for EA. This may reflect the small sample size and larger studies should assess EA efficacy for CIPN.

NEURO-006**ASSESSING THE INTEGRITY OF BLINDING IN A RANDOMISED SHAM-CONTROLLED ELECTROACUPUNCTURE TRIAL FOR CHEMOTHERAPY INDUCED PERIPHERAL NEUROPATHY**

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Introduction

Effective blinding is critical in sham-controlled acupuncture trials in supportive cancer care to minimise treatment expectancy bias and placebo effect. Expectancy of treatment benefit and prior acupuncture experience has shown to positively influence treatment outcomes. We assessed success of patient blinding and evaluated treatment expectancy in our randomised single-blinded sham-controlled trial of electroacupuncture (EA) for CIPN.

Methods

Patients were randomised to EA or sham-EA once weekly for 10 sessions. Sham-EA was administered at identical acupoints as EA with non-penetrating Streitberger needles without electrical stimulation; auditory cues simulated electrostimulation. Patients were blindfolded during treatments while acupuncturists were unblinded. Patients reported their perceived treatment allocation at their final session. Integrity of blinding was evaluated using Bang Blinding Index (BBI). Acupuncture Expectancy Scale (AES) scores from pre-, mid- and end of treatment were analysed for within-group change and compared by actual and perceived allocation.

Results

34 patients were randomised (n=17 each), 65% had prior acupuncture experience. At completion, 48% correctly identified their group, 15% were incorrect, and 36% were uncertain. BBI (range: -1 to 1, 0 = perfect blinding) was 0.56 (95% CI: 0.26–0.86) for EA and 0.12 (95% CI: -0.24–0.48) for sham-EA. Mean [SD] scores (range: 8–40) were significantly higher for EA (pre: 28 [6.2], mid: 27 [5.7], post: 28 [7.4]) indicating higher treatment expectation than sham (pre: 24 [6.5], mid: 21 [9.1], post: 24 [8.8], $p=0.03$). No significant changes in mean AES scores over time ($p=0.30$) were observed. Treatment expectation was not associated with actual ($p=0.14$) or perceived ($p=0.18$) group allocation.

Conclusions

Blinding was preserved in sham-EA, with partial unblinding for EA, potentially due to adverse events and patients' prior acupuncture experience. Treatment expectations were higher for EA, but not associated with improved outcomes, nor were expectations related to actual or perceived treatment allocation, suggesting minimal placebo effects and expectancy bias.

NEURO-007**MULTIMODAL EXERCISE IMPROVES NEUROPATHY OUTCOMES IN CANCER SURVIVORS: FINDINGS FROM A RANDOMIZED CONTROLLED TRIAL**

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Randwick, ³University Hospital of Würzburg, Institute of Clinical Genetics and Genomic Medicine, Würzburg, ⁴Neuroscience Research Australia, Sydney, ⁵University of Sydney, Sydney, ⁶University of Sydney, Daffodil Centre, Cancer Council NSW, ⁷Department of Oncology, St George Hospital, Kogarah, ⁸Mater Hospital, North Sydney, ⁹Prince of Wales Hospital, Department of Medical Oncology, Randwick, Australia, ¹⁰Chris O'Brien Lifecare, Camperdown, ¹¹Peak Health, Gympie, ¹²UNSW Medicine and Health Lifestyle Clinic, Randwick, ¹³University of Sydney

Introduction

Chemotherapy induced peripheral neuropathy (CIPN) is a common and debilitating complication in cancer survivors treated with neurotoxic chemotherapy. Exercise may improve CIPN symptoms and physical function, however, the effect of structured exercise has not been comprehensively investigated in cancer survivors. To quantify the impact of exercise on objective CIPN severity and physical function in cancer survivors.

Methods

A multi-site, open label, randomised controlled trial was undertaken. Adult cancer survivors at least 3 months post completion of neurotoxic chemotherapy were randomised to an 8-week supervised multimodal exercise intervention, incorporating aerobic and resistance exercise and balance training, or waitlist control (WC) of usual care. The primary outcome measure was the 7-component neurological grading scale Total Neuropathy Score clinical (TNSc). Secondary outcome measures included patient-reported CIPN (EORTC CIPN20), quality of life (SF-36) and physical function assessments including the Timed Up and Go (TUG) test and dynamic balance assessments. Planned accrual target was 96 participants (48 per group), powered to demonstrate a 1.7-point difference in TNSc between treatment groups at 8-weeks (80% power, $\alpha=0.05$). A linear mixed model was used to assess differences between groups at 8-weeks using an intention to treat approach. Post hoc within group analysis was also conducted.

Results

Between March 2019 and July 2023, participants were recruited from four oncology centres in Sydney, Australia. One-hundred-ninety-seven patients were assessed for eligibility, 90 were randomised and underwent baseline assessment (Intervention n=46, Control n=44). Seventy-six returned for follow up assessment after the 8-week intervention (Intervention n=37, Control n=39). The exercise intervention significantly improved TNSc scores compared to WC (mean diff between group Δ [95%CI]: 1.15 [-0.283, 2.574], $p=0.044$), as well as TUG test (0.60sec [0.00, 1.20], $p=0.026$) and dynamic balance (Postural sway path distance: 59.02mm [14.64, 103.40], $p=0.01$).

Conclusions

Eight weeks of multimodal exercise provide clinically meaningful improvements in objectively assessed CIPN and functional outcomes in cancer survivors.

NEURO-008**EVALUATING CONTROLLED COOLING THERAPY FOR THE PREVENTION OF CHEMOTHERAPY INDUCED PERIPHERAL NEUROPATHY (CIPN)**

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Introduction

CIPN is a common side effect of chemotherapeutic drugs, particularly taxane and platinum-based drugs. Symptoms range from acute and transient to chronic and painful, and they have a significant impact on

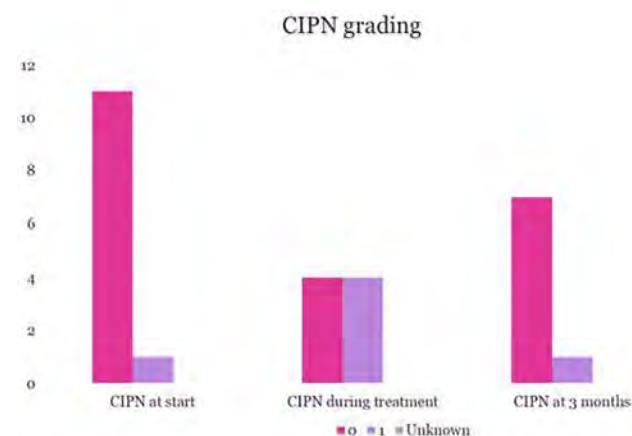
the patient's quality of life. There can also be an impact on treatment schedules with dose reductions or cessation of treatment, which can impact long-term patient prognosis. Growing evidence suggests that by using controlled thermotherapy (Hilotherm® Chemocare), fewer patients develop grade 2 CIPN while finding the device comfortable to use.

Methods

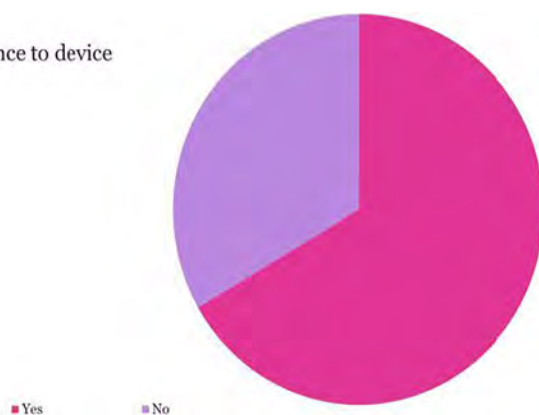
This was an observational prospective study. Data were collected over a 6-month period. The aim of this service evaluation is to evaluate the development of CIPN during chemotherapy treatment using common terminology criteria for adverse events (CTCAE). The secondary objectives were to assess the sustainability of the impact (at 3 months), identify alterations in the initial plan due to CIPN, and establish the level of adherence to the device. Adult patients with breast, gynaecological, or gastrointestinal (GI) cancer who received carboplatin and paclitaxel in combination, paclitaxel alone, or oxaliplatin-based regimens were included. Patients treated with other neurotoxic chemotherapeutic agents, with CIPN, skin infection, or any of the stated contraindications of use were excluded.

Results

Of the twelve patients included in this study, eight adhered to the device. During treatment, four patients did not develop CIPN and four developed grade 1 CIPN during treatment; after three months, seven had no CIPN and one had grade 1 CIPN. Only one treatment modification was attributed to CIPN. Patients reported good tolerability, although prolonged glove wear was a barrier to adherence.



Adherence to device



Conclusions

Findings suggest that controlled cooling therapy is feasible and acceptable, with the potential to reduce CIPN severity and preserve treatment

intensity. Larger-scale evaluations are warranted to confirm the benefits and support broader adoption across oncology practice.

NEURO-009

ANTI-INFLAMMATORY INTERVENTIONS PREVENT PEDI- ATRIC ALLOGENEIC HSCT PLASMA-INDUCED BLOOD- BRAIN BARRIER TOXICITY IN VITRO

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Introduction

Cognitive impairment affects 60% of children undergoing allo-geneic HSCT (allo-HSCT), profoundly impacting quality of life. However, effective interventions are lacking due to poor mechanistic understanding. We previously identified increased levels of a clinical biomarker of blood-brain barrier (BBB) damage in pediatric allo-HSCT (S100 β), correlating with increased plasma IL-6 and reduced brain-derived neurotrophic factor. We therefore sought to explore the mechanistic basis of these findings by determining the effects of allo-HSCT plasma on BBB integrity *in vitro* and evaluating methods of BBB protection.

Methods

Human induced pluripotent stem cells were differentiated to brain microvascular endothelial cells (BMECs) and cultured as monolayers in transwells. Pooled plasma from N=5 pediatric allo-HSCT recipients (CRYOSTEM) was diluted 1:4 in BMEC media and compared with healthy control plasma and media alone. In parallel, patient plasma was co-administered with anti-inflammatory interventions: (1) the IL-6 receptor monoclonal antibody tocilizumab, and (2) the gut microbiota metabolite propionate. After 24-hours, BMEC apoptosis was assessed via caspase-3 immunofluorescent analysis.

Results

Allo-HSCT plasma induced a significant increase in BMEC apoptosis compared with both healthy control plasma and media only control ($P < 0.05$), while no difference was observed between healthy plasma and media only controls. Importantly, this toxicity was dependent on inflammatory signaling: both IL-6 inhibition with tocilizumab and the anti-inflammatory metabolite propionate prevented allo-HSCT plasma-induced BMEC apoptosis, with caspase-3 activity comparable to control conditions.

Conclusions

Circulating inflammatory markers induced by cancer therapy are capable of disrupting the BBB, and this therefore represents an important early step in the etiology of cognitive dysfunction.

NEURO-010

BREAKING THE BARRIERS TO UNDERSTANDING CHEM- OBRAIN: NOVEL CHARACTERISATION OF CHEMOTHER- APY-INDUCED BLOOD-BRAIN BARRIER DISRUPTION

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Introduction

Up to 75% of people treated with chemotherapy experience chemotherapy-induced cognitive impairment (CICI), yet effective treatments are lacking. Blood-brain barrier (BBB) damage has been implicated in CICI, but the underlying mechanisms remain unclear, limiting the development of BBB-targeted therapies. Therefore, we aimed to model chemotherapy-induced BBB damage *in vitro* and identify disruptions at transcript, pathway, and structural levels.

Methods

Human induced pluripotent stem cells were differentiated to brain microvascular endothelial cells (BMECs) and cultured as monolayers in transwells. BMECs were exposed for 48-hours to 1.28mM PM (active metabolite of cyclophosphamide), lipopolysaccharide (LPS, 10ng/mL) as a positive control, or media alone. BBB integrity was assessed by measuring the permeability of 4kDa fluorescein isothiocyanate across the monolayer. BMECs were then characterised via immunofluorescent analysis and confocal microscopy or bulk RNA sequencing.

Results

PM exposure impaired BBB integrity, resulting in significantly increased monolayer permeability ($P=0.002$), BMEC apoptosis ($P=0.002$), cellular oedema ($P=0.0005$), and stress-associated cytoskeletal remodelling. Both PM and LPS disrupted intercellular tight junctions as evident by ZO-1 disorganisation at cell membranes ($P<0.05$). PM upregulated the expression of transcriptional regulators (*ZBED2*, *ZNF707*, *POLR1H*), suggesting broad changes to gene expression associated with cellular stress response. Pathway analysis revealed enrichment of immune response/inflammation, apoptosis, cell activation, and defence response pathways with PM exposure.

Conclusions

PM induced multi-level toxicity to BMECs, encompassing direct cell death as well as transcriptomic and phenotypic changes indicative of cellular stress and endothelial dysfunction. These findings provide important insight into chemotherapy-induced BBB dysfunction and identify phenotypic and pathway targets to inform future therapeutic development.

NEURO-011

AN IN VITRO MODEL TO INVESTIGATE CHEMOTHERAPY DRUG-INDUCED NEUROTOXICITY AND THE CYTOPROTECTIVE EFFECTS OF COOLING (CONTROLLED HYPOTHERMIA)

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a dose-limiting side-effect of chemotherapy, with no regulatory authority-approved treatments or preventative strategies currently available for patients. Understanding CIPN pathobiology is limited by lack of human *in vitro* models that recapitulate the complexity of drug-targeted peripheral neuronal tissue and also address practical challenges of assessing chemotherapy-induced neurotoxicity. Emerging clinical evidence has demonstrated the promising potential of limb-cooling (limb-hypothermia) to ameliorate neurological toxicities and prevent CIPN development. To provide a better understanding of cellular mechanisms of CIPN and study the potential protective role of cooling, we have devised an *in vitro* model as a clinically relevant disease ‘mimic’.

Methods

We developed a method for rapid establishment of NT2 neuronal precursor-derived, differentiated NT2-N neurite cultures for high-throughput testing. CIPN-associated agents cisplatin, paclitaxel and vincristine were tested. Neurite outgrowth analysis was used to assess neurotoxicity by quantitative multimode cell imaging and detect reactive oxygen species (ROS) and phenotypic (biophysical) changes to neurites (neurite length, branching density, count). Damage-associated component release and cytokine secretion (associated with inflammation, senescence) were evaluated by ELISA- and filter array-based methodologies.

Results

We demonstrate that cisplatin, paclitaxel and vincristine induce differential biophysical (‘structural damage’) responses, as well as molecular changes (ROS induction and cytokine secretion) in a dose-dependent

and drug class-specific manner. Importantly, we provide novel evidence that cooling can significantly suppress drug-induced neurite cytotoxicity (protecting neurite length, branching and soma count) in a temperature-dependent fashion.

Conclusions

Our research has started to unravel the cellular mechanisms of CIPN development by providing evidence for drug-specific differences in neurotoxicity and the ability of cooling (hypothermia) to protect from drug-induced toxicity. Our findings are thus supportive of the promising role of limb-hypothermia in preventing CIPN development and may have important implications for clinical practice.

NEURO-012

WEB-BASED COGNITIVE REHABILITATION FOR PATIENTS WITH AGGRESSIVE LYMPHOMA WITH PERCEIVED COGNITIVE IMPAIRMENT: A RANDOMISED PILOT STUDY.

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Introduction

Cancer-related cognitive impairment (CRCI) is a frequent side effect of cancer and its treatment that can persist well after treatment completion, with major impacts on quality of life, daily living activities, and return to work. This randomised pilot study assesses the feasibility and acceptability of methods and procedures intended for use in a definitive trial of a web-based cognitive rehabilitation program — ‘Responding to Cognitive Concerns’ (eReCog)—in people with low perceived cognitive function after chemotherapy for aggressive lymphoma. Potential efficacy was also explored.

Methods

Participants were randomised one-to-one to receive usual care or eReCog plus usual care. The four-week eReCog program consists of four online modules based on the principles of cognitive behavioural therapy. Operational, neuropsychological test and patient-reported outcome measures (PROMs) data were collected before randomisation and approximately eight weeks later to assess trial outcomes. Primary feasibility outcomes included recruitment and retention rates (a priori progression criteria: ≥ 3 patients/month and $\geq 80\%$ of participants complete the trial, respectively).

Results

38 of 53 eligible participants consented to participate over 10 months (3.8 patients/month, 95% CI [2.7, 5.2]) and 36 of 38 (95%, 95% CI [83, 99]) completed the trial, indicating acceptable feasibility. Acceptable feasibility was also found for all four secondary outcomes: adherence to, usability of, and intrinsic motivation to engage with eReCog; and compliance with assessments. A large-sized difference favouring the intervention arm was observed on a measure of executive functioning. Medium-sized differences were observed on other neuropsychological test and PROM scales, but confidence intervals were wide and included zero.

Conclusions

Recruitment and retention rates, compliance with assessments and favourable changes on potential outcome measures suggest a large-scale, appropriately powered trial is warranted, as do findings that eReCog is acceptable to the study population.

NEURO-013**EXPLORATION OF SUSTAINED ENGAGEMENT WITH A WEB-BASED COGNITIVE INTERVENTION AMONGST PATIENTS WITH AGGRESSIVE LYMPHOMA: A QUANTITATIVE SUB-STUDY**

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Introduction

Cancer-related cognitive impairment (CRCI), a common side-effect of cancer and its treatment, is characterised by difficulties in memory, attention, and executive function. This qualitative sub-study was part of a single-site, parallel-group, pilot randomised controlled trial in which recruitment and retention exceeded our expectations. The aim was to explore participants experience and motivation for sustained engagement with a web-based cognitive rehabilitation (eReCog) intervention amongst people with aggressive lymphoma who were self-reporting cognitive decline.

Methods

We used an inductive qualitative approach, conducting semi-structured interviews with fourteen participants. Interviews were recorded, transcribed and a reflexive thematic approach was used to describe and interpret key themes and sub-themes in the data.

Results

Fourteen interviews were completed. We extracted four themes describing participants experience and motivation for sustained engagement with eReCog. These included: information needs, experience of participation, support, and ease of use. Participants were motivated to engage to gain knowledge and strategies to manage their CRCI symptoms, they enjoyed the experience and felt validated via the online community created. Finally, they valued the additional support they received and appreciated the convenience and flexibility of the web-based program.

Conclusions

Our findings show that engagement with eReCog was driven by perceived cognitive improvements, psychosocial benefits, and accessibility. Addressing both cognitive and psychosocial needs is warranted in web-based rehabilitation to foster continued participation engagement. Web-based cognitive rehabilitation interventions should enhance accessibility and earlier integration into the cancer trajectory to optimise long-term survivorship care in people with haematological cancers should be considered.

NEURO-014**THE CIPNEX PILOT PROTOCOL: A HAND-FOOT EXERCISE REGIMEN FOR CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY AMONGST PEOPLE WITH GYNAECOLOGICAL CANCERS**

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a common distressing complication of gynaecological cancer treatment, affecting 60–70% of those receiving taxane- and platinum-based chemotherapy. Symptoms—including numbness, tingling, pain, impaired fine motor function and proprioception—typically emerge during treatment and may persist into survivorship. CIPN is associated with falls, reduced quality of life and mobility, and can necessitate chemotherapy dose reductions or cessation. No medications have been shown to effectively prevent or treat CIPN. Evidence into non-pharmacological options, such as hand-foot exercise interventions, is emerging. This two-phased project aims to co-design, pilot and evaluate a self-managed hand-foot exercise intervention to reduce CIPN symptom severity and improve quality of life among people with gynaecological cancers.

Methods

In Phase One, the intervention will be co-designed with a Stakeholder Advisory Group, comprising consumer representatives, clinicians and service leads (Figure 1). Two resource formats will be developed, an internet-based application and a paper booklet. In Phase Two, the intervention will be piloted using a quasi-experimental pretest-post test design. Repeated measures will collect patient outcome and experience data.



Figure 1. Role of the SAG

Results

This abstract reports on the co-design of the hand-foot exercise intervention and accompanying patient resources with the Stakeholder Advisory Group. This first phase will produce a user-centred exercise intervention tailored to the needs and preferences of women at risk of or experiencing CIPN.

Conclusions

CIPN remains a persistent challenge for people with gynaecological cancers, with few strategies to prevent or manage symptoms. This project responds to clinical and consumer need by co-designing, piloting and evaluating a sustainable, low-cost, self-managed exercise intervention. Consumer and clinician engagement ensures resources are accessible and practical for real-world settings. Phase One establishes a strong foundation for implementation and evaluation towards future larger-scale testing of efficacy and impact.

NEURO-015**PREDICTION OF ANALGESIC USE AFTER NEUROTOXIC CHEMOTHERAPY: A MACHINE LEARNING STUDY USING JAPANESE CLAIMS AND HEALTH CHECKUP DATA**

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Introduction

Chemotherapy-induced peripheral neuropathy after oxaliplatin or paclitaxel leads to additional analgesic prescribing and contributes to polypharmacy, yet effective prevention and treatment strategies remain limited. We developed machine learning models to predict post-chemotherapy use of guideline-referenced analgesic and neuropathic pain medications.

Methods

Using the JMDC claims database in Japan, we analyzed patients with cancer who were treated with oxaliplatin or paclitaxel. The primary outcome was analgesic use within 12 months after the end of chemotherapy with gabapentin, duloxetine, pregabalin, tramadol, mirogabalin, mecobalamin, or goshajinkigan, defined as three or more prescriptions of any of the medications. Models were evaluated using five-fold cross-validation and ranked by area under the receiver operating characteristic curve.

Results

The oxaliplatin cohort included 10,793 patients (2,528 with the analgesics). Gradient Boosting Classifier performed best with area under the curve 0.76, accuracy 0.81, recall 0.35, and F1 score 0.46. The paclitaxel cohort included 14,800 patients (4,302 with the analgesics); Gradient Boosting Classifier performed best with area under the curve 0.81, accuracy 0.79, recall 0.53, precision 0.67, and F1 score 0.59. Permutation importance indicated that pre-treatment and on-treatment prescribing patterns were the strongest predictors of the outcome. Chemotherapy exposure intensity proxies added predictive value, chemotherapy claim rate per month in the paclitaxel cohort. A linked analysis incorporating annual health checkup data reduced the available sample size and was associated with lower predictive performance.

Conclusions

Claims-based prescribing trajectories with chemotherapy intensity can moderately predict post-chemotherapy analgesic use after oxaliplatin or paclitaxel. Further research with assessments of neuropathic symptoms or functional measures is needed to develop proactive supportive care and mitigate polypharmacy.

NEURO-016

A COMMON SET OF CO-EXPRESSED GENES ARE ASSOCIATED WITH DIABETIC PERIPHERAL AND CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY

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Introduction

Diabetic peripheral neuropathy (DPN) and chemotherapy-induced peripheral neuropathy (CIPN) are major clinical challenges with limited therapeutic options. While these conditions arise from different causes, they may share common molecular mechanisms that could be targeted for intervention. The objective of this study was to identify shared molecular mechanisms between DPN and CIPN using consensus co-expression analysis of publicly available transcriptomic datasets.

Methods

We performed consensus weighted gene co-expression network analysis (WGCNA) on two publicly available datasets: GSE185011 (DPN vs. healthy controls in peripheral blood mononuclear cells) and GSE173610 (paclitaxel-treated vs. control iPSC-derived sensory neurons). After filtering all but the most variable genes, consensus analysis was used to identify conserved co-expression modules across both conditions. Protein-protein interaction networks were constructed using STRING DB.

Pathway enrichment analysis was performed using KEGG, Reactome, WikiPathways databases, and Gene Ontology (GO) terms.

Results

Consensus analysis identified a 193-gene module (ME3/brown) significantly associated with both DPN (correlation=0.817, $p=0.0040$) and CIPN (correlation=0.971, $p=0.0060$, Figure 1). The protein-protein interaction network was significantly enriched for interactions ($p < 1.0 \times 10^{-16}$). Functional enrichment analysis of this module revealed pathways related to Glycolysis, FoxO signaling, Apoptosis, and Autophagy.

Conclusions

Our analysis reveals a convergent molecular signature underlying both DPN and CIPN, centered on metabolic reprogramming, transcriptional stress, and programmed cell death. These findings provide a systems-level framework for developing therapies targeting shared pathological mechanisms.

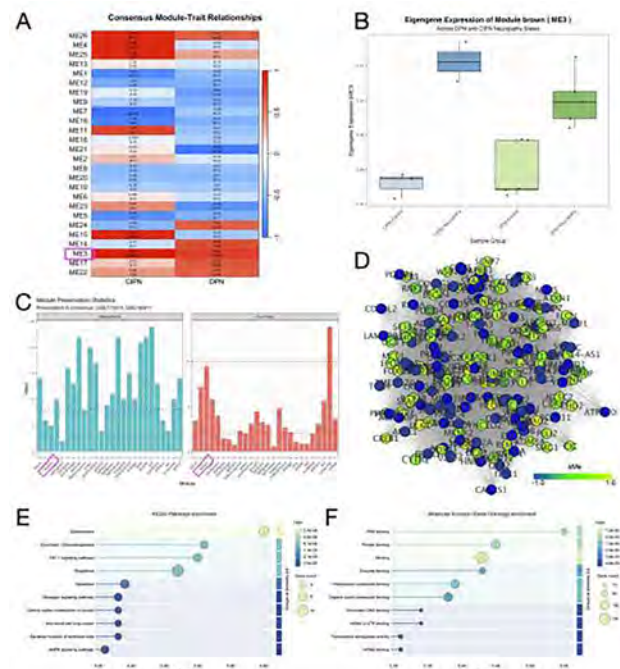


Figure 1. Consensus Co-Expression Module identified across chemotherapy-induced and diabetic peripheral neuropathies. (A) Module-trait heatmap across the two studies. The key consensus module is marked with a magenta square. (B) Module eigengene expression across the two studies. (C) Network preservation statistics. (D) Network visualization of the consensus module. Edge widths are scaled by TOM weights. Nodes are colored by eigengene-based (kME) value. (E) Top 10 enriched KEGG pathways for genes in the consensus module. (F) Top 10 enriched GO Molecular Function terms for genes in the consensus module.

NEURO-018

MEISSNER CORPUSCLE DENSITY IN CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY- EVALUATION OF A NOVEL OBJECTIVE BIOMARKER

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a significant side effect cancer treatment with limited objective measures to quantify

nerve integrity. In-vivo reflectance confocal microscopy (RCM) is a non-invasive technique to quantify Meissner corpuscles (MC) density as a biomarker of sensory neuropathy. We aimed to investigate the association between MC density and established markers of CIPN.

Methods

In-vivo RCM was undertaken using Vivascope 1500 at 15 discrete sites on left hand digit V. 32 matrices (0.5mmx0.5mm) were acquired in a vertical plane at 7µm intervals. MC density is presented as mean MC/mm². CIPN assessment included the patient-reported measure EORTC-CIPN20 (range=0-100), Total Neuropathy Score clinical (TNSc; range=0-24), NCI-CTCAE (range=Grade 0-4), and sensory nerve conduction studies on sural and median nerves. Function was assessed using grooved pegboard completion time (sec) and postural sway path length (mm; PPA Sway Path).

Results

12 female patients who completed taxane treatment for breast (n=11) or gynaecological (n=1) cancer (median time since treatment= 6(IQR 9) months) were recruited. Median MC density was 2.25(IQR 1.92)/mm² (range=0.4-5.4/mm²). MC density was below age- and sex-controlled normative ranges for 3 patients (Creigh et al 2022). Patients with CIPN (NCI-CTCAE G1-3 n=7) did not have lower MC density than patients without CIPN (G0 n=5, P>0.05). MC density trended towards correlation with patient-reported CIPN (r=0.5, P=0.09) but was not correlated with TNSc (r=-0.1, P>0.05). Median and sural nerve amplitudes were correlated (r=0.8, P=0.01), however neither correlated with MC density (median r=-0.3, sural r=-0.2, both P>0.05). MC density was not associated with grooved pegboard completion time (r=0.2, P>0.05) but was associated with postural sway path length (r=-0.7, P=0.02).

Conclusions

This pilot study demonstrated feasibility of assessing MC density via RCM in cancer patients and identified the need for larger, longitudinal studies to further examine MC density as an objective biomarker for monitoring development of CIPN.

NEURO-019

THE SMALL MOLECULE LCRF-0006 INCREASES EFFECTIVENESS OF THE MYELOMA DRUG BORTEZOMIB WITHOUT INDUCING PERIPHERAL NEUROPATHY IN MICE

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Introduction

Peripheral neuropathy (numbness, tingling and pain in hands and feet) is a highly debilitating complication of neurotoxic anti-cancer therapies. Moderate-severe peripheral neuropathy is frequently managed by drug dose reductions that adversely impact cancer treatment outcomes. We have previously reported that the small molecule LCRF-0006 synergistically increases anti-tumour effectiveness of the neurotoxic myeloma drug bortezomib in a pre-clinical model. Here, we investigated whether LCRF-0006 improves myeloma tumour response to bortezomib without exacerbating neuropathic side effects.

Methods

C57BL/6 mice were treated with LCRF-0006 (100 mg/kg), low-dose (LD; 0.5 mg/kg) or high-dose (HD; 1 mg/kg) bortezomib (BTZ), the combination of LCRF-0006 and LD-BTZ, or vehicles alone. Myeloma disease studies were performed in mice injected i.v. with transgenic Vk*MyC cells expressing GFP. Weight analysis, behavioural phenotyping and von Frey mechanical sensitivity testing was performed to assess overt bortezomib side effects in non-tumour-bearing mice.

Neurotoxicity (serum NfL levels) and neuroimmune signalling (qPCR analysis of sciatic nerve dorsal root ganglia [DRG]) was also assessed.

Results

The LCRF-0006-LD-BTZ combination, but not LD-BTZ alone, reduced end-point myeloma disease burden compared with vehicle treatment (P<0.01). HD-BTZ-treated mice displayed elevated serum NfL (P<0.001), increased DRG expression of genes *Adgre1* (P<0.01) and *Tnfa* (P<0.05), and symptoms of peripheral neuropathy (sensory loss in, and increased grooming of, paws [P<0.05]), accompanied by reduced general well-being (weight loss and reduced track length [P<0.0001]), compared with vehicle-treated mice. These changes were not observed in mice treated with LD-BTZ alone or the LCRF-0006-LD-BTZ combination.

Conclusions

We have generated proof-of-concept data that LCRF-0006 increases the therapeutic effectiveness of low doses of bortezomib without inducing neurotoxicity and overt peripheral neuropathy symptoms. The use of LCRF-0006 represents a therapeutic opportunity to lower the effective dose of bortezomib, thereby potentially mitigating the adverse impact of bortezomib-induced peripheral neuropathy on quality of life and cancer control in people with myeloma.

NEURO-020

SYSTEMATIC REVIEW TO INFORM CLINICAL PRACTICE GUIDELINES FOR THE PREVENTION AND MANAGEMENT OF CANCER RELATED COGNITIVE IMPAIRMENT

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Introduction

Cancer-related cognitive impairment (CRCI) is consistently identified as an unmet need for people living with or beyond cancer. Despite this, there is an absence of Clinical Practice Guidelines to inform best practices in the prevention and management of cognitive symptoms related to cancer or its treatments. Using a multinational perspective, the MASCC Neurological Complications Study Group aimed to address this gap by conducting a systematic review of the current evidence base and best practice for prevention and management of CRCI.

Methods

Six electronic databases were searched for relevant literature: MEDLINE, PsycINFO, CINAHL, Embase, Scopus, and Cochrane. Studies in any language were included from inception until September 2025. Inclusion criteria were studies aiming to prevent, manage, or improve CRCI, through a pharmacological or non-pharmacological intervention, in participants with a history or current diagnosis of any type of cancer. Included studies had CRCI as one of the main outcomes, and some form of comparator.

Results

Once duplicates were removed, 6521 studies were eligible for screening, with 338 of these studies proceeding to full text screening. Following full-text screening, 172 studies were included for extraction. Studies described pharmacological (N=38) interventions such as methylphenidate, donepezil, memantine, and ginkgo, with another 133 studies describing non-pharmacological interventions including cognitive (N= 56), psychological (N=14), exercise (N=19), and yoga (N=6). A variety of cancer types were described, with breast (N=68), mixed (N=56), and brain (N=25) being the most common. Most studies were in adults (N=149), with 15 reporting on paediatric populations and 4 specifically older adults. Efficacy and level of evidence for each intervention will be reported, with discussion of any variation according to participant cancer and demographic characteristics.

Conclusions

Findings from this review will be used to create a comprehensive clinical practice guideline enabling clinicians to adopt evidence-based best-practice to manage CRCI.

NEURO-021

CHARACTERISING THE LOSS AND GAIN OF SENSORY FUNCTION IN PATIENTS WITH CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a debilitating and dose-limiting side effect of neurotoxic chemotherapy treatment. Whilst sensory loss is a prominent feature, some patients also experience hyperalgesia, a maladaptive gain of sensory function. Understanding the relationship between sensory loss and gain is important to accurately phenotype patients and develop appropriate outcome measures. We aimed to characterise sensory loss and gain, and determine association with other measures of CIPN.

Methods

Taxane-treated patients were assessed 3-24 months post-chemotherapy completion with quantitative sensory testing (QST), clinical neuropathy assessment (TNSc) and patient-reported outcome measures (EORTC CIPN20). QST was used to identify sensory loss via reduced warm or cold detection thresholds, or reduced vibration perception. Sensory gain was assessed through reduced heat and cold pain thresholds, or pain induced by a calibrated pinprick. Thresholds

for sensory loss and gain were established from published age and sex-matched healthy control data.

Results

Of 55 patients recruited, 65% (n=36) reported persistent CIPN at 8±8 months post-chemotherapy. 47% (n=17) demonstrated sensory loss and 17% (n=6) demonstrated sensory gain. 14% (n=5) demonstrated both sensory loss and gain. Interestingly, 22% (n=8) did not demonstrate evidence of sensory loss or gain.

Participants with both sensory loss and gain reported significantly greater CIPN than those with sensory loss alone (Dunn's p=0.039) or sensory gain alone (Dunn's p=0.043, Figure 1). There was no significant difference in patient-reported CIPN between participants with only sensory loss or gain (Dunn's p>0.99). There were also no significant differences in TNSc scores between sensory profiles.

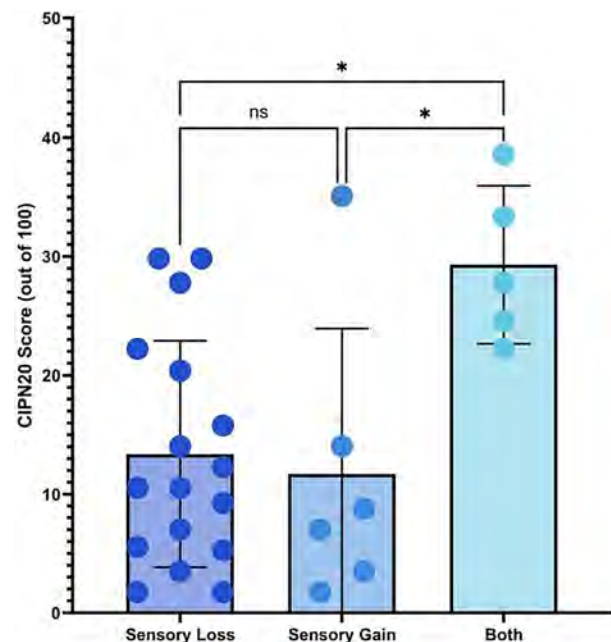


Figure 1. Comparison of EORTC CIPN20 scores between sensory profiles. Columns represent averages and bars represent standard deviations.

Conclusions

CIPN produces a range of sensory abnormalities. The development of both gain and loss of sensory function could indicate increased patient-reported CIPN severity. As current CIPN assessment tools do not adequately differentiate these phenomena, CIPN measures which stratify patients based on sensory profile could enable symptom-specific treatment strategies in CIPN.

NEURO-022

TOPICAL HERBAL MEDICINE AS TREATMENT FOR CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY: A SYSTEMATIC REVIEW OF RANDOMIZED CONTROLLED TRIALS

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a common neurological complication of cancer treatment that worsens function and quality of life. Topical herbal medicines are increasingly used as localized interventions for neuropathic symptoms; however, their clinical efficacy remains uncertain. This systematic review evaluates the effectiveness of topical herbal formulations for CIPN in cancer populations.

Methods

We systematically searched Scopus, MEDLINE (Ovid), CINAHL, and Cochrane CENTRAL for randomized controlled trials assessing topical herbal formulations in adults with CIPN. Outcomes included validated measures of CIPN pain, overall severity, sensory function, and adverse events. Risk of bias was assessed using RevMan 5.3, and all procedures were conducted in accordance with PRISMA guidelines.

Results

Five trials involving 201 participants were included, with overall risk of bias assessed as moderate due to limited blinding and underpowered sample sizes. In breast cancer patients, henna vs. standard care significantly improved overall severity of oxaliplatin-induced peripheral neuropathy measured by CIPN Assessment Tool ($p < 0.001$), with significant reductions in sensory and functional subdomain scores. In mixed cancers population, *Costus sp.* oil significantly vs. placebo significantly reduced neuropathic pain intensity measured by VAS ($p = 0.001$) and improved FACT/GOG-Htx scores ($p = 0.028$). Trials evaluating ajwain cream, *Citrullus colocyntis* oil, and a multi-essential oil formulation did not demonstrate statistically significant improvements in CIPN severity, pain, or quality of life, as compared to placebo. No studies incorporated quantitative sensory or functional testing. All interventions were well tolerated, with only mild localized skin reactions reported.

Conclusions

Despite modest benefits from certain herbal treatment in reducing CIPN pain and sensory symptoms, current evidence is limited by small sample sizes, methodological heterogeneity and lack of objective outcome measures. Rigorous, adequately powered RCTs with objective CIPN measurements are needed.

NEURO-023

AT1 RECEPTOR BLOCKADE WITH LOSARTAN TO PREVENT PACLITAXEL NEUROPATHY IN BREAST CANCER: A RANDOMIZED PROOF-OF-CONCEPT TRIAL

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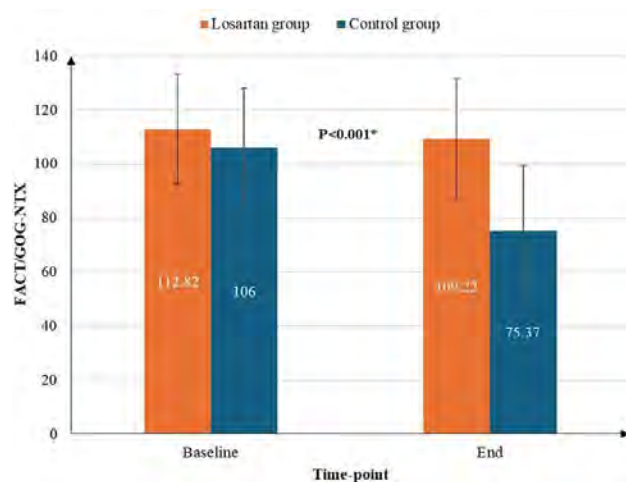
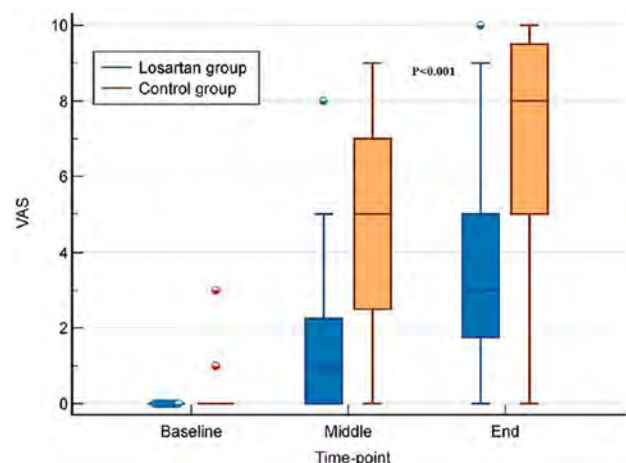
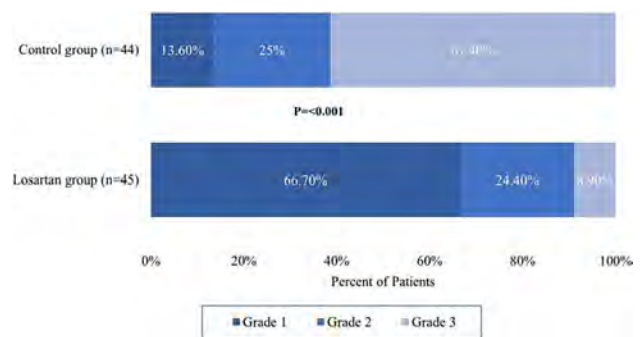
Introduction

Paclitaxel-induced peripheral neuropathy (PIPN) is a frequent, dose-limiting toxicity with major quality-of-life (QoL) impact. There is no established preventive therapy. We evaluated losartan as a pragmatic neuroprotective strategy during paclitaxel.

Methods

Prospective, randomized, open-label, parallel controlled trial comparing losartan 100 mg once daily + standard of care (SOC) vs SOC alone. Neuropathy was graded weekly using NCI-CTCAE over a 3-month/12-week period. Primary endpoint: incidence of grade ≥ 2 peripheral neuropathy. Secondary endpoints included pain (VAS), QoL (FACT-GOG-NTX), serum NGF, paclitaxel dose modification, and safety.

Results



Eighty-nine patients were analyzed (losartan n=45, control n=44). At end of treatment, grade ≥ 2 neuropathy occurred in 15/45 (33.3%) with losartan vs 38/44 (86.4%) with SOC ($P < 0.001$). Grade 3 neuropathy was 8.9% vs 61.4%, respectively. Pain improved with losartan: median (IQR) VAS at mid-treatment 1 (0–2.5) vs 5 (2.25–7) and at end 3 (1.5–5) vs 8 (5–9.75) (both $P < 0.001$). QoL favored losartan at end of treatment: FACT-GOG-NTX 109.22 $\pm$ 22.66 vs 75.37 $\pm$ 24.23, and

neurotoxicity subscale 31.87 ± 6.43 vs 15.45 ± 10.04 (both $P < 0.001$). NGF did not differ significantly between groups (baseline 39 ± 7.52 vs 39.55 ± 4.31 ; end 40.53 ± 7.16 vs 39.77 ± 2.99). Paclitaxel dose reduction due to neuropathy was lower with losartan (11.1% vs 36.4%, $P = 0.005$), with no significant difference in cumulative paclitaxel dose. Losartan was well tolerated (cough 15.6% vs 18.2%; adherence ~97%; no signal for clinically meaningful hypotension).

Conclusions

Losartan substantially reduced clinically significant PIPN and improved pain and QoL, while supporting chemotherapy delivery. These proof-of-concept data support confirmatory, ideally blinded, multicenter trials of RAAS inhibition as a low-cost preventive strategy for taxane neurotoxicity.

NEURO-024

APPLICATION OF INTELLIGENT QUESTION AND ANSWER SYSTEM IN HEALTH EDUCATION FOR CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY IN LUNG CANCER PATIENTS

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a common adverse reaction in lung cancer patients undergoing chemotherapy, often leading to treatment interruption and poor prognosis due to insufficient cognition and lack of self-management. This study constructed an intelligent question and answer system based on the Coze platform and Retrieval-Augmented Generation (RAG) knowledge base to explore its application effect in CIPN health education.

Methods

The system included four core modules: structured RAG knowledge base, multimodal interaction, multi-turn dialogue, and personalized suggestion push, deployed via a WeChat official account. A total of 197 lung cancer patients receiving chemotherapy in a Chongqing hospital (February–August 2025) were selected by convenience sampling and divided into the control group (99 cases) and the observation group (98 cases). Health education service experience, CIPN knowledge mastery rate, self-management behavior score, and adverse event incidence were compared.

Results

The observation group achieved a significantly higher total score of health education service experience, as well as higher scores in the dimensions of timeliness, accessibility, repeatability, and ease of learning, compared with the control group (all $P < 0.05$). The CIPN knowledge mastery rate of the observation group was 93.88%, which was notably higher than the 74.75% of the control group. The self-management behavior score of the observation group was (27.96 ± 3.05) points, significantly exceeding the (20.89 ± 3.42) points of the control group ($P < 0.05$). Additionally, the observation

group had a lower overall incidence of adverse events (3.06% versus 14.14% in the control group), with a statistically significant difference specifically in the incidence of treatment interruption between the two groups ($P < 0.05$).

Conclusions

The intelligent question and answer system based on the Coze platform and RAG knowledge base can significantly improve CIPN health education service experience, knowledge mastery, and self-management ability of lung cancer patients undergoing chemotherapy. It reduces adverse event risk and offers a practical solution for optimizing chemotherapy-related neurotoxicity management.

NEURO-025

ASSESSING THE VALIDITY OF A PATIENT REPORTED SCREENING TOOL FOR CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY

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Introduction

Chemotherapy induced peripheral neuropathy (CIPN) is an often under-recognised and significant toxicity in people with cancer. While patient-reported tools are validated to assess CIPN, the widely used Australian Cancer Institute NSW EviQ anti-cancer drug induced peripheral neuropathy screening tool's comparability to established CIPN screening questionnaires is unclear.

Methods

In a prospective study across two Australian sites, symptomatic patients receiving neurotoxic therapy completed comprehensive CIPN screening, including the EviQ 11-item tool and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire CIPN 20-item tool (EORTC-QLQ-CIPN-20). Composite scores for each instrument were created – for EviQ, by summing all items and for CIPN-20, by linearly converting CIPN-20 scores as previously established. Concurrent validity was assessed using Spearman's correlation comparing composite scores and clinically matched questions between tools.

Results

One hundred participants were included. Median age was 53 and 72 (72%) were female. Most participants had either breast (46, 46%) or gastrointestinal (13, 13%) malignancies, and received taxane (58, 58%) and/or platinum (33, 33%) chemotherapy. The median EviQ composite score was 6 (IQR 3–9). The median CIPN20 composite score was 14.8 (IQR 8.8–21.7). Composite scores between screening tools were strongly correlated ($r = 0.75$, $p < 0.001$). no individual question in either questionnaire was strongly correlated with the composite score ($r < 0.7$). The majority of CIPN screening questions in the EviQ questionnaire showed low correlation with their clinically matched CIPN20 question ($r < 0.5$). Only two questions showed strong association: problems walking and hearing loss ($r > 0.7$, $p < 0.001$) [Table 1].

Table 1: Correlations between clinically matched questions in EviQ and EORTC-QLQ-CIPN20

EviQ Question	EORTC-QLQ-CIPN20 clinically equivalent	Spearman's rho (p-value)
1) Numbness or tingling in hands or feet	1.Tingling in fingers or hands 2.Tingling in toes or feet 3.Numbness in fingers or hands 4.Numbness in toes or feet	0.54 (<0.0001) 0.56 (<0.0001) 0.55 (<0.0001) 0.49 (<0.0001)
2) Pain or discomfort in hands or feet	5.Shooting or burning pain in fingers or hands 6.Shooting or burning pain in toes or feet	0.41 (<0.0001) 0.34 (0.0006)
3) Weakness in arms or legs	15. Difficulty climbing stairs or getting up out of a chair because of leg weakness	0.67 (<0.0001)
4) Problems walking	9. Standing or walking due to difficulty feeling the ground under your feet 14. Difficulty walking from foot drop	0.72 (<0.0001) 0.45 (<0.0001)
5) Able to undertake activities of daily living independently (doing up buttons, writing etc.)	11. Difficulty holding a pen/difficulty writing 12. Difficulty manipulating small objects 13. Difficulty opening a jar because of weakness in hands 19. Difficulty using pedals (driving)	0.49 (<0.0001) 0.52 (<0.0001) 0.42 (<0.0001) 0.0894 (0.42)
6) Currently constipated	NA	NA
7) Hearing loss	18.Hearing difficulty	0.76 (<0.0001)
8) Ringing or buzzing in ears	18.Hearing difficulty	0.28 (0.0047)
9) Dizziness	16.Dizzy when standing up	0.64 (<0.0001)
10) Difficulty breathing/swallowing/eating/drinking	NA	NA
11) Muscle spasms in mouth/jaw/hands/fingers/feet	7.Cramps in hands 8.Cramps in feet	0.55 (<0.0001) 0.50 (<0.0001)
Legend Grading scale EviQ: None (0) → Disabling/life threatening (4) EORTC-QLQ-CIPN20: Not at all (1) → very much (4)		
Strength of association Strong ($r \geq 0.7$) Moderate ($r = 0.4 - 0.7$) Weak ($r < 0.4$)		

Conclusions

The EviQ CIPN screening tool demonstrates strong concurrent validity with CIPN20 at the composite level but limited item-level agreement. While EviQ may be suitable for rapid screening, it does not capture the breadth of CIPN symptoms assessed by CIPN20. Further analysis on the validity and utility of different patient-reported CIPN screening tools to detect CIPN is necessary.

NEURO-026

COMPARE CHANGES OF COGNITIVE FUNCTION IN NEWLY DIAGNOSED COLORECTAL CANCER PATIENTS BETWEEN AFTER SURGERY AND COMBINED WITH CHEMOTHERAPY

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Introduction

Cognitive function of cancer patients might be affected by cancer-related treatments mainly reported by chemotherapy. However, some evidences addressed chemotherapy did not increase the risk of cognitive impairment in colorectal cancer patients. Therefore, the aim of this study was to compare the changes of subjective and objective cognitive function in newly diagnosed colorectal cancer patients between after surgery and combined with chemotherapy.

Methods

A longitudinal design was conducted with collecting 5 times including before treatment (T0), 1 (T1), 3 (T2), 6 (T3), 9 (T4) and 12 (T5)

months after treatment. The newly diagnosed as colorectal cancer patients including group A (surgery only) and group B (surgery and chemotherapy). A set of questionnaires including a demographic and clinical characteristics form, symptom severity scale, fatigue symptom inventory, Brief perceived Cognitive impairment scale (BPCIS), Montreal Cognitive Assessment (MoCA) and Functional Assessment of Cancer Therapy – General (FACT-G) was used to collect data. Generalized estimation equations were used to examine the changes of the studied variables between the two groups.

Results

Compared to the group A ($n = 42$), patients group B ($n = 44$) had younger age and late stage and experienced higher level of symptom severity and fatigue at T2. The objective cognitive function measured by MoCA and Group B had significant worse overall cognitive function at T4 and lower language function assessed by the MoCA at 1 and 9 months after surgery. There was no significant subjective cognitive impairment and quality of life in the two groups.

Conclusions

By controlling the time and surgery effect, our study found that the chemotherapy might affect language speaking even at 9 months after surgery which is generally about at 3 months after end of chemotherapy. It is recommended to follow-up their cognitive function during the treatment and even at the end of chemotherapy, especially the language speaking.

NEURO-027

CLINICAL, FUNCTIONAL AND NEUROPHYSIOLOGICAL FEATURES OF BORTEZOMIB-INDUCED PERIPHERAL NEUROPATHY

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Introduction

Bortezomib-induced peripheral neuropathy (BIPN) remains a significant and prevalent neurotoxicity which limits treatment tolerability and produces chronic neurological and functional deficits. As phenotyping the long-term impacts of BIPN on cancer survivors is challenging due to the lack of single gold-standard outcome measures, this study aimed to comprehensively profile its characteristics using a variety of assessments.

Methods

Thirty-eight patients (mean age=64.9±9.0 years, 63% male) who had completed bortezomib treatment for multiple myeloma were recruited (mean time since treatment=11.7±9.1months, mean cumulative dose=26.8±12.1mg/m²).

Outcome measures included the National Cancer Institute sensory neuropathy scale (NCI), Total Neuropathy Score clinical version (TNSc), a validated patient-reported questionnaire (EORTC-CIPN20), two-point discrimination task, and sural and tibial nerve conduction studies measuring sensory nerve and compound muscle action potentials respectively (SNAP, CMAP).

Results

Amongst bortezomib-treated cancer survivors, 39% ($n=15/38$) were graded to have moderate to severe BIPN (NCI Grade≥2). Despite no differences in age, BMI or demographics between groups, patients with moderate to severe BIPN reported greater symptom burden on the EORTC-CIPN20, increased neurological dysfunction, increased two-point discrimination threshold and reduced sural SNAP amplitude compared to those with no to mild BIPN (Table 1).

Symptom phenotyping on the EORTC-CIPN20 revealed 53% of patients ($n=20/38$) reported both sensory (tingling/numbness) and

motor (cramps/weakness) disturbances, with the severity of sensory disturbances greater than the severity of motor symptoms (43.8(25.0) vs 31.3(12.5), $p=0.0127$). 53% of patients ($n=20/38$) reported both upper and lower limb symptoms, though severity in the lower limbs was greater than in the upper limbs (40(22.5) vs 30(15), $p=0.0266$). Neurological examination revealed 68% ($n=25/37$) had reduced pinprick sensibility and 30% ($n=11/37$) had reduced vibration sensibility. Reduced sural amplitudes were moderately correlated with neurological dysfunction on the TNSc ($r=-0.61$, $p=0.003$), and total EORTC-CIPN20 scores ($r=-0.42$, $p=0.017$).

Table 1. Differences in Assessments between Patients with Moderate to Severe BIPN and No to Mild BIPN.

Assessment	NCI Grade 0-1 (N=23)	NCI Grade 2-3 (N=15)	p-value
Age (years)	62.5(13.0)	64.5(8.8)	0.3003
BMI (kg/m ²)	24.9(2.5)	25.5(3.6)	0.3477
Cumulative Dose (mg/m ²)	20.8(16.3)	20.8(7.9)	0.5523
EORTC-CIPN20 Score (0-100)	6.1(10.5)	21.1(16.1)	0.0001***
Sensory Subscale (0-100)	28.1(17.2)	53.1(14.1)	0.00001***
Motor Subscale (0-100)	25.0(6.3)	37.5(25.0)	0.0039**
Upper Limb Subscale (0-100)	25.0(5.0)	37.5(16.3)	0.0012**
Lower Limb Subscale (0-100)	30.0(13.8)	45.0(25.0)	0.0002***
TNSc Score (0-24)	3.0(2.0)	6.0(3.3)	0.0036**
Two Point Discrimination (mm)	10.0(7.0)	16.0(1.0)	0.0167*
Sural SNAP (μV)	10.3(11.2)	4.8(6.4)	0.0267*
Tibial CMAP (mV)	11.0(5.5)	8.6(5.2)	0.2120

Note. Data is presented as median (IQR).

Conclusions

These results highlight a predominant pattern of sensory and lower limb symptoms with chronic neurological dysfunction, particularly in patients with moderate to severe BIPN.

NEURO-028

EXOSOMAL MICRO-RNA PROFILING IMPLICATES KEY PATHWAYS ASSOCIATED WITH COGNITIVE IMPAIRMENT IN BREAST CANCER PATIENTS: A LONGITUDINAL STUDY

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Introduction

As mediators of intercellular communication, exosomal microRNAs (miRNAs) serve as promising biomarkers of cancer-related cognitive impairment (CRCI) while also providing mechanistic insight into the regulation of biological pathways underlying the condition. Here, we perform exosomal miRNA profiling and identify biological pathways associated with CRCI in a longitudinal study of breast cancer patients.

Methods

Breast cancer patients receiving treatment completed the Functional Assessment of Cancer Therapy-Cognitive Function (FACT-Cog)

questionnaire and blood draws every 12 weeks for up to two years. Plasma exosomes were analyzed using RNA-seq. Differential miRNA expression analyses between timepoints with and without CRCI (PCI <60) were conducted via mixed effects models adjusted for batch effects, performed separately for metastatic and non-metastatic breast cancer patients. Results were combined using Fisher's combined probability test to identify miRNAs associated with CRCI across both groups. miRNAs with an unadjusted p-value of < 0.05 were selected for miRNA-Target network analysis and KEGG pathway enrichment using miRNet. Significance was indicated by a false discovery rate (FDR) of < 0.05.

Results

Forty-two patients were included. Patients had a mean age of 53.6 years (SD: 11.7) and were majority Hispanic (60%) with early-stage (I-III) (52%), ER/PR+ (74%) breast cancer. Sixteen patients (38%) reported CRCI. Eight miRNAs ($p<0.05$) were eligible for pathway analysis. 54 total pathways were enriched, which were involved in inflammation (e.g. TGF-beta and chemokine signaling), neuronal function and synaptic plasticity (e.g. neurotrophin signaling, axon guidance, dopaminergic synapse), and cancer-related signaling (e.g. ErbB, p53) (all FDR < 0.05).

Conclusions

Exosomal miRNAs may play a role in CRCI by modulating inflammation, neurotransmission, and synaptic plasticity. These findings support the feasibility of targeting exosomal miRNA-driven pathway regulation as a novel therapeutic approach for CRCI and identify specific biological pathways which may serve as potential targets.

NEURO-029

COMPARING CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY AND NEUROFILAMENT LIGHT CHAIN IN PACLITAXEL- AND DOCETAXEL-TREATED PATIENTS

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a common consequence of taxane chemotherapy, producing persistent sensory dysfunction and reduced quality of life. Neurofilament light chain (NfL) has emerged as a sensitive biomarker of axonal injury in CIPN, with studies identifying elevated NfL in paclitaxel-treated patients. However, the relevance of NfL in identifying CIPN caused by other taxanes, such as docetaxel, remains poorly characterised. This exploratory analysis investigated agent-specific differences in NfL concentration and CIPN frequency.

Methods

Cancer patients treated with a 3-weekly docetaxel regimen (DTX; $n=11$) or a 3-weekly carboplatin/paclitaxel regimen (PTX; $n=13$) were recruited. CIPN was assessed at end of treatment using a patient-reported outcome questionnaire (EORTC QLQ-CIPN20) and clinical grading scale (NCI-CTCAE). Serum NfL was quantified in pg/mL using a Quanterix Simoa assay at post-cycle 1 and mid-treatment.

Pairwise comparisons used Mann-Whitney U and Fisher's exact tests; continuous data is reported as median (IQR).

Results

At the end of treatment, CIPN frequency and severity were higher in PTX compared to DTX (92% vs 55%; 15.79 vs 10.53), however neither difference reached statistical significance ($p=0.06$ and $p=0.12$). Notably, post-cycle 1 NfL was significantly higher in PTX (64.01 (23.7)) than in DTX (15.74 (17.6); $p<0.001$), with this difference persisting at mid-treatment (PTX: 114.27 (97.0) vs DTX: 47.92 (26.0); $p=0.002$). However, the extent of NfL increase from post-cycle 1 to mid-treatment did not differ by agent (PTX: 35.91 (55.6) vs DTX: 25.71 (43.8); $p=0.62$). Post-cycle 1 NfL was strongly correlated with post-treatment CIPN severity in PTX (Spearman's $\rho=0.58$, $p=0.04$) but not DTX (Spearman's $\rho=-0.09$, $p=0.83$).

Table 1: Demographics and treatment characteristics by chemotherapy regimen

Descriptive data is reported as median (IQR) and pairwise comparisons used the Mann-Whitney U test.

Characteristic	DTX (n = 11)	PTX (n = 13)	P-value
Age, years	66.3 (13.2)	66.3 (14.8)	0.505
BMI, kg/m ²	27.6 (6.6)	26.0 (8.2)	0.582
Cancer type, n (%)			
Breast	6 (54.5)	0 (0)	—
Prostate	5 (45.5)	0 (0)	—
Ovarian	0 (0)	8 (61.5)	—
Cervical	0 (0)	1 (7.7)	—
Endometrial	0 (0)	4 (30.8)	—
Days from cycle 1 infusion to post-cycle 1 blood test	18 (14)	20 (2)	0.277
Days from preceding infusion to interim blood test	20 (0)	20 (2)	0.504
Proportion of total cumulative dose received at post-cycle 1 blood test (%)	21.3 (8.3)	17.4 (7.6)	0.791
Proportion of total cumulative dose received at interim blood test (%)	50.0 (0)	50.8 (3.3)	0.195

Conclusions

This preliminary analysis demonstrated agent-specific trends in NfL elevation during early taxane treatment. Confirmatory studies are required to validate this finding and the predictive utility of early NfL for CIPN.

NEURO-030

LIMB CRYOCOMPRESSSION FOR PREVENTION OF TAXANE-INDUCED PERIPHERAL NEUROPATHY: A PHASE II STUDY

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a common dose-limiting toxicity of taxane-based chemotherapy with no established prophylactic strategy. We evaluated the safety, tolerability and efficacy of limb cryocompression in reducing CIPN.

Methods

This analysis represents updated Phase II results with extended follow-up. Patients receiving taxane-based chemotherapy underwent limb cryocompression using the Paxman Limb Cryocompression System (PLCS). Study endpoints included safety, tolerability and efficacy in reducing sensory CIPN at 12 weeks from chemotherapy initiation and facilitating chemotherapy delivery. Outcomes assessed were rates of adverse events, withdrawal, physician-assessed CIPN using the Common Terminology Criteria for Adverse Events (CTCAE), patient-reported outcomes using the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-CIPN twenty-item scale (EORTC QLQ-CIPN-20), and taxane dose modifications.

Results

147 patients were enrolled (median age 52 years, range 31–82); 96.6% were female and 88.4% had breast cancer. 72.1% of patients received Paclitaxel, 27.2% Docetaxel and 0.7% Abraxane. 44.2% underwent concurrent scalp cooling. 109 patients (74.1%) completed cryocompression without premature termination. 14/22 patients (9.5%) withdrew due to cold intolerance; remaining withdrawals were unrelated to cryocompression. Concurrent scalp cooling did not affect tolerability ($p=0.70$). No serious adverse events were observed.

Sensory CIPN incidence at 12 weeks was 26.6% (29/109) defined by CTCAE ³G1 and 15.2% (14/92) by a ³ point increase in the EORTC QLQ-CIPN-20 sensory subscale. CTCAE G2 CIPN occurred in 2.8% (3/109), with no G3/4 events. Chemotherapy dose modification due to CIPN occurred in 5.5% (6/109). No significant predictors of CIPN were identified.

Conclusions

Limb cryocompression was safe and well tolerated in patients receiving taxane-based chemotherapy and demonstrated promising results in reducing CIPN while supporting planned chemotherapy dosing. A multicentre randomised prospective study is ongoing to validate these results (NCT05642611). These data support cryocompression as a feasible supportive care strategy, with benefits across clinician- and patient-reported outcomes.

NEURO-031

ASSOCIATIONS BETWEEN CHEMOTHERAPY STATUS, COGNITIVE PERFORMANCE, AND INFLUENCING FACTORS IN PATIENTS WITH COLORECTAL CANCER: A CROSS-SECTIONAL STUDY

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Introduction

Chemotherapy-related cognitive impairment has become an increasing concern among patients with colorectal cancer (CRC). However,

evidence comparing domain-specific cognitive function between patients undergoing active chemotherapy and survivors, as well as factors influencing these domains, remains limited. This study aimed to compare objective and perceived cognitive performance between patients with CRC receiving active chemotherapy for 3–6 months and those who had completed chemotherapy within the past five years, and to further explore factors associated with the cognitive domains identified between the two groups.

Methods

A cross-sectional study was conducted in northern Taiwan. A total of 100 patients with stage I–III CRC undergoing active chemotherapy ($n = 42$) or who had completed chemotherapy within the past five years ($n = 58$) were recruited. All participants completed a battery of assessments measuring objective cognitive function, perceived cognitive function, and symptom severity. Independent t-tests and multivariable linear regression were used to compare group differences and to identify factors associated with the identified domains.

Results

Patients in the completed chemotherapy group demonstrated significantly poorer performance than those receiving active treatment in overall cognition, immediate memory, attention, processing speed, and semantic verbal fluency. Completed chemotherapy status was negatively associated with these cognitive domains compared with active treatment status. Female gender was associated with poorer immediate memory, attention, and processing speed compared with male gender; fewer years of education were negatively associated with immediate memory; and older age was negatively associated with semantic verbal fluency.

Conclusions

Compared with patients receiving active chemotherapy, those who had completed chemotherapy demonstrated poorer performance across multiple cognitive domains, suggesting that chemotherapy-related cognitive effects may persist for up to five years. Identification of vulnerable domains and related factors, including fewer years of education, female gender, and older age, may inform the development of targeted interventions and supportive care to improve cognitive performance.

NUTRI-001

PHARMACIST-LED CDTM SCREENING ENABLES EARLY MULTIDISCIPLINARY INTERVENTION FOR CANCER CACHEXIA AND IMPROVES PHYSICAL FUNCTION IN DIGESTIVE CANCERS

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Introduction

Anamorelin, a ghrelin receptor agonist approved exclusively in Japan since April 2021, provides a unique opportunity to evaluate real-world supportive care for cancer cachexia. We assessed whether a pharmacist-led Collaborative Drug Therapy Management (CDTM) system enables earlier identification of cachexia and improves outcomes of a multimodal intervention combining anamorelin, nutrition, and exercise, while examining the gap between Japanese regulatory criteria and Asian diagnostic standards.

Methods

From December 2021 to June 2025, patients with gastric, pancreatic, or colorectal cancer undergoing outpatient chemotherapy were screened using a two-step CDTM protocol: (1) nurse-led weight-loss screening and (2) pharmacist-led eligibility assessment based on Japanese regulatory criteria for anamorelin. Eligible patients ($n=22$) received

anamorelin with individualized nutritional counseling and exercise therapy. Physical function was assessed at 12 weeks using gait speed, 30-second chair stand test (CS-30), and Clinical Frailty Scale (CFS).

Results

Among 311 screened patients, 68 (21.9%) met the primary weight-loss criterion, but only 18 (5.8%) fulfilled the strict Japanese eligibility criteria, indicating substantial under-identification of cachexia. In the intervention group ($n=22$), significant improvements were observed in CS-30 ($+15.11 \pm 21.55\%$, $p=0.006$), gait speed ($+11.95 \pm 17.52\%$, $p=0.005$), and CFS ($p<0.01$). In contrast, no significant changes were found in handgrip strength or lean body mass. Major exclusion reasons included weight loss without anorexia. No Grade ≥ 3 adverse events occurred.

Conclusions

This pharmacist-led, CDTM-based multimodal intervention significantly improved physical function and frailty, demonstrating that functional recovery can precede measurable muscle mass gains. The marked discrepancy between Japanese regulatory criteria and the 2023 Asian Working Group for Cachexia (AWGC) standards suggests that current indications may delay timely supportive care. Pharmacist-driven, patient-centered screening represents a scalable model to enable earlier and more effective cachexia management in Asian oncology practice.

NUTRI-002

INTERVENTIONS FOR EARLY SATIETY IN CANCER: A SYSTEMATIC REVIEW

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Introduction

Early satiety is common in cancer and contributes to reduced intake, malnutrition, and cancer-associated cachexia, yet is rarely a primary target in trials. Existing guidelines emphasize appetite and weight loss more broadly, leaving uncertainty about effective, symptom-focused interventions specifically for early satiety in oncology populations.

Methods

A systematic search included studies evaluating interventions for early satiety in adults with solid tumors or hematologic malignancies where early satiety was reported as primary or secondary outcome. Studies on non-malignant conditions, qualitative research, non-English publications, and secondary literature were excluded. Four databases (MEDLINE/Ovid, Embase, Web of Science, Cochrane) were searched from inception until June 24, 2025. Two reviewers independently screened, extracted data, and assessed risk of bias, with findings synthesized narratively due to outcome heterogeneity.

Results

The databases search yielded 3063 records, with 3 additional studies identified manually (Figure 1). After de-duplication and screening, 34 articles underwent full-text review, and seven met inclusion criteria. The included studies ($n=7$) comprised one randomized, double-blind, placebo-controlled crossover erythromycin trial and six prospective non-randomized or single-arm studies of OHR118, thalidomide, medroxyprogesterone plus celecoxib and supplements, metoclopramide, or nizatidine (Table 1). Heterogeneity in study design, populations, and early-satiety outcome measures precluded meta-analysis, so results were synthesized narratively. The randomized trial had “some concerns” risk of bias for satiety using the revised Cochrane tool, while all non-randomized studies had at least “serious,” and sometimes “critical,” risk of bias due to uncontrolled designs, confounding, attrition, and limited early-satiety reporting (Table 2). Overall, evidence for early-satiety improvement was inconsistent and of low certainty.

Table 2. Risk of Bias Assessment



Conclusions

Current evidence for interventions targeting early satiety in cancer is sparse, heterogeneous, and at serious or critical risk of bias, yielding low-certainty findings. Well-designed randomized trials using standardized, validated satiety measures are urgently needed to guide symptom-focused management and inform future guidelines for this under-studied symptom.

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Introduction

Unintentional weight loss is common in people with pancreatic cancer and predicts poor outcomes. This study characterized temporal patterns of weight change following a pancreatic cancer diagnosis in a large, diverse patient population in a community oncology setting.

Methods

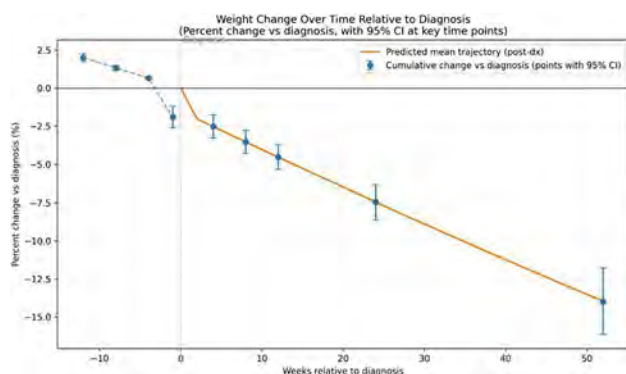
Adults diagnosed with stage I–IV pancreatic cancer from 2020–2024 were identified from an internal registry. Longitudinal weights from six months

Abbreviations: DSSI, Dyspnea Symptom Severity Index; ES, Early safety; ECOG, Eastern Cooperative Oncology Group; ESAS, Edmonton Symptom Assessment System; GI, Gastrointestinal; HNC, Head and Neck Cancer; MPA, Medroxyprogesterone acetate; NSCLC, Non-small cell lung cancer; NRS, Numerical Rating Scale; PaP, Palliative Prognostic Score; PG-SGA, Patient-Generated Subjective Global Assessment; SIRS, Systemic Inflammatory Response Syndrome; VAS, Visual Analogue Scale.

prior to 18 months after diagnosis were extracted from electronic medical records. Among 635 eligible patients, 402 had baseline weights within one week of diagnosis. Percent weight change relative to diagnosis was modeled with separate pre- and post-diagnosis slopes, adjusting for age, sex, and stage, with patient-level random effects. Kaplan-Meier methods were used to estimate length of follow-up and landmark overall survival. $P < 0.05$ was considered statistically significant.

Results

Median age was 69 (range 34–93) years; 48% were female, 71% White and non-Hispanic/Latino (98%). 52% had stage IV disease. Weight declined by 0.57% (95% CI, -0.64 to -0.49) per week before diagnosis and 0.28% (95% CI, -0.32 to -0.22) per week after diagnosis. Mean cumulative change was +14.7% (95% CI, +12.9% to +16.5%) at six months pre-diagnosis, +7.3% (95% CI, +6.5% to +8.2%) at 3 months pre-diagnosis, -3.6% (95% CI, -4.2% to -2.9%) at 3 months post-diagnosis, -7.1% (95% CI, -8.4% to -5.9%) at 6 months post-diagnosis, and -14.3% (95% CI, -16.7% to -11.9%) at 12 months post-diagnosis. Median follow-up was 19.6 months; 225 deaths (56%) occurred. One- and two-year survival rates were 0.53 and 0.34, respectively.



Conclusions

Weight loss began up to six months before diagnosis and persisted afterward, averaging a 14% reduction within a year. These findings highlight the need for nutritional intervention at diagnosis and demonstrates the value of consistent and longitudinal weight management to identify at risk for future severe weight loss.

NUTRI-005

CLINICAL OUTCOMES OF ENTERAL VERSUS PARENTERAL NUTRITION DURING HAEMATOPOIETIC STEM CELL TRANSPLANTATION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Nutrition support is emerging as an important component of care post stem cell transplantation (SCT), influencing recovery and clinical outcomes. Due to poor oral intake post-transplant conditioning, enteral (EN) or parenteral nutrition (PN) is commonly required. An updated assessment of the literature on the optimal mode of nutrition support was indicated to assist in informing and standardising clinical practice.

Methods

This systematic review and meta-analysis was registered on PROSPERO and followed the PRISMA guidelines. Four databases were searched up to May 2025. Studies that compared provision of EN and PN for paediatric or adult patients undergoing autologous or allogeneic transplantation were included. The Cochrane RoB 2 and ROBINS-I tools were used to complete risk of bias assessments. Random-effects meta-analyses (restricted maximum likelihood) was performed using Stata version 18.

Results

Twenty studies (14 observational studies; 6 trials) of primarily small sample size (15 studies < 80 participants) met the inclusion criteria. Meta-analysis was completed for five outcomes including acute graft versus host disease (GVHD) (14 studies), severe grade III–IV GVHD (8 studies), gastrointestinal GVHD (10 studies), severe mucositis (9 studies) and overall survival (10 studies). EN provision was associated with a lower risk of GVHD (any grade: RR = 0.75, 95% CI 0.64–0.87, $p < 0.001$; lower risk of grade III–IV GVHD: RR = 0.49, 95% CI 0.33–0.73, $p < 0.001$ and gastrointestinal acute GVHD (RR = 0.61, 95% CI 0.49–0.76, $p < 0.001$).

No significant association was observed between mode of feeding and mucositis or overall survival. Several studies reported trends toward fewer bloodstream infections, faster haematologic engraftment, and favourable gut microbiome profiles with EN; however, quantitative synthesis was not feasible for these outcomes.

Conclusions

Within the limitations of the current evidence, EN use is associated with clinically relevant reductions in rates of GVHD compared to PN use post SCT.

NUTRI-006

THE CURRENT LANDSCAPE OF FOOD AND NUTRITION INSECURITY RESEARCH IN CANCER SURVIVORSHIP: A GLOBAL SYSTEMATIC SCOPING REVIEW

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Introduction

This review maps and synthesises existing literature on food and nutrition insecurity (FNI) among cancer survivors and carers, many of whom experience physical, psychosocial, practical, and financial burdens, coupled with increased nutritional requirements from cancer and its treatment.

Methods

Six academic databases (APA PsycINFO, CINAHL, Embase, Medline, ProQuest, Web of Science) were searched in July 2025. Studies reporting on FNI among adult cancer survivors and/or carers were eligible for inclusion. Two independent reviewers conducted screening and data extraction, with findings summarised descriptively.

Results

Of 7,189 records, 135 studies were included ($n=115$ quantitative, $n=14$ qualitative, $n=6$ mixed methods), mostly published within the past five years ($n=119$, 88%) and conducted in the United States ($n=109$, 81%). Most involved cancer survivors ($n=118$, 87%), with few involving carers ($n=19$, 14%). Among 99 (73%) studies that measured FNI at the individual or household level, 24 instruments were used, most commonly the United States Department of Agriculture Household Food Security Survey Module ($n=33$, 33%). In population-based studies ($n=22$, 16%), an average of 9% (range=4–49%) of cancer survivors had FNI, while an average of 15% were at risk of FNI (range=6–55%). FNI was often associated

with sociodemographic factors, including lower income and younger age, and poorer outcomes, including treatment non-adherence and mortality.

Conclusions

FNI is an emerging concern in cancer survivorship, but remains under-researched, particularly among carers who are often responsible for sourcing and preparing food during and after cancer treatment. Future research should prioritise diverse populations and standardised measurement approaches, and focus on developing targeted interventions from diagnosis onwards.

NUTRI-008
BODY COMPOSITION IN OVARIAN CANCER: IS ASSESSMENT OF A SINGLE PHENOTYPE A COSTLY OVERSIMPLIFICATION? RESULTS FROM A COX PROPORTIONAL HAZARDS ANALYSIS

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Introduction

Ovarian cancer has the poorest survival outcomes among gynaecological cancers. Low muscle mass is associated with poorer survival in other cancers. In ovarian cancer, this association is unclear. The overall distribution between muscle and adipose tissue and muscle composition may have greater prognostic value.

Methods

Retrospective observational study of 99 women [mean (SD) age 60 (12.7) years, 80% stage III/IV] diagnosed with epithelial ovarian cancer between August 2020 and March 2024. Sociodemographic and clinical characteristics were extracted from medical records. Body composition phenotypes (low skeletal muscle index [SMI], low skeletal muscle density [SMD], high subcutaneous [SATI], visceral [VATI] and total adipose tissue index [TATI]) were assessed from pretreatment CT images. Sex- and BMI-specific cut-off points were used to define muscle, and the median to define high adiposity. Data on survival were obtained from the death registry. Cox proportional hazards models were fitted and adjusted (age, stage, comorbidities, BMI) to assess association with survival.

Results

Prevalence of low SMI was 67% (n=67), 57% (n=57) had low SMD, and 49% (n=49) had high TATI. When examining combination phenotypes, 37% (n=37) had low SMI and low SMD, 23% (n=23) low SMI with high TATI, 33% (n=33) low SMD with high TATI, and 15% (n=15) had low SMI, low SMD and high TATI (Figure 1). Women with low SMI and high adiposity (TATI, SATI, VATI) had 1.9-2.2 higher hazard of mortality. Similarly, women with low SMD and high adiposity (TATI, SATI, VATI) had 2.1-2.4 higher hazard of mortality.

There was insufficient or weak evidence of mortality with remaining phenotypes (Table 1).

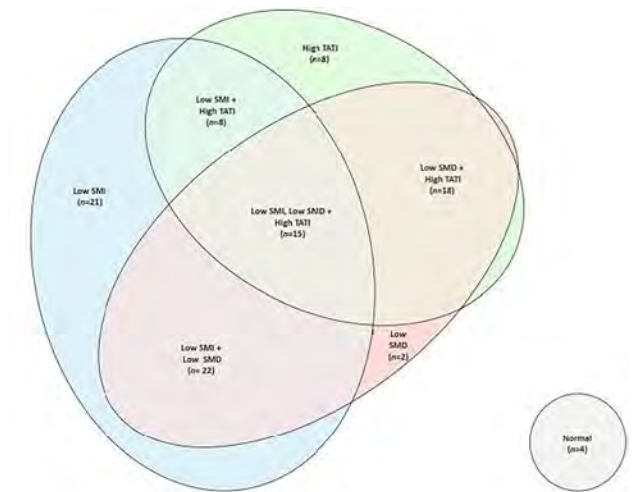


Figure 1.
Euler diagram demonstrating the distribution each body composition phenotype across the sample

Phenotype	Death (n/N)	Hazard ratio (95% CI)	P-value
Singular phenotypes			
Low SMI	34/67	1.36 (.68 - 2.74)	p = 0.39
Low SMD	32/57	1.74 (.90 - 3.37)	p = 0.098
High TATI	27/49	1.70 (.89 - 3.25)	p = 0.11
High SATI	27/49	1.65 (.86 - 3.17)	p = 0.13
High VATI	27/49	1.87 (.97 - 3.58)	p = 0.06
Overlapping phenotypes			
Low SMI + Low SMD	22/37	1.63 (.87 - 3.06)	p = 0.13
SMI + adipose tissue			
Low SMI + High TATI	15/23	1.91 (1.01 - 3.61)	p = 0.05
Low SMI + High SATI	16/23	2.0 (1.09 - 3.70)	p = 0.03
Low SMI + High VATI	15/24	1.91 (.99 - 3.71)	p = 0.06
SMD + adipose tissue			
Low SMD + High TATI	19/33	2.22 (1.06 - 4.65)	p = 0.04
Low SMD + High SATI	19/33	2.12 (1.10 - 4.23)	p = 0.03
Low SMD + High VATI	20/34	2.41 (1.13 - 5.09)	p = 0.02

Abbreviations: CI: confidence interval, SMD: skeletal muscle density, SMI: skeletal muscle index, SATI: subcutaneous adipose tissue, TATI: total adipose tissue index, VATI: visceral adipose tissue. Models adjusted for age, stage, BMI and Charlson comorbidity index.

Conclusions

These findings emphasise the complexity of body composition, demonstrating additive effects when phenotypes co-occur. Singular assessments may be an oversimplification, limiting provision of personalised care. To enhance pre-treatment risk stratification, more nuanced methods are necessary to capture such complexity and leveraging existing CT images offers this opportunity.

NUTRI-009
EXPLORING NUTRITION-RELATED ISSUES AND EXPERIENCES OF NUTRITION CARE DURING TREATMENT FOR OVARIAN CANCER: A QUALITATIVE ANALYSIS

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Methods

This pilot longitudinal mixed-methods study involved advanced cancer patients and family caregivers recruited from three palliative care hospitals in Hong Kong between June and October 2024. Patients and caregivers were assessed at baseline and 8-week follow-up, during which they were asked to complete the Functional Assessment of Anorexia/Cachexia Therapy Scale, the Generalized Anxiety Disorder-7, and the Patient Health Questionnaire-9, followed by semi-structured joint interviews. Descriptive statistics and correlation analysis were used to analyze quantitative data, while thematic analysis for interview data.

Results

Of the 12 dyads that participated in this study, two were lost to follow-up due to patient death, and 10 dyads completed the assessments. Half of the patients and 7 caregivers reported worsening cachexia, with 4 caregivers observing greater symptom progression than patients (difference score −15 to −6). Around half of patients and caregivers reported increased anxiety and depression, but 30–40% caregivers rated greater worsening than patients. Increased caregiver–patient discrepancy in cachexia appraisal over time showed moderate positive associations with increased caregivers’ anxiety ($r = 0.37$) and depression ($r = 0.32$), but not with patients’ distress. Interview data revealed that dyads who were on the same page of identifying, explaining, and managing cachexia symptoms tended to perceive stable or improved patient status. By contrast, caregivers experienced greater distress when they perceived deteriorating symptoms or when improvements in oral intake and nutritional management did not result in slowed weight loss.

Conclusions

Discrepancies in cachexia appraisal within dyads may be important for psychological well-being in caregivers, which needs to be confirmed in future large studies.

NUTRI-013
ADJUVANT GINGER (ZINGIBER OFFICINALE) FOR CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING MANAGEMENT: A META-ANALYSIS OF EFFICACY, SAFETY, AND OPTIMAL DOSING

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Introduction

Evidence supports the antiemetic effects of ginger for chemotherapy-induced nausea and vomiting (CINV). However, uncertainty around optimal dosing and the lack of a recent high-quality meta-analysis limit its guideline adoption. This review aimed to evaluate the efficacy, safety, and optimal dosing regimen of adjuvant oral ginger (*Zingiber officinale*) supplementation for CINV and related outcomes, compared to placebo or standard anti-emetic medication, in people of any age.

Methods

This systematic review and meta-analysis searched five databases to September 2025. Outcomes were the incidence and severity of acute (≤ 24 hours post chemotherapy), delayed (> 24 hours post chemotherapy), and anticipatory CINV, CINV-related outcomes, and adverse events. Data were pooled using RevMan; subgroup analysis explored optimal dosing. Study quality was assessed with RoB2 and confidence in pooled effect estimates with GRADE.

Results

Twenty-five randomised controlled trials were included ($N=2,435$ participants, 8% < 18 years of age). Most studies (64%) had low or some risk of bias; 86% administered ginger in capsule form. Adjuvant ginger reduced the odds of acute and delayed nausea by 31–46% (1–2g/day, 3–4 times daily, ≥ 3 -days), acute and delayed vomiting by 69–70% (0.5–2g/day, 2–4 times daily, ≥ 3 -days), and improved malnutrition incidence, fatigue severity, and CINV-related quality of life (1.2g/day, four times daily, 5-days; GRADE: moderate-to-high; Table). Ginger had no effect on nausea severity. There was no association with heartburn/reflux/indigestion events or any adverse event (GRADE: very low). Insufficient data precluded meta-analyses for anticipatory CINV, vomiting episodes, and mood.

Table. Results from meta-analyses conducted to evaluate the efficacy, safety, and optimal dosing regimen of ginger supplementation for chemotherapy-induced nausea and vomiting and related outcomes.

Outcome	Ginger			Control	Pooled estimate	95% CI	Sig. of pooled estimate (p)	I ²	N of Studies	Sample Size	GRADE level of confidence
	Dose	Frequency	Duration								
Nausea incidence											
Acute	1–2g/d	TID or QID	3–6d	Placebo, usual care	OR: 3.58	0.35, 0.86	0.008	0%	5	435	High
Delayed	1–2g/d	QID	5–6d	Placebo, usual care	OR: 2.54	0.31, 0.92	0.020	20%	3	283	High
	0.5–2g/d	BD, TID, or QID	5d–3 cycles	Placebo, usual care	OR: 3.69	0.49, 0.99	0.040	29%	7	854	Moderate
Nausea severity											
Acute	1–2g/d	BD or QID	5–6d	Placebo	SMD: 0.04	-0.19, 0.26	0.870	0%	6	539	Very low
Delayed	0.5–2g/d	BD, TID, or QID	1d–3 cycles	Placebo, usual care	SMD: 0.15	-0.62, 0.31	0.510	67%	7	599	Very low
Vomiting incidence											
Acute	0.5–2g/d	BD or TID	3d–3 cycles	Placebo, usual care	OR: 3.31	0.13, 0.75	0.010	63%	5	432	Moderate
Delayed	0.5–2g/d	TID or QID	3d–3 cycles	Placebo, usual care	OR: 3.30	0.10, 0.90	0.030	86%	7	709	Moderate
Other outcomes											
Fatigue severity ^a	1–2g/d	QID	5d	Placebo	MD: 6.62	3.10, 10.15	<0.001	0%	2	154	High
Malnutrition incidence ^a	1–2g/d	QID	5d	Placebo	OR: 3.43	0.21, 0.30	0.020	27%	2	154	High
CINV-related QoL score ^b	1–2g/d	QID	5d	Placebo	MD: 10.84	5.53, 16.15	<0.001	0%	2	154	Moderate
Adverse events											
Reflux events	0.5–2g/d	BD or QID	5d–2 cycles	Placebo	OR: 1.30	0.43, 2.81	0.640	24%	5	454	Very low
Any adverse event	0.5–2g/d	BD, TID, or QID	3d–3 cycles	Placebo, usual care	OR: 1.49	0.79, 2.81	0.220	87%	13 ^c	1662	Very low

AE: adverse event; BD: twice daily; CI: confidence interval; d: days; g: grams; GRADE, Grading of Recommendations, Assessment, Development and Evaluations; I²: heterogeneity; MD: mean difference; N: number; OR: odds ratio; SMD: standardised mean difference; TID: three times daily; QID: four times daily; QoL: quality of life.
^aFixed effects model. All others used random effects. ^bFunnel plot shows no indication of publication bias.

Conclusions

Adjuvant ginger supplementation was efficacious and safe for acute and delayed CINV, malnutrition, fatigue, and quality of life. The most effective dosing regimen was a total of 1–2g/day, administered 3–4 times daily for at least 3 days, commencing on the day of chemotherapy before infusion begins. Future research, especially in paediatric patients, should refine optimal dosing based on bioactive constituents and focus on implementation and personalisation.

NUTRI-014
IMPACT OF DIABETES ON NUTRITIONAL STATUS IN PEOPLE WITH CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Malnutrition is common in cancer and negatively effects symptom burden, treatment tolerance, and quality of life. Coexisting cancer and diabetes may exacerbate nutritional decline, but evidence has not yet been synthesised in a meta-analysis. In adults with cancer, this systematic review and meta-analysis aimed to evaluate the nutritional status of people with diabetes mellitus (Type 1 or 2) compared to those without diabetes.

Methods

Four databases were searched to April 2025 for quantitative studies assessing nutritional status outcomes, excluding studies that relied solely on biochemical markers, total body weight, body mass index, fat mass, or dietary intake as indicators of nutritional status. Data were pooled using RevMan; sensitivity analysis explored sources of heterogeneity. Study quality was assessed with Joanna Briggs Institute tools. Certainty in pooled effect estimates were assessed with Grading of Recommendations, Assessment, Development, and Evaluation (GRADE).

Results

Twenty-eight observational studies were included (N=26,785 participants, n=3,851 with diabetes). Most studies were conducted in Asian countries (68% studies) in people with gastrointestinal or mixed cancer types (50% and 38% studies, respectively), and were published from 2022 onwards (88% studies). Compared to people without diabetes, there was high GRADE certainty that people with comorbid cancer and diabetes had 89% higher odds of malnutrition (OR: 1.89, 95% CI: 1.34–2.68, p<0.001, n=8,673 participants), 72% higher odds of sarcopenia (OR: 1.72, 95% CI: 1.06–2.77, p=0.03, n=3,055 participants), and 69% higher odds of frailty (OR: 1.69, 95% CI: 1.41–2.03, p<0.001, n=3,383 participants). Diabetes type and management were poorly reported, precluding subgroup analyses. Insufficient data prevented meta-analyses for nutritional status scores and muscle mass.

Conclusions

This review provided the first meta-analytic synthesis demonstrating that adults with cancer and comorbid diabetes are at substantially higher odds of malnutrition, sarcopenia, and frailty than those without diabetes, highlighting the critical need for early nutritional assessment and targeted interventions in this high-risk population.

NUTRI-015

PREDICTORS OF CANCER-RELATED MUSCLE LOSS: A MODIFIED DELPHI STUDY TO DEVELOP QUESTIONS FOR A SCREENING TOOL

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Introduction

This study engaged international experts in establishing a core set of predictors of cancer-related muscle loss to inform development of screening tool questions.

Methods

Following a scoping review, a two-round Delphi study was conducted. Identified predictors were rated using a 9-point Likert scale based on importance ('not important'–'critical') and agreement ('strongly disagree'–'strongly agree') with the operationalisation of predictors into screening tool question format. Consensus was reached when ≥70% of participants rated 7–9 (critical) or ≥70% rated '4' to '6' (important but not critical) with a median score ≥7. Additional predictors were recommended by experts, but no predictors were removed between rounds. A 10-person steering committee including researchers, clinicians and a biostatistician revised screening tool questions after each round.

Results

Thirty experts from eight countries and five disciplines (47% physicians) completed both Delphi rounds (91% retention). Fifteen predictors reached consensus. Low physical performance (e.g., completion of daily tasks), poor physical function (e.g., gait speed), fatigue, multimorbidity, weight loss, dysphagia, low calf circumference, physical inactivity, sedentary behaviour, age, and reduced energy intake, protein intake, muscle strength and appetite were reached consensus (Table 1). Low mid-upper arm circumference was rated as 'important but not critical' and was included. Side-effects and prolonged immobilisation were removed by the committee. Consensus was reached on nine questions and corresponding responses, one question (not response), and one response (not question). The wording of questions and responses not reaching consensus was revised by the steering committee. Sixteen questions, representing the 15 predictors, were established.

Table 1. Results from Delphi round 2: rating predictor importance

Predictors	Median score	Not important N (%)	Importance	
			Important but not critical N (%)	Critical N (%)
Low physical performance	8	0 (0)	3 (10)	27 (90)
Poor physical function	8	0 (0)	3 (10)	27 (90)
Fatigue	7	2 (7)	10 (33)	18 (60)
Reduced energy intake	8	1 (3)	2 (7)	27 (90)
Reduced protein intake	8	1 (3)	6 (20)	23 (77)
Multimorbidity	7	2 (7)	12 (40)	16 (53)
Diabetes	5	5 (17)	23 (77)	2 (7)
Cardiovascular disease	5	6 (20)	23 (77)	1 (3)
Smoking	4	9 (30)	19 (63)	2 (7)
High alcohol intake	4.5	11 (37)	13 (43)	6 (20)
Unintentional weight loss	9	0 (0)	1 (3)	29 (97)
Reduced muscle strength	8	0 (0)	1 (3)	29 (97)
Presence of treatment side effects	7	2 (7)	12 (40)	16 (53)
Reduced appetite	8	1 (3)	6 (20)	23 (77)
Nausea	6	2 (7)	17 (57)	11 (37)
Diarrhoea	5.5	3 (10)	19 (63)	6 (20)
Dysphagia	7	2 (7)	10 (33)	18 (60)
Pain	6	4 (13)	15 (50)	11 (37)
Low calf circumference	7	0 (0)	9 (30)	21 (70)
Low mid-upper arm circumference	6	1 (3)	17 (57)	12 (40)
Physical inactivity	8	2 (7)	5 (17)	23 (77)
Depression	5	5 (17)	18 (60)	7 (23)
Anxiety	5	5 (17)	22 (73)	3 (10)
Recent hospital admission	6	2 (7)	19 (63)	9 (30)
Sedentary behaviour	8	1 (3)	4 (13)	25 (83)
Neurological conditions	6	2 (7)	18 (60)	10 (33)
Prolonged immobilisation	7	1 (3)	10 (33)	19 (63)
Age	7	0 (0)	9 (30)	21 (70)

Conclusions

This international Delphi study established consensus on key predictors of cancer-related muscle loss and corresponding screening tool

questions to inform the development of a screening tool for cancer-related muscle loss. The questions will undergo face validity testing with end-users, after which, the screening tool will be developed and validated (Figure 1).

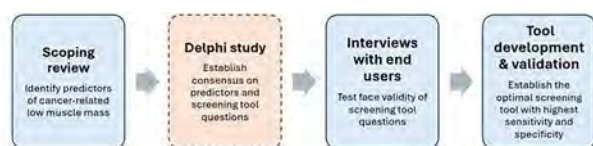


Figure 1. Study design including a scoping review, international Delphi survey and face validity testing

NUTRI-017

PROGNOSTIC IMPACT OF CACHEXIA-RELATED CRITERIA (EPCRC, AWGC, MGPS) USING TIME-DEPENDENT ANALYSES ACROSS MULTIPLE TUMOR TYPES

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Introduction

Cancer cachexia is defined using multiple criteria, including EPCRC and AWGC, which rely on weight loss and physical assessments that may be difficult to obtain in routine practice. The modified Glasgow Prognostic Score (mGPS), based on CRP and albumin, is not a diagnostic criterion for cachexia but may provide an objective inflammation-based marker. This study compared EPCRC, AWGC, and severe inflammation defined by mGPS for their prognostic ability across major cancer types.

Methods

This retrospective cohort included patients with colorectal, gastric, pancreatic, and lung cancer who initiated first-line systemic therapy at Gifu University Hospital from January 2013 to December 2023. Cachexia onset was evaluated from treatment start to end of first-line therapy. Cachexia was defined using EPCRC or AWGC. Severe inflammation was defined as mGPS=2 (CRP >0.5 mg/dL and albumin <3.5 g/dL). Cumulative incidence and time-dependent Cox regression adjusted for age, sex, NLR, ICI use (gastric/lung), and mFOLFIRINOX or GnP (pancreatic) were applied.

Results

For overall survival (OS), mGPS showed the strongest associations overall and across most cancer types (HR 1.75, 95%CI 1.43–2.15), compared with AWGC (1.62, 1.29–2.02) and EPCRC (1.30, 1.06–1.58). mGPS remained prognostic in colorectal (1.73, 1.24–2.43) and gastric cancer (2.78, 1.54–5.00), where EPCRC and AWGC showed weaker or non-significant associations. For progression-free survival (PFS), mGPS again showed the strongest prognostic performance overall (1.69, 1.42–2.02), followed by AWGC (1.52, 1.26–1.85) and EPCRC (1.23, 1.02–1.47). Significant associations were observed in colorectal (1.61, 1.18–2.18), gastric (1.96, 1.14–3.37), and pancreatic cancer (1.89, 1.38–2.59), whereas EPCRC and AWGC did not consistently predict PFS in colorectal or gastric cancer.

Conclusions

mGPS demonstrated the highest prognostic performance across tumor types. These findings indicate that inflammation-based indicators may enable earlier identification of high-risk patients and support individualized assessment strategies for cancer cachexia.

NUTRI-020

THE PREVALENCE OF MALNUTRITION AND THE RISK OF SARCOPENIA IN PATIENTS TREATED WITH IMMUNOTHERAPY.

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Introduction

Malnutrition and sarcopenia are often present at cancer diagnosis and can be exacerbated through treatment. Both can have considerable effects on patient outcomes including reduced quality of life and increased mortality. Immunotherapy treatments have significantly enhanced response and survival rates for many cancer types, whilst being cited as having reduced side effects compared to chemotherapy. However, the impact of immunotherapy on patients' nutritional status remains under explored. This study aimed to compare malnutrition prevalence and sarcopenia risk in patients treated with immunotherapy and chemotherapy.

Methods

Two multi-site point prevalence studies were conducted across 27 Victorian acute health services in July 2022 and 2024 and combined for this analysis. Adults with cancer receiving ambulatory cancer therapy and multi-day stay inpatients were included. Malnutrition risk was assessed using the Malnutrition Screening Tool, malnutrition diagnosis determined using the GLIM criteria, and sarcopenia risk assessed using SARC-F questionnaire with calf circumference.

Results

A total of 3826 patients (median age 65 years, 51.2% female) were included, 455 were treated with immunotherapy and 1627 with chemotherapy. Malnutrition prevalence was 28.8% (n=1105) overall, 27.2% (n=124) in immunotherapy treated patients and 30.9% (n=689) in chemotherapy treated patients. Among patients with malnutrition, a higher proportion of chemotherapy patients were receiving active dietetic intervention compared to immunotherapy patients (48.1% vs. 35.4%). Risk of sarcopenia was similar overall and in patients treated with immunotherapy and chemotherapy (20%, 21% and 19.6%, respectively).

Conclusions

Patients treated with immunotherapy appear to have similar rates of malnutrition and sarcopenia risk as those treated with chemotherapy yet receive less access to nutritional care. Health services should ensure immunotherapy treated patients have access to the same screening and referral pathways to dietetic services as traditional treatments to treat and prevent both conditions and minimise associated adverse outcomes.

NUTRI-021

HOW MANY CANCER PATIENTS ARE EXPERIENCING FOOD INSECURITY? A PERSPECTIVE FROM VICTORIA, AUSTRALIA.

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Introduction

Food security is defined as having physical, social and economic access to sufficient, safe and nutritious foods to meet dietary needs and preferences for an active and healthy life. When these conditions are not met, food insecurity results. In the context of a cancer diagnosis and the associated risk of malnutrition, food insecurity is an important but under-recognised issue, with little available data within Australia. As maintaining adequate nutrition is critical to prevent and treat malnutrition, it is important to understand the level of food insecurity experienced by people with cancer. The study aimed to assess the food security status of people with cancer in Victoria.

Methods

A multi-site point prevalence study was conducted in Victorian acute health services in July 2024. Adults receiving ambulatory treatment and multi-day stay inpatients were included. Patients were assessed for malnutrition and food security status was determined using the U.S. Household Food Security Survey Module for Adults.

Results

Twenty-four health services recruited 2121 adult oncology patients. Overall food insecurity was 6.9%, with the majority experiencing marginal food insecurity (4.0%). There was little difference in food security status between admitted and ambulatory patients, and between metropolitan or regional/rural locations. Culturally and linguistically diverse (CALD) patients recorded higher rates of food insecurity (10.4%) compared to non-CALD patients (6.0%; $p=0.001$). Patients who were food insecure had a higher prevalence of malnutrition (37.0%) compared to those assessed as food secure (28.0%).

Conclusions

This study represents, to our knowledge, the first measure of food security in an oncology population in Australia. These results are clinically important and suggest that to effectively address the issue of malnutrition, food security must also be considered as part of a multimodal intervention. Further exploration into strategies to improve the food security status and support the oncology population should be a priority.

NUTRI-022

THE KNOWLEDGE GAP AND PRACTICE DEFICIENCIES IN CANCER CACHEXIA MANAGEMENT AMONG NIGERIAN HEALTHCARE PROFESSIONALS.

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Introduction

A significant gap exists between international guidelines on cancer cachexia and clinical practice, a challenge expected to be more acute

in low-resource settings. No prior study has comprehensively assessed healthcare professional (HCP) knowledge and practice regarding cancer cachexia in Nigeria, despite its high cancer burden.

Methods

A nationwide, cross-sectional survey was conducted among 441 Nigerian HCPs (physicians, nurses, dietitians, pharmacists, physiotherapists) using a modified version of the GENESIS-CC questionnaire. Data were analyzed using descriptive statistics to evaluate knowledge, perceptions, and clinical practices.

Results

While HCPs demonstrated high awareness of cachexia importance (69.2% strongly agreed to assess it), significant knowledge gaps were identified. Only 55.6% recognized the role of systemic inflammation, and 77.3% considered malnutrition an appropriate substitute for cachexia, indicating a fundamental misunderstanding of its pathophysiology. Practice was inconsistent; though 63.7% weighed patients at each visit, only 48.5% systematically tracked weight over time, and 73% relied on clinical judgement over guidelines. Management focused on nutritional support (83.2%) with underutilization of multimodal strategies (e.g., 15.4% used anti-inflammatories). Critical educational deficits were noted, with only 20.4% receiving undergraduate cachexia training, though over 80% expressed strong interest in further education.

Conclusions

This first Nigerian survey reveals a critical disconnect between cachexia awareness and effective management, driven by knowledge gaps and insufficient training. These findings highlight an urgent need for targeted education and context-appropriate clinical pathways to integrate cachexia care into Nigerian oncology practice.

NUTRI-023

SYNERGISTIC IMPACT OF L3 MUSCLE INDEX AND ATTENUATION ON SURVIVAL IN ADVANCED GASTRIC CANCER: A SINGLE-CENTER, LARGE COHORT, PROSPECTIVE ANALYSIS

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Introduction

Early identification of high-risk patients with advanced gastric cancer (AGC) is vital for timely supportive care. This study aimed to evaluate the prognostic impact of combining L3 Muscle Index (L3MI) and Muscle Attenuation (HU) at diagnosis and its correlation with multidimensional nutritional and functional parameters.

Methods

From June 2020 to July 2025, 583 patients with newly diagnosed AGC were prospectively enrolled. L3MI and HU were measured via L3-level CT scans. Optimal cut-offs were determined using maximally selected rank statistics (MaxStat) with the Lau 94 method. Patients were categorized into Group 1 (High L3MI/High HU), Group 2 (Low L3MI or Low HU), and Group 3 (Low L3MI/Low HU). Comprehensive assessments included BIA, hand grip strength (HGS), serum biochemistry, PG-SGA, and GLIM criteria.

Results

Median overall survival (OS) showed significant stepwise declines: Group 1 (22.6 months), Group 2 (19.3 months), and Group 3 (14.3 months) ($p < 0.001$). Multivariate analysis confirmed that the "depleted group" (Group 3) was an independent predictor of mortality (Hazard Ratio [HR]: 1.670, 95% CI: 1.222–2.280, $p = 0.001$). This CT-based classification significantly correlated with other multidimensional assessments: Group 3 exhibited significantly higher PG-SGA scores ($p < 0.001$), reduced HGS ($p < 0.001$), and lower skeletal muscle mass measured by BIA ($p < 0.001$). Furthermore, Group 3 was associated

with lower albumin levels and elevated systemic inflammatory markers, including neutrophil-to-lymphocyte ratio (NLR) and CRP ($p < 0.001$).

Conclusions

The combination of L3MI and HU is a robust prognostic indicator in AGC. Its strong correlation with validated tools like PG-SGA and HGS supports using CT-based muscle assessment as a core component of integrated screening to identify high-risk patients requiring intensive, multimodal supportive care.

NUTRI-025

SYSTEMIC INFLAMMATION INDUCES VASCULAR ENDOTHELIAL GLYCOCALYX SHEDDING IN A MURINE MODEL OF CANCER CACHEXIA

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University of Yamanashi

Introduction

Cancer cachexia has various symptoms including fluid retention and leads to poor prognosis. Vascular endothelial glycocalyx (VEG) plays a role in vascular permeability and homeostasis. Systemic inflammation such as sepsis causes VEG shedding, and cancer cachexia is strongly associated with systemic inflammation. Therefore, this study investigated whether cancer cachexia causes VEG shedding, focusing on the role of inflammatory cytokines.

Methods

We compared two murine models of cancer cachexia: the Colon26 model (CD2F1 mice), known for high production of inflammatory cytokines, and the 85As2 model (BALB/c nu/nu mice), characterized by low inflammatory cytokine production. Serum syndecan-1 concentrations were measured as a marker of VEG shedding, and the serum inflammatory cytokines (IL-1 β , IL-6, IL-10, TNF) concentrations were also measured. Additionally, the ultrastructure of the VEG in the capillaries of the heart, brain, kidney, and liver was visualized using scanning electron microscopy (SEM).

Results

In the Colon26 model, serum syndecan-1 level in the cachectic group significantly increased over time compared to control group. In the cachectic group, serum IL-6 and TNF levels were significantly higher compared to the control group. SEM analysis revealed extensive shedding of the VEG in the major organs. In contrast, in the 85As2 model, serum syndecan-1 levels showed no difference between the two groups. In the cachexia group, a slight but statistically significant increase in serum IL-6 was observed compared to the control group, while TNF was significantly decreased. SEM demonstrated that the VEG structure remained intact, like the control group.

Conclusions

These findings demonstrate that systemic inflammation associated with cancer cachexia induces VEG shedding. The differential outcomes between the two models suggest that inflammatory mediators, rather than cachexia itself, are the primary drivers of endothelial damage. Protecting VEG may represent a novel therapeutic strategy for managing fluid retention in terminal cancer.

NUTRI-026

NUTRITIONAL STATUS AND PEG TUBE PLACEMENT IN HEAD AND NECK SQUAMOUS CELL CARCINOMA IN A RESOURCE-LIMITED SETTING

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Introduction

Malnutrition is a major determinant of treatment tolerance, quality of life, and outcomes in head and neck squamous cell carcinoma (HNSCC). International guidelines (ESMO/NCCN) recommend early nutritional assessment and consideration of prophylactic enteral feeding for high-risk patients receiving chemoradiotherapy. In conflict-affected, resource-limited settings, implementation of these recommendations is challenging. This study evaluates nutritional status and timing of percutaneous endoscopic gastrostomy (PEG) placement in Palestinian HNSCC patients to identify gaps in supportive and palliative care delivery.

Methods

We retrospectively reviewed 330 HNSCC patients treated at Augusta Victoria Hospital, the sole radiotherapy center in Palestine, between 2019 and 2024. Data included disease stage, treatment modality, mucositis grade, nutritional deterioration, PEG tube placement, and timing (prophylactic vs reactive). Outcomes were assessed in relation to guideline-based nutritional care principles.

Results

Most patients presented with locally advanced disease requiring definitive chemoradiotherapy. PEG tubes were placed in 13.3% of patients; approximately 80% were inserted reactively after the development of grade 3 mucositis and significant nutritional decline. Prophylactic PEG placement, as recommended by ESMO and NCCN for high-risk patients, was infrequent. Reactive PEG placement was associated with treatment interruptions, increased supportive and palliative care needs, and advanced nutritional compromise.

Conclusions

Despite high nutritional risk, PEG placement in this cohort was predominantly delayed and reactive. These findings reveal a critical gap between international guidelines and real-world practice in a resource- and mobility-restricted setting. Early, guideline-concordant nutritional assessment and prophylactic PEG consideration may improve treatment tolerance, reduce morbidity, and enhance equity in supportive cancer care. This study provides actionable evidence to inform context-adapted nutritional and palliative care pathways in underserved populations.

NUTRI-027

UTILIZING ARTIFICIAL INTELLIGENCE TO MEASURE LOW MUSCLE MASS AS A PREDICTOR OF SARCOPENIA IN NEUROENDOCRINE TUMOURS (NET)

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Introduction

Deep learning segmentation facilitates automated extraction of skeletal muscle index (SMI) from computed tomography (CT), enabling quantification of low muscle mass (LMM) prevalence in large cohorts. In neuroendocrine tumours (NET), a unique cancer group in which prolonged gastrointestinal symptoms and dietary restriction are common, research on muscle loss is limited. We aimed to utilise deep learning to identify presence of LMM at time of NET diagnosis in a retrospective cohort.

Methods

CT scans from PET/CT acquisitions (2005–2024) of patients with a NET of the gastrointestinal tract, pancreas or lung were extracted from the imaging database of an ENETS Centre of Excellence in Melbourne, Australia. Superior-inferior location of L3 was extracted using the TotalSegmentator deep learning model. Skeletal muscle was segmented at L3 with the AutoMAT-ICA deep learning model. Skeletal muscle area and patient height were used to compute SMI. Low SMI (sarcopenia) was defined using Martin et al (2013). LMM prevalence was computed using $<43 \text{ cm}^2/\text{m}^2$ (BMI $<25 \text{ kg}/\text{m}^2$) and $<53 \text{ cm}^2/\text{m}^2$ (BMI $>25 \text{ kg}/\text{m}^2$) in men, and $<41 \text{ cm}^2/\text{m}^2$ for women.

Results

A total of 13514 CT scans from 1807 patients were obtained. After filtering for available data (diagnosis date, height) 674 patients were eligible for inclusion (Figure 1). Quality assurance of deep learning segmentation resulted in a final sample of 522 (58% male, mean age 60.3). Figure 2 shows the distribution of SMI. LMM prevalence was 24.3% for men, and 29.4% for women within 90 days of diagnosis.

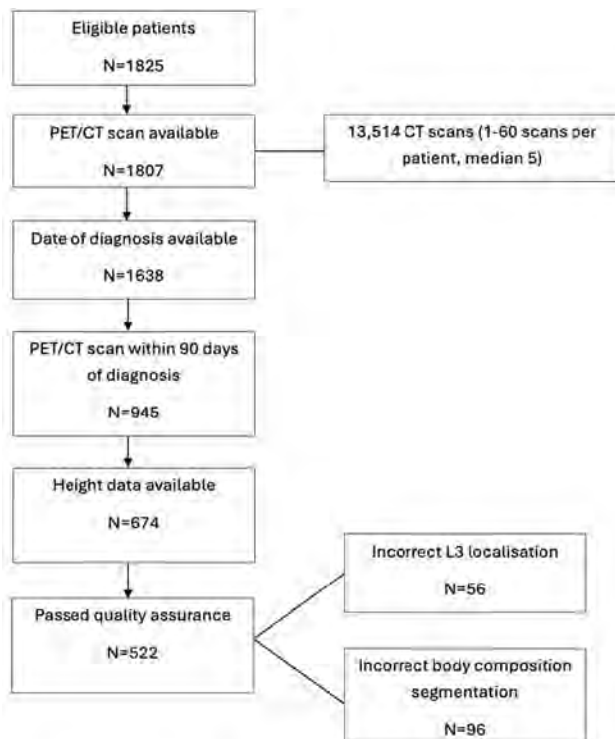


Figure 1: Patient screening, data availability and deep learning segmentation quality assurance results

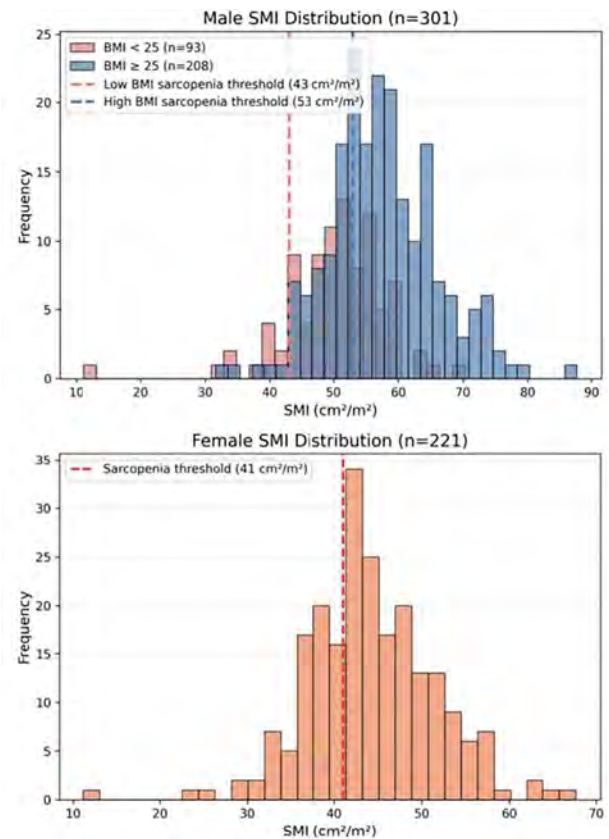


Figure 2: Distribution of skeletal muscle index computed as skeletal muscle area at L3 / (height²) for male and female patients.

Conclusions

LMM was identified in a quarter of patients within three months of NET diagnosis. Analysis is underway to investigate change in LMM over-time, and its association with survival. Stage two of this research will investigate and establish associations between LMM and clinical/treatment characteristics in people with NET, in order to inform future nutritional models of care.

NUTRI-028

INVESTIGATING THE NUTRITIONAL STATUS OF ADOLESCENTS AND YOUNG ADULTS FOLLOWING A CANCER DIAGNOSIS: FINDINGS FROM THE AYCANN STUDY

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Introduction

Adolescents and young adults with cancer (AYA; 15–25 years) face unique challenges that can impact their nutritional status, growth, development, and wellbeing. While malnutrition and related complications are well documented in paediatric and adult populations, there remains limited understanding of the specific needs of AYA. This study aimed to investigate the nutritional status, needs and outcomes of AYA after cancer diagnosis.

Methods

A longitudinal observational study was conducted among AYA across five tertiary adult and paediatric services in Melbourne, Australia. Eligible patients were within 6-weeks of cancer diagnosis or relapse and undergoing active treatment. Assessments were undertaken at baseline, and 2-, 4- and 6-months, including nutritional risk (PNST or MST); nutritional status (Patient Generated Subjective Global Assessment); muscle strength (hand-grip strength); frequency of dietitian contact, type of nutrition support; health-related quality of life (AQOL-6D). Analysis was descriptive with effect size estimates (Cohen's d) used to characterise the size of difference between groups.

Results

Over eight-months, 48 patients were enrolled (median age 20yrs, range 15–25yrs; characteristics in Table 1) with 75% receiving cancer treatment at adult centres. Forty-two percent were malnourished during the study, with the highest prevalence at baseline (37%), and in patients treated at paediatric centres (58%). Hand grip strength showed a mean reduction over time, a trend primarily observed in males (T0 n=33, M 42.1; T6 n=17, M 37.8). Access to dietetic care varied (23–56% over-time) with higher rates of contact recorded in paediatric settings (Figure 1). Health related quality of life was significantly lower compared to the general population, with a very large effect size seen at baseline and 2-months.

Table 1: Participant characteristics (N=48)	n	%
Primary cancer type		
Haematological	19	39.6
Sarcoma	9	18.8
Testes	5	10.4
Head & Neck	3	6.2
Other	12	25
Relapsed		
Yes	8	16.7
No	40	83.3
Treatment during study period (multiple responses allowed)		
Chemotherapy	41	85.4
Surgery	9	18.8
Radiotherapy	4	8.3
Immunotherapy	2	4.2
Stem cell transplant	1	2.1

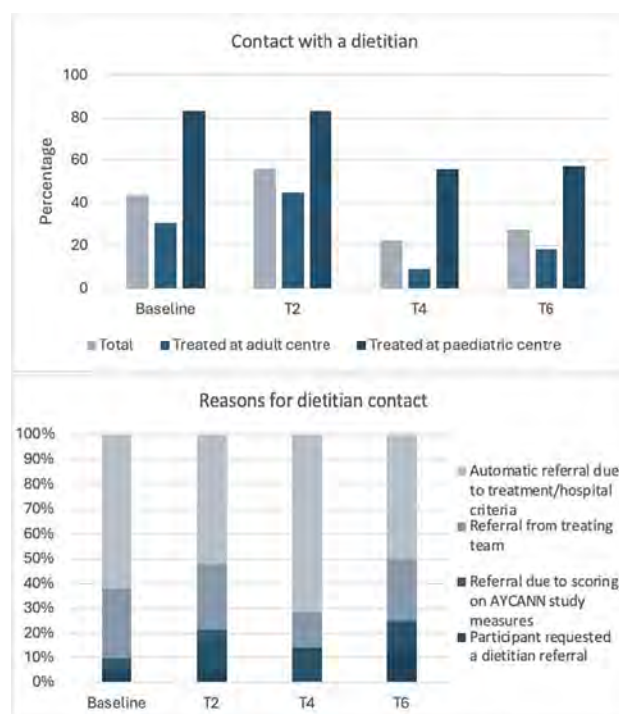


Figure 1: Dietitian contact among AYA at paediatric and adult centres

Conclusions

The AYCANN study reveals a high burden of malnutrition among AYA, alongside variable access to nutrition care. Findings support early dietitian engagement, standardised screening and referral pathways to optimise nutritional outcomes and the development of targeted AYA-specific nutrition resources.

NUTRI-029

TIMELINESS OF MALNUTRITION SCREENING AND DIETITIAN REFERRALS FOR UGI CANCER PATIENTS IN A REGIONAL HEALTH SERVICE

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Gippsland Regional Integrated Cancer Service

Introduction

Malnutrition is a common side effect of Upper Gastrointestinal (UGI) cancer which can negatively impact treatment and survival outcomes. Current clinical guidelines recommend all UGI cancer patients be considered at high risk of malnutrition and referred to a dietitian at diagnosis. The Optimal Care Pathway (OCP) for Oesophagogastric cancer indicates supportive care assessments should be completed using validated screening tools (including the Malnutrition Screening Tool (MST)) within 2 weeks of diagnosis.

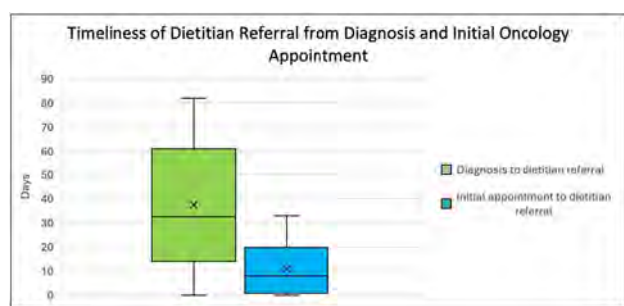
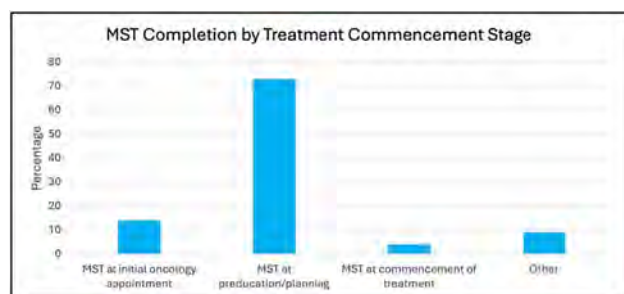
Methods

A manual file audit (n=40) was completed for all patients undergoing treatment (radiotherapy and/or systemic therapy) for UGI cancer during 2023 at a regional health service to investigate timeliness of malnutrition screening and dietitian referral.

Results

Only 1 patient had documentation of MST completion at diagnosis (endoscopy), hence initial oncologist appointment (IOA) was deemed the next pragmatic opportunity for nutritional screening. 64% of patients had documented evidence of MST completion, ranging from 0–61 days from IOA

and only 42% within 2 weeks of IOA. 17% of patients had evidence of an MST completed on the same date as the IOA, with the majority completed at pre-treatment sessions. Of those who had an MST completed, 91% scored 2 or above. Although 93% were referred to a dietitian, only 26% of patients were referred to a dietitian at IOA (range 0-33 days).



Conclusions

Due to the known variety of patient pathways to a UGI cancer diagnosis in Gippsland, it may not yet be feasible to embed malnutrition screening into diagnostic services. This audit indicates inconsistent nutritional screening at IOA and subsequent dietitian referral processes, which will inform a service improvement project embedding the MST into current supportive care screening tools at IOA. Following this, a regional-wide collaboration optimising nutritional screening at diagnostic services and the integration of systemised dietitian referral pathways may improve early nutrition interventions.

NUTRI-030

LIFELOG EXERCISE-NUTRITION PROGRAM REDUCES CACHEXIA AFTER ESOPHAGECTOMY: RCT

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Introduction

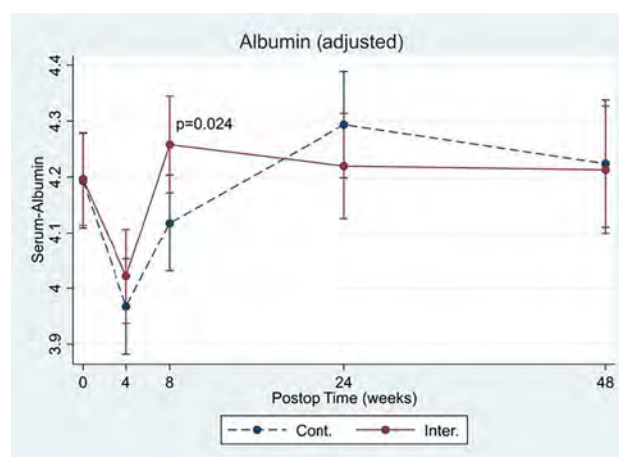
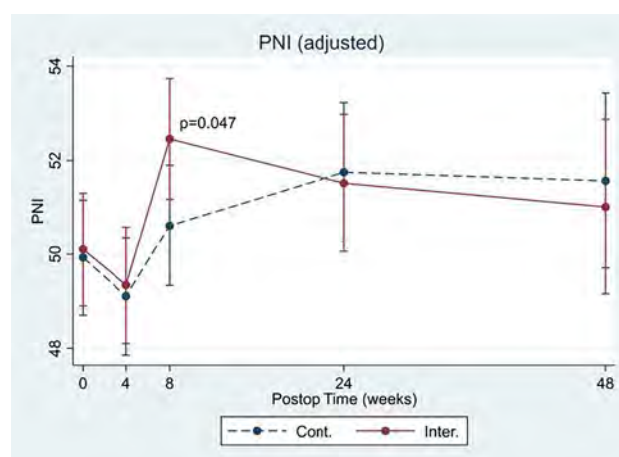
About half of esophageal cancer surgery patients suffer severe weight loss ($\geq 10\%$), hindering recovery and quality of life. Elderly patients especially struggle with new dietary habits and often fail to meet energy and protein needs, even with nutritional support. This randomized trial tested whether a lifelog-based exercise and nutrition program (ExN) could reduce severe weight loss.

Methods

In this single-center trial, 94 patients aged 18–79 undergoing curative esophagectomy were randomized after surgery to ExN (n=48) or control (n=46) (IRB: SMC-2021-05-003; CRIS: KCT0006446; 2018R1D1A1B07050523 and RS-2023-CC139856). Randomization was stratified by sex, baseline body mass index (BMI; < 23.0 vs ≥ 23.0), and discharge plan (home vs. nursing facility). The 8-week ExN program included weekly specialized nurse-led nutritional counseling, home-delivered protein supplements, lifelog-based education, and supervised exercise. The main outcome was severe weight loss ($\geq 10\%$) at 8 weeks post-surgery. Secondary outcomes included nutritional markers, sarcopenia, and cachexia. Outcomes were tracked for up to 1 year and analyzed using a two-proportion z-test and mixed model.

Results

Between 2022 and 2023, 136 patients were pre-registered, and 94 were randomized following secondary screening. Baseline characteristics were comparable between groups (90.4% male; mean BMI 23.0 ± 2.9 ; stage I 25.5%, II 25.5%, III 39.4%, IV 9.6%; 100%; median hospital stay 11 days, IQR 9–14). Severe weight loss ($\geq 10\%$) at 8 weeks postoperatively was in 52.2% and 42.6% (control vs ExN group, $p=0.353$). In the adjusted mixed model, PNI, Albumin, and hemoglobin levels were higher in the ExN group at 8 weeks ($p=0.047$, $p=0.024$, and $p=0.005$, respectively). Cachexia prevalence was significantly lower in the ExN group at 4 weeks ($p=0.047$) but not at 8 weeks ($p=0.485$). No significant difference in sarcopenia was observed between groups.



Conclusions

This exercise and nutrition intervention, including ONS delivery, demonstrated early benefits by reducing the incidence of cachexia and improving nutritional markers. Further research in larger multicenter trials is recommended.

NUTRI-032

BUILDING CONSENSUS: USING A DELPHI TECHNIQUE TO DEFINE CORE ELEMENTS AND CLINICAL DETERMINATES FOR A NUTRITION MODEL OF CARE FOR PEOPLE WITH CANCER

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Introduction

Access to cancer nutrition care is often poor and it can be challenging for cancer services to put models of care into practice. The aim of this study was to seek consensus on the core elements and key clinical determinants for a nutrition model of care for people with cancer.

Methods

A two-round, national online Delphi study was conducted in Australia (February-May 2025). Proposed items were developed via a scoping review, then presented to a panel of nutrition experts and people with lived experience of cancer (consumers). Panellists rated their level of agreement for importance and feasibility against 62 items on an 11-point Likert scale. Relative response frequencies were assessed against *a priori* thresholds to determine consensus ratings for each item [‘strong consensus’ if $\geq 70\%$ of participants rated ≥ 7 for both importance and feasibility].

Results

Sixty-nine and 60 panelists participated in round 1 and 2 respectively (68% nutrition experts, 32% consumers in both rounds). Strong consensus was reached for 32 items including 8/10 core elements: timely and evidenced-based care; flexible care; accessible care; multidirectional communication; training and education; risk stratified care; multidisciplinary engagement; and nutrition leadership. Twenty-four of 52 clinical determinants reached consensus and spanned sufficient resources; systems, governance and qualified staff to provide evidence-based care; infrastructure to support multidisciplinary care, triaging and flexible access to services. Opportunities for enhancing nutrition care and improving feasibility using strategies beyond workforce and resource allocation were identified, including elevating the value and practice of nutrition care.

Conclusions

Consensus on important and feasible elements of cancer nutrition care have highlighted key aspects relating to access, evidence-based clinical practices, leadership, workforce and resource allocation. Findings have the potential to address systemic barriers to access and unwarranted variation in care. Future work will include forming system-level guidance for cancer nutrition care within complex health environments.

NUTRI-033

PROSPECTIVE STUDY OF ANAMORELIN IN PANCREATIC CANCER CACHEXIA: CLINICAL AND TRANS-LATIONAL INSIGHTS INTO TREATMENT RESPONSE HETEROGENEITY

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Introduction

Clinical evidence for anamorelin in pancreatic cancer cachexia remains limited, despite its approval in Japan. This study represents the first prospective evaluation of anamorelin in pancreatic cancer, assessing real-world efficacy and safety and exploring treatment-response heterogeneity through biomarkers.

Methods

This prospective, single-center observational study enrolled patients with advanced or recurrent pancreatic cancer cachexia treated with oral anamorelin for up to three months. The primary endpoint was change in lean body mass (LBM) from baseline; the secondary endpoint was the LBM-based responder rate, defined as maintenance or increase in LBM.

Results

Seventeen patients were included in the efficacy analysis (median age, 68 years; median weight loss, 8.3%). Anamorelin treatment was associated with increases in LBM (+0.9 kg at 1 month and +1.4 kg at 2 months), with an LBM-based response rate of 58.8%. Quality-of-life (QOL) domains related to appetite, body weight, and total scores showed significant improvement at 1 month. A low baseline body mass index (BMI) strongly predicted response to anamorelin (cutoff, 20.4 kg/m²; AUC, 0.886; $p=0.008$). In longitudinal analyses, lower baseline BMI and C-reactive protein levels were significantly associated with greater LBM gain over time (estimated change: -0.70 kg per kg/m² and -1.86 kg per mg/dL, respectively). In contrast, biomarkers of the GH-IGF-1 axis and systemic inflammatory markers (IL-1 β , IL-6, and TNF- α) were not associated with treatment response. Grade ≥ 2 hyperglycemia occurred in 26.1% of patients, with a median onset of 4.5 days after treatment initiation. This adverse event was highly predictable based on reduced pretreatment Δ C-peptide levels (cutoff, 1.03 ng/mL; AUC, 0.967; $p=0.0032$).

Conclusions

Anamorelin improved LBM and QOL in patients with pancreatic cancer cachexia. Baseline BMI and insulin secretion may help optimize patient selection and risk stratification. Future studies should further characterize determinants of response and evaluate generalizability, so that insights from anamorelin can inform therapeutic strategies for cancer cachexia.

NUTRI-034

THE EFFECT OF NUTRITION IMPACT SYMPTOMS ON NUTRITION STATUS AFTER CURATIVE-INTENT TREATMENT FOR UPPER GASTROINTESTINAL CANCERS: A SYSTEMATIC REVIEW

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Introduction

Gastric, oesophageal, and pancreatic cancers are common worldwide. Survival rates remain low (5-year rates approximately 11.5–33.5%) but are slowly improving due to advances in curative treatments. Long-term nutrition impact symptoms are a frequent outcome of these treatments, yet these symptoms are often under-recognised, under-diagnosed and under-treated, leading to an increased risk of malnutrition and adverse health outcomes. This review aimed to explore nutrition impact symptoms that are present following curative-intent treatment for upper gastrointestinal (UGI) cancers and assess their impact on nutrition status.

Methods

A systematic search of four electronic databases was conducted to identify studies that involved adults treated with curative-intent for UGI cancers. Included studies reported both nutrition impact symptoms and nutrition outcomes. Only studies using a validated tool to assess nutrition outcomes were included. Study quality was assessed using the Academy of Nutrition and Dietetics Quality Checklist for Primary Research and a narrative synthesis was completed.

Results

Eleven studies ($n = 953$ participants), predominantly from the Asia-Pacific region, met the inclusion criteria. Participants were mostly male (68%), and surgery was the primary treatment (91%). Reflux was the most commonly reported symptom ($n = 8$), followed by abdominal pain, constipation and diarrhoea. Nutrition status was assessed using various validated tools: Patient-Generated Subjective Global Assessment ($n = 6$, 55%), Mini Nutritional Assessment ($n = 2$, 18%), and Global Leadership Initiative on Malnutrition as well as Subjective Global Assessment and Prognostic Nutritional Index (both $n = 1$, 9%). Malnutrition prevalence was up to 87% one-year post-treatment.

Conclusions

Nutrition impact symptoms are common and persistent following curative-intent treatment for UGI cancers. Validated assessment tools should be included in future research and follow-up should extend beyond 12 months. Ongoing, personalised dietetic support to identify and manage these symptoms in the long-term is recommended to improve health outcomes for cancer survivors.

NUTRI-035

NUTRITION-RELATED EXPERIENCES AND PREFERENCES OF ADOLESCENTS AND YOUNG ADULTS WITH CANCER AND THEIR HEALTH PROFESSIONALS: A QUALIATIVE STUDY

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Introduction

Adolescents and young adults (AYA, aged 15–25) with cancer encounter distinct nutrition challenges during a life stage defined by growing autonomy and identity development. Although malnutrition and weight changes are well documented in both paediatric and adult oncology, limited qualitative understanding of AYA's own experiences,

preferences, and support needs exists. This study aimed to examine the nutrition-related experiences, needs, and engagement of AYA with cancer, alongside healthcare professionals' perspectives on AYA access to appropriate nutrition care. Key priorities for enhancing nutrition support, education, and future research in AYA were identified.

Methods

This exploratory sub-study was conducted as part of the multi-site AYCANN (AYA CANcer Nutrition) project. Qualitative data were generated through focus groups and interviews with AYA who were undergoing cancer treatment or had completed within the previous six months. Purposive sampling was used to capture variation in diagnoses, treatment settings, and ages. Additional focus groups and interviews were conducted with multidisciplinary health professionals involved in AYA care. Thematic analysis was conducted in an inductive manner to maintain the integrity and closeness of the data to the questions asked.

Results

Sixteen AYA and 19 oncology healthcare professionals from 3 adult and 2 paediatric health services in Melbourne (Australia) participated in the focus groups. Analysis identified five key themes: 1) Broad nutritional impacts of cancer among AYA, 2) Need for earlier dietitian contact/intervention, 3) Models of AYA nutrition care need revision, 4) Diet transitions and eating to survive, 5) Standardised hospital nutrition care is unsuitable for AYA. Variations in AYA nutrition models of care between paediatric and adult health centres was additionally identified.

Conclusions

AYA value timely, age-appropriate, and individualised nutrition support, yet current care is inconsistent and often insufficient. Findings emphasise the need for earlier dietitian involvement, AYA-specific resources, and standardised nutrition pathways to optimise experiences and outcomes for this population.

NUTRI-036

WEIGHT LOSS AND NUTRITION IMPACT SYMPTOMS IN HEAD AND NECK CANCER PATIENTS TREATED WITH DEFINITIVE CHEMORADIO THERAPY: A MULTICENTRIC STUDY

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¹ULSLO, ²ULSTMAD, ³ULSET

Introduction

Head and neck cancer (HNC) is frequently accompanied by malnutrition, largely driven by nutrition impact symptoms (NIS) such as dysphagia, mucositis, xerostomia, taste changes and chewing difficulties, which intensify during radiotherapy. These symptoms substantially reduce dietary intake and contribute to nutritional decline.

Methods

This was a retrospective, observational, multicentric study including adult patients with HNC who underwent definitive chemoradiotherapy with a three weekly cisplatin regimen between January 2020 and June 2025 across three hospitals in Portugal. Clinical, nutritional and symptom related data were extracted from medical records. The primary endpoint was to evaluate absolute and relative weight loss and NIS symptoms occurring during treatment.

Results

The study included 97 patients, with a mean age of 63.0 ± 10.4 years (range: 36–83). The cohort was predominantly male (82.5%). 84.6% with stage 3 or 4 cancer. The most common primary tumor locations were the oropharynx (56.7%) and larynx (25.8%). The majority of patients (79.4%) completed three cycles of high-dose cisplatin. Patients experienced a mean absolute weight loss of 7.53 ± 7.03 kg, representing a 10.5% reduction in total body weight. Half of the cohort lost more than 10.8% of their initial weight, with some losing up to 31%.

Patients reporting NIS (n=60) experienced a significantly higher mean relative weight loss compared to those without symptoms (11.7% vs. 7.56%, $p=0.035$).

Conclusions

This study reveals the profound physical toll of chemoradiotherapy, with patients losing an average of over 10% of their weight during treatment. This decline was significantly exacerbated by the presence of NIS during treatment, showing correlation between the symptomatic burden of treatment and the severity of nutritional depletion. Nutritional support cannot be reactive. Our findings advocate for a shift toward proactive nutritional oncology, where symptom management is integrated into the treatment plan from day one to protect the patient's physical integrity and quality of life.

NUTRI-042

WEIGHT TRAJECTORIES IN PATIENTS TREATED WITH IMMUNE CHECKPOINT INHIBITORS: A LARGE SINGLE-CENTER RETROSPECTIVE STUDY

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Introduction

Immune checkpoint inhibitors (ICIs) are used across cancer types. Although obesity is known to influence ICI effectiveness and immune-related adverse event profiles, longitudinal weight changes and body mass index (BMI) patterns after ICI initiation are poorly characterized. We described longitudinal weight/BMI trajectories in an ICI cohort.

Methods

We conducted a retrospective study of patients (N = 20,950) who received ≥ 1 ICI at MD Anderson Cancer Center between 2004–2024. Baseline BMI was categorized as underweight, normal, overweight, obesity class I–III. Body weight was assessed at baseline, 1, 3, 6, 9, 12, and 24 months after ICI initiation. Weight change was defined as $\geq 5\%$ change from baseline. Demographic and clinical characteristics were summarized using descriptive statistics in SAS.

Results

Mean age was 62.8 years; 57.7% male and 80.1% White. Most patients received ICIs for melanoma, lung, or genitourinary cancers. ICIs: PD-L1 60.2%, PD-1 21.8%, multiple ICIs 14.9%, CTLA-4 2.2%, PD-1+LAG-3 0.9%. Baseline BMI distribution: 2.9% underweight, 32.1% normal, 34.4% overweight, 19.0% obesity class I, 7.5% class II, 4.2% class III; baseline weight 80.8 kg (SD 20.5). Among patients with follow-up, cumulative proportion experiencing $\geq 5\%$ weight loss from baseline was 12.5% at 30 days, 27.0% at 3 months, 32.2% at 6 months, 33.4% at 12 months, 35.0% at 18 months, and 33.2% at 24 months. Cumulative proportion experiencing $\geq 5\%$ weight gain was 4.1% at 30 days, 9.5% at 3 months, 14.6% at 6 months, 21.2% at 12 months, 23.7% at 18 months, and 26.4% at 24 months.

Conclusions

Patients on ICI showed divergent weight trajectories: meaningful weight loss was more common and accumulated while weight gain

became more common later. These findings underscore the need to integrate nutritional and metabolic surveillance early into ICI care. Future studies should examine whether weight change influences survival, response, metabolic outcomes, and toxicity risk.

NUTRI-043

DIETARY STRATEGIES TO ALLEVIATE SYMPTOMS IN PEOPLE UNDERGOING CHEMOTHERAPY FOR GYNAECOLOGICAL CANCER: A SYSTEMATIC REVIEW

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Introduction

People with gynaecological cancer represent a cancer population with a high symptom burden, frequently experiencing distressing disease- or treatment-related symptoms that negatively impact nutritional status, treatment tolerance, and quality of life. Despite evidence supporting dietary strategies for symptom management during chemotherapy, a comprehensive evidence synthesis for individuals with gynaecological cancer is lacking, including for the pre-treatment period. This review aimed to evaluate the efficacy of dietary strategies to alleviate symptoms before and during chemotherapy, compared to placebo or standard care, in adults with gynaecological cancer.

Methods

Adhering to PRISMA guidelines, seven databases were searched from 1996 to November 2025. Eligible studies were randomised controlled trials (RCTs) that evaluated the efficacy of dietary strategies (including dietary modification, counselling, or nutraceuticals), administered either alone or alongside other non-pharmacological components, for any symptom. Study quality was evaluated using the Revised Cochrane Risk of Bias Tool for Randomised Trials. Findings were synthesised narratively.

Results

Across eleven RCTs (n=774 people), ten studies (n=10/11;91%) assessed nutraceuticals, and one (n=1/11;9%) assessed a combined diet/exercise intervention (Table 1). All interventions were delivered after initiation of chemotherapy. Studies mostly included participants with ovarian cancer (n=5/11;45%) or mixed gynaecological cancers (n=5/11;45%). There was a statistically significant positive effect of red ginseng, curcumin, glutamate, whole-plant cannabis extract, and mushroom extract supplementation on select symptoms (n=1 study each). One study found a statistically significant negative effect of Chinese herbal medicine on peripheral neuropathy and red ginseng on daytime sleepiness. Other nutraceuticals and the diet/exercise intervention had no effect on symptoms.

Table 1: Findings from studies evaluating the efficacy of dietary strategies for symptoms in adults undergoing chemotherapy for gynaecological cancer.

Intervention	No. Studies	Participants	Symptoms											
			Nausea ^a	Vomiting	Constipation	Diarrhoea	Anorexia	Dysphagia	Peripheral Neuropathy	Pain	Cognition	Mood	Headache	Sleep-wake disturbance
Oral nutraceuticals														
Chinese herbal medicine	2	78	NS ^b	NS ^b	NS ^b	NS ^b	NS ^b	- ^b	NS ^b		NS ^b		NS ^b	NS ^c
Red ginseng	1	30	+	+				+		+		+	-	+
Rikkunshito	2	215	NS ^c	NS ^c			NS ^c							
Curcumin	1	78									+	^a		
Glutamate	1	43							NS	+				
Cannabis extract	1	54	+	+										
Mushroom extract	1	100	+	+			+					+		NS
Probiotics	1	95	NS	NS		NS	NS			NS			NS	NS
Diet and exercise intervention														
Combined diet and exercise intervention (dietitian and physio-therapist led)	1	61							NS		NS	NS		NS

+

Statistically significant positive effect

NS

No statistically significant effect

-

Statistically significant negative effect

Symptom not assessed

a. Studies evaluating ginger supplementation for nausea and vomiting were excluded, as these outcomes have been meta-analysed elsewhere (Crichton et al., 2026).
b. n=1/1 study; the single study assessing this outcome observed this effect.
c. n=2/2 studies; both studies assessing this outcome observed this effect.
d. Statistically significant effect found for executive function and selective attention domain but not for overall cognitive function score.

Conclusions

A substantial gap in evidence for dietitian-led dietary interventions to alleviate symptoms in gynaecological cancer was identified, highlighting a priority for future research. Preliminary evidence suggests potential benefits of some nutraceuticals for selected symptoms during chemotherapy for gynaecological cancer; however, further adequately powered RCTs with standardised interventions are needed before use can be recommended.

NUTRI-044
EXPLORING THE PREVALENCE OF CANCER MALNUTRITION AND SARCOPENIA RISK IN VICTORIA.

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Introduction

The presence of malnutrition and sarcopenia can have significant effects in cancer patients, including reducing quality of life and increasing mortality. Cancer-related malnutrition risk and prevalence has been reported in Victoria five times since 2012, the last in 2022, indicating rates are trending downwards. Less is known about the risk and prevalence of cancer-related sarcopenia within Australia. The aim of this study was to determine the prevalence of malnutrition and sarcopenia risk within the Victorian adult cancer population.

Methods

A multi-site point prevalence study was conducted across Victorian acute health services in July 2024. Adults with cancer receiving ambulatory therapy and multi-day stay inpatients were included.

Malnutrition risk was assessed using the Malnutrition Screening Tool, malnutrition diagnosis was determined using ICD-10 and GLIM criteria, and sarcopenia risk was assessed using the SARC-F + calf circumference.

Results

Twenty-four health services recruited 2121 adult oncology patients into the study (n=341 inpatients, 16%). Overall malnutrition prevalence was 10% using ICD-10 criteria and 28% using GLIM criteria. Inpatients had the highest prevalence of malnutrition (23% ICD-10; 46% GLIM) compared to ambulatory patients (8% ICD-10; 25% GLIM). Twenty percent of all patients were at risk of sarcopenia with prevalence highest in inpatients (35%) compared to ambulatory (17%). Eleven percent of all patients were at risk of both malnutrition and sarcopenia, and of those not at risk of malnutrition, 172 patients (8%) were at risk of sarcopenia.

Conclusions

Malnutrition continues to be highly prevalent, affecting 1 in 4 adult oncology patients. Sarcopenia risk affects approximately 1 in 5 oncology patients and occurs in combination with malnutrition risk but also alone. This study demonstrates the importance of a clinical model that includes a systematised malnutrition and sarcopenia risk screening program to facilitate appropriate nutrition (and other multi-modal) assessments and interventions.

NUTRI-045
DEVELOPMENT OF A TOOLKIT TO SUPPORT IMPLEMENTATION OF THE COSA POSITION STATEMENT OF CANCER-RELATED MALNUTRITION AND SARCOPENIA RECOMMENDATIONS

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¹Peter MacCallum Cancer Centre, Nutrition & Speech Pathology Department, Melbourne, ²University of NSW, School of Clinical Medicine, Maridulu Budyari Gumal SPHERE Cancer Clinical Academic Group, Sydney, ³Deakin University, Institute for Physical Activity and Nutrition (IPAN), Geelong, ⁴Monash University, Department of Nutrition, Dietetics and Food, Melbourne, ⁵Peter MacCallum Cancer Centre, Physiotherapy & Occupational Therapy Department, Melbourne, ⁶Cancer Council Queensland, Brisbane, ⁷Calvary Mater Newcastle, Department of Medical Oncology, Newcastle, ⁸Edith Cowan University, Nutrition and Health Innovation Research Institute, Joondalup, ⁹Flinders Medical Centre, Department of ENT Otolaryngology Head & Neck Surgery, Adelaide, ¹⁰Northern Cancer Institute, Medical Oncology, Sydney

Introduction

The Clinical Oncology Society of Australia (COSA) position statement on cancer-related malnutrition and sarcopenia was published in 2020. It was identified that practical guidance was required to support the uptake and implementation of the recommendations into clinical practice. This project aimed to develop a toolkit to support implementation of the position statement recommendations into practice within health services.

Methods

Stage one (August 2023-May 2024) focused on the development of resources to support screening and assessment recommendations and the web platform. Stage two (May 2025-June 2026) included resource development to support treatment, the role of the multidisciplinary team and transition of care recommendations. In both stages, working groups were formed with multidisciplinary cancer clinicians from across Australia to iteratively create the toolkit resources (i.e., collation of clinical tools, checklists, audit tools, case studies, exemplars summaries). At the conclusion of stage one and two, end-users

reviewed the toolkit and completed an online survey [incorporating the System Usability Scale (SUS) and questions based on the Theoretical Framework of Acceptability (TFA)].

Results

Stage one and two saw high engagement from multidisciplinary clinicians (n=40) across seven working groups. In stage one, 35 new resources and 2 new videos were developed, and 13 existing instructional videos identified. The stage one end-user survey (n=14) found the toolkit had above average usability (SUS score 71) and was deemed acceptable to end users (TFA general acceptability score 4.1). In stage two, 28 additional resources were developed, and the end-user review will close June 2026.

Conclusions

An online, evidence-based, multidisciplinary toolkit to support implementation of the COSA cancer-related malnutrition and sarcopenia position statement is available on the COSA website (<https://www.cosa.org.au/groups/nutrition/toolkit/>). It is anticipated the toolkit will lead to benefits for patients, clinicians and health services. Further evaluation of the toolkits ability to support implementation of the position statement recommendations is warranted.

NUTRI-046

HYPOVITAMINOSIS D IN THE ACUTE INPATIENT CANCER REHABILITATION POPULATION: PREVALENCE, PREDICTORS, AND PRACTICAL IMPLICATIONS

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Introduction

Hypovitaminosis D has been associated with multiple medical conditions, including cancer, and is common among patients with decreased functional status admitted for acute inpatient rehabilitation (IPR). While prior studies have evaluated vitamin D status in general IPR populations, data on patients with cancer in this setting remain underexplored. This study aimed to determine the prevalence of hypovitaminosis D and identify its predictors among adults with cancer undergoing acute IPR.

Methods

This retrospective observational cohort study included consecutive adult cancer patients admitted to a cancer hospital's inpatient rehabilitation service between December 1, 2023, and May 24, 2024. Vitamin D levels were classified as hypovitaminosis D (≤ 29 ng/mL) or sufficient (≥ 30 ng/mL). The primary outcome was the prevalence of hypovitaminosis D; secondary outcomes included associated demographic, clinical, laboratory, and functional factors, as well as vitamin D supplementation rates at admission, during IPR, and after discharge.

Results

Among 126 patients, 78 (62%) had hypovitaminosis D. Significant predictors included younger age (median 66.0 vs. 71.5 years, $p=0.006$), lower serum calcium (8.9 vs. 9.1 mg/dL, $p=0.042$), and neurogenic bladder or bowel (32.5% vs. 5.3%, $p=0.024$). At IPR admission, 29% (n=36) were already on supplementation, while 40% (n=51) initiated it during IPR. At 3- and 6-month post-discharge, 48% (n=61) and 39% (n=49) remained on supplementation, respectively.

Table 1. Vitamin D levels and supplementation characteristics among the 126 patients included in the study (N=126)

Endpoints	n (%)
Vitamin D level upon admission to inpatient rehabilitation	
Hypovitaminosis D (<30 ng/mL)	78 (62)
No hypovitaminosis D (≥ 30 ng/mL)	42 (33)
Missing Data	6 (5)
Timing of vitamin D supplementation	
Continued outpatient vitamin D supplementation during hospital and inpatient rehabilitation stay	26 (21)
Vitamin D supplementation started during hospitalization, but before transfer to inpatient rehabilitation	10 (8)
Started after transfer to inpatient rehabilitation based on vitamin D level	51 (40)
Stopped outpatient vitamin D supplementation during hospital and inpatient rehabilitation stay and resumed medication after discharge	5 (4)
Vitamin D supplementation 3 months after discharge from inpatient rehabilitation	
Yes	61 (48)
No	53 (42)
No documents available to confirm	12 (10)
Vitamin D supplementation 6 months after discharge from inpatient rehabilitation	
Yes	49 (39)
No	48 (38)
No documents available to confirm	29 (23)

Table 2. Potential Risk Factors (comparisons between the groups with and without Hypovitaminosis D (HVD))

Characteristic	Patients with Hypovitaminosis D (n=78)	Patients without Hypovitaminosis D (n=42)	p-value
Age, years, median (range)	66.0 (22-84.5)	71.5 (45.5-84.5)	0.006
Gender			
Male	33 (42.3%)	18 (42.9%)	0.915
Female	45 (57.7%)	24 (57.1%)	
Race			
White	41 (52.6%)	21 (50.0%)	0.842
Black	14 (17.9%)	8 (19.0%)	
Hispanic/Latino	10 (12.8%)	5 (11.9%)	
Asian	4 (5.1%)	2 (4.8%)	
Other	9 (11.5%)	6 (14.3%)	
Insurance			
Medicaid	33 (42.3%)	18 (42.9%)	0.915
Medicare	33 (42.3%)	18 (42.9%)	
Private	12 (15.4%)	6 (14.3%)	
Other	11 (14.1%)	5 (11.9%)	
Insurance type			
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mechanisms, and preclinical evidence suggests that fibre supplementation may attenuate these inflammatory signals. However, whether fibre supplementation could reduce symptom burden and promote maintenance therapy adherence has not previously been investigated. The Adhere Study is an interventional pilot study aimed at determining the tolerability, safety, and efficacy of fibre supplementation in reducing side effect severity and promoting adherence in people with breast cancer. As the first study of its kind, an evaluation of recruitment practices is warranted to inform the completion of the main trial.

Methods

Eligibility included adults receiving systemic maintenance therapy (targeted-, hormonal- and/or chemotherapy) for breast cancer, at 6- to 24-months post diagnosis. Advertisements through news stories and social media were conducted to identify potential participants. Interested individuals expressed their interest via an online form or email, following which researchers made contact to assess eligibility. Eligible participants were randomised at a ratio of 2:1, intervention to control, to receive 12g of wheat dextrin daily for 3 months. Overall symptom burden and cognitive symptoms were determined using the ESAS-r-CS and the FACT-Cog questionnaire, respectively.

Results

Key recruitment lessons were: (1) social media advertisements yielded a greater number of expressions of interest; (2) tailored advertisement attracted more eligible participants; (3) inclusion of targeted symptoms facilitated the enrolment of intended target population; and (4) the timeliness of contacting potential participants was a critical determinant of successful recruitment. These strategies yielded a well-targeted sample, with enrolled participants (N=13) exhibiting a significant symptom burden of interest.

Conclusions

Symptom-specific advertising on social media combined with prompt contact successfully identified and enrolled clinically appropriate participants, supporting targeted recruitment for fibre intervention trial among survivors of breast cancer.

NUTRI-048

NUTRITIONAL IMPACT ON THE ONCOLOGICAL PROGNOSIS OF CANCER PATIENTS – AN ISLAND EXPERIENCE

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Hospital do Divino Espírito Santo Ponta Delgada

Introduction

Malnutrition is a highly prevalent condition in cancer patients, affecting prognosis, limiting treatment response, and impacting quality of life. Some tumors location represent a higher risk for malnutrition. Integrating nutrition into the therapeutic plan is not merely supportive, but an active strategy to optimize outcomes.

Methods

A prospective study was conducted with outpatients over a one-year period. Nutritional risk assessment was performed using the MUST tool and NUTRISCORE.

Results

A total of 153 patients were evaluated, 56.3% female and 43.7% male. The median age was 63 years. Regarding tumor location, the most prevalent were digestive tract cancer, (29,4%) and breast cancer (29,4%). According to the MUST score, 55.6% of patients presented a low nutritional risk, 12.4% a medium risk, and 32% a high risk. Regarding tumor location, 45.6% presented a low-risk location, 23.8% a medium risk, and 30.6% a high risk. The body mass index was calculated with a median of 25,8 (16-41,5) at the first appointment. In the high and medium risk MUST groups, the median weight loss at six months was 74.6%. Male patients showed greater weight

loss at 6 months compared to female patients (5,4% vs 2%). Patients with high nutritional risk showed greater weight loss at six months compared with the others (8.3% vs 0%). A positive correlation was observed between a high-risk MUST score and death at one year ($p<0.001$). Patients with high-risk MUST also presented with a high-risk location (64.8%), and consequently, a greater weight loss at 3 and 6 months ($p<0.001$). All patients with high-risk locations were referred to the nutrition oncology team, and the majority (50%) was on artificial nutritional support ($p<0.001$).

Conclusions

Patients with a high nutritional risk consequently have a worse one-year prognosis. Nutrition education is essential to empower patients to understand and adopt the adjustments implemented by the nutrition team.

NUTRI-049

DEVELOPMENT AND PILOT TESTING OF A PSYCHOEDUCATIONAL INTERVENTION TO SUPPORT PATIENTS AND CAREGIVERS COPE WITH CANCER AND UNINTENTIONAL WEIGHT LOSS

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Introduction

Unintentional weight loss in cancer patients may indicate cachexia, a multifactorial syndrome characterized by skeletal muscle mass loss (with or without loss of fat mass). Cachexia is associated with increased treatment toxicity, morbidity and mortality, and decreased quality of life and has a profound effect on both patients and caregivers. Cachexia assessment and management are reported to be an unmet need and there are currently no known effective treatments. The aim of this study was to develop an intervention (website) to provide support and education for cancer patients with unintentional weight loss and their caregivers.

Methods

The website was based on an existing small group intervention (workshop) and was created following the Person Based Approach for developing interventions. The preliminary site map was produced based on the workshop with input from an expert panel comprising patients, carers, and health care professionals. User testing with patients and caregivers used 'think aloud' interviews to improve the website, continuing until no further modifications were suggested ('saturation'). Pilot testing with 15 patients and 15 caregivers is in progress. Participants use the website independently, complete bespoke measures of knowledge (pre- and post-intervention), and acceptability and satisfaction, and are invited to provide feedback.

Results

Website content includes a short film, animation, and interactive components which provide an explanation of why people with cancer lose weight, how to eat well, strategies for maximising nutritional intake when appetite is poor, and managing emotions and conflict. 'Saturation' was reached in user testing following interviews with four patients and two caregivers. Pilot testing is due for completion in early 2026.

Conclusions

Trustworthy resources are required to support patients and caregivers to self-manage, particularly when resources are scarce. Preliminary results suggest this website meets the needs of some cancer patients with unintentional weight loss and their caregivers. A planned evaluation study will test this.

NUTRI-050**A RANDOMIZED CONTROLLED TRIAL EVALUATING THE EFFICACY OF ANAMORELIN HYDROCHLORIDE IN PATIENTS WITH GASTRIC CANCER CACHEXIA**

Kazuyoshi Yamamoto¹, Yukinori Kurokawa², Yasuhiro Miyazaki³, Yoshitomo Yanagimoto⁴, Ryohei Kawabata⁵, Atsushi Takeno⁶, Yusuke Akamaru⁷, Keijiro Sugimura⁸, Jin Matsuyama⁹, Yutaka Kimura¹⁰, Kotaro Yamashita², Hidetoshi Eguchi², Yuichiro Doki²

¹Osaka International Cancer Institute, ²The University of Osaka, Department of Gastroenterological Surgery, Suita, ³Osaka General Medical Center, Department of Gastroenterological Surgery, Osaka, ⁴Toyonaka Municipal Hospital, Department of Surgery, Toyonaka, ⁵Sakai City Medical Center, Department of Gastroenterological Surgery, Sakai, ⁶National Hospital Organization, Osaka National Hospital, Department of Surgery, Osaka, ⁷Osaka Rosai Hospital, Department of Gastroenterological Surgery, Sakai, Japan, ⁸Kansai Rosai Hospital, Department of Gastroenterological Surgery, Amagasaki, ⁹Higashiosaka City Medical Center, Department of Gastroenterological Surgery, Higashiosaka, ¹⁰Kindai Nara Hospital, Department of Gastroenterological Surgery, Ikoma

Introduction

Cancer cachexia affects 50–80% of patients with advanced malignancies, particularly those with lung and gastrointestinal cancers. Anamorelin, a ghrelin receptor agonist, has shown improvements in appetite, lean body mass (LBM), and total weight in non-small-cell lung cancer-associated cachexia; however, no randomized controlled trials (RCTs) have been conducted in gastrointestinal cancers. We conducted the first multicenter RCT evaluating anamorelin in gastric cancer with cachexia.

Methods

Eligible patients had unresectable advanced or recurrent gastric cancer with cachexia and were scheduled to receive or were receiving first- to third-line chemotherapy. Patients were randomized to Group A (anamorelin for 12 weeks) or Group N (no anamorelin), stratified by institution and gastrectomy procedure. The primary endpoint was change in LBM at 8 weeks. Secondary endpoints included changes in total weight, fat mass, handgrip strength, Cancer Fatigue Scale, QOL-ACD scores, grade ≥ 2 chemotherapy-related anorexia, nausea, vomiting, and chemotherapy compliance.

Results

Among 217 consented patients, 203 were randomized (Group A 104; Group N 99). After exclusions, 101 in Group A and 97 in Group N were analyzed. Baseline characteristics were balanced. The 8 weeks LBM change was +0.99 kg vs. +0.14 kg ($P=0.0629$). Prespecified ANCOVA adjusting for baseline LBM and gastrectomy procedure showed significance favoring Group A ($P=0.0184$). Body weight (+1.17 vs. -0.59 kg, $P<0.0001$) and fat mass (+0.15 vs. -0.73 kg, $P=0.040$) increased significantly in Group A. Appetite-related QOL improved, and grade ≥ 2 anorexia (10.6% vs. 23.2%, $P=0.022$) and nausea (0% vs. 6.3%, $P=0.013$) were less frequent in Group A. One case of grade 3 hyperglycemia resolved with medical treatment. Chemotherapy compliance and tumor response were similar.

Conclusions

Anamorelin improved appetite-related QOL, reduced chemotherapy-induced anorexia and nausea, and showed a favorable effect on LBM in gastric cancer cachexia. These results support anamorelin as a promising supportive-care option for advanced gastric cancer. Funded by Ono Pharmaceutical Co., Ltd.

NUTRI-051**CAN DIETARY FIBRE WITH/WITHOUT PROBIOTICS IMPROVE CONSTIPATION AND DIARRHOEA IN PEOPLE HAVING CANCER TREATMENT? A SYSTEMATIC REVIEW AND META-ANALYSIS**

Jiaqi (Ann) Zhang¹, Skye Marshall², Patsy Yates¹, Elizabeth Isenring¹, Molly Fahey³, Lynette Law⁴, Megan Crichton¹

¹Cancer and Palliative Care Outcomes Centre, Centre for Healthcare Transformation, School of Nursing, Queensland University of Technology, Queensland, ²Centre for Quality and Patient Safety Research, Institute for Health Transformation, School of Nursing and Midwifery, Faculty of Health, Deakin University, Victoria, ³The University of Queensland, Centre for Online Health, Queensland, ⁴Caring Futures Institute, College of Nursing and Health Sciences, Flinders University, Adelaide

Introduction

Constipation and diarrhoea are common and distressing during cancer treatment. Dietary fibre and probiotics can manage constipation and diarrhoea, however, their use in cancer care remains inconsistent due to limited high-quality evidence. This review explored the efficacy and safety of adjuvant oral dietary fibre, with or without probiotics, for improving constipation and diarrhoea in people of any age undergoing any type of cancer treatment.

Methods

This systematic review and meta-analysis of randomised controlled trials (RCTs) searched six databases from inception to February 2024 and assessed study quality using the revised Joanna Briggs Institute RCT Critical Appraisal Tool. Meta-analysis was conducted using RevMan; sensitivity analysis explored sources of heterogeneity using the leave-one-study-out method. Confidence in pooled effect estimates were assessed with GRADE.

Results

Fifteen RCTs ($n=1153$, 9% <18 years of age) assessed dietary fibre alone (supplements [$n=4$ studies], diet modification [$n=4$ studies]) or combined with probiotic supplements ($n=7$ studies). All studies met 55% of quality appraisal criteria. Supplementation of dietary fibre, with or without probiotics, reduced odds of constipation by 42% compared to placebo or standard care (OR: 0.58, 95% CI: 0.37-0.92; $n=5$ studies; GRADE: High). Supplementation of dietary fibre with probiotics reduced odds of diarrhoea by 86% compared to placebo (OR: 0.14, 95% CI: 0.02-0.87; $n=4$ studies; GRADE: Low). There was no effect of dietary fibre alone on the odds of diarrhoea (OR: 1.63, 95% CI: 0.44-5.97; $n=5$ studies; GRADE: Very low). Interventions were well tolerated with no reported adverse events ($n=7$ studies monitored events).

Conclusions

Dietary fibre, alone or combined with probiotics, was a safe and efficacious adjuvant for reducing constipation and diarrhoea during cancer treatment. Future high-quality, adequately powered RCTs with standardised interventions and reporting of adverse events are needed to strengthen confidence in these findings and clarify the differential effects of fibre alone versus synbiotic formulations, especially in paediatric populations.

NUTRI-052**TRAJECTORIES AND PREDICTORS OF NUTRITION INTAKE-RELATED PROBLEMS IN HEAD AND NECK CANCER SURVIVORS: A LONGITUDINAL ANALYSIS OF THE HEAD AND NECK 5000**

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¹German Cancer Research Center (DKFZ), Unit of Cancer Survivorship, Heidelberg, Germany, ²Baden-Württemberg Cancer Registry, Heidelberg, Germany, ³University of Bristol, Bristol Dental School, Bristol, United Kingdom, ⁴University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, United Kingdom

Introduction

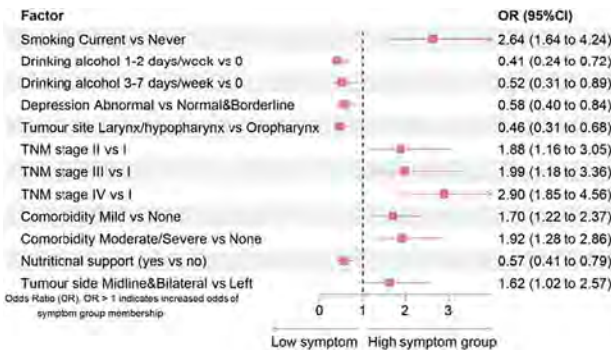
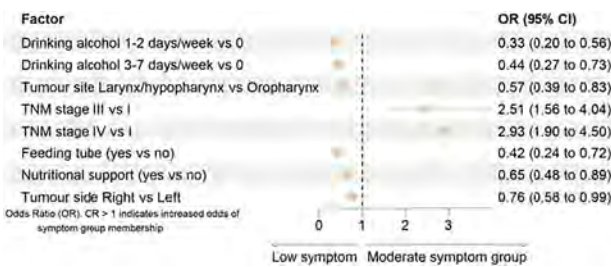
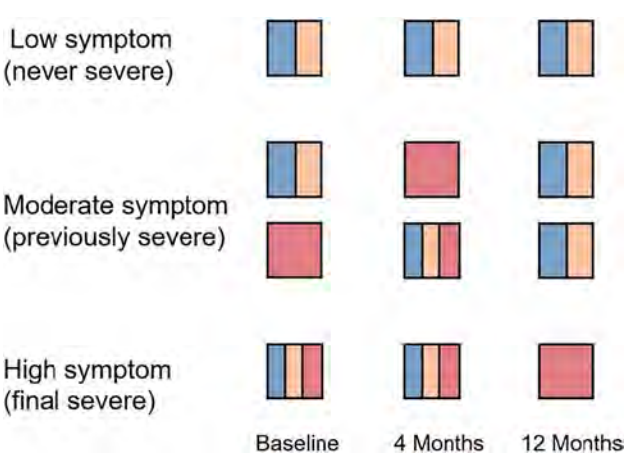
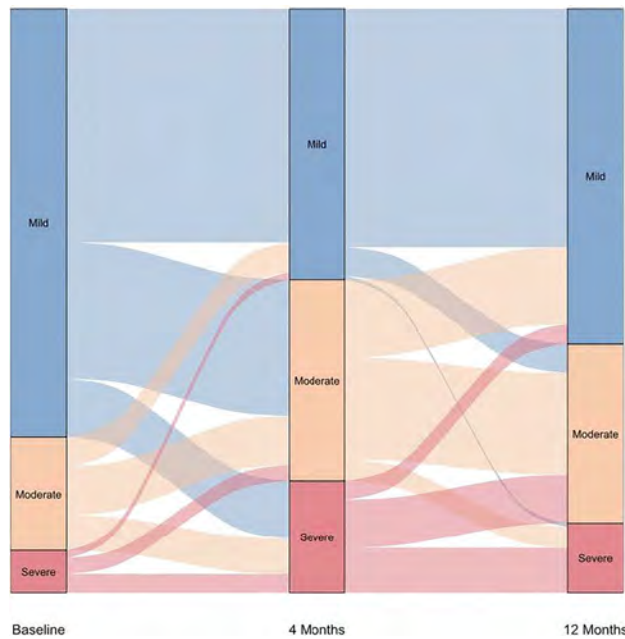
Nutrition intake problems may affect head and neck cancer (HNC) survivors' nutrition intake-related symptom burden. Their longitudinal trajectories and predictors remain insufficiently studied.

Methods

We analyzed 2,088 HNC survivors from the Head and Neck 5000 cohort. Nutrition intake-related problems, including trismus, dysphagia, dental problems, xerostomia, sticky saliva, senses problems, pain problems and social eating, were assessed using the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Head and Neck 35 (EORTC QLQ-H&N35) at baseline, 4 months, and 12 months. At each time point, survivors were classified into mild, moderate, or severe symptom profiles using latent profile analysis. Based on longitudinal changes in these profiles across the three time points, trajectories were further summarized into three categories: Low symptom (never severe), Moderate symptom (previously severe), and High symptom (final severe). Multinomial logistic regression was employed to examine sociodemographic, clinical, lifestyle, and treatment predictors of trajectory membership.

Results

The cohort was predominantly male (73%) and aged ≥ 50 years (88%). The most common tumor sites were the oropharynx (54%) and larynx/hypopharynx (34%), and 42% presented with stage IV disease. Three symptom categories were identified: low ($n = 1,510$), moderate ($n = 324$), and high ($n = 254$). Multinomial logistic regression showed that current smoking, advanced TNM stage (III-IV), and comorbidities were associated with higher odds of high symptom trajectory, while alcohol consumption, tumor site at larynx/hypopharynx, having nutritional support, and feeding tube use were associated with higher odds of low symptom trajectory. Baseline depressive symptoms were inversely associated with symptom trajectory severity, suggesting possible underreporting of physical symptoms.



Conclusions

Nutrition intake-related problems trajectories in HNC survivors are heterogeneous. Early identification of vulnerable groups and targeted supportive interventions are essential to improve survivorship outcomes.

ONCOD-001

ACCESS TO DERMATOLOGIC CARE FOR HOSPICE PATIENTS

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Introduction

Hospice care, established in 1982 by Medicare, is intended to prioritize comfort, symptom relief, and quality of life for patients with

terminal illness. However, persistent ambiguity surrounding the scope of permitted services during hospice enrollment can unintentionally restrict access to care directly supporting these goals. Dermatologic conditions are common among hospice care patients, substantially impairing nutrition, sleep, and psychological well-being. Yet, specialty dermatologic care is often perceived as incompatible with hospice.

Methods

A narrative study of Ms. S was integrated with clinical observation and review of hospice models to explore ambiguities in hospice services, specifically in the context of specialist care for non-hospice-related conditions. We clarify current policy and propose strategies to improve patient-centered care during end-of-life. A patient with advanced multiple myeloma and treatment-associated mucositis served as a representative example of how misunderstandings regarding hospice eligibility and coverage affect symptom management.

Results

Ms. S individually contacted her dermatologic team while suffering from persistent oral lesions untreated by the hospice system. Unclear hospice reimbursement guidelines delayed effective care in fear of violating hospice regulations. In the US, hospice agencies operate under a capitated payment system in which they receive a fixed daily rate per patient. Treatments deemed outside the scope of hospice could be denied reimbursement by insurance, and either the hospice agency or patient would be required to cover outstanding costs. Conservative care is incentivized and specialty referrals are discouraged despite technical insurance coverage of non-hospice needs.

Ms. S is one of many patients experiencing a sense of abandonment from policy-driven limitations that delay care. She ultimately unenrolled from hospice and sought other means to receive necessary treatment, underscoring the major limitations in the current model.

Conclusions

Greater policy transparency, standardized provider education, and expansion of concurrent hospice models can ensure hospice fulfills its mission of comfort without sacrificing essential medical support.

ONCOD-005

IMPACT OF CANCER DRUG THERAPY AND PHYSICAL STATUS ON PRESSURE INJURY IN CANCER PATIENTS: A RETROSPECTIVE ANALYSIS OF PALLIATIVE CARE INTERVENTIONS

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Introduction

Pressure injuries (PIs) cause significant physical distress in cancer patients. However, factors contributing to PIs specific to this population—particularly the impact of targeted therapies—remain under-investigated. This study aimed to identify clinical factors associated with PI development, with a particular focus on the relevance of EGFR inhibitors (EGFRIs) and performance status (PS).

Methods

We conducted a retrospective study of hospitalized cancer patients who received palliative care team intervention at Hospital A between January and December 2024. Data, including patient demographics, PS, laboratory findings, treatment regimens (including cytotoxic and molecular targeted therapies), and PI characteristics, were extracted from medical records.

Results

Of 306 cases, 30 (9.8%) had PIs (22 hospital-acquired, 8 present on admission). The mean age was 67 years, and the majority (25/30) had a poor PS (3–4). Respiratory (n=11) and head and neck (n=4) cancers were predominant. Notably, among patients receiving pharmacotherapy, PIs occurred frequently in those treated with EGFR inhibitors or anti-EGFR antibodies. Laboratory data at PI onset showed a median albumin of 2.3 g/dL and CRP of 11.9 mg/dL, suggesting a background of cancer cachexia. In the active treatment group (n=16), PIs were observed even in patients undergoing intensive therapy despite declining PS.

Conclusions

Our findings suggest that a decline in PS and the use of EGFRIs are risk factors for PI development in cancer patients. The high prevalence in lung and head/neck cancers, often treated with EGFRIs, highlights the potential impact of drug-induced skin fragility. Despite being in the active treatment phase, several patients presented with PIs, emphasizing that intensive cancer treatment and impaired PS can coexist as high-risk conditions. Proactive skin assessment and preventive interventions are crucial for patients receiving EGFRIs, even during active oncological treatment. Given the healthcare costs associated with PI management, it is essential for patient quality of life and for optimizing resource allocation in oncology.

ONCOD-006

DRUG REPOSITIONING STUDIES FOR PREVENTION OF CAPECITABINE-INDUCED HAND-FOOT SYNDROME APPLICABLE TO LOW AND MIDDLE-INCOME COUNTRIES

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Introduction

Capecitabine-induced hand-foot syndrome (HFS) is a frequent adverse event that limits chemotherapy continuity. While inflammation is suggested to contribute to HFS pathogenesis, there is limited clinical evidence supporting effective preventive strategies beyond basic skin care. This drug repositioning research series aimed to evaluate the preventive efficacy of inexpensive topical anti-inflammatory agents, including corticosteroids and diclofenac, in patients receiving capecitabine-based chemotherapy.

Methods

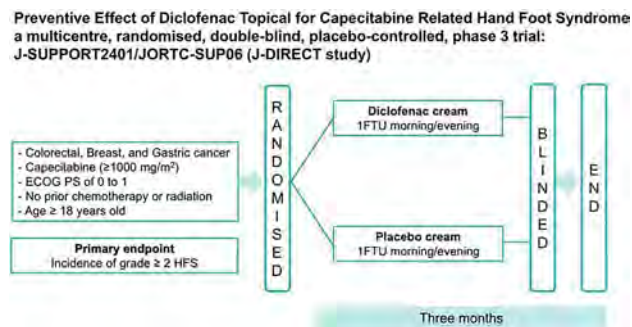
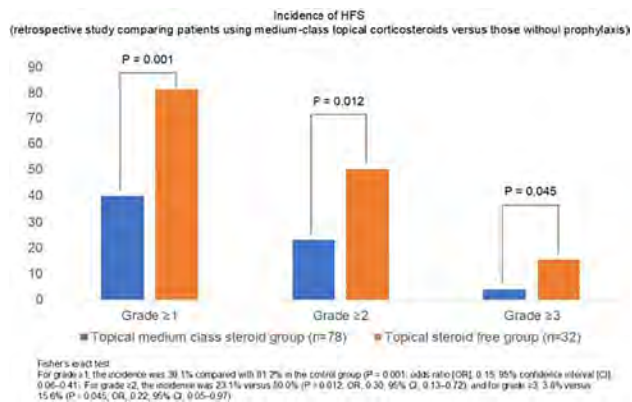
Three clinical studies were conducted: (1) a phase II single arm prospective study (T-CRACC) assessing prophylactic 0.1% hydrocortisone butyrate in patients with colorectal cancer receiving adjuvant CapeOX therapy; (2) a retrospective study comparing patients using medium-class topical corticosteroids versus those without prophylaxis; and (3) an ongoing randomized, double-blind, placebo-controlled phase III trial (J-DIRECT) evaluating diclofenac sodium 0.1% cream for HFS prevention. The primary endpoint was the incidence of grade ≥ 2 HFS.

Results

In the T-CRACC study (n=47), the incidence of grade ≥ 2 HFS was 6.4%, with no topical steroid-related adverse events. The retrospective study (n=110) demonstrated significantly lower grade ≥ 2 HFS incidence with medium-class corticosteroids compared with no prophylaxis (23.1% vs. 50.0%, $P=0.012$). J-DIRECT study is currently ongoing, with more than 200 participants enrolled to date.

Incidence of HFS (T-CRACC study)			
Four cycles			95% CI
	n	%	
Grade ≥1	12	25.5	14.0–40.0
Grade ≥2	3	6.4	1.0–18.0
Grade ≥3	0	0.0	0.0–8.0
Eight cycles			
Grade ≥1	20	42.6	28.0–58.0
Grade ≥2	8	17.0	8.0–31.0
Grade ≥3	1	2.1	0.0–11.0

HFS, Hand foot syndrome; CI, confidence interval; NA, not available



Conclusions

Collectively, these findings suggest that inexpensive, topical anti-inflammatory agents may effectively prevent capecitabine-induced HFS and could be applied in middle and low-income settings. When integrated with the results of the J-DIRECT study, these findings may contribute to establishing a novel, cost-effective preventive strategy against HFS.

ONCOD-007
NUTRITIONAL DEFICIENCY AND ITS EFFECT ON
PATIENTS WITH REFRACTORY SKIN TOXICITY FROM
AMIVANTAMAB THERAPY

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Introduction

Amivantamab is a bispecific monoclonal antibody agent targeting epidermal growth factor receptor (EGFR) and mesenchymal epithelial transition factor (MET) for treatment of advanced EGFR/MET mutated lung adenocarcinoma. Skin toxicity is common during amivantamab treatment, with up to 86% of patients experiencing cutaneous adverse events (AEs). Dermatologic AEs include acneiform eruption, pruritus, paronychia, granulomata, mucositis, and scalp ulceration, with up to 26% of patients experiencing grade 3 or higher skin toxicity. There are data associating severe EGFR inhibitor dermatologic AEs with nutritional deficiencies, including zinc, and suggests repletion of deficiencies can provide therapeutic benefit. We report common nutritional deficiencies in a series of patients with refractory skin AEs from amivantamab despite adherence to evidence-based prophylaxis and EGFR skin-directed protocols.

Methods

Retrospective chart review was conducted on 5 patients referred to Stanford University Department of Dermatology for refractory skin toxicity during amivantamab therapy from November 1, 2020 to December 31, 2025. Clinical and laboratory data were collected and reviewed from electronic medical records. This study was approved by the Stanford University Institutional Review Board.

Results

Mixed nutritional deficiency was common in patients with refractory cutaneous AEs on amivantamab therapy. Most common nutritional deficiencies included zinc (100%), protein (100%), iron (80%), vitamin A (60%), vitamin D (40%), vitamin B6 (40%), vitamin B1 (20%), and essential fatty acids (20%). Oral repletion of deficient nutrients led to clinical improvement in multiple skin AEs in our patients and may represent an important therapeutic consideration.

Conclusions

Patients with refractory amivantamab-related skin AEs had mixed nutritional deficiencies, notably zinc, protein, and iron. Oral repletion of identified deficiencies was associated with clinical improvement in cutaneous AEs, suggesting that nutritional assessment and targeted supplementation may be a valuable adjunct to dermatologic management and could support continued amivantamab therapy in patients. These findings support nutritional screening for patients experiencing refractory cutaneous AEs on amivantamab.

ONCOD-008
DEXAMETHASONE PREMEDICATION DELAYS SKIN
REACTIONS IN ENFORTUMAB VEDOTIN THERAPY FOR
ADVANCED UROTHELIAL CARCINOMA: A RETROSPEC-
TIVE STUDY

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Introduction

Enfortumab vedotin (EV)-induced skin reactions and hyperglycemia remain major concerns. The purpose of this study was to clarify dexamethasone (DEX) premedication can delay the onset of skin reactions in patients with advanced urothelial carcinoma (UC) receiving EV.

Methods

We retrospectively analyzed consecutive patients with advanced UC treated with EV monotherapy as a salvage-line treatment between December 2021 and September 2024 at two hospitals in Japan. Time to onset of skin reactions, hyperglycemia, and treatment failure was assessed using the Kaplan-Meier method. The relative dose intensity (RDI) was compared using Student's *t*-test.

Results

Fifty-five patients were included: 29 received DEX 6.6 mg and 26 received grisetron (GRN) 1 mg. The median time to onset of skin reactions was 29 (95% CI, 0–63) days in the DEX group and 8 (95% CI, 6–11) days in the GRN group (hazard ratio, 0.41; 95% CI, 0.22–0.77). Although the comorbidity of diabetes differed substantially between the groups—27.6% in the DEX group and 65.4% in the GRN group, no significant difference was observed in the time to hyperglycemia. Grade ≥ 3 skin reactions occurred in no patients in the DEX group and one patient in the GRN group, while Grade ≥ 3 hyperglycemia occurred in two patients in each group. The median time to treatment failure was 297 (95% CI: 121–473) days in the DEX group and 204 (95% CI: 150–258) days in the GRN group. The RDI was 74.3% in the DEX group and 63.8% in the GRN group ($P = 0.052$).

Conclusions

DEX premedication delayed the onset of skin reactions, although the comorbidity of diabetes differed substantially between the groups.

ONCOD-009

A PHASE I DOSE-ESCALATION AND EXPANSION STUDY OF EPIDERMAL GROWTH FACTOR (EGF)-CONTAINING OINTMENT FOR ANTI-EGFR-INDUCED ACNEIFORM RASH

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Introduction

Acneiform rash is a common cutaneous adverse event of anti-EGFR antibody therapy and has a detrimental effect for patient quality of life (QOL) and treatment continuity. Effective supportive care options remain limited. Epidermal growth factor (EGF)-containing ointments may promote epidermal repair and represent a novel supportive approach.

Methods

This phase I study comprised a dose-escalation part (Part 1) and an expansion part (Part 2). In Part 1, the recommended dose (RD) of EGF ointment (5, 10, and 20 ppm) was determined using a 3+3 design. In Part 2, exploratory evaluation of efficacy and safety was conducted at the RD. Overall, 20 patients from Parts 1 and 2 were included in the efficacy analysis. Eligible patients had RAS wild-type metastatic colorectal cancer and developed grade ≥ 2 acneiform rash on non-facial areas during anti-EGFR antibody therapy. The ointment was applied twice daily to a 5 × 5 cm target area for 13 days. The primary endpoint was response rate for acneiform rash, defined as ≥ 1 -grade improvement in CTCAE severity. Secondary endpoints included safety, adherence, and changes in Dermatology Life Quality Index (DLQI).

Results

Between July 2021 and March 2025, 28 patients were enrolled at Shizuoka Cancer Center, and 26 were evaluable. No dose-limiting toxicities were observed, and 20 ppm was determined as the RD. In

Part 2, median age was 69.5 years; 15% were male; all had PS 0 and received panitumumab. The response rate was 100% (20/20; 95% CI, 83.2–100%; $p < 0.0001$). No severe treatment-related adverse events occurred. Median compliance was 100% (mean, 98.6%). DLQI scores improved from baseline to day 14 (median: 2 to 1; mean: 3.45 to 1.68).

Conclusions

EGF-containing ointment showed favorable safety and efficacy for anti-EGFR-induced acneiform rash and may improve patient QOL. Further randomized controlled trials are warranted.

ONCOD-014

PIGMENTATION ON FINGERNAIL FOLDS ASSOCIATED WITH CANCER TREATMENT USING CHEMOTHERAPY AND IMPACT ON DAILY LIVING

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Introduction

Among physical appearance changes caused by chemotherapy, after hair loss, nail change was reported as the second most common side effect impacting quality of life (QOL). Existing evaluation criteria (CTCAE ver5.0 and MASCC EGFR-Dermatologic AE scale) focus on nail separation/loss but not on chronic inflammation or pigmentation. This study aimed to assess pigmentation on fingernail folds and clarify its impact on daily living.

Methods

Medical records of 43 patients undergoing chemotherapy and photographs of their fingernails were collected from 6 hospitals in metropolitan areas. After Ethics Committee approval and written consent from the subject patients, a self-administered paper questionnaire was conducted regarding impact on daily living, followed by evaluation of the photographs.

Results

The subject patients consisted of 13 males and 30 females with a median age of 56 years. Twenty-five received taxane-based therapy and 16 received fluoropyrimidine-based therapy. Among 28 patients with pigmentation on fingernail folds (65.1%), 20 had all fingernails affected: 17 with prominent pigmentation (39.6%) and 11 with non-prominent pigmentation (25.6%). Of 36 patients with nail discoloration (83.7%), 21 had 8 or more fingernails affected (48.8%). Five patients had nail fold pigmentation without nail discoloration (11.6%), while 13 had nail discoloration without nail fold pigmentation (31.2%). Regarding impact on daily living, prominent nail discoloration affected shopping ($p = 0.047$) and outings ($p = 0.088$). Pigmentation on all fingernail folds also affected shopping ($p = 0.078$) and outings ($p = 0.033$).

Conclusions

Pigmentation on fingernail folds occurred frequently but not always simultaneously with nail discoloration. Although manicure can be used for nail discoloration to improve QOL, a solution for pigmentation on fingernail folds has not yet been found. Therefore, evaluation criteria for pigmentation on fingernail folds and establishment of care methods are urgently needed.

ONCOD-019

INTERIM REPORT OF MASCC INTERNATIONAL HEALTH-CARE PROFESSIONAL SURVEY ON CURRENT PRACTICES IN MANAGING BREAST CANCER-RELATED LYMPHOEDEMA AND CELLULITIS

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Introduction

Despite increasing evidence supporting surveillance, early diagnosis, and timely intervention for breast cancer-related arm lymphoedema (BCRAL) and BCRAL-associated cellulitis, implementation in routine clinical practice remains inconsistent. Barriers vary across institutions and countries, limiting translation of evidence into practice. This study aims to characterize global practices in BCRAL and BCRAL-associated cellulitis management and identify barriers and unmet needs in early detection and care.

Methods

An online survey was conducted among regulated healthcare professionals involved in BCRAL care worldwide. The questionnaire included items on demographics and current clinical practices for BCRAL surveillance, diagnosis, intervention, and cellulitis management. Data collection will close in April 2026, with an anticipated sample size of 100–200. Ethical approval was obtained from the Hyogo Cancer Center Human Research Ethics Committee, Japan (R24-004). The survey was developed by the MASCC Multidisciplinary International Committee on BCRAL.

Results

Table 1. Diagnosis Methods Reported by Respondents for Clinical Lymphoedema (ISL Stage ≥1) and Latent Lymphoedema (ISL Stage 0)

	Clinical lymphoedema (ISL Stage ≥1) N (%)	Latent lymphoedema (ISL Stage 0) N (%)	Not used Not available N (%)
Clinical diagnosis	91 (90)	64 (63)	7 (7)
Tape measurement	86 (88)	61 (62)	6 (6)
Bioimpedance spectroscopy (BIS)	26 (34)	24 (31)	50 (65)
Lymphoscintigraphy	24 (32)	12 (16)	51 (67)
Magnetic resonance lymphangiography (MRL)	6 (9)	5 (7)	63 (90)
Indocyanine green (ICG) lymphangiography	25 (33)	15 (20)	51 (67)
Ultrasound	46 (56)	29 (35)	35 (43)
Computed Tomography (CT)	22 (32)	16 (24)	44 (65)
Perometry	7 (10)	7 (10)	60 (90)
Water displacement	3 (4)	3 (4)	65 (96)
Tonometry	3 (4)	2 (3)	65 (96)

Table 2. Intervention Methods Reported by Respondents for Clinical Lymphoedema (ISL Stage ≥1) and Latent Lymphoedema (ISL Stage 0)

	Clinical lymphoedema (ISL Stage ≥1) N (%)	Latent lymphoedema (ISL Stage 0) N (%)	Not used Not available N (%)
Education	97 (94)	88 (85)	3 (3)
Self-management education	96 (93)	86 (83)	4 (4)
Skin Care	98 (95)	87 (84)	2 (2)
Weight Management	83 (86)	73 (70)	11 (11)
Exercise	91 (93)	79 (81)	3 (3)
Bandaging	78 (85)	31 (34)	14 (15)
Compression Wrap	54 (71)	24 (32)	22 (29)
Compression Sleeve; Custom made	32 (69)	22 (29)	22 (29)
Compression Sleeve; Off the shelf	84 (88)	42 (44)	10 (10)
Manual Lymph Drainage (MLD)	81 (89)	42 (46)	9 (10)
Compression Pump	28 (38)	17 (23)	44 (60)
Lymphaticovenous Anastomosis (LVA)	36 (44)	11 (13)	45 (55)
Lymph Node Transfer	11 (16)	4 (6)	58 (84)
Debulking Surgery; Liposuction	15 (21)	4 (6)	56 (79)
Return to work support	45 (63)	33 (46)	26 (36)
Body image coping	33 (46)	20 (28)	38 (54)
Sexuality coping	29 (41)	18 (26)	41 (59)
Psychosocial coping	34 (49)	23 (33)	36 (51)
Refer to a Certified Lymphoedema professionals for CDT treatment	55 (72)	33 (43)	18 (24)

Data collection is ongoing. As of March 2026, 125 participants from 20 countries have responded (North America 14%, Latin America 10%, Europe 3%, Oceania 9%, Asia 65%), with 111 evaluable for analysis (nurses 19%, massage therapists/physical therapists/occupational therapists 30%, physicians 51%). Tables 1 and 2 summarize diagnostic and intervention methods for clinical or latent lymphoedema. Only 31 respondents (28%) reported offering prospective surveillance for early lymphoedema detection, whereas 80 (72%) reported testing and interventions only after symptoms developed. Reported barriers included insurance or self-pay issues (n=47, 59%), limited resources (n=38, 48%), low institutional priority (n=36, 45%), and lack of specialists (n=27, 34%). Participants also reported shortages of staff (n=68, 88%), budget (n=50, 65%), time (n=50, 65%), programs (n=42, 55%), and space (n=31, 40%). Final data will be presented.

Conclusions

These findings highlight substantial global variation in current practices and barriers to implementing prospective surveillance and early intervention for BCRAL. Addressing these barriers may improve early detection, strengthen BCRAL management, and reduce BCRAL-associated cellulitis among BC survivors.

ONCOD-020

ASSESSING THE EFFICACY OF DUPILUMAB IN THE TREATMENT OF CUTANEOUS TOXICITIES OF CANCER THERAPEUTICS

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Introduction

Cancer therapies cause a range of cutaneous toxicities, which reduce patient quality of life and disrupt treatment. Dupilumab, a monoclonal antibody targeting IL-4 and IL-13, shows promise in managing these toxicities, many of which resemble primary dermatoses for which dupilumab is an established treatment. We evaluated the efficacy of dupilumab in the management of cancer treatment-related cutaneous toxicities.

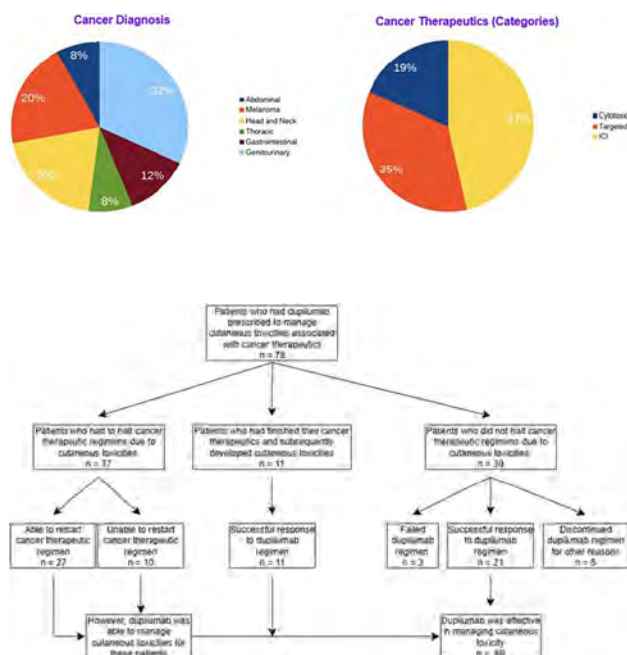
Methods

We performed a single-center retrospective chart review of adult patients who received dupilumab therapy as part of the management of cutaneous toxicity related to cancer therapy at New York University Perlmutter Cancer Center between January 1, 2016, and December 31, 2025. The primary outcome was change in grade of toxicity, expressed using the US National Cancer Institute's Common Terminology Criteria for Adverse Events (CTCAE) grading scheme.

Results

A total of 78 patients were included in our analysis. The most commonly implicated cancer therapeutic class in this cohort was immune checkpoint inhibitors (48.1%), followed by targeted therapies (31.6%) and cytotoxic therapeutics (20.3%). The most common toxicity was cancer therapy-related eczematous dermatitis, comprising 37.2% of cases, closely followed by prurigo nodularis (35.9%). Toxicities presented at an average CTCAE grade of 2.38. Following treatment including dupilumab (alone or as part of a combination of topical and systemic interventions), CTCAE grade was reduced to an average of 0.65 (p -value < 0.0001). The average time to an initial recorded response was 2.16 months, and the average time to maximal recorded response was 4.59 months.

Overall, 69 of the 78 patients had a reduction in CTCAE lesion grading, and the majority of patients treated were able to continue their cancer therapy. The predominant dupilumab-associated adverse event in this cohort was injection site pain, which led to drug discontinuation in two patients.



Conclusions

Dupilumab appears to be an effective and well tolerated treatment for the management of cutaneous toxicities from cancer therapy.

ONCOD-021

BARRIERS TO ACCESS: INSURANCE COVERAGE, FINANCIAL BURDEN, AND REGIONAL VARIATION IN SCALP COOLING THERAPY USE IN THE UNITED STATES

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Introduction

Scalp cooling therapy (SCT) is widely available internationally for chemotherapy-induced alopecia (CIA) prevention. However, it remains relatively uncommon in the United States, where many health insurance carriers consider CIA a cosmetic issue and limit its coverage. Consequently, SCT's financial burden frequently falls on patients. To better understand barriers to access and inform efforts to improve insurance coverage, this study characterized SCT out-of-pocket costs and identified factors influencing coverage.

Methods

Paxman Scalp Cooling provided deidentified records from U.S. facilities (January 2024–September 2025) for patients who received SCT with Paxman devices. Analysis was performed in RStudio ($\alpha=0.05$).

Results

2,482 patients were identified (mean age 55.6 ± 13.1 years; 98.6% female). Most were treated for breast cancer (77.6%), followed by endometrial (5.1%), ovarian (4.8%), and lung cancer (2.6%). 1,589 patients (64.1%) received partial or full SCT insurance coverage. Among patients with partial coverage ($n=113$), median copay was \$35 (IQR: \$20–50) per treatment. Compared to commercial insurance, Medicare Advantage plans (government-sponsored insurance for elderly patients) were more likely to provide coverage (OR=3.61 [1.81–7.22]), whereas Medicaid plans (government-sponsored insurance for economically disadvantaged patients) were less likely (OR=0.51 [0.37–0.69]). Age and diagnosis were not associated with coverage; however, geographic region was, with patients in the northeastern United States more likely to receive coverage than those in other regions (OR=1.26 [1.01–1.57]; $p=0.04$). Of 596 patients denied coverage who applied for Paxman assistance programs, 460 (77.2%) received assistance. Patients were prescribed 8.5 ± 5.2 SCT sessions on average, with mean total projected cost of \$62.74 (USD) with insurance coverage and \$2,056.41 without.

Conclusions

These findings underscore heterogeneity of coverage of SCT in the United States, and suggest nonmedical factors exacerbating financial barriers to access. Notably, a substantial proportion of patients lacking insurance coverage rely on manufacturer assistance. Further studies are needed to characterize this financial burden and inform advocacy efforts to improve equitable SCT access.

ONCOD-022

TOPICAL INTERVENTIONS FOR THE PREVENTION OF ACUTE RADIATION DERMATITIS IN BREAST CANCER: AN UPDATED SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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Introduction

Topical interventions (TIs) are commonly recommended to prevent acute radiation dermatitis (ARD). However, their comparative efficacy remains

unclear. This updated systematic review and network meta-analysis (NMA) evaluates and ranks the efficacy of TIs in patients with breast cancer undergoing adjuvant radiation therapy (RT).

Methods

A systematic literature search was performed on Embase, MEDLINE, and Cochrane Central from database inception to December 2, 2025. Randomized controlled trials (RCTs) comparing at least one TI to the standard of care (SOC) or placebo for the prevention of ARD in breast cancer patients were included. Eligible studies reported ARD incidence using RTOG or CTCAE grading criteria. The primary outcome was the incidence of Grade ≥ 2 (Gr2) ARD. Sensitivity analysis was performed for interventions evaluated in >1 RCT. Relative risks (RR) were estimated using NMA with random effects.

Results

Sixty-six RCTs studying 47 TIs met the inclusion criteria, of which 11 TIs were evaluated by >1 RCT. Eleven TIs significantly reduced the risk of $\geq$ Gr2 RD compared to placebo or SOC (Figure 1). Based on SUCRA rankings, the five most effective interventions were Plateletrich plasma lotion (0.9559), polyurethane film (0.9342), Alpha ointment (0.9170), boron-based gel (0.8746), and EOSSKY Fullerene cream (0.8525). Among TIs studied by >1 RCT, betamethasone, Hydrofilm, Mepitel film, and photobiomodulation significantly reduced the incidence of $\geq$ Gr2 RD (Figure 2). Significant heterogeneity was detected in both NMAs ($I^2 = 67.4\%$, $p < 0.0001$ for all RCTs, $I^2 = 67.4\%$, $p < 0.0001$ for TIs studied by >1 RCTs).

Conclusions

This NMA suggests several topical interventions reduce the incidence of grade ≥ 2 ARD in breast cancer patients receiving adjuvant RT. The evidence for the efficacy of betamethasone, Hydrofilm, Mepitel film, and photobiomodulation appears to be the most robust; however, the interpretation of these results is limited by substantial heterogeneity.

Fig. 1 – FOREST PLOT COMPARING TOPICAL INTERVENTIONS USED IN AT LEAST ONE STUDY VERSUS THE STANDARD OF CARE

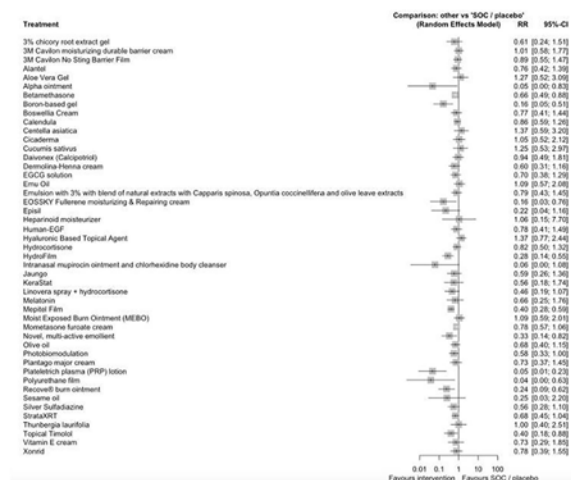
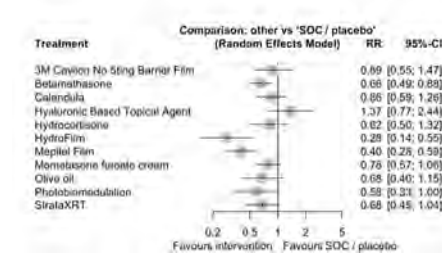


Fig. 2 – FOREST PLOT COMPARING TOPICAL INTERVENTIONS USED IN MORE THAN ONE STUDY VERSUS THE STANDARD OF CARE



ORAL-001

BARRIERS TO DENTAL CARE IN CANCER SURVIVORS: CROSS-CULTURAL ADAPTATION AND VALIDATION OF THE INDONESIAN DENTAL BARRIERS SURVEY

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Introduction

Despite the significant burden of persistent oral complications in survivors of head and neck cancer (HNC), Indonesia does not have a validated tool that is culturally adapted to assess barriers to dental care access. This study represents the first translation, cultural adaptation, and validation of the OraRad Survey of Experiences and Barriers in dental care for Indonesian HNC survivors.

Methods

The Survey of Experiences and Barriers questionnaire was cross-culturally adapted to develop an Indonesian version (SEDB-ID) and evaluated for validity and reliability through a cross-sectional study involving HNC patients at a hospital in Jakarta, Indonesia. All participants provided informed consent and completed the SEDB-ID via Google Form, followed by a structured telephone interview. Reliability testing included Cronbach's alpha, total and inter-item correlations, and intraclass correlation coefficients to assess internal consistency and temporal stability.

Results

A total of 28 eligible HNC patients participated in the study. The SEDB-ID demonstrated high reliability, with a Cronbach's alpha of 0.89 and an intraclass correlation coefficient of 0.90 based on test-retest data from (the first 10%) survey participants. Most respondents ($n = 20$; 71.4%) agreed they understood the effects of cancer and its treatment. Only half of the participants reported returning to a dentist after completing cancer treatment ($n = 16$; 57.1%). Concerns regarding the cost of dental care were indicated by several respondents ($n = 13$; 46.4%). Xerostomia was the most frequently reported oral complaint ($n = 25$; 89.3%).

Conclusions

SEDB-ID demonstrated strong reliability and was feasible for use among head and neck cancer patients in Indonesia. The findings highlight persistent oral complications and notable barriers to post-treatment dental care, including limited follow-up, financial concerns, and a high prevalence of xerostomia and other functional impairments.

ORAL-002**OROFACIAL TREATMENT EMERGENT ADVERSE EVENTS OF ADCS TARGETING HER2: A SYSTEMATIC REVIEW AND META-ANALYSES**

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Introduction

HER2-directed ADCs trastuzumab emtansine and trastuzumab deruxtecan are widely used in treating HER2-positive malignancies, making it important to characterize their treatment-related toxicities, including orofacial adverse events. However, the prevalence and severity of these AEs remain inconsistently reported. This systematic review and meta-analysis compared orofacial AEs associated with T-DM1 and T-DXd using peer-reviewed published trials and ClinicalTrials.gov to provide a clearer assessment across reporting platforms.

Methods

A systematic search of PubMed, Embase, the Cochrane Library, and ClinicalTrials.gov identified clinical trials reporting orofacial AEs in patients treated with T-DM1 or T-DXd. Eligible studies included randomized and non-randomized trials, and data extraction focused on orofacial outcomes reported in three or more studies. Random-effects meta-analyses estimated pooled prevalence and severity (Grade ≥ 3) and statistically compared the two ADCs. Risk of bias was assessed using the Cochrane Risk of Bias tool for randomized studies and the Methodological Index for Non-Randomized Studies (MINORS) for non-randomized designs.

Results

Oral mucositis was the most frequently reported orofacial AE, with a pooled prevalence of 14% in published literature. Rates were significantly higher for T-DXd compared with T-DM1 (17% vs. 9%, $p = 0.04$). ClinicalTrials.gov findings were similar (16% for T-DXd vs. 6% for T-DM1). Dry mouth showed a pooled prevalence of 19% for T-DM1 in published literature and 13% for both ADCs on ClinicalTrials.gov. Dysgeusia was significantly more common with T-DXd (14% vs. 5%, $p < 0.01$) in published studies, while ClinicalTrials.gov reported equal rates (6%) for both drugs. Dysphagia had a lower prevalence overall (2% in published literature and up to 5% for T-DXd). Thrush was infrequently reported, with no significant differences.

Conclusions

Meaningful differences in orofacial AE profiles exist between T-DM1 and T-DXd, particularly for oral mucositis and dysgeusia. Variability across data sources highlights the need for standardized reporting to improve consistency and strengthen clinical understanding of ADC-related toxicities.

ORAL-004**ENHANCING THE COMPLETENESS RATE OF ORAL CARE PROVIDED BY ICU NURSES FOR CANCER PATIENTS**

Chiu-Chin Chang

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Introduction

This article aims to describe and enhance the completeness of oral care provided by ICU nurses for cancer patients, emphasizing its importance during cancer treatment. It addresses common complications such as mucosal ulcers, dry mouth, and oral infections, with the goal of reducing

infection risk, alleviating discomfort, and improving overall quality of life. The study offers practical insights to promote the integration of oral care in critical care, ultimately advancing overall patient health.

Methods

Data were collected through observation, physical assessment, nurse interviews, and medical record review to evaluate oral care practices. Care was individualized to address mucosal ulcers, dry mouth, and oral infections. Daily oral assessments enabled early detection of mucositis, and alcohol-free chlorhexidine or herbal mouthwash was used to reduce infection risk. Each session lasted 10–15 minutes and included moisturizers to relieve dryness and lavender oil with gentle massage to promote relaxation. Severe mucositis was managed with local anesthetics or systemic analgesics, while peppermint and neroli oils were used to ease pain and anxiety. Interdisciplinary collaboration among dental specialists, oncologists, and critical care nurses ensured regular evaluation and optimization of the care plan.

Results

Daily assessments enabled early detection of mucosal changes and effective management of oral issues. Regular cleaning with mouthwashes and moisturizers significantly reduced dry mouth and improved oral odor, while analgesics controlled pain from mucositis. Patients reported fresher oral sensations, diminished pain, and overall satisfaction with the care duration, leading to enhanced comfort and a reduced risk of infection.

Conclusions

Enhanced oral care is vital for managing cancer patients in the ICU. A comprehensive approach—including daily assessments, regular cleaning, targeted therapies, and appropriate care duration—significantly improves patient comfort, reduces infection risks, and elevates overall quality of life and health outcomes.

ORAL-007**ENHANCING ICU NURSES' ORAL CARE PERFORMANCE FOR CANCER PATIENTS: A STRUCTURED AND INDIVIDUALIZED SUPPORTIVE CARE APPROACH**

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Introduction

This project aimed to improve the quality and personalization of oral care delivered by ICU nurses to cancer patients. Due to mucosal damage from chemotherapy, immunosuppression, and intubation, patients face elevated risks of infection and discomfort. The initiative incorporated AI-based mucosal image recognition for early detection, along with standardized protocols, non-pharmacologic interventions, and family involvement to optimize supportive care delivery.

Methods**1. Standardized Protocols:**

A twice-daily oral care protocol using sponge brushes and alcohol-free Parmason mouthwash was established. Optional self-pay products such as Biotène gel and antiseptic toothpaste supported hydration and microbial control. Visual aids and digital tools improved consistency and documentation.

Individualized Supportive Care:

Oral care frequency and tools were adjusted based on mucosal condition, pain, and tolerance. For patients with discomfort or anxiety, lavender or peppermint aromatherapy and gentle massage provided non-pharmacologic symptom relief.

AI-Assisted Mucosal Assessment:

A mobile AI tool analyzed intraoral images captured by nurses to detect redness, ulcers, or mucosal damage. Real-time feedback enabled early detection and timely intervention.

Education and Family Engagement:

Nurses received simulation-based training on oral care and AI usage. Families were encouraged to participate in daily care when appropriate.

and were provided illustrated materials to support care continuity during hospitalization and beyond.

Results

The AI tool improved early recognition of mucosal changes and supported timely, evidence-based care adjustments. Patients reported less pain, reduced odor, and better oral comfort. Families expressed satisfaction and willingness to assist. Nurses noted greater confidence and clinical accuracy. Overall patient satisfaction improved, and oral complications declined.

Conclusions

This project integrated AI-assisted technology, standardized protocols, and individualized supportive care to enhance nurses' confidence and accuracy in oral care. It improved symptom control and quality of life for ICU cancer patients. Future efforts may expand this model and integrate AI into clinical systems for scalable supportive care.

ORAL-009

NURSE-LED PERIOPERATIVE ORAL ASSESSMENT AND INFECTION IN HEAD AND NECK CANCER PATIENTS

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Introduction

Participants with head and neck cancer are prone to surgical site infection (SSI) and pneumonia after surgery. Oral care provided by nurses during the acute postoperative periods is crucial. The purpose of this study were to observe oral hygiene status for two weeks post-head and neck cancer surgery using oral assessment tool we developed, to clarify the association with SSI and pneumonia, and to investigate change in self-efficacy regarding oral care.

Methods

Participants were patients undergoing head and neck cancer surgery between September 2023 and October 2024. Dental professionals provided perioperative oral care preoperatively and on postoperative day 1. Nurses assisted with oral cleaning, moisturizing, and counseling. Outcomes included SSI and pneumonia incidence rates, and self-efficacy for oral care at discharge. Oral assessments covered cleanliness, mouth opening difficulties, pain, while self-efficacy was measured using self-administered questionnaire. Logistic regression and multiple regression analyses examined associations between SSI, pneumonia, self-efficacy, and related factors.

Results

A study of 55 patients, with a mean age of 66.6 years, found SSI and pneumonia incidence rate was 18.2 % and 5.5 %, respectively. Self-efficacy score improved from 4.9 before surgery to 7.1 after. Over 2 weeks, oral hygiene and symptoms steadily improved, with patients moving toward self-care. Early moisturizing care by nurses within the first 5 days after surgery was key factor in predicting SSI, no clear link was seen between pneumonia and oral hygiene. High preoperative self-efficacy also predicted higher post-surgery self-efficacy, highlighting the value of preoperative counseling.

Conclusions

Regarding SSI, it is presumed that SSI occurred in patients where nurse determined moisturizing assistance was necessary, suggesting the importance of preventing oral dryness. Furthermore, preoperative counseling that enhances self-efficacy is required.

ORAL-010

CLINICAL AND RADIOLOGICAL HEALING AFTER SURGICAL TREATMENT OF MEDICATION-RELATED OSTEONECROSIS OF THE JAW: A RETROSPECTIVE OBSERVATIONAL STUDY

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Introduction

Medication-related osteonecrosis of the jaw (MRONJ) is increasingly managed with a surgical-first approach; however, variability in reported healing rates and outcome definitions persists. In particular, the impact of early surgical reintervention in cases of delayed wound healing remains unclear. The aim of this study was to evaluate clinical and clinico-radiographic healing 12 months after surgical treatment of MRONJ and to identify risk factors for poor healing, remission, and recurrence.

Methods

This retrospective observational study included patients with MRONJ surgically treated between November 2021 and September 2025. Surgical procedures - dentoalveolar curettage, sequestrectomy, and marginal resection - were planned according to SICMF-SIPMO clinico-radiological criteria. Clinical healing was assessed using the Modified Healing Index (MHI), while radiological evaluation was performed with CT/CBCT at 12 months. Healing was defined as the absence of clinical and radiological signs of disease; remission as symptom resolution with radiological stability; and recurrence as reappearance of MRONJ within one year. Sites showing unfavorable healing at 1–3 months underwent early surgical reintervention. Multivariate logistic regression was used to identify independent risk factors for poor healing.

Results

Fifty-five patients (69 MRONJ sites) were included. At 12 months, soft tissue healing was observed in 98.6% of sites. Clinico-radiographic healing was achieved in 75.4%, while 23.2% showed remission. Two recurrences (4%) were recorded. Early reintervention was required in 14.5% of sites with delayed healing and resulted in complete clinical healing in all cases. Multivariate analysis identified advanced MRONJ stage as the only independent risk factor for poor healing (OR 10.93; 95% CI 1.88–63.72; $p < 0.01$).

Conclusions

Disease stage remains the primary determinant of outcome. Nevertheless, a combined medical-surgical approach seems to be effective in treating MRONJ. Moreover, early surgical reintervention in cases of delayed wound healing significantly contributes to achieving high cumulative healing rates.

ORAL-011

PANORAMIC IMAGING FOR EARLY OSTEORADIONECROSIS DETECTION IN LONG-TERM HEAD AND NECK CANCER SURVEILLANCE: A PILOT RETROSPECTIVE STUDY

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Introduction

Osteoradionecrosis (ORN) of the jaws is a serious late complication of radiotherapy for head and neck cancer that impacts patient quality of life and healthcare utilization. Clinically significant ORN still occurs in approximately 4–8% of patients despite advances in radiotherapy. Radiographic changes may precede clinical manifestations, providing an opportunity for earlier detection. The recently proposed ClinRad classification system incorporates imaging features to identify early radiation-induced bone injury and introduces Stage 0 ORN, a previously undescribed radiographic stage without clinical bone exposure. This study evaluated post-radiotherapy imaging to facilitate identification of subclinical ORN.

Methods

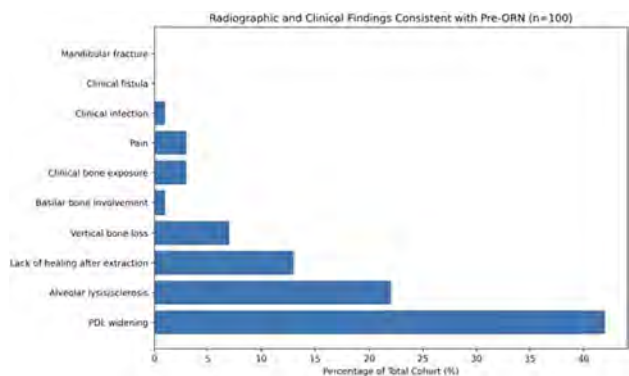
This retrospective study included patients treated with head and neck radiotherapy at Princess Margaret Hospital (2023–2024). All patients underwent pre-radiotherapy dental assessment and panoramic 1–2 years after treatment. Images were evaluated for early radiographic signs of ORN and correlated with clinical findings. Cases were categorized using the ClinRad classification system and descriptive analyses were performed. A total of 100 patients undergoing post-radiotherapy panoramic surveillance were included. Radiographic findings consistent with pre-ORN (ClinRad Stage 0) were identified in 49 patients (49%). Demographic characteristics and radiation dose were similar between groups.

Results

Among these cases, 46 of 49 (93.9%; 95% CI: 87–100%) corresponded to ClinRad Stage 0. Stage I and II were uncommon (4.1%, 2.0%), and no Stage III cases occurred. The most frequent radiographic findings were periodontal ligament widening (85.7%), alveolar bone lysis/sclerosis (44.9%), and lack of healing after extraction (26.5%). Vertical bone loss (14.3%) may indicate increased risk of tooth loss and ORN progression. Radiographic abnormalities occurred at median 18 months (11–27).

Variable	Pre- ORN Positive (n=49)	Pre- ORN Negative (n=51)	P value
Age (years), median (range)	63 (38–95)	64 (30–88)	0.54
Male	36 (75%)	35 (70%)	0.75
Smoking history			
• Never	27 (55%)	25 (49%)	
• Former	18 (37%)	25 (49%)	
• Active	4 (8%)	1 (2%)	
Radiation dose (Gy), median (range)	70 (50–70)	70 (36–70)	0.81
Time to radiographic abnormality (months), median (range)	18 (11–27)	—	—
Pre-radiotherapy extraction	24 (49.0%)	11 (21.6%)	0.006

Variable	n	%
Radiologic Findings		
PDL widening	42	85.7%
Lack of healing after extraction	13	26.5%
Vertical bone loss	7	14.3%
Lysis/sclerosis of alveolar bone on panoramic radiograph	22	44.9%
Lysis/sclerosis of basilar bone on panoramic radiograph	1	2.0%
Clinical Findings		
Clinical bone exposure	3	6.1%
Clinical fistula	0	0%
Clinical infection	1	2.0%
Pain	3	6.1%
Mandibular fracture	0	0%



Conclusions

Early radiographic abnormalities consistent with pre-ORN were most frequently detected approximately 18 months after radiotherapy and predominantly corresponded to ClinRad Stage 0, supporting the concept that radiographic changes may precede clinical manifestations and allowing earlier identification of subclinical disease.

ORAL-014
THE IMPACT OF ORAL FRAILITY ON MALNUTRITION AND QUALITY OF LIFE IN ELDERLY CANCER PATIENTS UNDERGOING CHEMOTHERAPY

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Introduction

Oral frailty is a common functional decline in the elderly. Elderly cancer patients undergoing chemotherapy are prone to aggravated oral function impairment due to chemotherapy-induced toxicity, which may further induce malnutrition and ultimately affect quality of life. This study aimed to explore the impact of oral frailty on malnutrition risk and quality of life in elderly cancer patients receiving chemotherapy.

Methods

A cross-sectional study was conducted, enrolling 321 elderly cancer patients (≥65 years old) who received chemotherapy at a cancer hospital in Chongqing from November 2024 to September 2025. Data were collected using a general information questionnaire, Oral Frailty Index-8, Nutrition Risk Screening 2002, and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30. Multivariate logistic regression was used to analyze the association between oral frailty and nutritional risk, and multivariate linear regression was applied to explore the effect of oral frailty on quality of life.

Results

The incidence of oral frailty was 43.0%. The incidence of nutritional risk in the oral frailty group (68.1%) was higher than that in the non-oral frailty group (31.7%) ($P<0.01$). The total score of EORTC QLQ-C30 in the oral frailty group [(58.26 ± 10.35)] was lower than that in the non-oral frailty group [(72.58 ± 9.62)] ($P<0.01$). Multivariate logistic regression showed that oral frailty remained an independent risk factor for nutritional risk in elderly cancer patients ($OR=4.219$, 95%CI: 2.683~6.627, $P<0.01$). Multivariate linear regression indicated that oral frailty had a significant negative impact on the total EORTC QLQ-C30 score ($\beta=-10.452$, 95%CI: -13.286~-7.618, $P<0.01$).

Conclusions

Oral frailty is highly prevalent in elderly cancer patients undergoing chemotherapy. Oral frailty is closely associated with increased malnutrition risk and decreased quality of life. Clinical attention should be paid to oral frailty assessment, and early targeted oral care interventions should be implemented to improve patients' nutritional status and quality of life.

ORAL-015
RELATIONSHIP BETWEEN CHANGES IN ALVEOLAR BONE MINERAL DENSITY AFTER HEAD AND NECK RADIOTHERAPY AND RADIATION DOSE – A PRELIMINARY STUDY –

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Introduction

According to Marx’s 3H principle, we hypothesized that the degree of decrease in alveolar bone mineral density (BMD) may be a predictor of ORN risk or radiation-induced bone damage. However, the relationship between changes in BMD after radiotherapy (RT) and radiation dose have not yet been clarified. The purpose of this study was to investigate the chronological changes of BMD after RT and to clarify the relationship between radiation dose and changes in BMD.

Methods

BMD was measured in head and neck RT patients using the Dental-SCOPE (Media Co, Tokyo, Japan), which is a commercially BMD quantitative analysis system. BMD was measured before RT, immediately, 6 months, 1 year, and 2 years after RT. The relationship between chronological changes in BMD and radiation dose was analyzed. This study was approved by the Ethics Committee of our Hospital (approval No. 2019-0001).

Results

A total of 23 regions from seven patients with head and neck RT were investigated. The mean BMD showed the lowest value immediately after RT, and the decreased BMD showed a tendency to recover. In addition, the degree of decrease in BMD was associated with the exposed radiation dose. No recovery tendency was observed in BMD exposed to radiation doses of 40 Gy or higher.

Conclusions

Radiation-induced BMD reduction is thought to result from decreased trabecular bone due to osteoclast activation and fat deposition. The histological changes are dose-dependent. In addition, several animal studies have shown that osteoclast activity normalizes early. Our results support these findings. The ISOO-MASCC-ASCO guidelines describe that a jaw dose of 50 Gy or higher indicates a risk of ORN after tooth extraction, and ORN is characterized by a hypocellular bone. Therefore, the degree of decrease in BMD may be a predictor of ORN risk or radiation-induced bone damage.

ORAL-017
THE CLINICAL AND RADIOLOGICAL CHARACTERISTICS OF TEMPOROMANDIBULAR JOINT METASTASES

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Introduction

Metastatic spread to the temporomandibular joint (TMJ) is exceedingly rare and is most often associated with advanced malignant disease. Diagnosis of TMJ metastases is particularly challenging, as its clinical manifestations may closely resemble those of more common conditions, including temporomandibular disorders. This diagnostic complexity may result in delayed detection and consequently postpone the initiation of appropriate management. The objective of this study is to describe the clinical and radiological characteristics of TMJ metastases.

Methods

We retrospectively reviewed the medical records of 17 cancer patients with suspected TMJ metastases who were evaluated at our clinic between 2007 and 2025. Inclusion criteria consisted of a known primary malignancy and radiographic findings compatible with metastatic involvement of the mandibular condyle. Six cases were excluded due to insufficient evidence supporting a definitive diagnosis of condylar metastases.

Results

Eleven patients met the inclusion criteria (8 females and 3 males), with a mean age of 56.8 years (range 32–77) at initial cancer

diagnosis and 61 years (range 37–78) at TMJ metastases diagnosis. Breast cancer was the most prevalent primary malignancy (7 cases). Clinical symptoms were reported in five patients and included trismus, pain, malocclusion, paresthesia and swelling. In four cases, TMJ metastases were detected incidentally in the absence of clinical symptoms. No sufficient information regarding the presenting symptoms was available for two patients. Radiographically, TMJ metastases most commonly demonstrated mixed or sclerotic characteristics. Ten patients died during follow-up, with eight deceased within 16 months of TMJ metastases diagnosis.

Conclusions

This series represents the largest cohort of TMJ metastases reported from a single medical center to date. The incidental detection of TMJ involvement in four patients suggests that the prevalence of this condition may be underestimated in the literature. TMJ metastatic disease should be included in the differential diagnosis of TMJ-related symptoms, especially in cancer patients.

ORAL-018
MRONJ AND IMMUNE CHECKPOINT INHIBITORS: CAUSAL ASSOCIATION OR MISATTRIBUTION USING REAL-WORLD DATA

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Introduction

Medication-related osteonecrosis of the jaw (MRONJ) is a recognized adverse event associated with anti-resorptive therapies. Recently, few case reports have described MRONJ occurring after treatment with immune checkpoint inhibitors (ICIs). However, these reports are isolated, and the true association between ICIs and MRONJ remains unclear. We sought to determine whether ICI use is independently associated with MRONJ or whether previously observed cases may represent misattribution.

Methods

We conducted a retrospective study using the TriNetX real-world database to identify patients treated exclusively with ICIs as a monotherapy. To isolate ICIs-related effects, patients receiving anti-resorptives, tyrosine kinase inhibitors and anti-TNF agents were excluded. Patients who had prior MRONJ outcomes before index event were further excluded in both case and control groups. Risks were compared between the ICI monotherapy cohort and control group after propensity matching by age and sex.

Results

	Patients in Cohort	Patients with MRONJ	Prevalence of MRONJ (%)	Risk Difference (95% CI)	Risk Ratio (95% CI)	Odds Ratio (95% CI)	p-value
Cohort 1: patients on ICIs (no anti-TNF- α , TKIs, antiresorptive medications)	79,703	25	0.03	0.02% (0.004% - 0.033%)	2.5 (1.2 - 5.2)	2.5 (1.2 - 5.2)	0.011
Cohort 2: patients not on ICIs, anti-TNF- α , TKIs, antiresorptive medications	79,716	$\leq 10^*$	0.01				

ICIs – immune checkpoint inhibitors, anti-TNF- α – anti-tumor necrosis factor-alpha, TKIs – tyrosine kinase inhibitors, MRONJ – medication related osteonecrosis of the jaw, CI – confidence interval, * – precise counts of equal or less than 10 are not provided from TriNetX database

In a cohort of 81,206 patients treated with ICI monotherapy, the mean age was 64.4 years, with 56.66% male and 42.65% female. Pembrolizumab was the most frequently used agent (52.49%). The overall prevalence of MRONJ

was 0.041% (n = 33). MRONJ cases were associated with pembrolizumab (n = 23), nivolumab (n = 6), atezolizumab (n = 2), and cemiplimab (n = 2). Table 1 compares the risk for MRONJ among patients receiving ICIs versus control cohort after propensity matching. Patients receiving ICI monotherapy demonstrated a higher observed risk of MRONJ compared with controls: 0.03% versus $\leq 0.01\%$. This yielded a risk difference of 0.02% and an odds ratio of 2.5 (95% CI: 1.21–5.21, $p = 0.011$), indicating a substantially increased relative risk among ICI recipients.

Conclusions

Use of ICIs was associated with a small but statistically significant increase in MRONJ risk. Patients receiving ICIs had a 2.5-fold higher risk compared with controls. These findings highlight the need for clinical awareness and monitoring of patients on ICIs.

ORAL-019

CHANGES IN ORAL HEALTH PARAMETERS AFTER HEAD AND NECK RADIOTHERAPY: TWO-YEARS FINDINGS FROM A PROSPECTIVE OBSERVATIONAL STUDY

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Introduction

This study aimed to evaluate the incidence of carious lesions and changes in periodontal status in a cohort of patients treated with radiotherapy (RT) for head and neck cancer (HNC), with a minimum follow-up of 2 years. A secondary objective was to assess the need for dental extractions following RT.

Methods

This prospective cohort study was approved by the Ethics Committee of the Università Cattolica del Sacro Cuore (Ref. 22858/18) and registered on ClinicalTrials.gov (ID: NCT04009161). The study population consisted of patients with HNC who, prior to RT, underwent a clinical-radiographic examination to assess their periodontal and dental health status, followed by the elimination of oral foci of infection. These patients were then enrolled in a follow-up program. The primary outcome was good oral health, defined as the absence of severe periodontitis and a DMFT score ≤ 13 .

Results

In total, 113 patients were included (mean follow-up 49.42 ± 21.41 months). Seventeen patients exhibited a worsening of oral health ($p=0.007$), which was influenced by age (OR=0.955, 95% CI: 0.914–0.998) and the minimum dose to the oral cavity (OR=3.72, 95% CI: 1.24–11.13). Similarly, the DMFT index increased (diff: 3.63 (95% CI: 1.54 – 5.73, $p < 0.001$), and this increase was associated with smoking ($\beta = 2.05$, 95% CI: 0.27 – 3.83, $p = 0.02$). Although the worsening of the periodontitis stage was not statistically significant ($p=0.35$), localized deterioration was observed, evidenced by an increase in sites with PPD $>5\text{mm}$ ($p=0.02$). Tooth loss (2.06 teeth/patient) was significant ($p<0.001$), primarily due to caries (48.5%) and periodontitis (48.1%). The identified risk factors were age ($p=0.025$) and RT dose $>60\text{ Gy}$ to the oral cavity ($p=0.023$).

Conclusions

This study confirms that patients treated with radiotherapy (RT) experience a significant deterioration in oral health, which directly correlates with the received radiation dose.

ORAL-020

OSTEORADIONECROSIS INCIDENCE AFTER TEETH EXTRACTIONS IN IRRADIATED PATIENTS: A PROSPECTIVE STUDY

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Introduction

This study aimed to evaluate the incidence of Osteoradionecrosis (ORN) for tooth extractions (TE) performed after radiotherapy (RT). Secondary objectives were to evaluate which variables related to tooth extraction may affect the risk of ORN.

Methods

This prospective cohort study was approved by the Ethics Committee of the Università Cattolica del Sacro Cuore (Ref. 22858/18) and registered on ClinicalTrials.gov (ID: NCT04009161). The study population consisted of patients with HNC who underwent TE during their follow-up after RT. ORN was defined as exposed bone at an unhealed post-extraction socket in the absence of oncological recurrence. The RT plans were reviewed, and each post-extractive socket was contoured to calculate the received radiation dose.

Results

In total, 56 patients with 232 TE were included. ORN was diagnosed in 7 patients (12.5% of patients) after 16 TE (6.9% of TE). The following risk factors for ORN were retrieved: dose at the extraction site (OR = 1.14; CI 95%: 1.06–1.22; $p < 0.001$), site of extraction (OR for mandible vs maxilla = 4.74; CI 95%: 1.26–17.81; $p = 0.021$), reason for extraction (OR for periodontitis vs other reasons = 8.76; CI 95%: 1.99–38.59; $p = 0.004$), surgical extractions (OR = 9.84; CI 95%: 1.48–65.62; $p = 0.018$).

Conclusions

TE after RT represent a high-risk procedure for ORN development, directly correlated to the dose of RT, and influenced by patient-related factors and surgical variables.

ORAL-021

BRUSHING AWAY BACTEREMIA: DENTAL-ONCOLOGY COLLABORATIVE TO IMPROVE ORAL CARE AND REDUCE MBI-CLABSIS

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Introduction

Mucosal barrier injury–central line–associated bloodstream infections (MBI-CLABSIs) are often linked to inadequate oral hygiene (OH). To address rising MBI-CLABSIs on an inpatient pediatric oncology and bone marrow transplant (BMT) unit, we launched a quality improvement (QI) initiative that culminated in a dental–oncology collaborative to standardize OH workflows.

Methods

Our goal was to reduce MBI-CLABSIs by improving OH education for clinicians and families and improving OH reliability. We aimed to increase twice daily toothbrushing for patients with a central line admitted to the inpatient unit from 16.6% (baseline data from January 2024) to 50% by January 2026, inclusive of patient's race, ethnicity, and language. Using the hospital's QI framework, a multidisciplinary team of nurses, oncologists, and pediatric dentists worked to streamline OH efforts. First, an evidence-based OH bundle

was developed. Then, policies, procedures, and patient-family education tied to OH were refreshed to align with dental recommendations. Subsequently, pediatric dental residents joined nurse experts in patient rounding, bedside oral assessment, patient/family education, and initiating interventions. The dental residents also developed clinician-centered education sessions.

Results

Toothbrushing compliance increased to a record 36.7% by April 2025, with an unprecedented 154-day stretch of no MBI-CLABSIs from January 2024 through June 2024. While not yet achieving 50% compliance, toothbrushing compliance experienced a centerline shift up from 21.4% to 30.6%. The engagement of dental residents fostered increased nursing interest in OH. Similarly, the dental residents became more familiar with the management of oncology patients. This bidirectional training is unique for both oncology clinicians and pediatric dentistry programs.

Conclusions

This structured dental–oncology partnership built on standardized rounding and team and family education increased OH compliance and was associated with reduced MBI-CLABSIs. Next steps include surveying patients and families to quantify the collaborative’s influence and evaluating the impact of resident time on unit-level outcomes.

ORAL-022

ORAL HEALTH IN HEAD AND NECK CANCER SURVIVORSHIP: LEARNING THE NEEDS, IMPROVING THE CARE

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Introduction

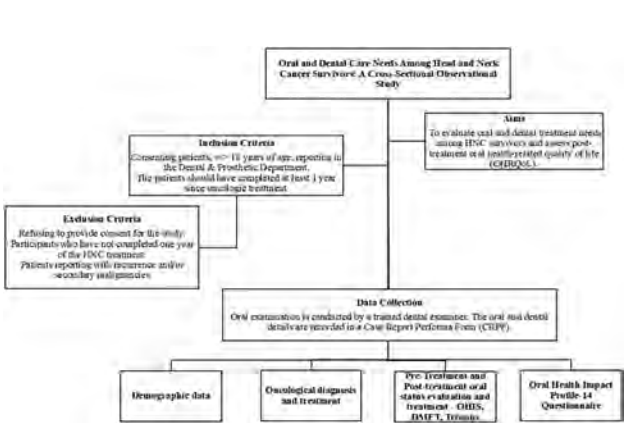
Advances in oncologic treatments and shifting epidemiological trends have increased the population of head and neck cancer (HNC) survivors, many experiencing persistent oral and dental sequelae. These unmet needs highlight the need for structured, long-term oral care protocols in survivorship to reduce complications and improve quality of life.

Aims

To evaluate oral and dental treatment needs among HNC survivors and assess post-treatment oral health-related quality of life (OHRQoL).

Methods

This cross-sectional study included HNC survivors who met the inclusion criteria, reported to the Dental and Prosthetic Department, and had completed curative therapy at least 1 year earlier. Demographic data, oncologic diagnoses, and treatments were retrieved from institutional records. Comprehensive oral examinations assessed dental status, including Oral Hygiene Index-Simplified (OHI-S) and Decayed-Missing-Filled Teeth (DMFT) scores. OHRQoL was evaluated using the Oral Health Impact Profile-14 (OHIP-14), with summary scores calculated and associations with clinical variables analyzed via appropriate statistical tests.



Results

From March 2024 to March 2025, 365 HNC survivors were recruited (85.8% male). Early-stage (I-II) disease occurred in 117 (32.1%), and advanced-stage (III-IV) disease in 248 (67.9%). Radiation therapy was administered to 335 (91.8%), with 223 (66.6%) receiving pre-radiation prophylaxis. Prosthodontic rehabilitation was provided to 252 (69.0%). Other post-treatment needs included periodontal procedures (61.4%), conservative treatments (36.7%), and extractions (35.9%). Mean OHIP-14 score was 21.22 ± 9.59 (median 20, IQR 15–27), indicating moderate OHRQoL impact. Significant associations included education ($p = 0.05$), cancer stage, trismus ($p < 0.001$), radiation ($p < 0.001$), OHI-S ($p = 0.004$), and DMFT ($p = 0.005$). Highest domain burdens were physical ability (3.75 ± 1.98), functional limitations (3.68 ± 1.66), and physical pain (3.37 ± 1.61).

OHIP-14 (Subscales)	Mean ± SD	Median
Functional Limitation	3.68 (1.66)	4.00 (3.00)
1) Trouble performing work	2.07 (0.99)	2.00 (2.00)
2) Worried about of future	1.62 (0.94)	1.00 (1.00)
Physical pain	3.37 (1.61)	3.00 (2.00)
3) Painful eating	1.91 (0.85)	1.00 (1.00)
4) Uncomfortable throat	2.06 (1.01)	2.00 (2.00)
Psychological discomfort	3.05 (1.81)	3.00 (2.00)
5) Self-conscious	1.47 (0.92)	1.00 (1.00)
6) Hair loss	1.98 (1.05)	1.00 (1.00)
Physical Disability	3.75 (1.98)	3.00 (3.00)
7) Don't like how you look	1.74 (1.00)	2.00 (1.00)
8) Interdependent needs	2.01 (1.04)	2.00 (2.00)
Psychological disability	2.48 (1.66)	2.00 (2.00)
9) Difficult to relax	1.63 (0.71)	1.00 (0.00)
10) Embarrassment	1.45 (1.15)	1.00 (1.00)
Social Disability	3.10 (1.80)	3.00 (2.00)
11) Inhabits with other people	1.59 (1.09)	2.00 (1.00)
12) Difficulty doing usual jobs	1.41 (1.00)	1.00 (1.00)
Handicap	3.79 (1.42)	2.00 (1.00)
13) Less satisfaction	1.35 (1.10)	1.00 (1.00)
14) Unable to function	0.44 (0.62)	0.00 (1.00)
Total	21.22 (9.59)	20.00 (12.00)

Conclusions

HNC survivors exhibit substantial gaps in prophylaxis, hygiene, and prosthodontic care, yielding moderate OHRQoL impairment. Advanced stage, trismus, radiation, poor oral indices, and prosthetic deficits significantly influence outcomes, underscoring the need for targeted survivorship protocols.

ORAL-023**ANALYSIS OF INFLUENCING FACTORS OF ORAL FRAILITY IN ELDERLY LUNG CANCER PATIENTS UNDERGOING CHEMOTHERAPY BASED ON A BAYESIAN NETWORK MODEL**Yumei Shi, **Jingui Huang**

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Introduction

Oral frailty is common in elderly cancer patients undergoing chemotherapy, exacerbating malnutrition and reducing quality of life. Elderly lung cancer patients face higher risks due to impaired immune function and poor treatment tolerance. This study explores the influencing factors and their association pathways of oral frailty in this population using a Bayesian network model, providing a reference for precise clinical interventions.

Methods

A convenience sample of 739 elderly lung cancer patients undergoing chemotherapy was selected from 4 tertiary grade A hospitals in Chongqing (November 2024–September 2025). Data were collected via a general information questionnaire, Oral Frailty Index-8, Functional Assessment of Anorexia/Cachexia Therapy Anorexia/Cachexia Subscale, Family APGAR Scale, Chemotherapy-induced Taste Alteration Scale, Athens Insomnia Scale, and Hospital Anxiety and Depression Scale. Univariate analysis and modified Poisson regression identified independent factors. R4.3.2 and Netica7.01 software were used for Bayesian network model construction and risk inference.

Results

The incidence of oral frailty was 55.34%. The model included 7 nodes and 11 directed edges. Age, cancer-related anorexia, chemotherapy-induced taste alterations, depression, and insomnia directly affected oral frailty. Chemotherapy-induced taste alterations, depression, insomnia, and family function were indirectly associated via cancer-related anorexia; family function and insomnia also acted indirectly through depression. The model showed good discriminative ability (AUC=0.948), with a 98.4% oral frailty probability in patients with age ≥ 60 years, cancer-related anorexia, chemotherapy-induced taste alterations, depression, and insomnia.

Conclusions

Oral frailty is prevalent in elderly lung cancer patients undergoing chemotherapy, with complex network associations among influencing factors. The Bayesian network model visually presents direct and indirect pathways, offering a valuable tool for early identification of high-risk groups and formulation of hierarchical clinical interventions.

ORAL-024**ODONTOGENIC INFECTION-RELATED FEVER DURING PERIOPERATIVE AC OR TC CHEMOTHERAPY FOR BREAST CANCER: INCIDENCE AND CLINICAL IMPACT**

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Introduction

Doxorubicin-cyclophosphamide (AC) and docetaxel-cyclophosphamide (TC) are standard perioperative chemotherapy regimens for

breast cancer. Febrile neutropenia (FN) is a common adverse event, and odontogenic infections may contribute to febrile episodes. This study was performed to investigate the incidence and impact of odontogenic infection-related febrile episodes during AC and TC chemotherapy.

Methods

A total of 408 patients with breast cancer receiving 4 cycles of AC ($n = 285$) or TC ($n = 123$) between 2015 and 2020 were included in this single-center retrospective study. Patients recorded daily axillary temperatures and oral symptoms. Dental evaluations were performed when oral infection was suspected. Febrile episodes ($\geq 37.5^\circ\text{C}$) were assessed, and their association with odontogenic infections was determined from dental records. Relative dose intensity (RDI) was calculated to assess chemotherapy delivery.

Results

Overall, 40.2% of patients experienced febrile episodes, and the frequency was higher in the TC group (48.8%) than the AC group (36.5%, $P = 0.02$). Febrile episodes related to oral infections occurred in 9.1% of patients, of which 78.4% were attributed to odontogenic infections (7.1% of all patients). Most odontogenic infection-related fevers occurred during the first chemotherapy cycle (79.3%, $P < 0.01$). Chemotherapy RDI was reduced in 3 patients due to odontogenic infection, but remained $\geq 85\%$.

Conclusions

Odontogenic infection-related febrile episodes occur in approximately 7%–8% of patients with breast cancer receiving perioperative AC or TC chemotherapy, predominantly during the first cycle. Early identification and management of odontogenic infections may reduce the risk of FN and help maintain chemotherapy delivery.

ORAL-025**MRONJ INCIDENCE AND RISK FACTORS IN MULTIPLE MYELOMA PATIENTS UNDERGOING PRE-ASCT DENTAL EXTRACTIONS: A RETROSPECTIVE STUDY**

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 Princess Margaret Cancer Centre

Introduction

Medication-Related Osteonecrosis of the Jaw (MRONJ) can be a significant complication for patients with Multiple Myeloma (MM) who receive IV bisphosphonates (BP) and undergo dental extractions before Autologous Stem Cell Transplantation (ASCT). This retrospective study examines the incidence of MRONJ and risk factors in MM patients with a history of IV BP who underwent dental extractions prior to ASCT.

Methods

Records of 1,547 MM patients between 2011–2022 were reviewed, with 320 patients meeting the eligibility criteria for analysis. Statistical analyses were performed using GraphPad Prism software.

Results

On average, three teeth were removed before ASCT, and 4.1% of patients developed MRONJ. Periodontitis was the main reason for dental extraction among MRONJ cases. Patients on Zoledronic acid was 5 times more likely to develop MRONJ than those on Pamidronate alone, with the highest risk when Pamidronate was later switched to Zoledronic Acid. A single dose of IV BP was sufficient to cause MRONJ, and the onset of MRONJ could span multiple years.

Table 1: Number of dental extractions and reasons for extractions, according to MRONJ status.

	All patients (%) (n = 320)	No MRONJ (%) (n = 307)	MRONJ (%) (n = 13)	p-value
Number of Extractions				
Average	2.99	2.98	3.15	0.84
Range	1 to 19	1 to 19	1 to 11	
Reason for Extractions				
Periodontal Disease	85 (27%)	78 (25%)	7 (54%)	
Residual Root	10 (3%)	10 (3%)	0	
Caries	90 (28%)	86 (28%)	4 (31%)	
Acute Abscess	8 (3%)	7 (2%)	1 (8%)	
Periapical Disease	105 (33%)	105 (34%)	0	
Vertical Fracture	7 (2%)	7 (2%)	0	
Exo 8's	14 (4%)	13 (4%)	1 (8%)	
Missing	1 (0%)	1 (0%)	0	

Table 2: Bisphosphonate agents and administration routes, according to MRONJ status.

	All patients (%) (n = 320)	No MRONJ (%) (n = 307)	MRONJ (%) (n = 13)	p-value
Number of Doses				
Average	2.260330579	2.26	2.33333	0.95
Range	0 to 45	0 to 45	0* to 6	
Agent				
Pamidronate	182 (57%)	179 (58%)	3 (23%)	p<0.0001
Zoledronic acid	92 (29%)	85 (28%)	7 (54%)	
Both	6 (2%)	3 (1%)	3 (23%)	
None	34 (11%)	34 (11%)	0	
Missing	5 (2%)	5 (2%)	0	
*Some patients were started on intravenous bisphosphonates following tooth extraction (ie doses = 0 at time of extraction) and went on to develop MRONJ at the extraction site were included				
Comparison	Original p-value	Adjusted p-value	Odds Ratio	95% CI
Zoledronic acid vs Pamidronate	0.034	0.054	4.914	1.318 to 17.72
Both vs Zoledronic acid	0.0133	0.0266	12.14	2.354 to 56.85
Both vs Pamidronate	0.0004	0.0012	59.67	9.584 to 316.7

Table 3: Bisphosphonate doses, according to MRONJ status.

Bisphosphonate Doses	All patients (%) (n = 320)	No MRONJ (%) (n = 307)	MRONJ (%) (n = 13)	P = 0.0770
0	90 (28%)	86 (28%)	4 (31%)	
1	26 (8%)	24 (8%)	2 (15%)	
2	23 (7%)	22 (7%)	1 (8%)	
3	31 (10%)	30 (10%)	1 (8%)	
4	52 (16%)	51 (17%)	1 (8%)	
5	7 (2%)	6 (2%)	1 (8%)	
6	5 (2%)	3 (1%)	2 (15%)	
>6	8 (3%)	8 (3%)	0 (0%)	
Unknown	78 (24%)	77 (25%)	1 (8%)	

Conclusions

MRONJ incidence was associated with periodontitis and the administration of intravenous bisphosphonates, with a higher risk at increased doses. There was no minimum dose of IV BP that could be administered with no risk of MRONJ, as a single dose of IV BP was sufficient to develop MRONJ. These findings can support evidence-based strategies for MRONJ prevention in MM patients with IV BP history undergoing pre-ASCT dental care.

ORAL-026

CHARACTERISING COMPLEXITY OF DENTAL CARE IN ONCOLOGY

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Introduction

The dental management of patients with a cancer diagnosis is known to be complex as treatment plans need to take into account a variety of factors. However there is no data describing what contributes to this complexity, nor is there a mechanism to capture this despite similar frameworks existing in medical and surgical oncology. The Complexity Checklist (CC) is a recently validated tool that aims to capture facets that contribute to patient complexity in the provision of dental treatment.

Methods

Referrals for dental review of patients with a cancer diagnosis during the period July 1 2025 – December 31 2025 were reviewed. Data recorded included demographic information, medical history and dental treatment provided. In addition, dental records included the completion of the CC at the end of each appointment.

Results

Referral sources ranged from a variety of specialties and included referrals for dental management pre, during and post cancer treatment. During the study period 88 patients were referred for review with management being provided over 239 appointments. Dental treatment included 175 extractions, 115 dental restorations and fabrication of two obturators. Aspects of patient complexity captured by the CC included: the impact of oncology treatment side-effects on dental treatment planning; coordinating dental interventions to not interfere with the administration of systemic treatment; taking into consideration socio-cultural beliefs to guide dental treatment; and providing dental treatment to maintain quality of life. Further, analysis revealed that the CC was sensitive to changes in complexity factors between appointments for the individual patient including changes in medical history, overall treatment intent and considerations for dental treatment provided.

Conclusions

This study has highlighted the complexities in providing dental treatment for patients with a cancer diagnosis, and introduces the CC for use in Dental Oncology to better describe its contribution to overall patient management.

ORAL-028

EVALUATION OF TIME-DEPENDENT RISK OF MEDICATION-RELATED OSTEONECROSIS OF THE JAW USING THE NEW KATAGIRI SCORE: A COMPETING RISK ANALYSIS

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Introduction

The cumulative risk of medication-related osteonecrosis of the jaw (MRONJ) increases with prolonged exposure to bone-modifying agents (BMAs). However, clinicians lack a practical method to evaluate time-dependent MRONJ risk in relation to life expectancy. The New Katagiri Score is an established prognostic tool for survival in patients with metastatic bone tumors. We examined whether this score can stratify time-dependent MRONJ risk while accounting for the competing risk of death.

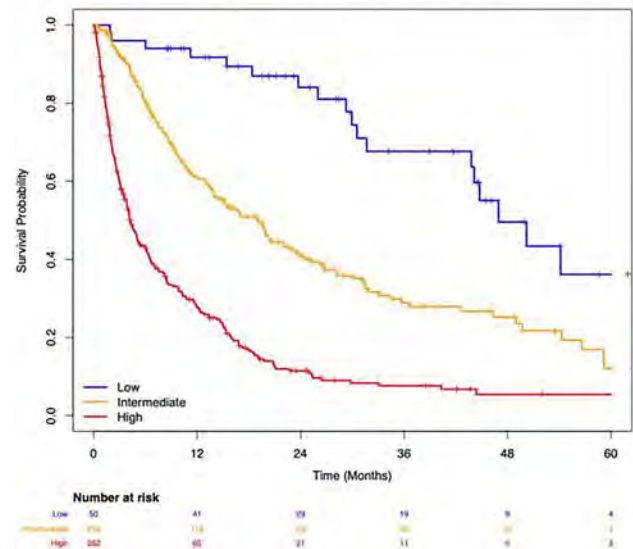
Methods

Following approval by the Institutional Review Board of Miyagi Cancer Center (No. 2024-047), we retrospectively analyzed 562 patients with metastatic bone tumors who initiated BMA therapy (denosumab or zoledronic acid) between 2018 and 2023. Patients were stratified into low-, intermediate-, and high-risk groups using baseline New Katagiri Scores. MRONJ incidence was evaluated using Fine–Gray competing risk regression, adjusting for age, sex, and number of remaining teeth, with death treated as a competing event.

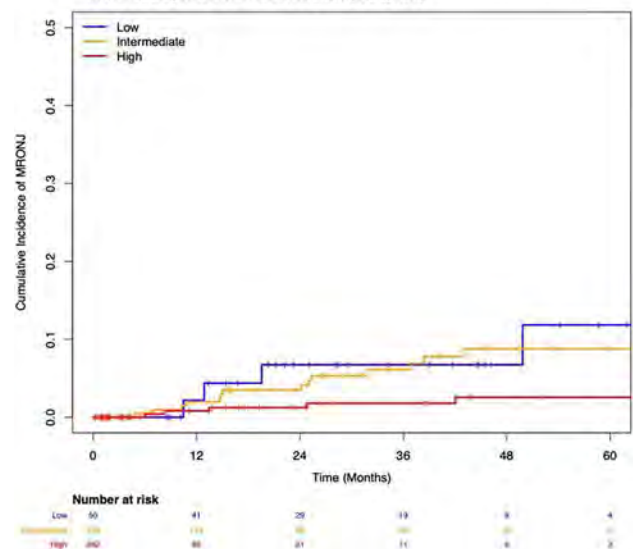
Results

MRONJ occurred in 23 patients (4.1%), and 392 patients (69.8%) died. Kaplan–Meier analysis showed no significant differences in MRONJ incidence among risk groups. In contrast, multivariable Fine–Gray analysis demonstrated a significant inverse association between mortality risk and MRONJ. The high-risk group had a significantly lower MRONJ risk than the low-risk group (adjusted subdistribution hazard ratio [aSHR], 0.24; 95% confidence interval [CI], 0.06–0.89; $P = .03$). The number of remaining teeth was not significantly associated with MRONJ. The cumulative incidence at 60 months was highest in the low-risk group (11.8%) and lowest in the high-risk group (2.6%).

Kaplan–Meier estimates of overall survival stratified by the New Katagiri Score. (The curves demonstrate distinct survival profiles among the three risk groups.) 0–3 (low-risk group), 4–6 (intermediate-risk group), and 7–10 (high-risk group). The rates of survival for these three groups are significantly different.



Cumulative incidence of MRONJ stratified by the New Katagiri Score (Low, Intermediate, and High-risk groups). (Estimates were calculated using the Fine–Gray model with death as a competing risk.)



Conclusions

The New Katagiri Score effectively stratifies time-dependent MRONJ risk by incorporating life expectancy. Patients with favorable systemic prognoses face higher long-term MRONJ risk due to prolonged BMA exposure. Use of this score may support personalized dental management, emphasizing prevention while avoiding overtreatment in patients with limited life expectancy.

ORAL-029

PROGNOSIS-ADAPTED ORAL SUPPORTIVE CARE BEFORE BONE-MODIFYING AGENTS IN LUNG CANCER: A 5-YEAR SURVIVAL COHORT FROM A TERTIARY DENTAL HOSPITAL

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Introduction

In treating patients with advanced cancer and bone metastasis, the key issue is not limited to medication-related osteonecrosis of the jaw (MRONJ) risk assessment but includes prognosis evaluation. Under oncologic constraints, the extent of dental intervention should be determined by anticipated patient survival. This study assesses 5-year survival and prognostic subgroups relevant to oral supportive care in lung cancer.

Methods

This single-center retrospective cohort study includes lung cancer patients who first visited the Department of Advanced General Dentistry, Yonsei University Dental Hospital (Seoul, Republic of Korea) in 2021 ($n=167$). Baseline variables included stage, histology, BMA exposure, sex, age, and smoking status. Overall survival (OS) was defined with lung cancer diagnosis as time zero, and deaths were analyzed up to a maximum of 5 years (60 months) after diagnosis. Five-year survival estimates (95% confidence intervals) were derived using the Kaplan–Meier method, with stratified survival comparisons across subgroups.

Results

Stage IV accounted for 55.1% of the cohort, and 21.6% had documented BMA exposure. By the end of follow-up, 55 patients (32.9%) had died. The estimated 5-year OS was 66.6% and five-year OS was lower in stage IV disease (56.9%) and in the BMA-exposed group (53.3%) compared with the unexposed group (71.3%). NSCLC showed higher 5-year OS than SCLC (68.5% vs 43.8%).

Conclusions

Dental care in advanced lung cancer should be considered with prognostic status. When prognosis is limited, priority should be given to rapid stabilization of acute infection and to minimal function and pain management. However, with anticipated long-term survival and BMA exposure, dental care focused on recurrent infection control and preventive maintenance is needed.

OTHER-002

GLOBAL PERSPECTIVES ON MASCC CLINICAL PRACTICE GUIDELINES: INTERNATIONAL SURVEY OF AWARENESS, IMPLEMENTATION AND INSIGHTS TO INFORM FUTURE UPDATES

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¹Rambam Health Care Campus, ²

Introduction

The Multinational Association of Supportive Care in Cancer (MASCC) is internationally recognized for developing evidence-based Clinical Practice Guidelines (CPGs) for managing cancer or treatment-related toxicities, but their implementation remains uncertain. This study aimed to evaluate global awareness, utilization, and perceptions of MASCC CPGs, to inform strategies to enhance future updates and implementation.

Methods

An international online survey was distributed via the MASCC platform between February and March 2025 to healthcare professionals

specialized in supportive care in cancer. The survey included both closed- and open-ended questions addressing awareness, usage, perceived strengths and limitations, implementation challenges, and suggestions for improvement.

Results

A total of 423 responses were received, 264 (63%) from MASCC members. Participants represented all world regions, with 271 (65%) having 11–20 or more years of clinical experience. Overall, 302 (78%) reported routinely using MASCC CPGs in the management of cancer or treatment-related toxicities. Even among non-members, MASCC CPGs were cited as the most frequently used guidelines compared with other sources. The mucositis and antiemetic guidelines were the most recognized and applied. Key facilitators included the guidelines' strong evidence and multidisciplinary development. Reported barriers included limited availability or high cost of recommended interventions. Respondents suggested improvements related to the timing of updates, dissemination strategies, and the inclusion of patient-facing guidelines.

Conclusions

MASCC CPGs are widely recognized and valued globally, yet implementation remains variable. Targeted efforts to address resource constraints and enhance dissemination may strengthen their global awareness and implementation.

OTHER-005

RETROSPECTIVE AUDIT OF PICC LINES FROM A HIGH-VOLUME ONCOLOGY CENTRE IN A LOW RESOURCE LMIC SETTING

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¹AIG HOSPITALS, ²AIG, DEPARTMENT OF ONCOLOGY

Introduction

Peripherally Inserted Central Venous Catheters (PICCs) are widely used in cancer patients for chemotherapy, blood products, and supportive care. Data on real-world complications from high-volume Indian cancer centres remains limited. We studied utilization patterns, indications, and adverse events in this population.

Methods

Retrospective observational study of PICC line insertions at AIG (Asian institute of Gastroenterology) Hospital, Gachibowli was conducted from November 2022 to September 2025 in the dept of Oncology.

Variables studied included age, gender, diagnosis, catheter type, insertion date and tip position, chemotherapy regimen, documented complications, removal status and follow-up.

TABLE 1 – Demographics of PICC line patients

SL.NO	Diagnosis	NO. OF CASES (n=300)	PERCENTAGE %
1	GIT	210	70
2	Hematologic Malignancies	80	26.7
3	Miscellaneous Ca Breast Ca Bronchus & Lungs Ca Ovary	10	3.3

Table 2 – Complications of PICC lines

Sl. NO	TYPE OF COMPLICATIONS	% OF PICC COMPLICATION	Number N
1	Line related thrombosis/DVT	1.0	3
2	Culture positive infections	2.65	8
3	Local site infections	1.0	3
4	Catheter blockage	1.0	3
5	Accidental de-lining	1.65	5
	Malposition	1.0	3
	Total	8.3	N=25

Results

300 PICC insertions over the study period were audited with a predominance of gastrointestinal malignancies (70%). 220 (73%) patients were male & 80 (26.6%) were female; and the mean age was 38.5 (range 7 – 70yrs). Power PICC (79.0%) was the commonest, followed by Groshong (11.3%) and arrow catheters (9.7%) with tips positioned at the Cavo-atrial junction (72.0%), SVC (26.7%), IJV (0.3%) and axillary (1.0%). 79 catheters are still being used as of study date. Complications were noted in 8.3 % (25 patients). Average PICC line use was 135 days (4.5months; Range 1-270days), with 66 patients able to use beyond 6 months. Complications gradually reduced over the study period from (16 % in 2022; 52% in 2023; 36% in 2024 to 0% in 2025)

Conclusions

Our data demonstrates safe utilization of PICCs across broad spectrum of cancer patients, predominantly elective removals and low rates of major catheter-related complications. Our findings support safety and feasibility of PICC in complex cancer care when combined with standardized insertion techniques and dedicated line-care practices and improvement of patient care when handled in a dedicated CVAD clinic in a low – middle income country.

OTHER-008

MEDCANCER INITIATIVE RWANDA: A YOUNG LED SOLUTION TO SUPPORT CANCER CARE IN RWANDA

Darius Benimana

Medcancer initiative Rwanda

Introduction

In 2020, cancer was the second leading cause of death, accounting for 10 million deaths worldwide. Rwanda has seen a rise in cancer cases, with 10,704 reported in 2018. However, there is low awareness of cancer and its preventive measures among the population, especially in vulnerable areas. Many cancer cases in Rwanda are diagnosed at a late stage, which worsens the life of patients. To address these challenges, we aim to empower individuals and communities by raising awareness about cancer, promoting early diagnosis, facilitating access to effective treatment options, and advocating for preventive measures.

Methods

Medcancer is currently engaged in various activities to raise awareness about cancer in Rwanda. These activities include the preparation of educational cancer radio talks, early screening options, and capacity-building sessions for healthcare students. Medcancer also plans to organize large gatherings of the population where they will provide information on cancer preventive measures. Specifically, Medcancer is targeting the community umuganda program in the

Huye district and other locations. Additionally, Medcancer is working to improve cancer research among young individuals in Rwanda by assisting them in preparing research proposals and reviews.

Results

Medcancer has successfully engaged 65 young individuals to advocate for cancer awareness. Capacity-building sessions have been conducted for both members and students at the University of Rwanda, particularly at the College of Medicine and Health Sciences. Additionally, Medcancer has raised awareness about cancer among young individuals through Radio Salus, a radio station that broadcasts throughout Rwanda. Medcancer also has 10 research projects on various types of cancers, including both primary and secondary ones, which are currently being carried out by its members.

Conclusions

Medcancer Initiative Rwanda is making significant strides in raising awareness about cancer, promoting early diagnosis, and advocating for preventive measures in Rwanda.

OTHER-010

DETECTION OF SAFETY SIGNALS FOR ANTINEOPLASTIC DRUG-RELATED INTERSTITIAL LUNG DISEASE IN PATIENTS WITH HEAD AND NECK SQUAMOUS CELL CARCINOMA

Lin Cao¹, **Yanfei Wang¹**, Jie Ju², Zhongfen Liu², Lina Xia², Pei Zhang²

¹Peking University Cancer Hospital & Institute, Day Oncology Unit, Beijing, ²

Introduction

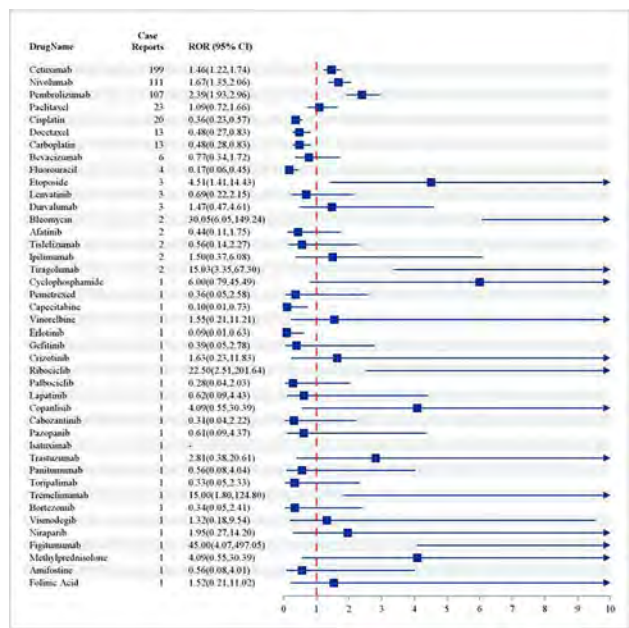
With the advent of the targeted therapy and immunotherapy era, an increasing number of antineoplastic drugs have been shown to be associated with interstitial lung disease (ILD), but large-scale real-world data are lacking. This study aimed to systematically detect ILD reporting signals associated with antineoplastic drugs used in the treatment of head and neck squamous cell carcinoma (HNSCC).

Methods

Data were collected from the U.S. FDA Adverse Event Reporting System (FAERS) database from the first quarter of 2004 to the first quarter of 2025, with structured datasets obtained directly through the FDA portal. Drug-related adverse event reports involving FDA-approved drugs for HNSCC treatment and with ILD as the preferred term (PT) were included. Cases of duplicate medication use, non-HNSCC indications, unapproved drugs, and drugs classified as concomitant medications or involved in drug interactions were excluded. Disproportionality analysis was performed using the reporting odds ratio (ROR) combined with the information component (IC) to assess safety signals. A statistically significant safety signal was defined as "lower limit of 95% confidence interval (CI) > 1 and number of ILD cases ≥ 3" or "lower limit of IC 95% CI > 0".

Results

Among 513 ILD cases involving 42 drugs, three showed significant signals: cetuximab [ROR=1.46, IC=0.36], nivolumab [ROR=1.67, IC=0.61], and pembrolizumab [ROR=2.39, IC=1.06]. The high-risk drug classes were anti-EGFR monoclonal antibodies [ROR=1.45, IC=0.35] and PD-1/PD-L1 inhibitors [ROR=2.14, IC=0.72].



Conclusions

ILD reporting in HNSCC is notably associated with anti-EGFR therapies and PD-1/PD-L1 inhibitors, which show stronger signals than traditional chemotherapy. Despite limitations such as database biases, these findings highlight the need for vigilant clinical monitoring of ILD in patients receiving these treatments, though further studies are required to confirm the actual clinical risk.

OTHER-011
PREGNANCY-ASSOCIATED CANCER: MAPPING CHANGES IN CANCER PHENOTYPES AND OUTCOMES ACROSS TIME SINCE PREGNANCY

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Introduction

Pregnancy-associated cancer (PAC) may be associated with pregnancy-related hormonal, metabolic, immunological changes persisting for up to 10 years postpartum. In pregnancy-associated breast cancer, altered tumour phenotypes, immune signalling, and molecular drivers are often observed postpartum; yet, data across other cancer types are scarce. Limited understanding of PAC biology complicates the diagnosis and management of PAC. This study will compare tumour phenotypes (histopathology, molecular features, biomarkers) and outcomes across postpartum intervals, providing the first cross-cancer assessment of long-term pregnancy effects on tumour biology.

Methods

We will conduct a population-based, retrospective cohort study using data linkage for all cancers diagnosed in women aged 15–54 in Queensland from 2008–2023. PAC includes cancers diagnosed during pregnancy or within 10 years postpartum, stratified as pregnancy, 0–1, 1–5, and 5–10 years postpartum; non-PAC includes cancers diagnosed >10 years postpartum or in women with no recorded pregnancies. Collected variables include maternal demographics and comorbidities; pregnancy characteristics and adverse outcomes; detailed tumour and histopathology features (e.g., ICD-O-3 morphology, stage, size,

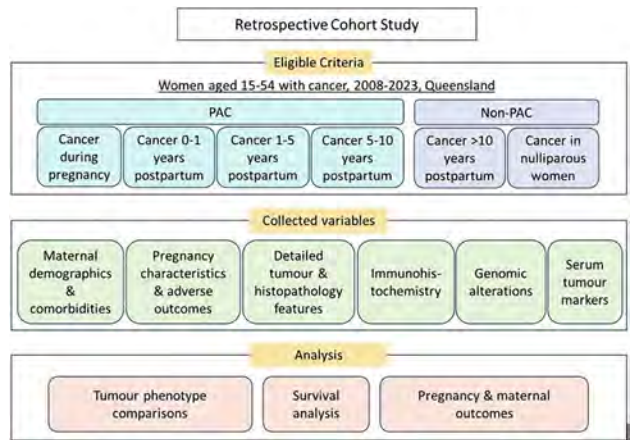
LVI/PNI, margins); comprehensive immunohistochemistry across cancer types (e.g., ER/PR/HER2, PD-L1, MMR); genomic alterations (e.g., TP53, BRCA1/2, KRAS, BRAF, EGFR, MSI, TMB); and serum tumour markers (e.g., CA125, CEA, AFP, LDH).

Results

Tumour phenotype comparisons will be summarised using counts, proportions, and summary statistics in PAC versus non-PAC and across postpartum intervals, adjusting for predefined confounders. Survival, pregnancy, and maternal outcomes will be analysed, accounting for tumour phenotypes.

Conclusions

We will identify periods of heightened cancer risk and clarify whether postpartum incidence peaks reflect biological changes, diagnostic factors, or shifts in tumour subtypes. Integration of tumour morphology, immunohistochemistry, genomic alterations, and circulating biomarkers will test the hypothesised pregnancy effect on carcinogenesis for up to 10 years postpartum. Findings inform risk stratification, screening timing, and guideline development for women during high-risk periods, providing the basis for PAC supportive care.



OTHER-012
EFFICACY OF ELINZANETANT FOR TREATMENT OF VASOMOTOR SYMPTOMS IN WOMEN WITH BREAST CANCER: SUBGROUP ANALYSIS OF OASIS-4 BY TYPE OF ENDOCRINE THERAPY

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Introduction

In the Phase III trial OASIS-4 (NCT05587296), elinzanetant (EZN), a dual neurokinin (NK)-targeted therapy (NK-1 and NK-3 receptor antagonist), significantly reduced vasomotor symptom (VMS) frequency vs. placebo (PBO) in women taking endocrine therapy (ET) for hormone receptor-positive (HR+) breast cancer. This subgroup analysis evaluated EZN's effects on VMS frequency and severity by type of ET in OASIS-4.

Methods

Women aged 18–70 years experiencing ≥35 moderate-to-severe VMS/week caused by ET for HR+ breast cancer were randomized 2:1 to receive EZN 120 mg for 52 weeks or PBO for 12 weeks followed by EZN for 40 weeks. Mean changes in daily moderate-to-severe VMS frequency and severity from baseline to weeks 1 (frequency only), 4, and 12 were analyzed by ET type (tamoxifen [TAM], aromatase inhibitor [AI], ovarian function suppression [OFS; i.e., gonadotropin-releasing hormone agonist], no OFS). This post hoc analysis was not powered for statistical testing.

Results

Mean age (years) was 50.4 for TAM, 51.9 for AI, 45.2 for OFS, and 53.4 for no OFS. Baseline mean daily moderate-to-severe VMS frequency ranged from 10.8–12.5 episodes per day, while mean VMS severity was 2.5 in all subgroups.

Greater reductions in VMS frequency with EZN vs. PBO were seen by week 1 across all subgroups (range EZN: -3.3 to -4.2; PBO: -1.6 to -2.1), with further reductions at week 4 (range EZN: -5.6 to -6.9; PBO: -2.5 to -3.7) and 12 (range EZN: -6.9 to -8.1; PBO: -3.0 to -5.8). A similar trend was observed for VMS severity at weeks 4 and 12 (Table). Reductions in VMS frequency and severity were maintained throughout the 52-week treatment period.

Table.

	TAM EZN 120 mg (n=175)	TAM PBO (n=90)	AI EZN 120 mg (n=141)	AI PBO (n=68)	OFS EZN 120 mg (n=88)	OFS PBO (n=48)	No OFS EZN 120 mg (n=228)	No OFS PBO (n=110)
Mean change from baseline (95% CI) in average daily moderate-to-severe VMS frequency								
Week 1	-4.2 (-5.2, -3.3)	-1.6 (-2.2, -0.9)	-3.8 (-4.4, -3.3)	-2.0 (-3.2, -0.9)	-3.3 (-3.9, -2.7)	-2.1 (-3.0, -1.1)	-4.3 (-5.1, -3.6)	-1.6 (-2.4, -0.9)
Week 4	-6.8 (-8.0, -5.7)	-2.5 (-3.5, -1.6)	-6.1 (-6.8, -5.4)	-3.7 (-5.2, -2.3)	-5.6 (-6.6, -4.8)	-3.2 (-4.7, -1.7)	-6.9 (-7.8, -6.0)	-3.0 (-4.0, -2.0)
Week 12	-8.1 (-9.2, -7.0)	-3.8 (-4.7, -2.0)	-7.4 (-8.2, -6.6)	-5.8 (-7.6, -4.0)	-6.9 (-7.8, -6.0)	-4.3 (-6.2, -2.4)	-8.1 (-9.1, -7.2)	-4.2 (-5.4, -3.0)
Mean change from baseline (95% CI) in average daily VMS severity								
Week 4	-0.8 (-0.8, -0.7)	-0.4 (-0.5, -0.3)	-0.7 (-0.8, -0.6)	-0.4 (-0.6, -0.3)	-0.6 (-0.8, -0.5)	-0.4 (-0.5, -0.3)	-0.8 (-0.8, -0.7)	-0.4 (-0.5, -0.3)
Week 12	-1.0 (-1.2, -0.9)	-0.5 (-0.7, -0.4)	-0.9 (-1.0, -0.8)	-0.5 (-0.6, -0.4)	-0.9 (-1.1, -0.8)	-0.6 (-0.8, -0.4)	-1.0 (-1.1, -0.9)	-0.5 (-0.6, -0.4)

AI, aromatase inhibitor; CI, confidence interval; EZN, ezrinetarin; OFS, ovarian function suppression; PBO, placebo; TAM, tamoxifen; VMS, vasomotor symptoms.

Conclusions

Consistent with results in the overall population, EZN had greater reductions in VMS frequency and severity than PBO irrespective of the type of ET, with rapid onset and sustained effect over 52 weeks.

OTHER-014

TAMOXIFEN THERAPY FOR SYMPTOMATIC GYNAECOMASTIA ASSOCIATED WITH TESTICULAR CANCER

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Introduction

Gynaecomastia is characterised by benign proliferation of male breast glandular tissue and may cause discomfort and cosmetic distress, prompting patients to seek medical attention. It has multiple aetiologies and may be associated with testicular tumours. Tamoxifen has been reported to be an effective treatment for symptomatic gynaecomastia.

Methods

This case report describes the use of tamoxifen in the management of gynaecomastia in a patient with testicular tumour.

Results

A 37-year-old man with stage I left-sided testicular teratoma treated with left orchidectomy presented with a several-month history of progressive left breast enlargement associated with mastalgia and a tender periareolar lump. He also reported occasional discomfort in the right breast. On examination, firm tissue was palpable in the left breast. Breast ultrasound demonstrated prominence of glandular tissue deep to the left nipple without a discrete mass, consistent with gynaecomastia. Blood tests revealed a low-normal morning testosterone level with normal thyroid, renal, and liver function. There was no evidence of testicular cancer recurrence. The patient was commenced on tamoxifen 10 mg daily, which he tolerated well. At three months, there was a reduction in breast size, with significant symptomatic improvement reported at six months. Repeat morning testosterone level subsequently increased to the mid-teens without additional intervention.

Conclusions

Tamoxifen is a selective oestrogen receptor modulator and represents an off-label medical option for the treatment of symptomatic gynaecomastia, with a favourable side-effect profile. Its mechanism of action involves antagonism of oestrogen receptors in breast tissue, thereby inhibiting oestrogen-driven proliferation of mammary epithelium. Previous studies have reported complete resolution of gynaecomastia in a substantial proportion of patients treated with tamoxifen. This case report supports the consideration of tamoxifen as a first-line medical therapy for symptomatic gynaecomastia following appropriate evaluation and careful discussion of potential risks and benefits.

OTHER-017

HIDDEN BURDENS: LEGAL AND FINANCIAL CHALLENGES FACED BY UNPAID CARERS OF PEOPLE WITH CANCER IN VICTORIA

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Introduction

Unpaid carers play a critical role in supporting people with cancer, yet their own legal and financial needs often go unmet. These challenges can cause significant distress and impact carers' wellbeing and economic security. This study explores the experiences of unpaid cancer carers in the state of Victoria, Australia, to identify gaps to inform law and policy reform and service delivery improvements.

Methods

Victorians aged 18 years and over who had provided unpaid care for someone with cancer in the past 10 years completed an online survey exploring legal and financial challenges, workplace impacts, and use of support services to identify unmet needs associated with unpaid cancer caring.

Results

105 unpaid cancer carers in Victoria completed the survey (50 female, 55 male), with 86% living in metropolitan areas. Most common age groups were 35–44, 45–54, and 55–63 years. Forty-two percent cared for someone with cancer and another person, while 39% had health concerns themselves. Legal issues affected 66% of carers, mainly around medical decision-making, workplace rights, and understanding their rights; 94% reported distress from these, yet 69% did not seek legal help. Workplace challenges were reported by 79%, with all experiencing distress. Financial strain was significant: 32% lost income, 30% faced worsening circumstances, and 97% reported distress due to the change in their financial situation. Carers managed costs by using savings and reducing essential spending, including healthcare. Use of legal, financial, and cancer support services was limited.

Conclusions

Unpaid cancer carers face significant legal and financial challenges causing distress. Urgent legal and policy action is needed to provide accessible legal advice, targeted financial support, and carer-inclusive workplace protections to reduce hardship, safeguard wellbeing, and ensure carers receive recognition and resources to sustain their vital role in cancer care. Cancer support organisations also need to improve service delivery for unpaid carers.

OTHER-018

TRANSFORMING ACCESS TO CANCER TRIALS: THE AUSTRALIAN TELETRIAL PROGRAM SOUTH AUSTRALIA JOURNEY!

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Introduction

The Australian Teletrial Program (ATP), funded by the Commonwealth Government's Medical Research Future Fund, is transforming access to clinical trials for rural, regional, and remote communities. In 2022, the Department for Health and Wellbeing established the **South Australian Regional Clinical Trials Coordinating Centre** to lead trial delivery and support across the state. Before ATP, research activity outside metropolitan Adelaide was minimal, leaving regional patients without opportunities to participate in cutting-edge studies.

Methods

The original model, piloted in 2016, was in oncology in Northern Queensland. ATP introduces an innovative cluster model that bridges metropolitan hospitals with regional health services, reducing barriers such as travel and cost. This approach ensures patients in remote areas can access advanced therapies close to home—critical in South Australia, where distance and resource limitations have long challenged equitable healthcare. Collaboration is at the heart of ATP's success. Strong partnerships between hospital services (private and public), regional/rural health services, universities, and research organisations create a shared ecosystem of expertise. These networks enable workforce training and knowledge transfer, empowering regional clinicians to deliver high-quality care tailored to local needs. Community engagement further strengthens the program, ensuring trials reflect patient priorities and expand access to comprehensive cancer care.

Results

Since 2022, ATP has built capacity in workforce, training, facilities, equipment, and systems. More than **550 regional South Australians** have participated in teletrials, with **25 studies** implemented across multiple therapeutic areas, including **10 oncology trials/registry trials**. Over **60 regional sites** are now involved, demonstrating the program's scalability and impact. The infrastructure and capability developed through ATP not only improve access but also provide a model that can be replicated nationally and internationally.

Conclusions

ATP's sustainability lies in its collaborative foundation—partnerships that transcend geography, align resources, and create opportunities for regional communities to benefit from world-class cancer care.

OTHER-019

CULTIVATING COLLABORATIVE CHANGE: CONSULTATION WITH CONSUMERS, COMMUNITY, CLINICIANS, CANCER POLICYMAKERS AND RESEARCHERS

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¹*Breast Cancer Network Australia*, ²*Breast Cancer Network Australia (BCNA) Seat at the Table (SATT) Consumer Representative*

Introduction

Breast density affects both breast cancer risk and mammographic sensitivity, with dense tissue masking tumours and increasing cancer risk. In Australia, inconsistent notification has created inequities in supportive care, contributing to uncertainty and unmet information needs. These are compounded by limited guidance for individuals with dense breasts and healthcare professionals who support them. Breast Cancer Network Australia (BCNA), independent and other organisations have advocated for transparent and consistent information about breast cancer risk and breast health to support shared-decision-making and equitable care.

Methods

BCNA trains individuals with lived experience of breast cancer to become Consumer Representatives (CRs), enabling them to advocate and represent diverse lived perspectives. BCNA responded to consumer preference and strong scientific evidence to form its call to action towards a nationally consistent approach to breast density. During 2025, BCNA and CRs contributed to consultation processes related to

development of a breast density guidance resource for General Practitioners (GPs). This included participation in a multi-disciplinary workshop, structured feedback and targeted advocacy.

Results

The first national risk-based breast screening guidance for GPs was produced, with consumer lived experience informing content alongside clinical expertise. This created a resource that responds to consumer need and evidence, helping to address a supportive care gap.

Conclusions

BCNA's ongoing breast density advocacy demonstrates how lived experience informed advocacy can drive a bottom-up system change and contribute to meaningful consumer-focused policy improvements. In this case, lived experience helped shape clear, evidence-based information, strengthening advocacy efforts. Importantly, this approach is transferrable and should be embedded across global supportive cancer care reform.

OTHER-020

DISSEMINATION AND UPTAKE: JOURNEY OF THE SUPPORTIVE CARE FRAMEWORK

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Introduction

The Supportive Care Framework was designed to guide clinical and health system planning. However, the time lag between development and uptake of a conceptual framework designed for this purpose is unclear. This project was undertaken to describe the dissemination and uptake by clinicians, researchers, and policy makers of the framework for supportive care of patients with cancer and families.

Methods

A modified scoping review was conducted to understand the diffusion and utilization of the Supportive Care Framework evidenced in publications listed with ResearchGate and Academic.Edu. All articles citing the four original publications describing the Supportive Care Framework were reviewed by two reviewers independently. Analysis included the authors' country, publication date, paper type, design, population, and type of use. Knowledge use categories included awareness, conceptual, instrumental, and persuasive.

Results

132 papers were identified with 76 assigned to Awareness/Conceptual use and 56 to Instrumental/Persuasive use. Forty-six were written by Canadian-based authors; other authors represented 24 different countries. Publication ranged from 1999 to 2021 with the number of articles increasing after the original framework articles became available through open access. Most applications were in cancer populations (n=112). The majority described research-based applications with the framework guiding study conceptualization, instrument development or data analysis. Clinical or educational applications were evident in seven publications.

Conclusions

Overall, the Supportive Care Framework has become widely known in a relatively short period of time, especially evident after open access availability. The framework has been used in research, education and clinical situations successfully as well as with both cancer and other chronic illness populations.

OTHER-021

KNOWLEDGE AND ATTITUDE OF HEALTHCARE PROFESSIONALS TOWARDS COMPLEMENTARY AND ALTERNATIVE MEDICINES USE IN CANCER PATIENTS - A SINGLE CENTER STUDY

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¹LAUTECH Teaching Hospital, ²LAUTECH TEACHING HOSPITAL

Introduction

Cancer patients often use Complementary and Alternative Medicine (CAM), which can interact with their treatments. However, Healthcare professionals (HCPs) are frequently unaware of this use, likely because of insufficient communication with their patients. This study aimed to assess the knowledge, and attitudes concerning CAM use by HCPs.

Methods

We conducted a cross-sectional questionnaire survey at a single institution in Nigeria. Participants included 121 HCPs involved in the direct or indirect management of cancer patients. The questionnaire collected personal and professional demographics, along with data on their knowledge and attitudes towards CAM.

Results

Of the 121 respondents, the majority were nurses (73; 60.3%), followed by doctors (30; 24.8%), pharmacists (9; 7.4%), physiotherapists (7; 5.8%), and dietitians (2; 1.7%). Overall, 38.8% reported prior use of CAM. Regarding knowledge and practice, 39.7% believed they had adequate knowledge about CAM, while 37.2% stated they would recommend it to a patient. A discrepancy was noted between reported practice and intent: while 63.6% said they would ask about CAM use during a consultation, only 31.4% had done so in the past six months. Statistical analysis revealed that respondents with prior CAM use were significantly more likely to recommend it ($p < 0.001$) and more likely to have been asked about it in the past six months ($p = 0.013$). This group was also more likely to believe that CAM reduces the side effects of chemotherapy ($p = 0.038$). These findings were supported by multivariate analysis, which confirmed that prior CAM use was significantly associated with a greater likelihood of recommending it (OR = 2.636; 95% CI 1.031–6.738; $p = 0.043$).

Conclusions

This study confirms that personal CAM use strongly influences healthcare professionals' attitudes and recommendation practices. Improving communication and CAM education within conventional oncology settings is therefore essential.

OTHER-022

OUTPATIENT SUPPORTIVE CARE FOR PATIENTS RECEIVING BI-SPECIFIC ANTIBODY STEP-UP DOSING

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Introduction

B-cell Maturation Antigen Bi-Specific Antibodies (BsAbs) are novel therapies for treating hematologic malignancies. Recent evolution from inpatient to outpatient step-up dosing requires strategic remote monitoring to ensure patient safety, focusing on the first days of therapy when the risk for life threatening toxicities is highest.

Methods

A digital educational module supported by a comprehensive clinical tool kit was developed to safely implement outpatient BsAb step-up dosing. Patient/caregiver and staff education; remote patient monitoring tools; phone triage and algorithm-based intervention guides for Cytokine Release Syndrome (CRS) and Immune Effector Cell-Associated

Neurotoxicity (ICANS) were key components of a successful program. All staff and patients/caregivers were assigned an education module. Outcomes for patient/caregiver dyads were accurate home monitoring record completion and timely critical value reporting to the care team. Additional outcome measures were the number of patients successfully treated out of the hospital, the rates of adverse events (AEs), and AE outcomes.

Results

The education module was completed by 80% of staff and 100% of patient/caregiver dyads. Nine patients have been successfully treated through initial implementation of the program. Patient home record completion, medication adherence and AE reporting was strengthened during daily nurse phone contacts after each step-up dose of BsAb. Three patients were hospitalized through remote triage of AEs. One patient was treated for CRS and two were treated for disease complications. All AEs were treated effectively, and all patients were discharged home.

Conclusions

The use of BSABs for the treatment of hematologic cancer provides promise for life saving therapy. An outpatient program that incorporates remote monitoring and close collaboration of the interdisciplinary team educates and empowers staff and patients in safe care, allowing patients to remain at home during treatment and be hospitalized only when necessary to manage life threatening adverse events.

OTHER-025

EFFECT OF CARNITINE-OROTATE COMPLEX(GODEX®) ON ALT RECOVERY IN COLORECTAL CANCER PATIENTS WITH OXALIPLATIN-INDUCED LIVER INJURY: A RETROSPECTIVE STUDY

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Introduction

Carnitine–Orotate Complex (GODEX®) has demonstrated hepatoprotective effects in patients with chronic liver disease and elevated liver enzyme levels. This study aimed to evaluate the effect of GODEX on ALT normalization in patients with oxaliplatin-induced liver injury (OILI).

Methods

We retrospectively analyzed colorectal cancer patients who developed ALT elevation during oxaliplatin-based adjuvant chemotherapy (FOLFOX or CapeOX) and were subsequently treated with GODEX. Patients with pre-existing liver disease including viral, alcoholic, or autoimmune hepatitis were excluded. The primary endpoint was ALT normalization (≤ 40 IU/L) at 4 weeks after GODEX initiation.

Results

A total of 80 patients were included in this study. The median age at the initiation of chemotherapy was 56 years (interquartile range [IQR], 50–63), with 43 males and 37 females. Most patients had Stage III cancer ($n = 62$, 78%), followed by Stage II ($n = 14$, 18%) and Stage I ($n = 4$, 5%). 71 patients received FOLFOX, whereas 9 received CapeOX. Median ALT increased from 18.0 IU/L (IQR, 13.0–25.2) at baseline to 77.5 IU/L (IQR, 66.0–102.2) at the onset of OILI. Following GODEX administration, median ALT decreased to 17.0 IU/L (IQR, 12.5–24.0) at week 4 and remained at 19.0 IU/L (IQR, 14.0–25.0) at week 8. ALT normalization was observed in 94% of patients at week 4 and 86% at week 8. Compared with ALT levels at GODEX initiation, improvement was observed in 98% of patients at week 4 and 100% at week 8. No patients required chemotherapy interruption or dose reduction due to hepatotoxicity. Two patients reported grade 1 dyspepsia and grade 1 nausea, respectively.

Conclusions

GODEX was associated with rapid ALT normalization in patients with OILI, without requiring chemotherapy interruption. These findings suggest that GODEX may serve as a supportive therapeutic option for managing OILI during adjuvant treatment. Prospective randomized studies are warranted to confirm these findings and to clarify its clinical role in this setting.

OTHER-026
WHAT ARE THE BEST PRACTICES FOR END-OF-LIFE COMMUNICATION WITH SURROGATES IN THE ICU? A SCOPING REVIEW

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Introduction

The intensive care unit (ICU) is a complex clinical environment with a dual challenge of providing aggressive treatment while also preparing for end-of-life (EOL) care. As ICU patients are frequently unconscious and unable to participate in decision-making, surrogates play a pivotal role to communicate with healthcare providers and make decisions on behalf of incapacitated patients. Therefore, this study aims to conduct a scoping review of successful EOL communication with surrogate decision-makers in the ICU.

Methods

This scoping review was conducted following the Arksey and O’Malley’s framework (2005) and reporting adhered to the PRISMA guidelines. Six databases were searched on 27 July 2025: PubMed, CINAHL, Embase, Web of Science, Scopus, and Cochrane. The research questions are: 1) What are the general characteristics of research on EOL communication with surrogates? and 2) What are the core domains of best practice in EOL communication with surrogates? We identified key practices of EOL communication with surrogates from the included articles and categorized them into domains.

Results

Total 22 articles from 2002 to 2024 were included in this study. Most studies (72.7%) were conducted in the United States, and qualitative designs (68.2%) were the most common methodology. To determine best practices in EOL communication with surrogates, we identified 18 key practices and six domains. These six core domains are: (1) Early and trust-bounded engagement (2) Providing emotionally responsive presence (3) Ensuring informed surrogate involvement (4) Facilitating value-concordant surrogate role performance (5) Providing ongoing and accompanying care (6) Maintaining a patient advocacy-oriented stance.

Conclusions

This study identified six core domains and eighteen key practices of successful EOL communication with surrogate decision-makers in the ICU. These findings provide a practical framework to guide healthcare providers in supporting surrogate decision-making while ensuring alignment with patient values and autonomy, thereby promoting patient-centered care in complex ICU settings.

OTHER-027
ATTITUDES OF CANCER CENTER ACADEMIC PHYSICIANS TOWARDS SEEKING AND DISCLOSING THEIR MENTAL HEALTH CARE

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Introduction

Licensing agencies and employers often ask physicians to disclose information about the presence or treatment of psychiatric diagnoses. This has recently improved somewhat, but the stigma remains. The purpose of this study was to survey clinical faculty at an academic cancer center about their attitudes and beliefs about receiving psychiatric and its disclosure to medical licensing entities.

Methods

We conducted a novel, anonymous survey of random faculty electronically via emailed links. A total of 29 items were included, and respondents were asked to strongly agree/ agree, neither agree to disagree, and disagree/ strongly disagree.

Results

The survey was sent to 139 faculty, of which 61 responded. 3 opted out. One responder did not finish the survey. 20 (35 %) feared that seeking psychiatric consultation or taking psychiatric medications would be a risk to their medical license, and 18 (32%) feared that seeking psychiatric consultation or taking psychiatric medications would be a risk to their present or future job. 35 (61%) agreed they would feel embarrassed if their colleagues knew that they were receiving or have received psychiatric care. 24 (42%) agreed that needing psychiatric care would affect their self-esteem, 11 (19%) agreed that they are receiving or have previously received psychiatric care, 13 (23%) agreed that they are taking or have taken psychoactive medications, and 5 (9%) agreed that they have withheld seeking psychiatric care due to concerns regarding disclosure.

Physician characteristics		N=57 (%)
Median age range	40- 49 years old	21 (36.84)
Female Gender		34 (59.65)
Race/ ethnicity	Latinx	
	Non-Hispanic White	25 (45.45)
	Non-Hispanic Black or African American	3 (5.45)
	Asian	27 (49.09)
Years of experience	< 5 years	9 (15.79)
	≥ 5 years	48 (84.21)
Patient mix	Inpatient	2 (3.51)
	A mix of inpatient and outpatient	45 (78.95)
	Outpatient	10 (17.54)

Table 1- patient demographics.

Conclusions

The low response rate may speak to the sensitivity of the subject matter and further reinforce why this topic is of grave importance for those in the medical community and the patients of those in the medical community. Our survey shows that we still have a long way to go to destigmatize members of the medical community receiving mental health care.

OTHER-028
EXPLORE THE FACTORS INFLUENCING FINANCIAL TOXICITY IN PATIENTS WITH DIGESTIVE SYSTEM CANCER RECEIVING IMMUNOTHERAPY: A CROSS-SECTIONAL STUDY IN TAIWAN

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Introduction

Patients with digestive system cancers (DSC) are often diagnosed at an advanced stage, making immunotherapy an important treatment option. However, this costly novel therapy may lead to financial toxicity (FT) and immune-related adverse events (irAEs) may further increase healthcare expenditures. Evidence on factors associated with FT in this population remains limited. Thus, this study aims to investigate the status of FT among patients with DSC receiving immunotherapy and to identify key factors.

Methods

A cross-sectional study was conducted in northern Taiwan. Adults (≥ 18 years) diagnosed with DSC and treated with immunotherapy were enrolled. Demographic and clinical characteristics were collected using a structured questionnaire. irAEs were assessed using the Patient-Reported Outcomes CTCAE (PRO-CTCAE), with higher scores indicating more severe irAEs. FT was measured using the COMprehensive Score for Financial Toxicity (COST), where lower scores represent higher FT.

Results

79 patients participated. Most experienced mild irAEs, with a mean PRO-CTCAE score of 12.6 (SD = 9.1). The most common irAEs were gastrointestinal (83.5%), systemic (78.5%), and neuropathy symptoms (59.5%). The mean COST score was 27.69 (SD = 10.2), and 39.2% of patients reported mild to moderate FT. Higher FT (lower COST scores) was significantly associated with prior radiotherapy ($B = -8.250$, $p = 0.001$), prior targeted therapy ($B = -5.972$, $p = 0.022$), bile duct cancer ($B = -1.501$, $p = 0.028$), and more severe irAEs ($B = -0.313$, $p = 0.006$). Having a monthly income was associated with lower FT ($B = 5.855$, $p = 0.007$).

Conclusions

Patients with DSC receiving immunotherapy experience varying degrees of FT. Those with bile duct cancer, prior radiotherapy or targeted therapy, more severe irAEs, or without a monthly income are at higher risk. Clinicians should monitor FT in these groups and provide support to reduce financial burden.

OTHER-031

NEWER-GENERATION H1 PLUS H2 ANTIHISTAMINES AS PRE-MEDICATION TO REDUCE RITUXIMAB-INDUCED HYPERSENSITIVITY REACTIONS: A RETROSPECTIVE STUDY

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Introduction

Rituximab, a chimeric anti-CD20 monoclonal antibody, is widely used in hematologic malignancies but is associated with frequent hypersensitivity reactions. Early studies reported reaction rates of up to 77%, with reductions to approximately 8–40% following routine premedication; however, effectiveness varies across regimens. This study was conducted to evaluate hypersensitivity outcomes, inform evidence-based supportive care, and enhance patient safety.

Methods

A retrospective cohort study was performed to compare two pre-medication protocols — a conventional regimen (Protocol A: diphenhydramine, dexamethasone, paracetamol) and a modified regimen (Protocol B: levocetirizine, famotidine, dexamethasone, paracetamol)—for preventing rituximab-induced hypersensitivity reactions (HSRs) in patients with hematologic malignancies receiving their

first rituximab infusion at Ramathibodi hospital between April 2023 and June 2025. The primary outcome was the incidence of HSRs, graded according to the Common Terminology Criteria for Adverse Events (CTCAE) version 5.0.

Results

A total of 308 patients were evaluated, with 158 in Protocol A and 150 in Protocol B. The baseline characteristics were well-balanced between the two groups ($p > 0.05$) (Table 1). The primary outcome analysis revealed that the incidence of rituximab-induced HSRs was significantly lower in Protocol B compared to Protocol A (8.0% vs. 16.5%; $p = 0.037$). Patients receiving Protocol B demonstrated a 51% reduction in the risk of HSRs (RR 0.49; 95% CI: 0.25–0.93). Most reactions were mild to moderate, with similar rates of severe events between protocols (Table 2). Symptoms were predominantly cutaneous and respiratory; cardiovascular and gastrointestinal symptoms occurred only in Protocol A. Median time to reaction onset was comparable between groups.

Table 1. Baseline Characteristics of Patients (N=308)

(Characteristics)	Protocol A (N=158)	Protocol B (N=150)
Age (Mean $\pm$ SD)	62.6 $\pm$ 14.3	63.8 $\pm$ 13.9
sex n (%)		
Male	78 (49.4%)	77 (51.3%)
Female	80 (50.6%)	73 (48.7%)
Diagnosis* n (%)		
DLBCL	74 (46.8%)	63 (42.0%)
FL	22 (13.9%)	19 (12.7%)
MZL	15 (9.5%)	11 (7.3%)
CLL	8 (5.1%)	11 (7.3%)
Other	39 (24.7%)	46 (30.7%)
Regimen** n (%)		
R-CHOP	72 (45.6%)	65 (43.3%)
R-CVP	22 (13.9%)	19 (12.7%)
R-B	16 (10.1%)	23 (15.3%)
Rituximab	18 (11.4%)	15 (10.0%)
R-DA-EPOCH	13 (8.22%)	11 (7.3%)
Other	17 (10.8%)	17 (11.3%)

*DLBCL=Diffuse Large B-cell Lymphoma, FL=Follicular Lymphoma,

MZL=Marginal Zone Lymphoma, CLL=Chronic lymphocytic leukemia,

**R-CHOP=rituximab+doxorubicin+vincristine+prednisolone,

R-B=rituximab+benadamustine,

R-CVP=rituximab+vincristine+prednisolone,

R-DA-EPOCH=rituximab + dose adjusted etoposide+prednisolone+vincristine+ cyclophosphamide+doxorubicin (all regimens rituximab dosing = 375 mg/m²)

Table 2. Comparison of Rituximab-induced Hypersensitivity Reaction (N=308)

Outcomes	Protocol A (N=158)	Protocol B (N=150)	P-value
Incidence of HSRs, n (%)	26 (16.5%)	12 (8.0%)	0.037 ^a
Relative Risk (RR)	Reference	0.49 (95%CI: 0.25-0.93)	-
Severity, n (%)			1.000 ^b
Mild to Moderate (Grade 1-2)	21 (80.8%)	10 (83.3%)	
Severe (Grade 3-4)	5 (19.2%)	2 (16.7%)	
Onset			0.801 ^c
Median time (minutes)	65.0	60.0	
Mean $\pm$ SD	71.4 $\pm$ 32.2	71.4 $\pm$ 32.2	

Remark: ^a Chi-square test ^b Fisher's exact test ^c Mann-Whitney U test * Statistically significant ($p \leq 0.05$)

Figure 1. Incidence of HSRs

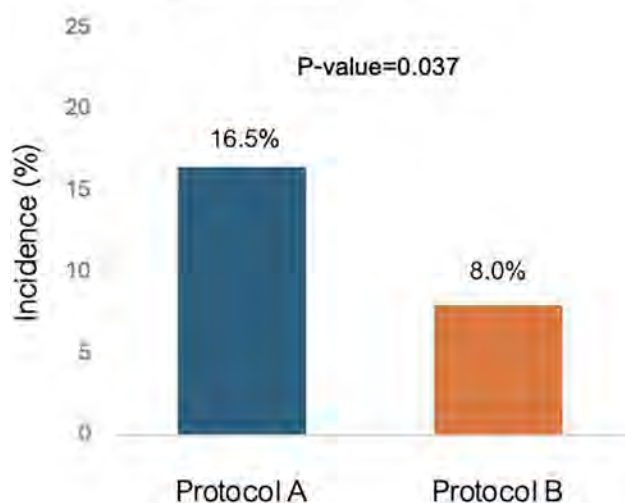
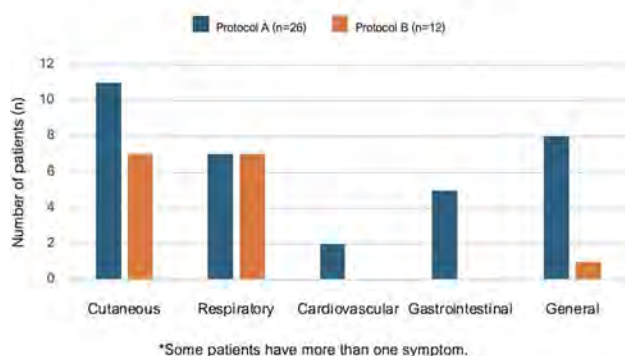


Figure 2. Distribution of specific symptoms during HSRs



Conclusions

The modified premedication protocol, which included newer-generation H₁-antihistamines and H₂-antihistamines, was associated with a significantly lower incidence of rituximab-induced HSRs compared with the conventional regimen. These findings support optimization of premedication strategies to improve the safety of rituximab treatment.

OTHER-034

CLARIFYING THE STRUCTURE OF CONSULTATION SUPPORT IN PAIN-RELATED CANCER CONSULTATIONS

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Introduction

During the COVID-19 pandemic, cancer consultation services faced unprecedented challenges, highlighting limitations in existing consultation systems. This study examines symptom-related cancer consultation records from routine practice prior to the pandemic to structure consultation support during non-crisis periods.

Methods

A total of 2,427 symptom-related consultation records from a cancer consultation service in 2018 were analyzed. First, the frequency of reported symptoms was examined. Pain was identified as the most frequently reported symptom. Subsequently, consultations related to pain were analyzed in detail. Professional responses were recorded using predefined response categories selected via checkboxes. We analyzed both the frequency of response categories and their co-occurrence patterns to visualize the structure of professional decision-support processes embedded in consultation practice.

Results

Frequency analysis showed that “coordination with other departments within the same institution” was the most frequently selected response category (n = 539), followed by “active listening and supportive communication” (n = 292), “advice and suggestions” (n = 253), “information provision” (n = 219), and “explanation of in-house consultation or visit” (n = 168). Referrals to external institutions were relatively rare. Co-occurrence analysis revealed that “active listening and supportive communication” functioned as a central hub in the decision-support structure. High-confidence combinations included listening followed by coordination with other departments (82.5%), advice and suggestions (63.4%), and information provision (42.8%). Furthermore, advice and suggestions were strongly associated with subsequent coordination actions. These patterns suggest a consistent decision-support flow: listening to patient concerns, organizing information and advice, and initiating coordination when necessary.

Conclusions

This reverse-analytic study visualized selective professional judgment in symptom-related cancer consultations and demonstrated the value of consultation records for clarifying decision-support structures in cancer care.

OTHER-036

ASSOCIATION BETWEEN TIME OF IMMUNE CHECKPOINT INHIBITOR ADMINISTRATION AND SURVIVAL IN ADVANCED MELANOMA

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Introduction

Several retrospective studies and at least one prospective study have suggested that early time-of-day administration of immune checkpoint inhibitors (ICIs) may be associated with improved survival, generating interest in chronotherapy in cancer treatment. While circadian regulation of T-cell function is well recognised, the long half-life of ICIs makes the biological basis of this observation uncertain. This study aimed to assess the association between time of ICI administration and overall survival (OS) in patients with metastatic or unresectable melanoma.

Methods

This was a single-centre retrospective cohort study. Patients who initiated pembrolizumab, nivolumab, or ipilimumab–nivolumab as first-line therapy for metastatic (stage IV) or unresectable (stage IIb) melanoma between 2020 and 2024 were included. Demographics, treatment regimen, infusion time, and survival outcomes were collected. Patients receiving >50% of infusions before 14:00 were compared with those receiving ≤50% before 14:00. OS was also analysed according to time of first infusion (before vs after 14:00). Survival was analysed using Kaplan-Meier curves and log-rank tests. Multivariable Cox regression included age, sex, ICI regimen, ECOG performance status, and presence of brain metastases at treatment initiation.

Results

Of the 110 patients included, OS did not differ between early and late administration groups based on either all infusions or first infusion time (log-rank $p=0.92$ and $p=0.69$, respectively). The hazard ratio (HR) for OS with late versus early administration (all infusions) was 0.97 (95% CI 0.54–1.73, $p=0.9$). Age (HR 1.03, 95% CI 1.00–1.06, $p=0.05$), ECOG performance status (HR 3.1, 95% CI 1.5–6.5, $p=0.003$) and brain metastases (HR 1.95, 95% CI 1.1–3.6, $p=0.03$) were associated with worse OS.

Conclusions

Time of ICI administration was not associated with OS in this cohort of advanced melanoma patients. These findings highlight the need for caution when interpreting previously reported benefits of early administration. A larger multicentre study across tumour types is ongoing.

OTHER-038

THE DEVELOPMENT OF STANDARDIZED DIAGNOSTIC CRITERIA FOR AROMATASE INHIBITOR-ASSOCIATED MUSCULOSKELETAL SYNDROME

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Introduction

Aromatase inhibitors (AIs) effectively reduce breast cancer recurrence among survivors with hormone receptor–positive disease and are considered standard of care. However, a substantial proportion of patients receiving AI therapy develop Aromatase inhibitor–associated musculoskeletal syndrome (AIMSS), characterized by pain and functional impairment. Up to 52% of patients experience AIMSS, contributing to high rates of treatment nonadherence. The pathophysiology of AIMSS remains poorly understood. Moreover, there are no standardized diagnostic criteria for AIMSS, nor are there consistently effective treatments. This gap in diagnostic accuracy and clinical management constrains meaningful research phenotyping and limits patient access to insurance-covered treatment. The present study aimed to propose diagnostic criteria for AIMSS through a multidisciplinary consensus process.

Methods

We conducted a comprehensive review of the existing literature on AIMSS. A multidisciplinary panel of oncologists, psychiatrists, pain specialists, and researchers collaborated to propose diagnostic criteria. The framework was designed to emphasize clinical utility, reproducibility, and applicability in both clinical and research settings.

Results

The proposed diagnostic criteria address the temporal relationship between symptom onset and initiation of AI therapy; characteristic musculoskeletal features, including pain location and quality; associated functional and neuropsychiatric impacts; and symptom reversibility following AI discontinuation. These criteria are intended for clinical use and future validation studies.

Conclusions

The development of standardized diagnostic criteria for AIMSS is expected to improve consistent phenotyping for research studies, facilitate early recognition, and enable standardized diagnosis in clinical settings. We anticipate that these proposed criteria will

advance research into underlying mechanisms and effective treatments, while also supporting insurance coverage for appropriate patient care.

OTHER-039

PREVALENCE OF SLEEP DISORDERS IN CANCER PATIENTS IN MOROCCO

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Introduction

Sleep disorders are common among cancer patients and significantly impair functional status and quality of life. Poor sleep quality is also frequently linked to depression, often overlooked in oncology. This study aims to assess the prevalence of sleep disorders in cancer patients and identify contributing factors.

Methods

A single-center cross-sectional study was conducted on 323 cancer patients followed at the Medical Oncology Department of Hassan II University Hospital in Fez morocco, over six months. Sleep was assessed using the Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale, Insomnia Severity Index (ISI), and QLQ-30. Data were analyzed using SPSS v27.

Results

A total of 323 patients were included; median age 53.75 years, 58.8% were male. The most common cancers were colorectal (24.5%), prostate (24.1%), gastric (22.6%). Metastatic disease was present in 73.4% of patients, and 63.2% were receiving chemotherapy. Mean sleep duration was 4.79 hours, and mean sleep latency was 1.709 hours. Sleeping pill use was reported by 11.5%. Caffeine consumption was noted in 74%, alcohol in 10.2%, and smoking in 21.1%. Additionally, 79.9% practiced prayer with Quran recitation, and 68.1% reported subjective sleep improvement.

Sleep disturbances were highly prevalent: 96% had PSQI ≥ 5 , 95.6% ISI > 7 , and Epworth > 7 , along with impaired QLQ-30 scores. Univariate analysis showed significant associations with gastric cancer ($p=0.046$) and metastatic stage ($p=0.013$), while age, sex, treatments, chronic pain, and spirituality showed no significant association. Anxiety showed a borderline association with poorer sleep ($p=0.093$). Multivariate analysis confirmed gastric cancer ($p=0.046$) and metastatic stage ($p=0.013$) as independent predictors.

Conclusions

Sleep disturbances are highly prevalent in Moroccan cancer patients and strongly associated with metastatic stage and gastric cancer. Spirituality provides emotional benefits but does not affect objective sleep pathology. Integrating systematic sleep screening, CBT-I interventions, and culturally informed supportive care into oncology practice is essential to improve patient outcomes.

OTHER-040

SPIRITUALITY AND SLEEP DISTURBANCES IN MOROCCAN CANCER PATIENTS

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Introduction

Cancer and its treatments frequently precipitate sleep disturbances, including insomnia and excessive daytime sleepiness, diminishing

patient quality of life. In highly religious settings such as Morocco, spirituality serves as a primary coping mechanism, offering hope and emotional support. This work represents a secondary analysis of our broader study on sleep disorders in Moroccan cancer patients, specifically aiming to explore the potential mediating role of spirituality—an aspect deeply rooted in Moroccan culture—in relation to objectively measured sleep quality and psychosocial burden.

Methods

A cross-sectional study was conducted at Hassan II University Hospital, Fez, Morocco, over six months. A consecutive sample of 323 adult cancer patients receiving oncology treatment completed validated questionnaires: Pittsburgh Sleep Quality Index (PSQI), Insomnia Severity Index (ISI), and Epworth Sleepiness Scale (ESS). Spiritual practices were assessed via a questionnaire on frequency of Islamic rituals and perceived impact on sleep. Stress and anxiety were evaluated with self-reported items. Descriptive statistics, Chi-square tests, and linear regression assessed associations, with $p < 0.05$ considered significant.

Results

Religious practice was high: 83.3% observed rituals, 79.9% reported regular prayer, and 68.1% perceived spiritual engagement improved sleep. Objectively, 95.7% met criteria for significant sleep disturbances (PSQI > 5), with moderate insomnia severity (mean ISI: 12.41). Common issues included difficulty initiating sleep (89.2%) and frequent nocturnal awakenings (62.5%). No significant correlation was found between frequency of religious practices and PSQI or ISI scores ($p = 1$). However, patients reporting positive spiritual impact demonstrated lower stress levels ($p = 0.190$) and improved coping mechanisms.

Conclusions

Spiritual practices are widespread and subjectively valued for emotional support among Moroccan cancer patients but do not directly reduce objectively measured sleep disturbances, which are primarily driven by biological and treatment-related factors. Nevertheless, spirituality serves as a critical psycho-emotional resource, mediating stress and enhancing resilience. Integrating spiritual assessment and support into holistic oncology care is essential to improve patient well-being.

OTHER-041

A QUALITATIVE STUDY OF CANCER CLINICAL TRIAL GROUPS' CONSUMERS' ACCEPTANCE OF THE MODULAR APPROACH TO PATIENT-REPORTED OUTCOME MEASUREMENT

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Introduction

There is growing interest in customising patient-reported outcome measures (PROMs). This involves selecting specific domains (i.e., subscales) that focus on key health-related quality of life (HRQoL) issues most relevant to a particular study's context, referred to as the *modular approach*. This qualitative study explored the acceptability of

the modular approach to administering PROMs from the perspectives of cancer consumers.

Methods

Consumers (patients, family members and/or caregivers) who have experience with cancer were recruited through cancer clinical trial networks in Australian and New Zealand. Data were collected through online focus groups. Interview probes and analysis were guided by Sekhon et al.'s Theoretical Framework of Acceptability.

Results

Ten consumers, all who were members of consumer advisory panels, participated across four focus groups. The acceptability of the modular approach was discussed in reference to four themes: (1) minimising respondent burden is not simply about shortening PROMs; (2) competing priorities of reducing burden, preserving PROM measurement properties and assessing breadth versus depth of issues; (3) new strategies are needed to improve PROM relevance; and (4) who should select the domains, and how?

Consumers valued the modular approach for increasing question relevance, minimising duplication, and allowing for more in-depth assessment of priority HRQoL issues. They also supported involving consumer representatives in domain selection to alleviate the burden on researchers during trial design.

Conclusions

Consumers were generally supportive of using the modular approach in administering PROMs in clinical trials, while also identifying ways to strengthen its acceptability. These included the need for clearer consensus and guidance on what constitutes a well-justified selection of domains and further personalisation of PROM domains (e.g., branching questions). These insights can help inform regulatory agencies and stakeholders about consumer needs and highlight the support needed if there is to be a paradigm shift in trial design towards tailored PROM administration.

OTHER-043

MIND THE GAP: EMBEDDING EQUALITY, DIVERSITY, AND INCLUSION IN ORGANISATIONAL PROCESSES: EVIDENCE FROM BRITISH ONCOLOGY PHARMACISTS ASSOCIATION

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Introduction

The British Oncology Pharmacy Association (BOPA) promotes equality, diversity, and inclusion (EDI) through its dedicated sub-committee, aiming to provide inclusive educational resources and support members throughout their careers. However, there is limited evidence on how EDI principles are embedded in BOPA's organisational processes.

A 2023 study highlighted gaps between organisational EDI policies and the lived experiences of oncology pharmacy professionals (*). Building on these findings, this research evaluates diversity and inclusion practices within BOPA, focusing on leadership representation. The objective is to identify barriers and propose evidence-based recommendations to strengthen EDI across the association.

*Dettwiller P, Ghiya S, McLean J, O'Callaghan S, Sanni A, Shaunak N, So L, EL Nabhani S. Equity, diversity, and inclusion in oncology pharmacy practice: Everyone's business. *Journal of Oncology Pharmacy Practice*. 2024 Jul 23.

Methods

In collaboration with BOPA's EDI Committee, the study assessed the extent to which diversity and inclusion are integrated into organisational processes. A mixed-method research design was implemented, and ethics clearance was sought. Data collection involved an anonymous survey distributed to all subcommittee members and one-to-one interviews with early respondents until thematic saturation was achieved.

Results

Between October and December 2025, 25 surveys were completed, and 10 interviews were conducted. Notably, 83% of respondents were NHS professionals based in England, with women representing 80% of participants; all respondents were pharmacists. Survey responses indicated that 95% agreed or strongly agreed with statements on EDI practices. Thematic analysis of interviews revealed three key issues:

1. Limited diversity in professional representation within leadership roles.
2. Recognition of strong support for training, yet gaps in leadership development opportunities.
3. Challenges posed by workload demands on volunteer roles.

Conclusions

This study identifies critical gaps and barriers in BOPA's EDI practices, particularly in leadership representation and workload sustainability. Findings will inform actionable, contextualised evidence-based improvements.

OTHER-044

EFFICACY OF ELINZANETANT ACROSS DIFFERENT POPULATIONS OF WOMEN FROM FOUR PHASE III OASIS STUDIES

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Introduction

To explore the efficacy of elinzanetant, a dual neurokinin-1,3 receptor antagonist approved for the treatment of moderate-to-severe vasomotor symptoms (VMS, also known as hot flashes), in different populations of women.

Methods

This analysis assessed efficacy data of elinzanetant from four Phase III OASIS trials. OASIS-1, -2, and -3 included women aged 40–65 years undergoing natural or surgical menopause experiencing moderate-to-severe VMS. OASIS-1 and -2 required ≥ 50 moderate-to-severe VMS/week for inclusion, while OASIS-3 had no minimum frequency threshold. OASIS-4 included women aged 18–70 years receiving endocrine therapy (ET) for hormone receptor-positive breast cancer experiencing ≥ 35 moderate-to-severe VMS/week. Women were randomized to receive elinzanetant 120 mg or matching placebo during the first 12 weeks. All trials evaluated mean (95% confidence interval) daily moderate-to-severe VMS frequency and severity (descriptively assessed in OASIS-3 and -4) as well as Patient-Reported Outcomes Measurement Information System Disturbance Short Form (PROMIS SD SF 8b total T-scores (descriptively assessed in OASIS-3) at baseline and week 12.

Results

OASIS-1, -2, -3, and -4 included 396, 400, 628, and 474 women, respectively.

Across all four OASIS trials, larger mean changes from baseline to week 12 were consistently observed in daily moderate-to-severe VMS frequency and severity, and PROMIS SD SF 8b total T-score in women who received elinzanetant 120 mg compared with placebo (Table 1).

Table 1: Summary of mean (95% CI) change from baseline to week 12 of efficacy parameters in OASIS-1, -2, -3 and -4

Mean (95% CI)	Elinzanetant 120 mg				Placebo			
	OASIS-1 (n=199)	OASIS-2 (n=200)	OASIS-3 (n=313)	OASIS-4 (n=316)	OASIS-1 (n=197)	OASIS-2 (n=200)	OASIS-3 (n=315)	OASIS-4 (n=158)
Baseline daily moderate-to-severe VMS frequency	13.4 (12.5, 14.3)	14.7 (13.1, 16.2)	6.7 (5.9, 7.5)	11.4 (10.7, 12.2)	14.3 (12.3, 16.2)	16.2 (14.6, 17.7)	6.8 (6.1, 7.5)	11.5 (10.5, 12.5)
Week 12 daily moderate-to-severe VMS frequency	-8.7 (-9.7, -7.7)	-10.0 (-11.5, -8.4)	-5.4 (-6.3, -4.5)	-7.8 (-8.5, -7.1)	-5.5 (-7.1, -4.0)	-7.2 (-8.5, -6.0)	-3.5 (-4.1, -2.9)	-4.2 (-5.2, -3.2)
Baseline daily VMS severity*	2.6 (2.5, 2.6)	2.5 (2.5, 2.6)	2.3 (2.2, 2.3)	2.5 (2.5, 2.5)	2.5 (2.5, 2.6)	2.5 (2.5, 2.6)	2.3 (2.2, 2.3)	2.5 (2.5, 2.5)
Week 12 daily VMS severity*	-0.9 (-1.1, -0.8)	-1.0 (-1.1, -0.9)	-1.2 (-1.3, -1.1)	-1.0 (-1.1, -0.9)	-0.6 (-0.6, -0.5)	-0.7 (-0.7, -0.6)	-0.8 (-0.9, -0.7)	-0.5 (-0.6, -0.4)
Baseline PROMIS SD SF 8b total T-score	61.0 (59.9, 62.1)	61.7 (60.8, 62.6)	57.4 (56.6, 58.2)	60.6 (59.9, 61.3)	60.2 (59.1, 61.3)	60.7 (59.7, 61.7)	58.0 (57.1, 58.9)	60.7 (59.7, 61.8)
Week 12 PROMIS SD SF 8b total T-score	-10.8 (-12.3, -9.4)	-10.6 (-11.8, -9.4)	-8.0 (-9.0, -6.9)	-10.6 (-11.5, -9.6)	-5.0 (-6.0, -3.9)	-5.0 (-6.6, -4.5)	-5.3 (-6.3, -4.3)	-4.1 (-5.3, -2.9)

*Score range: 0–3; 0, no VMS episodes; 1, mild; 2, moderate; and 3, severe symptoms. Higher scores indicate greater VMS severity.

CI, confidence interval; PROMIS SD SF 8b, Patient-Reported Outcomes Measurement Information System Sleep Disturbance Short Form 8b; VMS, vasomotor symptoms.

Conclusions

Elinzanetant reduced daily moderate-to-severe VMS frequency and severity, in addition to PROMIS SD SF 8b total T-scores, from baseline to week 12 to a greater extent than placebo in all four OASIS studies. These results suggest consistent efficacy across different populations of women, including those with a lower baseline symptom burden (OASIS-3) and those with VMS caused by ET for the treatment of breast cancer (OASIS-4).

OTHER-046

CATCH THE PATCH: A QUALITY IMPROVEMENT PROJECT TO IMPROVE DOCUMENTATION ON TRANSDERMAL PATCHES AMONG INPATIENTS AT A COMPREHENSIVE CANCER CENTER.

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Introduction

Medication-related errors remain a significant concern among hospitalized patients, particularly those using transdermal (TD) opioid patches. Errors in placement, documentation, and monitoring can lead to pain crises, withdrawal, or overdose, increasing morbidity and contributing to prolonged hospitalizations. Our institution observed a rise in safety incidents related to TD opioid patches, primarily due to inconsistent documentation.

Methods

We developed a quality improvement project using the Plan–Do–Study–Act cycle to enhance safety around TD patches. Through a fishbone diagram and process mapping, we identified that a lack of standardized electronic medical records (EMR) documentation of patch placement and its location was the primary barrier. In collaboration with the information technology team, we developed a flow sheet for nursing documentation of TD-patches that was visible to all clinicians. We implemented a step-by-step process that included education, easy-to-follow tip sheets, and were available to answer any questions related to documentation. Data was collected from

nursing documentation on the flow sheet whether TD patch was present on the patient's body with "yes or no" and its placement location among those with an order for TD patches. The intervention went live on January 1, 2024. We examined three months before and three months after implementation. We aimed to see if the TD-patch documentation improved at least by 5% from its baseline amongst narcotic patches.

Results

Post-intervention, there was a positive trend on TD patch documentation for opioids in this case fentanyl and buprenorphine patches by > 5%. Documentation increased by 12% and 5% on Buprenorphine and fentanyl patches respectively.

Conclusions

This quality improvement project encourages us to educate and implement standardization of EMR documentation for TD patch safety and workflow reliability. This approach was rapidly adopted and might benefit other institutions in managing patients who receive TD opiates and other drugs.

OTHER-047

BALANCING EMPLOYMENT AND CANCER CAREGIVING: A SCOPING REVIEW EXPLORING WORKPLACE ACCOMMODATIONS AND CAREGIVER PERSPECTIVES

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Introduction

Informal [unpaid] carers of those diagnosed with cancer often balance caregiving responsibilities alongside paid employment. As cancer care is increasingly delivered in outpatient settings, the carer role is becoming more challenging, causing a significant impact on workplace performance and productivity for employed carers. This scoping review examines workplace experiences of employed informal cancer carers and explores existing policies that support employed informal cancer carers.

Methods

Systematic scoping review of grey and academic literature published in past 10 years. Systematic search of PsycINFO, MEDLINE Complete, Scopus, and CINAHL identified peer-reviewed papers focusing on: informal carers aged 18-65 years in paid employment (part-time, full-time) that reported carers' workplace experiences, including workplace accommodations and policies. Grey literature search identified policy documents, guidelines, legislation, white papers, and fact sheets. Narrative review of eligible documents was undertaken.

Results

There were 480 unique academic papers identified from database searches, with 8 eligible for inclusion. Grey literature search identified 1,200 records, with 20 eligible (3 policy documents, 6 documents interpreting policies, 3 providing employer advice, 4 targeting carers and 4 specifying policy gaps). All were published from high income countries. Academic literature mainly reported experiences of women, aged 40-64. Studies reporting on carer experiences identified a struggle with role conflict, reduced productivity, and inconsistent access to workplace accommodations, with many carers unaware of available resources or unable to access them due to organisational barriers. Existing policies targeted carers broadly, lacking cancer-specific provisions. Policy documents highlighted workplace accommodations, provisions that currently exist to support carers, and recommendations for support.

Conclusions

There is a substantial gap in literature regarding cancer carers workplace experiences and in cancer-specific workplace policies. There is a pressing need for policy development, improved employer awareness and research to better understand and address the diverse needs to support employed cancer carers.

OTHER-048

FROM TOXICITY ASSESSMENT TO ADAPTIVE SAFETY CARE: IMPLEMENTING COMPREHENSIVE FAST-TRACK SAFETY EVALUATION FOR ANTICANCER DRUG DEVELOPMENT

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Introduction

The conventional drug development pathway in oncology, spanning 10 to 15 years, has long been slow, costly, and complex, often marked by late-stage failures due to efficacy or safety concerns. Improvement of the process including a multidisciplinary approach to enable a complete safety profile knowledge and management journeys is needed.

Methods

We aimed to develop a consensus approach, based on a literature review and sharing experience, skills and works of the different co-authors, in order to propose a new approach of clinical trials' process.

Results

In the past decade, the field has undergone major transformation. Innovative trial designs and fast-track regulatory pathways, such as priority review, breakthrough designation, accelerated approval, and fast-track processes, have significantly shortened timelines from Phase I to market approval. While these approaches have enabled quicker access to promising therapies, they have also exposed gaps in post-marketing safety and highlighted the need for tailored safety management strategies. These emerging safety challenges call for multidisciplinary evaluation and the integration of advanced monitoring technologies from early drug phase to post market development.

Figure 1: Drug development process in oncology

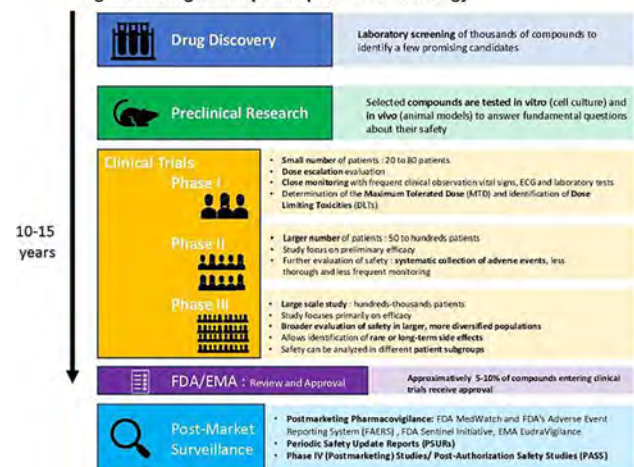
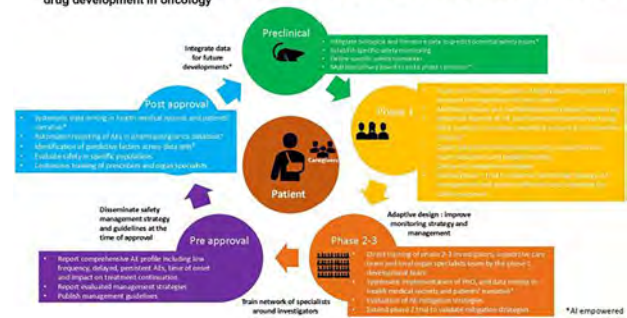


Figure 2: Safety Evaluation and limitations during the Drug Development Process



Figure 3: Implementing an innovative, comprehensive, and adaptive fast track safety evaluation for drug development in oncology



Conclusions

This consensus work introduces a comprehensive, adaptive fast-track safety evaluation framework designed to support oncology drug development. It aims to enhance patient safety while preserving the benefits of accelerated regulatory pathways, including multidisciplinary supportive care concept.

OTHER-050
MAJOR ADVERSE DENTAL EVENTS AT 2 YEARS POST RADIATION THERAPY

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Introduction

Radiation therapy (RT) for head and neck cancers often leads to lasting oral complications that compromise quality of life. Despite this, there is limited research into the rates of dental damage following radiation. The OraRad group estimated that rates of tooth loss post-radiation are 17.8% and that rates of bone exposure are 6.1% 2-year post-RT. However, this study did not consider the new ClinRad system for osteoradionecrosis proposed by Watson et al. This study aimed to assess “Major Adverse Dental Events” at two years following completion of radiation therapy.

Methods

A retrospective study was conducted on 1658 consecutive adult patients treated with at least 45Gy of head and neck RT between 2011-2022 and who had at least one follow up visit between 6 months and 2 years post-RT. Variables collected included post-RT caries, number

of extracted or hopeless teeth, and cases of osteoradionecrosis. Tooth loss was defined as a tooth that avulsed from the mouth. Hopeless tooth was defined as a tooth that would have otherwise been removed, had there not been a history of radiation. The ClinRad system was used to stage osteoradionecrosis. Data analysis was performed of the first 1145 patients for which data collection was completed.

Results

2 years post-RT, 7% of patients experienced tooth loss, 8% presented with non-restorable or hopeless teeth, 5% exhibited post-RT caries, most commonly stage 1. Osteoradionecrosis was observed in 6% of cases, with 50% of ORN cases presenting as stage 1. The rate of MADE at two-years post radiation was estimated at 15%. At 95% confidence level, the CI = 0.1502.

Table 1: Demographics, Clinical Features and MADE

All (n=1145)	
Patient Demographics	
Mean Age	62
Gender	
Females	311 (27.1%)
Males	834 (72.8%)
Smoking Status	
Smokers	598 (52.2%)
Non-Smokers	521 (45.5%)
Nil	26 (2.2%)
Tumor Site	
Oropharynx	430 (38%)
Oral Cavity	201 (18%)
Salivary Glands	111 (9%)
Skin	92 (8%)
Nasopharynx	89 (7%)
Larynx	81 (7%)
Hypopharynx	33 (3%)
Sarcoma	30 (2%)
Nasal Cavity	30 (2%)
Paranasal Sinus	23 (2%)
Other	25 (2%)
Dental Characteristics	
Mean Teeth Count at Initial Consult	27
Mean DMFS160 Score	61
MADE	
Hopeless Teeth	229 (20%)
Tooth Loss	214 (19%)
Stage 1 PRC	65 (6%)
Stage 2 PRC	11 (1%)
Stage 3 PRC	2 (0%)
Stage 4 PRC	1 (0%)
Stage 0 ORN	89 (8%)
Stage 1 ORN	57 (5%)
Stage 2 ORN	14 (1%)
Stage 3 ORN	3 (0%)

Conclusions

RT results in significant long-term dental morbidity. Emphasis on preventive care, fluoride protocols, and close dental follow-up with regular yearly radiographic assessment is essential to minimize post-RT complications and improve survivorship outcomes.

OTHER-052
MEDICATION RELATED HOSPITALISATIONS IN ONCOLOGY PATIENTS – A RETROSPECTIVE COHORT STUDY

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Introduction

Medication-related health events are an important issue affecting the safety of patients with cancer. This study aimed to describe the characteristics of medication-related and non-medication-related hospitalisations in oncology patients.

Methods

This retrospective cohort study was conducted using admitted patient care data from a tertiary metropolitan hospital in South Australia, covering a catchment area of ~350,000 people. We identified patients aged ≥ 25 years admitted under oncology between 01-January-2017 and 31-December-2022. Reasons for hospitalisations were identified using the International Classification of Diseases (ICD)-10 codes and classified into two broad categories: medication-related and non-medication-related. Descriptive analysis was conducted to compare the characteristics and level of care between the two groups.

Results

Over the 6-year period, 4,978 oncology admissions were recorded. Of these, 250 (5%) were considered medication-related. While there was no significant difference in mean age between those who experienced a medication-related admission and those who did not (65 and 64 years), the medication-related cases had a higher mean number of comorbidity (6 versus 4) than the non-medication-related counterparts. The average length of stay (LOS) was significantly longer (10.1 versus 4.7 days, p -value <0.0001) with a higher proportion of medication-related cases admitted to intensive care unit (ICU) compared to the non-medication-related counterparts (10% versus 2.6%). Among those admitted to ICU, the average ICU LOS was five times longer (10.1 versus 2.3 hours) in medication-related cases than the non-medication-related counterparts. Analysis of complexity of care using the Diagnosis Related Group (DRG) classification demonstrated the majority of the medication-related cases were rated as 'major complexity' compared to the non-medication-related counterparts (80% versus 48%).

Conclusions

Medication-related hospitalisations in oncology patients were associated with more complex levels of care and longer admissions. The development of targeted strategies for preventing medication-related morbidity in patients with cancer is warranted.

OTHER-054

DEVELOPING GYN CARE: A SEQUENTIAL MIXED METHODS STUDY INFORMING GYNAECOLOGICAL CANCER NURSING GUIDANCE

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Introduction

Nurses are critical in delivering coordinated, person-centred clinical and supportive gynaecological cancer care. Recognised challenges in nursing roles have informed recommendations to develop evidence-based gynaecological cancer nursing guidance. This study aimed to describe existing gynaecological cancer nursing guidance, explore perceptions and expectations for planned gynaecological cancer nursing guidance and investigate implementation determinants.

Methods

An exploratory sequential mixed methods study was undertaken comprising a scoping review, qualitative descriptive study and cross-sectional survey. Australian gynaecological cancer nurses and people with gynaecological cancer lived experience joined focus groups or interviews. Gynaecological cancer nurses and service leaders completed an online survey. Quantitative and qualitative data underwent descriptive and content analyses respectively.

Results

The scoping review identified 12 sources of international evidence providing clinical guidelines, practice recommendations or equivalent guidance on how nurses provide specialised care published since 2009.

No individual source provided comprehensive nursing guidance across all gynaecological cancer types.

Twenty gynaecological cancer nurses and seven women with lived experience of gynaecological cancer participated in focus groups or interviews. Themes included: 1) Foundational support resource for nurses; 2) Support care and educate nurses with content across the care continuum; 3) Design with functionality and practicality for nurses in everyday practice.

The planned development of gynaecological cancer nursing guidance was well supported by 90% ($n = 65$) of the $n=72$ survey participants. Two-thirds (66%, $n = 48$) reported at least weekly anticipated use. High levels of agreement were observed across all clinical guideline determinants. Qualitative findings highlighted three themes influencing implementation: "Integration into workflow," "Confidence in content," and "Practical support and endorsement."

Conclusions

Comprehensive guidance to inform gynaecological cancer nursing care is needed to improve care. Addressing this, development of a novel nursing guidance resource is planned and supported by key stakeholders. Recommended strategies to optimise implementation have been proposed.

OTHER-056

RESEARCH ON THE PATIENT JOURNEY MAPPING FOR TARGETED DRUG MEDICATION MANAGEMENT IN LUNG CANCER PATIENTS

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Introduction

To construct a patient journey mapping for lung cancer patients' targeted drug management, systematically analyze behavioral characteristics, emotional changes, core pain points, and intervention opportunities throughout the medication cycle, and provide a theoretical basis for formulating precise, phased intervention strategies.

Methods

A descriptive qualitative study was conducted. Purposive sampling selected 21 lung cancer patients receiving targeted therapy from a Chongqing tertiary hospital (June–October 2025) for semi-structured interviews. Based on the chronic disease medical responsibility transfer theoretical framework, content analysis was used to code data, sort out the dynamic medication management process, identify stage-specific pain points and opportunities, and construct a journey mapping. The map's completeness and authenticity were verified by patient and family representatives.

Results

A three-stage journey framework was clarified: Initiation Stage (1–3 months post-treatment initiation), Adaptation Stage (4–12 months), and Stabilization Stage (over 1 year). The Initiation Stage featured passive patient treatment acceptance and family-led medication management, with core pain points including insufficient targeted drug understanding, vague treatment expectations, and poor mastery of medication norms. The Adaptation Stage involved gradual patient participation in management, facing challenges such as difficulty coping with side effects, treatment cost pressure, and conflicts between medication and daily life. The Stabilization Stage achieved independent management but encountered poor adherence maintenance, long-term treatment burnout, and insufficient social support. A total of 13 core pain points and 15 intervention opportunities were identified, including preoperative cognitive intervention, multimodal skill training, cost support connection, and remote monitoring.

Conclusions

Lung cancer patients' targeted drug management is a dynamic, complex process with distinct stage-specific characteristics. The constructed

journey mapping intuitively presents the complete medication path and core needs, providing a visual tool for clinical "stage-adapted, demand-oriented" interventions. Optimizing nursing practice via phased health education and multi-dimensional support can improve adherence and treatment experience, enhancing long-term outcomes.

OTHER-057

FACTORS ASSOCIATED WITH ACUTE HEALTHCARE UTILIZATION DURING FIRST 6 MONTHS AFTER DIAGNOSIS OF ADVANCED CANCER

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Introduction

Patients with newly diagnosed advanced cancer are at high risk of requiring acute healthcare services. This study describes the incidence, timing, and burden of these events within six months of diagnosis and explores baseline factors associated with earlier first episode.

Methods

We analyzed 150 patients enrolled in an ongoing randomized controlled trial (recruited Dec 2023–Jun 2025) with 6-month follow-up. The primary outcome was time to first acute episode, defined as an emergency department visit or unplanned hospital admission. Cumulative incidence was calculated at 30, 90, and 180 days and median time-to-event were calculated. Secondary outcomes included unplanned admission counts, admission rates and inpatient bed-day burden. Associations between baseline factors, and time to first acute episode were examined using Cox proportional hazards regression.

Results

At 6 months, 60 of 150 patients (40.0%) experienced at least one acute event. Among the 60 patients, median time to first event was approximately 44 days. Cumulative incidence of an acute event was 16.3% at 30 days, 31.4% at 90 days, and 40.8% at 180 days (Table 1). A total of 91 unplanned admissions occurred, with 74% admitted to medical oncology and 692 inpatient bed-days accrued. During 6-month follow-up, 7/150 (4.7%) patients were reviewed by specialist palliative care teams (Table 2). Depressive symptoms (CES-D ≥ 16) were associated with earlier first acute episode (adjusted HR 2.32, 95% CI 1.39–3.88), but not age and tumor group (Table 3).

Table 1. Incidence of emergency department visit or unplanned admission within 180 days of enrolment

Outcome	
Occurrence of acute episode, n (%)	60 (40.0%)
Time to first acute episode, days, median (IQR)	43.5 (15.5–82.5)
Cumulative incidence	
At 30 days	16.3% (95% CI 11.2–23.3)
At 90 days	31.4% (95% CI 24.5–39.6)
At 180 days	40.8% (95% CI 33.3–49.3)

Table 2. Healthcare utilization within 180 days of enrolment

Healthcare utilization	
Unplanned inpatient admissions	
Patients with ≥ 1 unplanned admission, n (%)	54 (36.0%)
Total unplanned admissions, n	91
Unplanned admission rate	10.9 per 100 person-months
Admissions to medical oncology service, n (% of admissions)	67/91 (73.6%)
Inpatient length of stay	
Total inpatient bed days, n	692
Inpatient bed-day burden	82.5 per 100 person-months
Palliative care-related	
Reviewed by specialist palliative care team	7/150 (4.7%)

Table 3. Factors associated with time to first acute episode within 180 days

Predictor	Univariate analysis		Multivariable model	
	HR (95% CI)	P	HR (95% CI)	P
Age group				
≤ 65 years	Reference		Reference	
> 65 years	1.15 (0.68, 1.97)	0.599	1.14 (0.65, 2.02)	0.647
Tumour group				
Lung	Reference		Reference	
Gastrointestinal	1.8 (0.91, 3.57)	0.090	1.84 (0.95, 3.56)	0.069
Breast	1.1 (0.48, 2.51)	0.816	1.28 (0.54, 3.03)	0.573
Others	0.75 (0.35, 1.63)	0.469	0.79 (0.35, 1.76)	0.562
Depressive symptoms				
CESD < 16	Reference		Reference	
CESD ≥ 16	2.27 (1.37, 3.76)	0.002	2.32 (1.39, 3.88)	0.001

*CESD cut-off indicates individuals at risk of clinical depression

Conclusions

After a new advanced cancer diagnosis, a substantial proportion of patients utilized acute healthcare resources within two months. Depression at baseline is associated with earlier acute events, suggesting opportunities for targeted supportive care and early palliative integration to potentially reduce acute healthcare burden.

OTHER-058

IMPACT OF CHEMORADIOTHERAPY ON EMPLOYMENT STATUS IN PATIENTS WITH LOCALLY ADVANCED HEAD AND NECK SQUAMOUS CELL CARCINOMA: A RETROSPECTIVE STUDY

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Introduction

Concurrent chemoradiotherapy (CRT) with cisplatin is a standard treatment for locally advanced head and neck squamous cell carcinoma (LA-HNSCC), aiming at organ and functional preservation. However, late toxicities such as xerostomia, dysphagia, taste disturbance, dental deterioration, peripheral neuropathy, tinnitus, and hearing loss may substantially impair quality of life and ability to work. Data on employment outcomes after CRT remain limited.

Methods

The cohort consisted of 102 men and 20 women, with a median age of 62 years (range, 38–80). Primary tumor sites were the oropharynx (n=61), hypopharynx (n=29), larynx (n=18), nasopharynx (n=9).

Eighty-two patients (67%) were regular employees and 40 (33%) were non-regular workers; 92 (75%) were company employees and 30 (25%) were self-employed. Sick leave during CRT was required in 112 patients (92%). After treatment, 75 patients (61%) were able to return to work, whereas 47 patients (39%) lost their jobs or closed their businesses. Job loss occurred more frequently among non-regular employees and self-employed workers. The timing of employment loss was before treatment in 16 patients, during treatment in 10, and after treatment in 21. Only 10 of the 47 unemployed patients were referred to the public employment service, and only 2 were successfully re-employed.

Results

Nearly 40% of patients with LA-HNSCC treated with cisplatin-based CRT lost their employment, particularly those with non-regular or self-employed work. Early, structured vocational and social support integrated into cancer care is essential to mitigate the long-term socio-economic impact of CRT.

Conclusions

We retrospectively reviewed patients with LA-HNSCC who received cisplatin-based CRT at our institution between October 2021 and October 2025. Among 165 treated patients, 122 who were employed at the start of treatment were included. Patient demographics, tumor site, employment type, sick leave during treatment, return-to-work status, job loss or business closure, timing of employment loss, and use of public employment support were analyzed.

OTHER-059

MINIMAL CLINICALLY IMPORTANT DIFFERENCES IN THE RANDOMIZED TRIAL OF MEPITEL FILM VS STANDARD CARE FOR PREVENTING RADIATION DERMATITIS IN BREAST CANCER

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Introduction

In clinical trials, statistically significant changes in patient-reported outcomes may not always be clinically meaningful. This study aimed to determine minimal clinically important differences (MCIDs) for the Skin Symptom Assessment (SSA) questionnaire in a randomized controlled trial comparing Mepitel Film (MF) with standard of care (SOC) for preventing radiation dermatitis (RD) in breast cancer patients. MCIDs represent the smallest changes in patient-reported outcome measures that are meaningful to patients.

Methods

A secondary analysis was conducted using data from a phase III randomized controlled trial (n = 376) evaluating MF versus SOC for RD prevention during breast cancer radiation therapy. Anchor- and distribution-based methods were used to estimate MCIDs for SSA scores, with worst CTCAE grade as the anchor. MCIDs were assessed between baseline and 2 weeks post-RT, and between 2 weeks post-RT and 3, 6, 12, and 24 months post-RT.

Results

MCIDs were determined for all patients, MF and SOC subgroups, and by CTCAE grade comparisons (0–1 vs 2–3 and 0–2 vs 3). Both

MF and SOC groups showed significant deterioration from baseline to week 2 post-RT, followed by significant improvement from week 2 post-RT to subsequent follow-ups. From baseline to 2 weeks post-RT, MCIDs for deterioration in MF patients ranged from 0.11 units (edema) to 0.76 units (erythema), while SOC patients required changes from 0.29 units (edema) to 1.21 units (pigmentation). MCIDs for the other time points ranged from 0.12 units (edema, MF) to 1.13 units (erythema, SOC). SOC patients required larger changes in SSA score for clinical significance. Using distribution-based analysis, MCIDs were closest to 0.5 standard deviations across all time points and subgroups.

Table 1. MCIDs of patient-reported SSA scores at all time points in MF and SOC patients

SSA Item	Baseline - Week 2		Week 2 - Month 3		Week 2 - Month 6		Week 2 - Month 12		Week 2 - Month 24	
	MF	SOC	MF	SOC	MF	SOC	MF	SOC	MF	SOC
Pruritus	-0.45	-0.66	0.33	0.54	0.44	0.58	0.58	0.60	0.55	0.59
Pain or Soreness	-0.33	-0.51	0.34	0.33	0.24	0.42	0.40	0.57	0.34	0.52
Blisters/Peeling	-0.51	-0.70	0.47	0.66	0.58	0.71	0.58	0.73	0.52	0.70
Erythema	-0.76	-1.11	0.77	1.02	0.73	1.06	0.79	1.13	0.76	1.02
Pigmentation	-0.69	-1.21	0.32	0.69	0.31	0.83	0.33	0.87	0.43	1.00
Edema	-0.11	-0.29	0.03	0.12	0.04	0.18	0.12	0.23	0.12	0.35
Trouble fitting bra/clothes	-0.06	-0.09	0.05	0.05	-0.03	-0.02	0.06	0.11	0.01	0.08

Note: Bolded MCID indicates statistically significant differences between mean change

Conclusions

MCIDs can help determine clinically meaningful cutoffs in clinical trials and guide HCP decisions to introduce interventions. Future studies should validate findings using a broader range of anchors that are clinically relevant.

OTHER-060

LIDOCAINE NEBULIZATION FOR INTRACTABLE COUGH IN END-OF-LIFE CANCER PATIENTS

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Introduction

Cough is a commonly encountered distressing symptom in cancer and non-cancer patients at the end of life. Despite multiple treatment options including benzonatate, mucolytics and opiates, cough can sometimes be difficult to control leading to physical and psychological distress for patients and families. We evaluated the potential use of nebulized lidocaine as a treatment option for intractable cough in patients at end of life.

Methods

Retrospective chart review of three advanced cancer patients in an acute palliative care unit.

Results

The first patient was a 79-year-old male with a past medical history of thyroid carcinoma status post chemotherapy and radiation treatment targeting thyroid and lymph nodes with subsequent vocal cord paralysis. He had intractable cough and was on opiates, glycopyrrolate, guaifenesin, and albuterol nebulization with no relief. Patient noted significant benefit from the addition of nebulized lidocaine. Medication was continued for cough relief through end of life and eventually, the patient expired in the unit.

The second patient was a 48-year-old male with history of metastatic lung adenocarcinoma status post lobectomy, chemotherapy, and radiation therapy. He received dextromethorphan, benzonatate, guaifenesin, hydrocodone-homatropine, and hydromorphone for intractable cough without any relief. He noticed improvement of the cough after addition of nebulized lidocaine. Patient was discharged home with hospice. The third patient was a 26-year-old male with AML s/p chemotherapy and stem cell transplant, fungal pneumonia who had cough that did not respond to benzonatate, dextromethorphan-guaifenesin, hydrocodone-homatropine, and hydromorphone. He was started on nebulized lidocaine but his cough did not improve. Patient eventually expired in the palliative care unit.

Conclusions

Lidocaine nebulization is a potential treatment option in advanced cancer patients at end-of-life experiencing intractable cough. Nebulized lidocaine may provide an alternative or supplemental option. Further research is needed to determine the appropriate conditions that nebulized lidocaine can be utilized for the management of cough.

OTHER-062

EFFECTS OF AN EXTENDED PLISSIT MODEL-BASED SEXUAL HEALTH CARE INTERVENTION ON SEXUAL HEALTH OUTCOMES IN WOMEN WITH ENDOMETRIAL CANCER

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Introduction

Sexual dysfunction and impaired sexual quality of life are common yet underrecognized survivorship issues among women with endometrial cancer. As survival rates improve, addressing long-term supportive care needs has become an essential component of comprehensive cancer care. The Extended PLISSIT model provides a structured framework for sexual health interventions; however, evidence regarding its effectiveness in gynecologic cancer survivorship, particularly in Asian populations, remains limited. This study evaluated the effects of an Extended PLISSIT model-based sexual health care intervention on sexual function and sexual quality of life in women with endometrial cancer.

Methods

In this randomized controlled study, 60 women with endometrial cancer undergoing surgical staging were assigned (1:1) to receive either a 12-week Extended PLISSIT model-based sexual health care intervention or routine ward-based education. Sexual function and sexual quality of life were assessed at baseline and at 1, 3, and 6 months post-intervention using validated patient-reported outcome measures. Group-by-time effects were analyzed using generalized estimating equations.

Results

No statistically significant group-by-time interaction effects were observed for sexual function or sexual quality of life during the follow-up period.

Conclusions

Within a survivorship care context, a 12-week Extended PLISSIT model-based sexual health intervention did not significantly improve sexual function or sexual quality of life among women with endometrial cancer. These findings highlight the complexity of sexual health needs in gynecologic cancer survivors and suggest that brief, information-focused interventions may be insufficient to address long-term quality-of-life outcomes. Future survivorship-oriented supportive care programs may benefit from longer-term, multidisciplinary, and partner-inclusive approaches to more effectively support sexual health and overall quality of life in this population.

PALLI-001

OPIOID PRESCRIBING AND REFERRAL TIMING FOLLOWING A SYSTEM-WIDE INPATIENT GOALS-OF-CARE INITIATIVE

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Introduction

Hospital based goals-of-care programs expanded rapidly during the COVID-19 pandemic in United States; their downstream effects on outpatient palliative care and symptom management remain poorly understood. We examined the impact of a system-wide goals-of-care program implemented at a large tertiary cancer center on subsequent outpatient palliative care referrals and opioid prescribing.

Methods

This was a secondary analysis of 400 random patients undergoing initial outpatient palliative care consultation before (June–November 2019) and after (June–November 2020) implementation of a goals-of-care program. Demographics, Clinical characteristics, substance use risk (CAGE –AID), symptom burden (Edmonton Symptom Assessment Scale), and opioid data (morphine equivalent daily dosing, MEDD) were collected from the electronic health record and compared between two cohorts in Univariate analysis. Multivariable analyses were performed to identify predictors of opioid prescribing.

Table 1. Comparisons of Changes in Outcome Variables between Group over Time

Variable	Time	Intervention	Control	Between group Comparison		Comparisons of change between groups over time			
		Mean (SD)	Mean (SD)	SMD	t	B (Group X Time)	SE	95%CI	Wald χ^2
Sexual Function	T3	10.50(9.51) (N=29)	15.11(9.71)	0.47	1.84	-3.05	2.33	-7.62-4.52	1.70
	T2	10.80(9.20)	10.04(7.68)	0.09	-0.38	2.49	2.32	-2.06-7.04	1.15
	T1	7.48(5.02)	6.67(5.60)	0.15	-0.59	2.45	2.32	-2.09-7.01	1.11
	T0	11.64(10.00)	13.28(8.95)	0.17	0.60	-	-	-	-
Sexual Quality of Life	T3	68.81(25.57) (N=29)	69.30(17.81)	0.02	0.08	3.73	3.44	-3.01-10.48	1.17
	T2	69.11(24.07)	67.26(18.73)	0.08	-0.33	6.22	3.42	-0.48-12.93	3.30
	T1	68.52(21.26)	69.74(17.91)	0.06	0.24	3.14	3.42	-3.56-9.85	0.84
	T0	68.70(24.22)	73.07(17.42)	0.20	0.80	-	-	-	-

Note: T0, baseline; T1, month 1; T2, month 3; T3, month 6; t, value of independent sample t-test; SMD=standard mean difference (Cohen's d). Parameter Estimates(B) represent the group x time interaction, test using the Wald χ^2 in generalized estimating equations for repeated measurements and exchangeable correlation structure. Reference category: Control group at T0: *p<0.05; **p<0.01; ***p<0.001.

Results

Table 1. Demographics and clinical variables

Variable	2019	2020	p-value
Age (median, IQR)	62 (52,70)	61 (51,70)	0.5
Sex (N (%))			0.3
Female	106 (53%)	117 (59%)	
Race and Ethnicity			0.90
White non-Hispanic	132 (66%)	125 (62.5%)	
Cancer Group			
Breast	23 (12%)	23 (12%)	0.4
GI	41 (21%)	49 (25%)	
GU	26 (13%)	17 (8.5%)	
GYN	21 (11%)	18 (9%)	
Head and Neck	13 (6.5%)	21 (11%)	
Hematological	16 (8%)	21 (11%)	
Lung	26 (13%)	27 (14%)	
Other	34 (17%)	24 (12%)	
Cancer Stage			0.9
Advanced*	180 (90%)	179 (90%)	
ECOG	2 (1,3)	2 (1,2)	0.001
CAGE AID†			0.036
ESAS			
Pain	5 (2,7)	4 (2,6)	0.2
Fatigue	6 (4,8)	5 (3,7)	0.002
Nausea	1 (0,5)	0 (0,2)	<0.001
Depression	1 (0,4,5)	1 (0,4)	<0.4
Anxiety	3 (0,6)	5 (0,3)	0.3
Appetite	5 (2,7)	4 (3,6)	0.2
Wellbeing	5 (3,7)	4 (2,6)	0.002
Sleep	5 (3,7,5)	5 (2,6)	0.002
Financial Distress	1 (0,5)	0 (0,2)	<0.001
Spiritual Pain	0 (0,2)	0 (0,0)	0.019
ESAS Total Symptoms Score	40 (28,57)	36 (25,48)	<0.001
ESAS Physical	34 (14,32)	19 (11,25)	<0.001
Time to referral‡	11.95	12	0.8
Reason for consult			0.2
Pain	126 (63%)	127 (64%)	
Non pain	57 (29%)	50 (25%)	
BOC	17 (8.5%)	19 (9.5%)	
Other	0 (0%)	4 (2%)	
MEDD at consult	7.5 (0,30)	0 (0,30)	0.2
Opioid Type			0.3
None	139 (70%)	152 (78%)	
Strong Opioid	57 (29%)	45 (22%)	
Weak Opioid	4 (2%)	5 (2.5%)	

Table 2. Multivariable Regression Analysis for predictors of opioid prescribing

Predictor	Beta	p-value	95% CI (Lower)	95% CI (Upper)
ESAS Pain	0.387	<0.001	0.173	0.299
ESAS Fatigue	0.015	0.82	-0.072	0.091
ESAS Nausea	0.058	0.273	-0.031	0.11
ESAS Drowsiness	-0.001	0.992	-0.071	0.071
ESAS Appetite	0.082	0.149	-0.018	0.117
ESAS Shortness of Breath	-0.025	0.645	-0.083	0.052
ESAS Depression	0.0	0.999	-0.08	0.08
ESAS Anxiety	-0.068	0.209	-0.069	0.015

Among 400 patients, pre implementation cohort had higher CAGE-AID, ECOG and symptom burden (Table 1). Most patients were referred for pain (64%) (Table 1). Referral timing was similar (median 11.9 vs. 12.0 months, $p=0.80$) (Table 1). Median MEDD at consultation was low (7.5 mg [IQR 0–30] before vs. 0 mg [IQR 0–30] after, $p=0.20$), and strong opioid use did not differ (29% vs. 22%, $p=0.30$) (Table 1). Median ESAS pain was (4 [IQR 2–6] vs. 4 [IQR 2–6]) (Table 1). In multivariable analysis, higher ESAS pain score was the only independent predictor of opioid dose ($\beta=0.39$, 95% CI 0.17–0.30; $p<0.001$) (Table 2).

Conclusions

A system-wide goals-of-care program was not associated with earlier referrals to outpatient palliative care. Opioid doses at initial outpatient palliative care consultation remained low. Referral timing, including that close to end of life, was not associated with opioid dose, necessitating need to understand the downstream effects of low opioid prescribing in this population. Evaluation of integrated inpatient–outpatient palliative care models is needed that align goals of care initiatives with longitudinal symptom management.

PALLI-002

AVAILABILITY OF PALLIATIVE CARE AND REFERRAL PRACTICES OF ONCOLOGISTS IN MEXICO BEFORE AND DURING THE COVID-19 PANDEMIC

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Introduction

Early referral to specialized palliative care (SPC) leads to improved quality of life and symptom control for people with advanced cancer. International organizations now recommend routine early SPC referral. In many countries, the COVID-19 pandemic increased barriers to accessing SPC services, as resources were reallocated to address the challenges it posed. We aimed to compare the availability of SPC and cancer care resources, and SPC referral practices of Mexican oncologists before and during the COVID-19 pandemic.

Methods

We conducted an anonymous survey among practicing certified oncologists in Mexico, distributed via email by the Mexican Society of Oncology and the Mexican Society of Radiation Oncology. The invitation included a REDCap link to the questionnaire, which consisted of 33 questions from five domains: a) Demographics and oncology practice, b) Cancer care resources before and during COVID-19, c) SPC resources before and during COVID-19, d) SPC referral practices before and during COVID-19, and e) Opinions about SPC services. Two reminder emails were sent. Surveys were analysed if they were at least partially complete.

Results

We received 128 responses, 68 partial and 60 complete, including oncologists from 21/32 states. 70% were males, and 40% had ≤ 5 years of practice. Fifty-three participants (41%) affirmed exposure to SPC education, and 27 (21%) confirmed access to SPC. There were no differences in the availability of cancer or SPC services before and during COVID-19 (Table 1 & Figure 1a). Referral time to SPC remained unchanged, with an estimated prognosis of ≤ 6 months before and during COVID-19, though 78% of oncologists preferred referral at diagnosis under ideal circumstances (Figures 1b and 1c). Opinions about SPC were mostly positive (Table 2).

Table 1: Cancer Care Resources Before and During COVID-19

Access to		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	P-value
Hospital bed	Before	28	8	3	1	1	.38
	During	19	9	5	4	4	
Opoids	Before	22	14	4	1	0	.73
	During	17	11	7	5	1	
Surgery	Before	29	10	1	1	0	.68
	During	22	7	1	9	2	
Systemic therapy	Before	25	10	5	1	0	.88
	During	19	10	5	7	0	
Radiotherapy	Before	22	11	5	2	1	.73
	During	15	4	9	8	5	
Telehealth	Before	5	4	9	9	14	.87
	During	6	5	10	7	13	
PPE	Before	13	11	8	5	4	.89
	During	14	11	5	6	5	
Covid-19 vaccine (Health care workers)		19	17	2	1	2	na
Covid-19 vaccine (patients)		15	16	5	1	4	na

Table 2: Opinions About Palliative Care Services

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
I feel comfortable providing PC	14	14	4	2	2
I feel comfortable discussing EOL topics and code status	3	6	4	11	12
I enjoy treating patients throughout disease trajectory (including EOL)	14	13	5	2	2
I don't feel comfortable referring to PC until near EOL	4	4	6	3	25
Patients perceive negatively PC	4	10	11	7	4
Likely to refer to Supportive Care instead of PC	10	9	12	4	1
PC adds too many HC providers	1	5	10	14	6
Patients reject PC referral	1	5	10	14	6
PC should be a priority during COVID-19	21	10	5	0	0
PC consults increase risk of COVID-19 exposure	3	7	9	11	6
PC adds burden due to limited PPE	2	6	11	11	6



Figure 1. Availability and referral to SPC: 1a) Availability to accept referrals by Palliative Care (PC); 1b) timing of referral related to cancer status to PC; 1c) timing of referrals in terms of time to PC.

Conclusions

Availability of SPC was scant before and during COVID-19. Oncologists had positive attitudes towards SPC and would ideally refer their patients early.

PALLI-004

PROGNOSTIC PERFORMANCE OF PRAGMATIC TRIAGE LEVEL FOR PATIENTS ADMITTED TO AN INTENSIVE CARE UNIT AT A COMPREHENSIVE CANCER CENTER

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Introduction

Existing intensive care unit (ICU) prognostic models are difficult to operationalize and few have been validated in oncology. The Society of Critical Care Medicine proposed guidelines for a 5-level pragmatic score to triage ICU admissions. In this study, we examined the association between Triage Levels (TLs) and hospital mortality among cancer patients transferred from medical floors to the ICU.

Methods

This retrospective cohort study included consecutive adult medical patients admitted to our ICU between 1/1/2024 and 12/31/2024. We collected data on patient demographics, the TLs (Table 1), and EPIC Deterioration Index (EDI). The study outcomes were hospital mortality, overall survival, ICU mortality, hospital length of stay (LOS), ICU LOS, hospice discharge, and supportive/palliative care referral. Multivariable regression models were used.

Table 1. ICU Admission Triage Level Framework

Triage Level	Framework Components			Recommended Action based on Triage Level
	Acute issues	Potential QOL**	Overall Life Expectancy***	
Level 1	Reversible	Good QOL expected	Potential survival of > 1 year	Definite ICU admission
Level 2	Reversible	Good QOL expected	6 months-1 year	Justified ICU trial
Level 3	Reversible	Good QOL possible	3-6 months	Selected/cautious ICU trial
Level 4	Likely not reversible	Poor QOL expected	3-6 months	ICU possibly not recommended
Level 5	Not reversible	Very poor QOL expected	Less than 3 months	ICU never recommended

* Triage levels are not absolute, should be re-evaluated every 48 hours during ICU stay

** QOL that is expected if the acute issues are addressed

*** Oncological and comorbidities

Abbreviations: QOL – quality of life

Results

Among the 1,705 ICU patients (mean age 61.4, 43.2% female), 1,502 (88%) had a TL, with 589 (39.2%), 424 (28.2%), 295 (19.6%), 145 (9.7%) and 49 (3.3%) patients assigned TL1, TL2, TL3, TL4, and TL5, respectively. Hospital mortality increased progressively with higher TLs, ranging from 13.2% (95% confidence interval [CI] 10.7, 16.2) to 71.4% (95% CI 57.4, 82.3) among TL1 to TL5 patients, respectively ($P < 0.0001$). TL was significantly associated with overall survival, ICU mortality, ICU LOS, hospice discharge, and supportive/palliative care referral (all $P < 0.0001$, Table 2). TL remained significantly associated with hospital mortality and overall survival after adjusting for demographics and EDI. TL had greater specificity (92% versus 89%, $P = 0.02$), and similar overall accuracy (73% versus 73%, $P = 0.86$) compared to EDI.

Table 2. Relationship between hospital outcomes and TLs

Outcomes	TL 1 N = 589 (39.2%)	TL 2 N = 424 (28.2%)	TL 3 N = 295 (19.6%)	TL 4 N = 145 (9.7%)	TL 5 N = 49 (3.3%)	P
Hospital mortality, % (95% CI)	13.2 (10.7, 16.2)	25.2 (21.3, 29.6)	42.7 (37.2, 48.4)	54.5 (46.3, 62.4)	71.4 (57.4, 82.3)	<0.0001
Overall survival, days, median (95% CI)	507 (421, 586)	94 (70, 138)	23 (19, 33)	10 (7, 15)	5 (3, 9)	<0.0001
ICU mortality, % (95% CI)	7.6 (5.6, 10.1)	10.6 (8, 13.9)	18.6 (14.6, 23.5)	31 (24, 39)	32.7 (21.1, 46.8)	<0.0001
ICU LOS, days, median (95% CI)	2.8 (2.6, 3)	3.6 (3.3, 3.9)	4 (3.6, 4.4)	3.8 (3.3, 4.4)	4 (3.1, 5.1)	<0.0001
Hospital LOS, days, median (95% CI)	12.8 (11.9, 13.8)	12.9 (11.9, 14.1)	14.1 (12.7, 15.6)	12.1 (10.4, 14)	11.1 (8.9, 14.3)	0.29
Hospice discharge, % (95% CI)	2.2 (1.3, 3.8)	12.3 (9.5, 15.8)	11.9 (8.6, 16.1)	20.0 (14.9, 27.3)	16.3 (8.4, 29.4)	<0.0001
Referral to supportive/palliative care, % (95% CI)	30.1 (26.5, 33.9)	57.1 (52.3, 61.7)	66.4 (60.9, 71.6)	89.7 (83.5, 93.7)	88.8 (77.7, 95.7)	<0.0001

* Days from TL to death.
Abbreviations: TL – triage level; CI – confidence interval; ICU – intensive care unit; LOS – length of stay

Conclusions

Higher TLs were associated with hospital mortality independent of other prognostic factors. Upon further validation, TL may represent a pragmatic approach to support decision making in the ICU, with more intensive goals of care and supportive care for patients with higher TLs.

PALLI-007

INTEGRATING ELECTRONIC PATIENT-REPORTED OUTCOME MEASURES INTO SUPPORTIVE AND PALLIATIVE CARE AMBULATORY SERVICES

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Introduction

Electronic patient-reported outcome measures (ePROMs) are standardised ways for patients to report health information to their clinicians, harnessing digital technology such as mobile-based applications. In cancer care, PROMs use leads to improved quality of life, better symptom control, and fewer emergency department presentations, but ePROMs are under-researched in Australian palliative care settings. We evaluated the feasibility of using an adapted version of a validated, multilingual ePROM for a mobile application amongst cancer patients, within supportive and palliative care outpatient services at Monash Health.

Methods

Through collaborative co-design with industry partners and consumers, we adapted the Integrated Palliative Outcome Scale (IPOS) for a mobile application for patients, which could be accessed by clinicians via a web-based portal. Usage data was collected automatically and descriptive statistics were examined as insights into how patients used the ePROM system.

Results

26 adult cancer patients were recruited. Patients had a mean age of 61 and were predominantly female (62%) and English-speaking (85%). All patients had a primary diagnosis of cancer, with lung being the most predominant cancer type (27%). 18 successfully installed the mobile application, and 15 of these entered information across 72 separate instances of use, with physical symptom scales the most utilised feature (65%). Marked variability was observed in individual patient use, how many features they accessed and how usage changes over time. These early indications suggest feasibility, with patients willing to use the ePROM and continue doing so over time however consumer evaluation and correlation of entries with medical records remains ongoing and will be available at the time of presentation.

Conclusions

Patients demonstrated frequent but individually variable use of the adapted IPOS ePROM, reflecting potential differences in how patients prefer to communicate health-related concerns and experiences, and will warrant further exploration to better understand what factors influence feature use.

PALLI-010

ASSESSING FUNCTIONAL IMPROVEMENT IN PATIENTS WITH METASTATIC BONE PAIN IN OUTPATIENT SPECIALIST PALLIATIVE CLINIC: PROSPECTIVE OBSERVATIONAL STUDY

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Introduction

Cancer-related bone metastases are a major cause of reduced quality of life (QOL) in patients with advanced malignancies, leading to physical, functional, and psychosocial impairments. Existing research consists of retrospective or cross-sectional studies from HIC, with a notable lack of prospective evidence from LMIC. This study addresses this gap by prospectively evaluating the impact of standard palliative care on functional status (FS) in patients with Metastatic Bone Pain (MBP) in a tertiary cancer hospital in India.

Aim: To evaluate the impact of palliative care on Activities of Daily Living (ADL) in patients with MBP using the BI

Objective: Primary: To assess change in BI scores from baseline to 2 weeks.

Secondary: To evaluate the impact of palliative care on pain intensity, overall QOL in patients with MBP and document current patterns of management in patients with MBP

Methods

Prospective observational study, conducted over 15 days in Palliative Medicine OPD of TMH, Mumbai, and ACTREC, Navi Mumbai. Newly registered patients aged ≥ 18 years with advanced cancer and MBP were included. Patients on follow-up, with unstable medical conditions, or cognitive impairment excluded. FS assessed using the BI, pain intensity using the NRS, and QOL using the EORTC QLQ-BM22 at baseline and Day 15.

Results

A sample size of 53 patients analysed. A statistically significant reduction in pain scores from baseline to Day 15 (median 7 to 3; $p < 0.001$).

Significant improvement noted in EORTC QLQ-BM22 painful sites ($p=0.002$) and painful characteristics ($p<0.001$). No statistically significant change observed in BI scores (median 100, $p=0.131$). A paradoxical increase in functional interference was noted despite pain reduction ($p<0.001$).

Conclusions

While palliative care effectively reduced pain in patients with MBP, this did not translate into short-term functional improvement. Further long-term and interventional research is imperative to refine strategies and enhance the quality of life for this patient population

PALLI-011

BREATHLESSNESS IN LUNG CANCER IN AUSTRALIA: A NATIONAL PALLIATIVE OVERVIEW

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Introduction

Breathlessness occurs in 70-90% of people with lung cancer (LC). The epidemiology of breathlessness across LC disease trajectory in Australia is undocumented. Our aim was to determine the prevalence and severity of LC-related breathlessness in an Australian palliative care cohort.

Methods

We analysed data collected by the Palliative Care Outcomes Collaboration (PCOC), a collective of palliative care centres around Australia. We accessed the Symptom Assessment Scale (SAS), a 7-item measure assessing symptom-related distress on a scale ranging 0 (none at all) to 10 (worst possible). The SAS item 'breathing problems' was treated as our breathlessness measure. Scores were categorised into severity levels; absent (0), mild (1-3), moderate (4-7), severe (8-10). Assessments occurred when participants first enter a service, participants' condition changes, and on discharge. PCOC labels patient condition with 'phases': stable (symptoms are controlled); deteriorating (patient's condition worsens but this is expected); unstable (patient's condition unexpectedly rapidly worsens); or, terminal (death likely to occur soon). Our primary outcome of interest was the proportion of clinical encounters reporting breathlessness-related distress per phase type.

Results

We obtained 240,171 clinical encounters between LC patients and palliative services. Over half (57.8%) the sample were male, 89.9% English speaking, and 72.4% lived in metropolitan areas. Overall, 57.3% of encounters experienced breathlessness. During stable phases ($N=76,405$), 32.6% of encounters reported mild breathlessness-related distress, 19.8% moderate, and 4.9% severe. During unstable phases ($N=41,752$), 26.8% reported mild distress, 25.8% moderate, 10.1% severe. During deteriorating phases ($N=91,937$), 34.8% reported mild distress, 22.9% moderate, 4.6% severe. During terminal phases ($N=30,077$), 22% reported mild breathlessness-related distress, 16.3% moderate, and 5.9% severe.

Conclusions

In Australia, LC-related breathlessness is generally of mild to moderate severity and is reported more frequently when a patient's condition worsens (unstable or deteriorating). Potential for early interventions of low to moderate intensity may prevent occurrence of breathlessness.

PALLI-012

ENHANCING ICU NURSES' IMPLEMENTATION OF PALLIATIVE CARE: A HOLISTIC, FAMILY-CENTERED MODEL WITH REMEMBRANCE AND RITUAL

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Introduction

This project aimed to strengthen ICU nurses' confidence and quality in delivering palliative care to terminally ill cancer patients. In high-intensity settings where invasive treatments prevail, the project emphasized humanizing end-of-life care through structured communication, spiritual support, and family involvement to improve comfort, closure, and dignity.

Methods

1. Standardized Care Pathway Development

An ICU-specific palliative care protocol was implemented, covering pain relief, withdrawal of life-sustaining treatments, spiritual support, and respectful postmortem procedures. A structured "Four Messages" guide (Thank you, I'm sorry, I love you, Goodbye) was introduced to promote meaningful emotional exchange.

2. Spiritual and Legacy Care

Bedside life review and legacy rituals were facilitated with patients and their loved ones. Keepsakes such as fingerprint art, handwritten farewell notes, or memory books were created to honor the patient's life and support bereavement.

3. Family Participation in Physical Care

Family members were encouraged to assist with simple acts of care—oral cleansing, hand wiping, and gentle touch—to maintain connection and dignity. Visual guides and psychosocial support were provided to help families engage in the farewell process and aftercare.

4. Nurse Capacity Building

Hands-on simulation training, emotional resilience workshops, and one-on-one coaching in palliative care communication and family support were delivered to enhance clinical skills and emotional preparedness.

Results

ICU nurses reported improved confidence and clarity in delivering end-of-life care. Personalized rituals and family-centered practices supported more meaningful comfort care. Patients experienced less pain, oral discomfort, and anxiety. Families appreciated participating in final care and valued commemorative items. Staff feedback indicated reduced moral distress and stronger team cohesion.

Conclusions

This integrative model, combining standardized care, spiritual rituals, and family involvement, proved feasible and impactful in ICU palliative settings. It promoted dignity, strengthened nurse-family bonds, and can be scaled to other units to enhance compassionate end-of-life care.

PALLI-013

END-OF-LIFE CARE FOR HOSPITALIZED OLDER ADULTS WITH TERMINAL CANCER: PERSPECTIVES OF HOSPITAL CARE ATTENDANTS

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Introduction

Background:

Taiwan became a super-aged society in 2025, and older adults account for most cancer deaths. Consequently, the need for inpatient end-of-life care for older patients with terminal cancer continues to grow. As front-line caregivers, hospital care attendants face complex care demands and substantial work-related stress. However, previous studies have focused mainly on long-term care facilities or home care settings, with limited attention to hospital-based care attendants.

Objective:

To explore the experiences and needs of hospital care attendants providing end-of-life care for hospitalized older adults with terminal cancer.

Methods

A qualitative study was conducted using semi-structured interviews with 18 hospital care attendants from two hospitals in southern Taiwan. Eligible participants had at least one year of caregiving experience and had cared for hospitalized older patients with terminal cancer within the previous six months. Data were transcribed verbatim and analyzed using thematic analysis.

Results

Three themes were identified. The first theme, providing physical end-of-life care, subthemes included recognizing signs of dying, providing comfort and hygiene care, and managing symptoms and daily care needs. The second theme, facilitating final conversations, subthemes included guiding patients in expressing gratitude, love, apology, and farewell, helping fulfill final wishes, and serving as a communication bridge. The third theme, fostering resilience and professional growth, subthemes included emotional burden and self-adjustment, the need for practical end-of-life care training, and recognition and support from healthcare teams and family members.

Conclusions

Hospital care attendants play an essential role in end-of-life care for older patients with terminal cancer. Beyond physical care, they also provide emotional support and facilitate communication among patients, families, and healthcare professionals. Strengthening end-of-life training and psychological support may enhance their competence and improve care quality.

PALLI-015

CHELSEA II TRIAL: CLUSTER RANDOMISED TRIAL OF CLINICALLY-ASSISTED HYDRATION IN THE LAST DAYS OF LIFE

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Introduction

Provision of clinically-assisted hydration (CAH) at the end of life is highly contentious due to the paucity of evidence for or against CAH, which is intensified by the variable assertions of healthcare professionals, and the generally positive opinions of patients and their informal carers.

Methods

The trial was a cluster randomised trial involving 91 sites (hospices - 81, hospitals - 10) in the United Kingdom. Sites were randomised to one of two arms: Arm "A" involved standard end-of-life care, with support to drink, and 4 hourly oral care; Arm "B" involved identical care to Arm A, but also included CAH. Consent was obtained according to relevant country law, with most participants recruited through "nominated consultees".

CAH could be given either intravenously or subcutaneously; the fluid used was 4% dextrose with 0.18% sodium chloride, and the volume given was based upon national (generic) guidance for maintaining hydration (i.e. 25mL/kg/day). The trial lasted 14 days.

Participants were reviewed every four hours by the clinical (nursing) team for presence absence of pain, shortness of breath, nausea and vomiting, and audible upper airway secretions, and the Nursing Delirium Screening Scale (Nu-DESC) and Modified Richmond Agitation and Sedation Scale (m-RASS) were completed.

Results

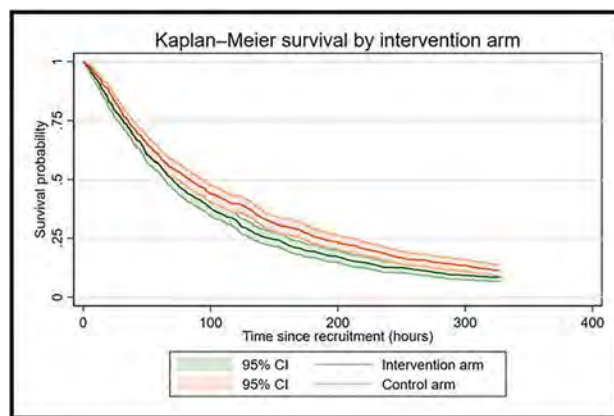
Summary of results:

1565 participants recruited: 1385 died, 152 survived (>14 days), 28 withdrawn.

Primary endpoint (delirium): no statistically significant difference between arms; secondary endpoints: no difference between arms for most outcomes, except increased prevalence of audible secretions in CAH arm, and increased survival in CAH arm. No difference in peripheral oedema, pulmonary oedema, ascites between arms. Minimal AEs

(primarily pooling with subcutaneous administration): no SAEs. No difference in health related costs between arms.

Adherence with CAH regimen was suboptimal (31.4%), although CACE analysis was similar to ITT analysis.



Conclusions

The trial results will help inform clinical practice, but decisions about commencing/discontinuing CAH should always be individualised.

PALLI-016

DECENTRALISED CLINICAL TRIALS ENHANCE PALLIATIVE CARE RESEARCH PARTICIPATION: A KEY OUTCOME OF THE ACUPUNCTURE FOR CANCER PAIN MANAGEMENT TRIAL

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Introduction

Recruitment to palliative care (PC) clinical trials is challenging due to poor and rapidly changing performance status, competing priorities and attrition. This risks the quality of evidence underpinning PC since participating subjects may be less representative, with those who are older, more unwell and largely confined to home not included. As part of the COMET program to increase clinical trial access for community PC patients, we designed a trial of cancer pain relief through acupuncture tailored to enable delivery at home. The purpose of this paper is to highlight the role of 'decentralised clinical trials' in PC (where trial components are conducted outside the central research facility) based on the experience of this acupuncture trial.

Methods

The phase 2 acupuncture for cancer pain trial was delivered in hospital (within a wellness centre) or at home based on participant preference. Primary outcomes included feasibility of recruitment and completion, while secondary outcomes included pain relief, impact on quality of life and analgesia use. Qualitative data on experience of trial participation were also collected.

Results

Primary outcomes of feasibility and completion were readily met with all 14 participants recruited and completing the trial within 6 months. Notably all participants requested for delivery of acupuncture at home. Qualitative data strongly endorsed the trial conduct at home "it was so convenient to have (the acupuncturist) visit me at home...I couldn't have done (the trial) otherwise".

Conclusions

The easy recruitment, completion and high engagement with this trial highlights the possibilities of decentralised clinical trials. Such decentralisation of trials with majority/full delivery at home raises

opportunities to improve recruitment, completion and representation of the real-world population and therefore, better evidence underpinning care. Further discussion is needed to delineate resource implications and if there are limits on which PC trials can be conducted at home.

PALLI-018 **CONTINUOUS SUBCUTANEOUS INFUSIONS: IS THERE AN UNMET NEED FOR EXTENDED INFUSIONS 48 HOURS AND BEYOND**

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Introduction

A continuous subcutaneous infusion (CSCI) is an effective method of drug administration commonly encountered in end-of-life care when the oral route is compromised. Current practice in most areas is to limit syringe pump infusion time to a maximum of 24 hours for numerous safety reasons, including familiarity as well as available chemical and microbiological stability data. Nonetheless, clinical experience suggests that many prescriptions persist beyond a single day. The primary aim of this study is to evaluate current practice and review the length of time that prescriptions for CSCIs persist unchanged beyond 24 hours. The secondary aim is to generate a list of commonly prescribed drugs or drug combinations that are present in prescriptions for CSCIs that remain unchanged for at least 48 hours.

Methods

A multi-centre service-evaluation was conducted across participating UK palliative care services. Data were collected from routine clinical practice and entered into a secure REDCap database. For each CSCI prescription, duration and content were recorded for up to eight days; values of 8 days represent right-censored data due to cessation of data collection beyond this point. Registration entries (0 days) were excluded.

Results

Prescription duration demonstrated a right-skewed distribution, with a median of 2 days, and mean of 3.06 days (SD 2.38). The interquartile range was 1–4 days and 62% of prescriptions remained unchanged after 24 hours. A minority reached the 8-day ceiling, indicating some degree of right-censoring and suggesting that the true upper tail of the distribution is longer than observed. Prescribing patterns showed consistent use of a limited set of two- and three-drug combinations, with the most common combination used in prescriptions persisting for more than 24 hours being morphine and midazolam.

Conclusions

In UK palliative care services, many CSCI prescriptions persist beyond the initial 24-hour period. These findings support further evaluation of extended infusion intervals.

PALLI-019 **INCREASING PALLIATIVE CARE REFERRALS FOR ONCOLOGY PATIENTS BY REDUCING PROVIDER AND PATIENT BARRIERS: A QUALITY IMPROVEMENT INITIATIVE**

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Introduction

Early palliative care can improve the symptoms, mood, quality of life, and potentially improve survival for patients with advanced lung cancer. For head and neck patients concurrent palliative care reduces dysphagia, pain, and depression symptoms. Palliative care interventions help reduce distress in both patients and caregivers. ASCO, NCCN, and ACCP guidelines recommend early palliative care referrals for advanced cancer patients.

Despite the demonstrated benefits, only 8–11% are referred to palliative care. Barriers include patients' misunderstandings, as well as provider biases and specialist shortages. Introducing best practice advisories has proven effective in promoting palliative medicine referrals.

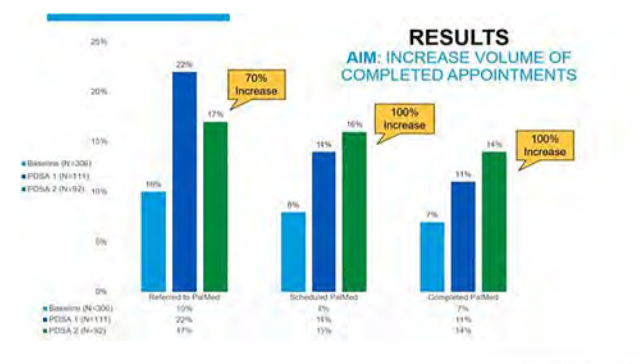
By identifying and reducing patient and institutional barriers to referrals, we hope to increase palliative care consultations.

Methods

DMAIC (Define-Measure-Analyze-Improve-Control) quality improvement methodology guided development of a structured referral process for patients with advanced head, neck, and lung cancers at oncology consultation. Root causes, such as stigma, misconceptions, and referral barriers, were identified using an affinity diagram and prioritized via a Pareto chart. PDSA cycle 1 components included an EMR-embedded screening tool and standardized nurse education scripting. PDSA cycle 2 components included revised educational materials and rebranding palliative care as supportive medicine. An impact-effort matrix was used to select and plan future interventions.

Results

At baseline, 10% of oncology patients (N=306) were referred to palliative care; 8% scheduled and 7% completed a consultation. After implementing PDSA cycle 1, palliative care referrals increased to 22%, scheduled consults to 14%, and completed consults to 11%. Following PDSA cycle 2, 17% of oncology patients were referred to palliative care, 16% scheduled and 14% completed palliative consultations. Following these interventions, referrals to palliative medicine increased 70% and completed consults increased 100%.



Conclusions

Implementing an integrated screening tool, scripted nursing tools, and enhanced patient understanding regarding palliative medicine can significantly increase early palliative care referrals for advanced oncology patients.

PALLI-020 **"I STILL THINK IT'S VERY HELPFUL, EVEN THOUGH IT'S HARD": PERSONALING PALLIATIVE CARE FOR ADOLESCENTS AND YOUNG ADULTS, USING 'VOICING MY CHOICES'**

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Introduction

Adolescents and young adults (AYA) with cancer need age-appropriate resources to ensure that their individualised palliative care needs are effectively communicated. Our team previously co-designed an Australian version of the advance care planning guide, *Voicing My Choices* with AYA, parents and healthcare-professionals. In this study, AYAs with cancer rated the appropriateness, helpfulness, and stressfulness of the Australian *Voicing My Choices* adaptation and proposed further changes.

Methods

AYAs diagnosed with cancer and aged 15–25 years at time of study, were recruited from three Australian hospitals. Participants were asked during an interview to rate how helpful and stressful they found each topic. Participants were also asked if each page in *Voicing my Choices* was appropriate (yes/no) and what changes they would recommend. Quantitative data were analysed with descriptive statistics. Qualitative data were analysed with content analysis.

Results

Twelve AYAs with cancer participated. AYAs were 58% female, 41% spoke a language other than English at home, mean age was 18.92 years at study and 17.25 years at diagnosis. Participants endorsed the Australian *Voicing My Choices* as appropriate (98%) and all topics were rated as more helpful than stressful. The topics rated as most stressful were *Medical Care Decisions* (2.2/5) and *Life Support* (2.7/5). However, both were also rated as very helpful to self and others (*Medical Care Decisions*: 4.7/5, 4.7/5; *Life Support*: 4.3/5, 4.6/5 respectively). All participants suggested at least one (typically minor) change/improvement.

Conclusions

Participants rated *Voicing My Choices* (Australia) as appropriate and helpful for personalising palliative care, and rated stressfulness as low, with minor changes suggested for future versions. Our findings support *Voicing My Choices* as a clinically relevant tool for conducting palliative care discussions with AYAs in Australia. Future work should explore how to support AYAs as they engage in conversations about palliative care topics, across the disease trajectory.

PALLI-021

PALLIATIVE CARE FOR ADVANCED CANCER UNDER PRIVATIZED MEDICARE MARKET IN THE US AND THE ROLE OF PROVIDER NETWORKS

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Introduction

Despite guideline recommendation of early palliative care integration for patients with advanced cancer, its utilization remains low in the U.S. Medicare, a traditionally federally operated insurance program for elderly adults in the US, is increasingly penetrated by private Medicare

Advantage (MA) plans. To date, little is known about differences in palliative care between MA and Traditional Medicare (TM) and how restricted provider networks under MA contribute to these differences.

Methods

Using population-based cancer registry and Medicare linkage, we identified Medicare beneficiaries aged ≥66 years diagnosed with distant-stage breast, colorectal, lung, pancreatic, or prostate cancer in 2016–2021. The primary outcome was cumulative incidence of palliative care billing within 6-month of diagnosis. To assess the role of provider networks, we first assigned each patient a treating oncologist and then conducted 1:1 matching of patients enrolled in a MA plan to patients in TM treated by the same oncologists. Multivariable Cox proportional hazards models estimated differences in palliative care receipt between TM and MA, before and after matching, adjusting for patient characteristics.

Results

Among 135,402 beneficiaries included, 67.7% were enrolled in TM and 32.3% in MA; 7.3% were Hispanic, and 9.5% non-Hispanic Black. The 6-month cumulative incidence of palliative care was higher among MA than TM beneficiaries (13.3% vs. 9.3%), with an adjusted hazard ratio [aHR] of 1.39 (95% CI, 1.34–1.44). Palliative care use was particularly higher among patients in health maintenance organization (HMO) plans (aHR=1.66, 95%CI=1.60–1.72). After matching on treating oncologists, 23,033 TM and 23,033 MA patients were included. Differences in palliative care were attenuated and statistically non-significant, with cumulative incidence of 11.0% and 10.4% among MA and TM, and an aHR of 1.05 (95%CI=0.99, 1.11).

Conclusions

Palliative care billing was significantly higher among MA than TM beneficiaries, but these differences were substantially reduced after accounting for provider networks.

PALLI-022

ADMISSION-LEVEL DETERMINANTS OF INPATIENT MORTALITY AND LENGTH OF STAY IN PALLIATIVE CANCER CARE IN INDIA

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Introduction

Inpatient palliative care wards in low- and middle-income countries often represent a late point of access for patients with advanced cancer. Many are admitted with high symptom burden and poor functional status, yet data identifying admission-level predictors of inpatient death or prolonged hospital stay are limited, affecting triage and allocation of scarce beds.

Methods

We conducted a retrospective cohort study of adult cancer patients admitted to inpatient palliative care wards at AIIMS, Delhi from January–December 2025, comprising 2171 inpatient admissions.

Admission variables included age, sex, ECOG performance status, number of presenting complaints, primary reason for admission, and routine laboratory parameters (serum albumin, haemoglobin, total leukocyte count, and serum creatinine).

The primary outcome was death during index admission. The secondary outcome was length of stay (days). Categorical variables were analysed using chi-square/Fisher's exact tests, continuous variables using non-parametric tests, and length of stay using regression with robust standard errors. All analyses were univariable.

Results

A planned analysis of 650 admissions with complete baseline data was done. Mortality increased with worse ECOG performance status

(ECOG 4: 32.9%; $p<0.001$) and higher number of presenting complaints ($p<0.001$). Infection/sepsis- and delirium-related admissions had higher mortality than pain-related admissions ($p<0.001$). Patients who died had lower serum albumin ($p<0.001$), higher leukocyte counts ($p=0.0003$), and worse kidney function ($p=0.0001$). Haemoglobin was not associated with mortality ($p=0.19$).

Longer hospital stay was associated with poorer ECOG status, higher symptom burden, infection-related admissions, lower albumin, higher leukocyte count, and worse kidney function (all $p<0.05$).

Conclusions

Routinely available clinical and laboratory factors identified patients at higher risk of inpatient death or prolonged stay. These findings may support triage, earlier goals-of-care discussions, and equitable inpatient resource allocation. Multivariable analyses and results of the full cohort ($N=2171$) will be presented at the conference.

PALLI-026

KNOWLEDGE, ATTITUDES, AND SELF-EFFICACY OF HOSPITAL CARE ASSISTANTS IN END-OF-LIFE CARE FOR OLDER ADULTS WITH TERMINAL CANCER

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Introduction

Hospital care assistants (HCAs) play a frontline role in caring for hospitalized older adults with terminal cancer, yet little is known about their end-of-life (EOL) care knowledge, attitudes, and self-efficacy. This study examined these attributes and their associated factors among HCAs in Taiwan.

Methods

A cross-sectional survey using convenience sampling was conducted among HCAs with experience caring for older adults with terminal cancer in two hospitals in southern Taiwan. The questionnaire consisted of four sections: demographic characteristics, and knowledge, attitudes, and self-efficacy regarding EOL care.

Results

A total of 98 HCAs completed the survey. Among the participants, 91.8% were female, the mean age was 57.1 years, 65.3% had at least a high school education, 84.7% had experience caring for patients with terminal cancer receiving hospice/palliative care, and 61.2% had received EOL care training. HCAs with higher educational levels had significantly greater EOL care knowledge ($p=0.010$). Those with experience caring for patients receiving hospice/palliative care had significantly higher knowledge ($p=0.016$) and self-efficacy ($p=0.038$) than those without such experience. In stepwise multiple regression analyses, attitudes, educational level, and hospice/palliative care experience significantly predicted knowledge, explaining 31.6% of the variance. Knowledge and job satisfaction significantly predicted attitudes, accounting for 29.9% of the variance. Attitudes and hospice/palliative care experience significantly predicted self-efficacy, accounting for 15.0% of the variance.

Conclusions

EOL care competence among HCAs caring for older adults with terminal cancer is shaped by the interrelationships among knowledge, attitudes, and self-efficacy, as well as by educational level, job satisfaction, and hospice/palliative care experience. Targeted education and palliative care training may enhance HCAs' preparedness and improve supportive EOL care for older adults with terminal cancer.

PALLI-028

RESPIRATORY THERAPISTS' ATTITUDES AND BELIEFS REGARDING HIGH FLOW NASAL CANNULA USE AT THE END-OF-LIFE

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University of Texas MD Anderson Cancer Center

Introduction

Respiratory therapists (RTs) are frequently involved in providing high-flow nasal cannula (HFNC) treatment for patients at end-of-life (EOL). However, few studies have examined RTs' attitudes and beliefs about EOL HFNC management, which have important clinical, logistical, and ethical implications for the provision of goal-concordant care.

Methods

We conducted an anonymous survey among RTs at our institution between October and November 2024. This 32-question survey consisted of 4 sections examining RTs' attitudes and beliefs regarding HFNC use at EOL, perceived benefits and harms of HFNC, and self-competence in management. We also collected RT characteristics, such as gender, age, religion, and years of experience.

Results

Table 1. Characteristics of Respiratory Therapists (n=60)

Characteristic		No. (%)
Age (years)	20-29	10 (17)
	30-39	31 (52)
	40-49	17 (28)
	50-59	8 (13)
	60+	2 (3)
	Unknown	2 (3)
Gender	Male	20 (42)
	Female	36 (60)
	Prefer not to answer	3 (5)
	Unknown	2 (3)
Religious Background*	Catholic	31 (52)
	Other	12 (20)
	Protestant	8 (13)
	Buddhist	4 (7)
	Hindu	2 (3)
	Unknown	2 (3)
	Agnostic	1 (2)
	Other	0 (0)
Months of Experience at Current Institution	Median (IQR)	36 (24-60)
	Median (IQR)	42 (12-87)
Working Environments	All units	46 (77)
	All units except Palliative Care Unit	4 (7)
	All units except Intensive Care Unit	1 (2)
	All units except Acute Care Center	1 (2)
	Intensive Care Unit and Regular Floor Only	1 (2)
	Unknown	1 (2)
	Palliative Care Unit and Regular Floor Only	1 (2)
	Regular Floor Only	1 (2)
Patients with advanced disease at EOL seen per month	Median (IQR)	19 (7-26)

Abbreviations: EOL, end of life

*Palliative Care Unit, Intensive Care Unit, Acute Care Center, Regular Floor

Table 2 Respiratory Therapists' Attitudes, Beliefs, and Self-Perceived Competence Regarding High-Flow Nasal Cannula Use at End of Life

Section 1. Beliefs and attitudes about management of high-flow nasal cannula (HFNC) at end of life (n = 87, last few days of life) (N=87)	Agree/Strongly Agree, No. (%) (95% CI)
1. In the last few days of life, the patient's goals for comfort-focused care affects my management of HFNC	35 (58%, 95% CI: 45-71%)
2. In the last few days of life, the patient's goals to be discharged to home from the hospital affects my management of HFNC	25 (47%, 95% CI: 34-60%)
3. In the last few days of life, HFNC should be continued if requested by a patient, even if they are hypoxemic	29 (48%, 95% CI: 35-62%)
4. In the last few days of life, HFNC should be discontinued if requested by a patient, even if they are hypoxemic	48 (79%, 95% CI: 62-93%)
5. For patients without decision-making capacity, HFNC use in the last few days of life should be continued if requested by the medical decision maker	38 (85%, 95% CI: 80-79%)
6. For patients without decision-making capacity, HFNC use in the last few days of life should be discontinued if requested by the medical decision maker	48 (75%, 95% CI: 62-85%)
7. When the goals are for comfort-focused care, I feel distressed about prolonging suffering by continuing HFNC in the last few days of life	29 (48%, 95% CI: 35-62%)
8. When the goals are for comfort-focused care, I feel distressed about concerning dying by continuing HFNC in the last few days of life	50 (58%, 95% CI: 51-67%)
9. When the goals are for comfort-focused care, I feel distressed about HFNC being used unnecessarily in the last few days of life	38 (58%, 95% CI: 45-71%)
10. When the goals are for comfort-focused care, I feel distressed about weaning or discontinuing HFNC in the last few days of life because of my religious beliefs	4 (7%, 95% CI: 0-18%)
11. When the goals are for comfort-focused care, I feel distressed about weaning patient's symptoms (ie, dyspnea) by weaning down or discontinuing HFNC in the last few days of life	31 (52%, 95% CI: 38-68%)
12. When the goals are for comfort-focused care, I feel distressed about shortening the patient's lifespan by weaning down or discontinuing HFNC in the last few days of life	14 (23%, 95% CI: 14-37%)
Section 2. Beliefs and attitudes regarding potential benefits of high-flow nasal cannula at the end of life (n = 87, last few days of life) (N=87)	Agree/Strongly Agree, No. (%) (95% CI)
1. Use of HFNC in the last few days of life relieves shortness of breath in conscious patients	44 (79%, 95% CI: 62-93%)
2. Use of HFNC in the last few days of life relieves shortness of breath in unconscious patients	18 (31%, 95% CI: 19-44%)
3. Use of HFNC in the last few days of life relieves shortness of breath in non-hypoxemic patients	24 (41%, 95% CI: 28-54%)
4. Use of HFNC in the last few days of life relieves shortness of breath in hypoxemic patients	42 (71%, 95% CI: 60-82%)
5. Use of HFNC in the last few days of life reduces patient's anxiety	21 (36%, 95% CI: 24-49%)
6. Use of HFNC in the last few days of life provides a sense of security for patients	30 (51%, 95% CI: 37-64%)
7. Use of HFNC in the last few days of life improves patient's quality of life	12 (20%, 95% CI: 11-32%)
8. Use of HFNC in the last few days of life improves patient's ability to communicate	19 (32%, 95% CI: 19-50%)
9. Use of HFNC in the last few days of life helps patients have more time with family	31 (52%, 95% CI: 40-67%)
10. In the last few days of life, HFNC is preferred by patients over manual respiration (hand) for their comfort	48 (82%, 95% CI: 73-91%)
Section 3. Beliefs and attitudes on potential harms of high-flow nasal cannula at the end of life (n = 87, last few days of life) (N=87)	Agree/Strongly Agree, No. (%) (95% CI)
1. Use of HFNC in the last few days of life prolongs the dying process	38 (82%, 95% CI: 65-74%)
2. Use of HFNC in the last few days of life prolongs patient's suffering	28 (45%, 95% CI: 32-61%)
3. Use of HFNC in the last few days of life increases patient's anxiety	19 (32%, 95% CI: 19-50%)
4. Use of HFNC in the last few days of life is painful to the patient	7 (12%, 95% CI: 5-23%)
5. In the last few days of life, HFNC is unnecessarily used	23 (40%, 95% CI: 27-53%)
Section 4. Self-perceived competence in management of high-flow nasal cannula at the end of life (n = 87, last few days of life) (N=87)	Agree/Strongly Agree, No. (%) (95% CI)
1. I feel confident in my ability to assess if a patient is comfortable on HFNC in the last few days of life	53 (91%, 95% CI: 81-97%)
2. I feel confident in my ability to troubleshoot HFNC apparatus for comfort in the last few days of life	48 (83%, 95% CI: 71-91%)
3. I have adequate training to caring for patients on HFNC in the last few days of life	48 (84%, 95% CI: 73-93%)
4. I have sufficient guidance from the medical team on starting down HFNC for comfort in the last few days of life	44 (78%, 95% CI: 63-90%)
5. I have sufficient knowledge about starting down HFNC for comfort in the last few days of life	48 (83%, 95% CI: 71-91%)

Table 3 Respiratory Therapist Characteristics Associated Agreement with Survey Item 1 (Management of High-Flow Nasal Cannula Being Affected By Goals for Comfort-Focused Care at the End of Life) (N=87)

Characteristic	Agree	Disagree	p-value
Age (mean, No. (%)			0.57
20-29	7 (32)	3 (12)	
30-39	14 (34)	7 (28)	
40-49	8 (28)	4 (12)	
50-59	3 (8)	1 (20)	
60+	2 (2)	3 (8)	
Unknown	1 (8)	0 (0)	
Gender, No. (%)			0.96
Male	17 (44)	13 (52)	
Female	13 (42)	10 (40)	
Prefer not to answer	1 (3)	2 (8)	
Unknown	2 (8)	0 (0)	
Religious background, No. (%)			0.27
Catholic	19 (44)	15 (60)	
Other	8 (27)	6 (24)	
Protestant	7 (20)	3 (12)	
Muslim	3 (8)	1 (4)	
Jewish	1 (3)	1 (4)	
Unknown	2 (8)	0 (0)	
Agnostic	1 (3)	0 (0)	
Natural	2 (5)	0 (0)	
Atheist	1 (3)	0 (0)	
Months of experience at current institution, median (IQR)	36 (17-64)	48 (13-62)	0.41
Location of experience at current institution, median (IQR)	18 (12-32)	40 (16-52)	0.34
Working environment, No. (%)			0.14
All floors	18 (74)	22 (86)	
All floors except Palliative Care Unit	1 (8)	1 (4)	
All floor except Intensive Care Unit	0 (0)	1 (8)	
All floors except Adult Care Center	2 (8)	0 (0)	
Intensive Care Unit Adult	1 (8)	0 (0)	
Regular Floor Only	1 (8)	1 (4)	
Intensive Care Unit Adult and Regular Floor Only	0 (0)	1 (4)	
Regular Floor Only	1 (8)	2 (8)	
Patients with advanced cancer at EOL seen per month, median (IQR)	18 (7, 30)	11 (7, 23)	0.88
Abbreviations: EOL, end of life			
* Palliative Care Unit, Intensive Care Unit, Adult Care Center, Regular Floor			

Response rate was 69% (60 of 87 RTs) (Table 1). Thirty-five (58%, 95% CI: 45-71%) RTs stated that patients' goals for comfort-focused care affected their management of HFNC at EOL (Table 2). Twenty-nine (48%) RTs reported distress about prolonging suffering, and 30 (50%) felt distressed about prolonging dying by continuing HFNC at EOL (Table 2). The majority perceived HFNC as beneficial for relieving dyspnea in patients who are conscious (n=44; 73%) or hypoxemic (n=42; 70%), but fewer perceived benefits for patients who are unconscious (n=18; 30%) or non-hypoxemic (n=24; 40%) (Table 2). Most reported feeling confident in their abilities to manage HFNC for comfort at EOL (Table 2). No significant associations were found between RT characteristics such as age, gender, or religion and answers to the primary question (Table 3).

Conclusions

Almost half of RTs that patients' goals for comfort-focused care at EOL do not affect their HFNC management, and almost half reported distress regarding HFNC use in this setting. Our findings underscore opportunities for more collaboration and support for RTs, who are often closely involved in EOL dyspnea management and the delivery of goal-concordant care in the last days of life.

PALLI-029

INCREASING TRENDS IN AGGRESSIVENESS OF END-OF-LIFE CARE FOR CANCER PATIENTS OVER THE LAST 15 YEARS: EXPERIENCE FROM A HIGH-VOLUME CENTER IN KOREA

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Introduction

Aggressive end-of-life (EOL) care remains a global challenge, impacting patient quality of life and healthcare expenditures. Despite the introduction of South Korea's hospice reimbursement (2015) and the Life-Sustaining Treatment Act (2018), evolving systemic therapies including immune checkpoint inhibitors (ICIs) may influence EOL patterns. This study evaluated real-world EOL care trends at a high-volume tertiary cancer center over 15 years.

Methods

We retrospectively analyzed in-hospital cancer decedents in the Department of Oncology (N=8,047) between 2010 and 2024 at Asan Medical Center. We examined EOL care indicators within 14 and 30 days of death, including systemic anticancer therapy (SACT), multiple emergency room (ER) visits, and intensive care unit (ICU) admissions. Subgroup analyses were conducted by age (<65 vs. ≥65 years) and cancer type (solid vs. hematologic malignancies).

Results

SACT use within the last 30 days of life significantly increased from 35.8% in 2010 to 51.3% in 2024, a trend that remained significant after adjusting for age, sex, and tumor type ($p < 0.001$). The rising adoption of cytotoxic and targeted agents, further accelerated by the 2015 introduction of immune checkpoint inhibitors, drove this increase. SACT within 30 days of death increased across all age groups; while younger patients saw a rise from 36.1% to 58.6%, older patients similarly increased from 35.4% to 46.3%. Multiple ER visits within 30 days of death also increased over time (22% in 2010 to 32.9% in 2024), whereas ICU admission rates exhibited a fluctuating pattern without a clear linear trend.

Conclusions

EOL care aggressiveness has intensified over the past 15 years, characterized by increased SACT and ER utilization near death. These findings suggest that current EOL policies have yet to curb the trend toward aggressive treatment in tertiary referral settings.

PALLI-031

ONCOLOGY NURSES' NEEDS FOR DIGITALLY SUPPORTED EARLY PALLIATIVE CARE: A QUALITATIVE DESCRIPTIVE STUDY

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Introduction

Early palliative care for patients with cancer improves symptom control, quality of life, and care coordination. Although digital health technologies show potential to enhance accessibility and continuity of care, their application in early palliative care remains limited. This study aimed to explore the needs of oncology nurses regarding digitally supported early palliative care.

Methods

This qualitative descriptive study was conducted using individual semi-structured interviews. Eight oncology nurses with at least one year of clinical experience were recruited from a tertiary hospital between September and December 2025. Interview questions focused on patients' needs in early palliative care, including symptom management, decision-making, advance care planning, and the application of digital health technologies. Interviews lasted an average of 74.1

minutes (range: 65–85 minutes) and continued until data saturation was reached. Data were analyzed using inductive content analysis, following the approach of Elo and Kyngäs (2008).

Results

Participants had a mean age of 35 years and an average of 12.6 years of clinical experience (range: 3–24 years). Four categories and 14 subcategories were identified. The categories were: (1) prioritization of early palliative care integration over crisis-driven approaches, (2) perceived needs for personalized and continuous symptom management in daily life, (3) addressing gaps in psychosocial symptom management beyond the hospital setting, and (4) demand for real-time, personalized digital interventions to promote shared engagement and continuity of early palliative care.

Conclusions

This study reveals structural and practical gaps in the initiation and continuity of early palliative care for patients with cancer. Nurses described care needs shaped by symptom trajectories, decision-making readiness, and caregiver burden. These findings suggest that future early palliative care interventions should be designed to support adaptive care processes, with digital technologies enabling personalized and timely support across the care continuum.

PALLI-032

IMPROVING QUALITY OF END-OF-LIFE CARE THROUGH THE K-HOPE CONSULTATIVE PALLIATIVE CARE MODEL: A PROSPECTIVE STUDY IN A TERTIARY HOSPITAL

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Introduction

Consultative Palliative Care Service (CPC) has been proposed as a suitable model for patients of end-of-life (EOL) in acute care settings. However, evidence regarding its impact on EOL care outcomes remains limited. To address this gap, we implemented the K-HOPE model (Korean Holistic Optimized Palliative care for End-of-life), a structured CPC system embedded into tertiary hospital workflows. The K-HOPE model prioritizes unmet needs based on the Integrated Palliative Care Outcome Scale and provides individualized comfort care to dying patients by applying a standardized protocol. This study evaluated the clinical effectiveness of the K-HOPE model on the quality of EOL in acute care hospital.

Methods

A prospective observational study was conducted using the K-HOPE model among 84 terminal cancer patients who received CPC from January 2023 to December 2024. The patients' unmet needs were periodically reassessed at baseline, and on days 3 and 7 after enrollment and provide CPC according to the needs. The Good Death Scale was also used to assess the quality of comfort care for 22 patients who died at the enrollment hospital.

Results

The mean age of the participants was 72.3 years, and 57.1% were male. The most common primary cancer was liver cancer (25.0%). The mean duration of CPC was 6.41 days. Constipation improved from 2.4 ± 1.5 to 1.2 ± 0.9 ($p = 0.038$). Notably, communication scores improved significantly from 4.1 ± 1.6 to 1.5 ± 1.2 ($p = 0.007$). Among patients who died in the hospital, 59.1% ($n = 13$) had a GDS score ≥ 12 , indicating good quality of death. The duration of CPC was significantly longer in the good death group (7.4 ± 6.2 days) than in the poor death group (1.7 ± 1.2 days).

Conclusions

The K-HOPE model effectively reduced symptom burden, improved communication, and enhanced the quality of EOL care for terminal cancer patients.

PALLI-033**IMPLEMENTATION OF INTEGRATED PALLIATIVE CARE OUTCOME SCALE INTO OUTPATIENT PALLIATIVE CARE CLINIC**Andrew Lin¹, Kimberley Gan¹, **Jessica Lee²**¹Concord Hospital, ²Concord Hospital, Palliative Care Specialist**Introduction**

The outpatient setting of palliative care is vitally important for assessing and tracking the symptoms and wellbeing of patients with complex medical, oncological issues, with a high symptom burden and concurrent psychosocial stressors. The integrated palliative care outcome scale (iPOS) is a global scale, adapted into multiple languages, to quantify physical and psychosocial symptoms in a condensed 2 page questionnaire.

Methods

We undertook a quality improvement project to implement iPOS screening in two palliative care outpatient clinics. We collected iPOS forms and entered monthly into a REDCap database to audit completion and prevalence of physical and psychosocial symptoms. The first PDSA cycle is reported.

Results

For iPOS data out of all clinic visits within this time frame was 18.9% (149/786). 91% (135/149) of participants were moderately affected by their symptoms (score of 2 or more) over the past 3 days. The most common reported symptom was weakness (73.15%, 109/149), followed by pain (56.37%, 84/149), poor mobility (47.65%, 71/149), and drowsiness (46.3%, 69/149).

For completion rates, the physical symptoms were completed at a 97.9% completion rate. However, the psychosocial symptoms had had less completion, specifically around questions about practical problems being met (79.19% complete), questions about feeling at peace (79.87% complete) and their ability to share with family or friends (80.54% complete).

Conclusions

This first PDSA cycle identified low completion of iPOS. High symptom burden on screening suggests that implementation of screening is important for patient care.

We received feedback from palliative care clinicians and reception staff about the benefits of this form for collecting longitudinal data. Challenges included patient fatigue, misinterpreting the date field and administrative support to provide the forms. The next cycle will include revision of the form and education to the healthcare providers and administration staff implementing this in clinics.

PALLI-035**A SYSTEMATIC REVIEW OF ACUPUNCTURE IN ONCOLOGY PALLIATIVE CARE: CLINICAL EVIDENCE AND CHALLENGES FOR DIGITAL HEALTH INTEGRATION**Wei Hsiang Lin¹, **Yvonne Hsiung²**¹Mackay Medical University, Department of Nursing; RenYu Traditional Chinese Medicine Clinic, ²Mackay Medical University, Department of Nursing / Office of International Affairs, New Taipei City**Introduction**

While acupuncture has demonstrated benefits for physical symptoms, it remains inconsistently integrated within oncology palliative care pathways. The role of digital health technologies in supporting its delivery, coordination, and scalability has not been systematically examined. This review aimed to synthesize clinical evidence on acupuncture in oncology palliative care and to identify gaps and challenges related to the incorporation of digital health.

Methods

A PRISMA-guided systematic review was conducted across PubMed, CINAHL, MEDLINE, and Airtiti Library covering publications from January 2000 to August 2025. Eligible studies included adults with advanced or metastatic cancer receiving palliative or supportive care and evaluating acupuncture interventions, with or without explicit digital health components. Quantitative, qualitative, mixed-methods studies, and case reports were included to capture clinical outcomes as well as contextual and implementation-related insights.

Results

Of 3,039 records identified, 23 studies met inclusion criteria. The majority focused on acupuncture as a standalone supportive intervention, with only a very small number explicitly incorporating digital health technologies. Acupuncture was consistently associated with improvements in cancer-related pain, fatigue, and nausea, with generally favorable patient acceptability. Psychological, sleep-related, and emotional outcomes were infrequently assessed and outcome measures varied substantially. Digital health applications were conceptual or exploratory, with minimal evaluation of clinical workflow integration or implementation feasibility. Common methodological limitations included small sample sizes, heterogeneous acupuncture protocols and high attrition in advanced disease populations.

Conclusions

Existing evidence supports acupuncture as a beneficial supportive intervention for symptom management in oncology palliative care. However, current research provides limited guidance on how acupuncture can be systematically integrated into digitally enabled palliative care models. Meta-analysis was not feasible due to methodological heterogeneity and variability in interventions and outcomes. Future research should prioritize implementation-oriented designs, including standardized acupuncture protocols, hybrid delivery models supported by digital symptom monitoring, workflow integration assessment, and economic analyses to inform scalability and policy development.

PALLI-037**VIBRATION-ASSISTED ANALGESIA FOR SEVERE SUBCUTANEOUS INJECTION-RELATED PAIN IN AN ADULT WITH METASTATIC PANCREATIC CANCER**Yanni Loh¹, Ivy Gough², Rebekah Ciampa³, **Jessica Lee³**¹Chris O'Brien Lifecare, Department of Palliative Care, Sydney, Australia, ²Concord Repatriation General Hospital, ³**Introduction**

Severe pain with subcutaneous (SC) breakthrough bolus injections can prevent delivery of essential symptom-relieving medications. Vibration-assisted analgesia (VAA) reduces procedural pain in other settings but is rarely reported for SC bolus administration in adult palliative care. We report a case in which vibration enabled ongoing SC breakthrough bolus injections on an acute oncology ward.

Methods

A 29-year-old woman with metastatic pancreatic adenocarcinoma and widespread bone metastases reported severe injection pain with prior SC breakthrough analgesia bolus and subsequently refused further SC injections, relying on oral rescue analgesia with suboptimal control. A handheld vibration device was applied to intact skin 2 cm proximal to the SC cannula insertion site, activated 5 seconds before and maintained throughout medication administration. The device was wiped with hospital-grade disinfectant between uses. Outcomes were anticipatory anxiety immediately prior to injection and injection pain measured on 0-10 Numerical Rating Scales, observed distress behaviours, and brief patient and nurse experience measures.

Results

The patient recalled anticipatory anxiety 9 out of 10 and injection pain 10 out of 10 with a prior SC bolus without vibration. Across six subsequent vibration-assisted SC bolus injections, post-injection pain had a mean NRS of 2.8 (median 3, range 0–5) and anticipatory anxiety had a mean of 2.3 (median 2, range 0–5). Distress behaviours were no longer observed. Nursing staff rated the intervention easy to use with minimal workflow disruption and noted it was immediately deployable compared with approaches requiring lead time such as topical anaesthetic. No adverse events occurred.

Conclusions

VAA was acceptable in this case and was associated with reduced injection pain, anticipatory anxiety and distress, enabling ongoing SC breakthrough bolus dosing and improving the injection experience. However, as an uncontrolled single-case report, these findings cannot establish efficacy. Given low cost, immediacy and minimal workflow disruption, prospective evaluation is warranted in palliative care populations.

PALLI-039

RISK FOR READMISSION TO AN INPATIENT PALLIATIVE CARE SERVICE

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Introduction

Palliative Care has rapidly become recognized as a vital contributor to the care of patients with serious illness. It emphasizes care for the whole person, intending to control symptoms and align care with the patient's own goals.

Typically, palliative care in inpatient settings provides recommendations for interventions, including symptom management and documenting goals-of-care conversations, and tends to be highly medically complex, with high rates of early post-discharge events such as readmissions, visits to emergency departments, or death.

Less common and well-studied is palliative care as a primary service, like Mayo Clinic's Inpatient Palliative Care Service (IPCS). There's an intense focus on palliative care and appropriate discharge planning, aligning with the patient's goals, in a medically complex patient population. Our study aims to elucidate reasons for patient's readmission within 30 days of discharge from an Inpatient Palliative Service.

Methods

A retrospective chart review was conducted on all patients discharged from the IPCS at our institution over 12 months. From an initial 676 patients, the study population was narrowed to 264 who were readmitted within 30 days. Data on demographics, diagnoses, length of stay, advance care planning documentation, comorbidities, and other information were extracted from the charts by the authors.

Results

For the 264 patients, a total of 63 were readmitted once, but 3 were planned readmissions. Therefore, only 60 (23%) were unplanned readmissions. Almost all readmissions were for patients with a cancer diagnosis, and for patients discharged home without hospice support.

Conclusions

Our initial findings showed patients discharged from an inpatient palliative care service are most likely to be readmitted if they have a cancer diagnosis and if they are dismissed without hospice. More research is necessary to elucidate how to monitor patients at high risk for readmission after discharge.

PALLI-040

CARING IN THE FINAL CHAPTER: ARE NEW GRADUATE NURSES READY?

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Introduction

New graduate nurses often encounter death early in their careers and many feel unprepared to provide compassionate end-of-life care. Palliative care education remains an underdeveloped component of nursing training in university programs and clinical placements. Evidence shows that structured and interactive palliative care education improves knowledge, attitudes, self-confidence, and preparedness among undergraduate nursing students.

Methods

A descriptive cross-sectional survey was conducted in new graduate nurses in a large metropolitan health district in Sydney, Australia, regarding their exposure and education in palliative and end-of-life care, as well as their confidence in identifying and caring for dying patients.

Results

Seventy-four respondents with less than 2 years of nursing experience completed the survey. Only 16% felt there was sufficient education on caring for dying patients during university. Almost three-quarters of participants had looked after dying patients during their placements, but only 20% were confident in managing these patients. Over one-fifth of surveyed new graduate nurses did not feel comfortable administering medications to relieve symptoms based on their own assessment. Thirty percent of participants associated palliative care medications with euthanasia or voluntary assisted dying.

Conclusions

This study has identified key gaps in early-career clinicians' clinical knowledge and confidence in palliative care, particularly regarding symptom management, misconceptions around medications, and medication administration. New graduate nurses have identified insufficient palliative care exposure and education in universities as potentially contributing factors.

Findings from this research are being used to formulate and implement targeted palliative care education sessions and the development of a structured education workbook for new graduate nurses, while informing advocacy for enhanced palliative care education in university programs.

PALLI-041

TRENDS IN DO NOT RESUSCITATE ORDERS, MORTALITY, AND DISPARITIES BY CANCER: 2017-2022 ARTIFICIAL INTELLIGENCE ANALYSIS OF 19 MILLION HOSPITALIZATIONS

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Introduction

Do not resuscitate (DNR) orders are meant to promote patient autonomy and advanced care planning, yet they have shown to be associated with worse inpatient outcomes and lower adherence to the standard of care. Little is known about these trends in cardio-oncology.

Methods

Quantum Bayesian Machine learning-augmented Propensity Score translational (QBAM-PS) statistics was performed on the National Inpatient Sample (NIS) as the United States' largest all-payer inpatient dataset.

Results

Of the 235,522,075 adult hospitalizations from 2017-2022, 19,206,825 (8.16%) had a DNR order compared to 2,777,399 (16.47%) of patients

with active cancer. DNR orders rose in the adult population from 2017 (6.90%) to 2022 (9.44%). The prevalence was over double in active cancer and rose faster: 14.68% (2017) to 18.35% (2022). In active cancer, the greatest differences of having versus not having DNR orders included STEMI (8.51% versus 2.69%), acute heart failure (8.15% versus 4.79%), and cardiogenic shock (7.97% versus 4.78%) (all $p < 0.001$). In QBAM-PS multivariable regression controlling for clinical confounders, active cancer significantly increased the odds of DNR orders (OR 1.24, 95%CI 1.22–1.25, $p < 0.001$). In active cancer, DNR orders significantly increased mortality odds (OR 6.08, 95%CI 5.89–6.27, $p < 0.001$). Within active cancer with DNR orders, mortality was significantly increased for African Americans (OR 1.24, 95%CI 1.17–1.32) and Hispanics (OR 1.21, 95%CI 1.12–1.31) compared to Caucasians, VA versus private insurance (OR 1.69, 95%CI 1.52–1.88), and micro versus urban metros of at least 1 million residents (OR 1.17, 95%CI 1.07–1.29) (all $p < 0.001$). In cancer, DNR significantly reduced total hospitalization costs by nearly \$10,000 per admission ($p < 0.001$).

Conclusions

This nationally representative AI analysis suggests that despite comparable clinical risks, cancer patients are more likely to be placed as DNR, face rising DNR rates, die at significantly higher rates, and face significant racial, insurance, and rural disparities in mortality.

PALLI-043

MASSAGE THERAPY IN AUSTRALIAN SPECIALIST PALLIATIVE CARE: A NATIONAL SURVEY OF SERVICE PROVISION

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Introduction

Massage therapy is increasingly recognised as a supportive intervention in advanced cancer and palliative care to enhance physical and emotional wellbeing and is recommended by organisations such as the American Society of Clinical Oncology and the National Center for Palliative Care (US). However, limited information exists regarding how massage services are implemented, organised, and sustained within specialist palliative care settings in Australia.

Methods

This study aimed to map and characterise, for the first time to our knowledge, the availability, organisation, and delivery of massage services across Australian specialist palliative care organisations. A nationally distributed online survey of 134 specialist palliative care organisations was conducted in late 2025.

Results

Forty-five responses were received (response rate 33.3%), with Victoria the most strongly represented state. Fifteen respondents reported providing massage services, while 30 reported no such services. Reasons for including massage included alignment with the holistic philosophy of palliative care; perceived benefits for patients' symptoms and quality of life; and availability of professionally trained therapists. Most services were located within public hospital settings and provided free of charge to patients. Considerable heterogeneity was observed in provider background, conceptualisation of massage therapy, service delivery models, and outcome measurement approaches. Funding constraints were identified as a significant barrier to service provision.

Conclusions

Massage services were reported in a minority of specialist palliative care organisations and were delivered through varied models. These findings highlight the need for clearer definitions, sustainable funding mechanisms, and structured practice frameworks to support consistent integration and evaluation of massage therapy within specialist palliative care.

PALLI-044

SAFETY AND FEASIBILITY OF PSILOCYBIN-ASSISTED PSYCHOTHERAPY FOR ADDRESSING EXISTENTIAL DISTRESS IN PATIENTS WITH ADVANCED SOLID CANCER

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Introduction

Approximately 40–50% of patients with cancer experience clinically significant psychological distress, which can impair engagement with medical care and reduce quality of life. Psychosocial and pharmacological interventions have small to moderate effects in alleviating distress, particularly for patients experiencing existential suffering related to meaning, identity, and mortality. Few randomized controlled trials in the United States and Switzerland have demonstrated the safety and efficacy of serotonergic psychedelic-assisted psychotherapy, including psilocybin, for existential distress in life-threatening illness. However, these studies have relied on highly standardized protocols, potentially limiting their applicability to routine clinical practice.

Methods

The primary objective is to evaluate the safety and feasibility of psilocybin-assisted psychotherapy for patients with advanced solid cancer in a Belgian setting. The secondary objective is to assess the feasibility and clinical implications of a flexible trial design allowing individualized dosing and a variable number of psilocybin sessions, to better reflect real-world practice.

This open-label safety and feasibility trial will enroll 20 patients with advanced solid cancer. Participants will complete preparatory psychotherapy, followed by one to three individualized psilocybin dosing sessions, with doses adjusted based on clinical response. Psychotherapy sessions for integration and preparation will be provided between dosing sessions and following the final dose, with optional monthly sessions for up to six months of follow-up.



Results

Conclusions

This interventional phase II study will be the first to evaluate the safety and feasibility of multiple psilocybin sessions in a population with limited therapeutic options and associated psychological distress. Novel evidence on psilocybin-assisted psychotherapy will be provided to guide future research and guideline development in medical oncology care.

PALLI-045

IDENTIFICATION OF FACTORS RELATED TO SURVIVAL USING ADMISSION DATA IN A PALLIATIVE CARE UNIT: A RETROSPECTIVE COHORT STUDY OF 273 CANCER PATIENTS

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Introduction

Accurate prognostic prediction for patients admitted to palliative care units (PCUs) is crucial for determining appropriate care plans. However, feasible diagnostic tests are often limited depending on the patient's condition. This study aimed to explore factors associated with survival based on Body Mass Index (BMI) and blood test results obtained upon admission.

Methods

We conducted a retrospective cohort study involving 311 cancer patients who died in our PCU between January 2024 and December 2025. Patients who did not undergo blood sampling within 10 days before or after admission were excluded, resulting in a final analysis of 273 patients (174 males, 99 females). The primary outcome was survival time from PCU admission to death. Survival analysis was performed using Cox proportional hazards regression models to identify factors independently associated with survival time. Missing data were handled using multiple imputation.

Results

Cox regression analysis identified BMI, WBC, Hb, Alb, PLT, CRP, and PT-INR as factors independently associated with survival. The hazard ratios (HR) and 95% confidence intervals (CI) were: BMI (HR: 0.95, 95% CI: 0.92–0.99), WBC (HR: 1.01, 95% CI: 1.00–1.02), Hb (HR: 1.21, 95% CI: 1.12–1.30), Alb (HR: 0.59, 95% CI: 0.41–0.87), PLT (HR: 0.98, 95% CI: 0.97–0.99), CRP (HR: 1.02, 95% CI: 1.00–1.04), and PT-INR (HR: 2.20, 95% CI: 1.48–3.28).

Conclusions

This study demonstrated that BMI, WBC, Hb, Alb, PLT, CRP, and PT-INR were associated with survival among patients who died in the palliative care unit. These routine admission data can serve as useful, non-invasive indicators for estimating prognosis and optimizing care plans without burdening patients.

PALLI-046

WHAT MAKES FOR A GOOD OR POOR SERIOUS ILLNESS CONVERSATION EXPERIENCE? FACTORS INFLUENCING PATIENT EXPERIENCE OF SERIOUS ILLNESS CONVERSATIONS

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Introduction

Serious illness conversations (SICs) are central to aligning treatment with patient values, yet little is known about how patients and caregivers experience these conversations in real-world practice. Prior studies have largely evaluated the Serious Illness Conversation Guide (SICG) itself, presenting barriers and facilitators as discrete factors without explaining how they interact to shape patient experiences. This study addresses this gap by examining patient experiences of SIC and developing a conceptual framework of SIC acceptability that encompasses both clinician and patient factors.

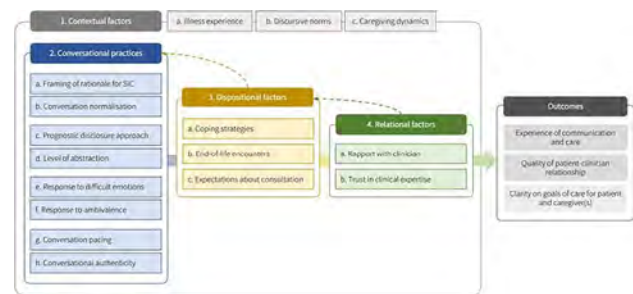
Methods

This mixed-methods study was embedded within a pilot implementation of the Serious Illness Care Programme in outpatient oncology and palliative medicine clinics at National Cancer Centre Singapore. 27 cancer patients were recruited, of whom 20 completed a Patient Experience Survey (PES) and were interviewed about their SIC experience. Quantitative data from the PES were analysed descriptively and compared with coder-assigned ratings of SIC experience using

Kruskal–Wallis tests. Qualitative data were thematically analysed, triangulating interviews with observation fieldnotes.

Results

Most participants rated their SICs as “mostly” or “extremely” worthwhile, reporting benefits such as reflection on values and strengthened relationships with clinicians. However, interviews revealed variations in experience: some found SICs meaningful and comforting, while others reported distress, confusion, or ambivalence. Positive experiences were associated with feeling heard and understood, whereas poor experiences stemmed from unmet readiness, strained rapport, or rushed delivery. Our conceptual framework (Figure 1) revealed SIC acceptability to be a dynamic interplay of conversational, dispositional, relational, and contextual factors.



Conclusions

This study advances understanding of SIC acceptability by integrating diverse influences into a cohesive framework. The findings highlight that acceptability is not static but continually shaped by patient readiness, clinician approach, and context. The framework offers a shared language for evaluating SIC experiences and a basis for designing interventions that enhance patient-centred communication.

PALLI-047

PATIENT READINESS FOR SERIOUS ILLNESS CONVERSATIONS IN ONCOLOGY: IDENTIFYING PSYCHO-EMOTIONAL BARRIERS THROUGH A PHENOMENOLOGICAL LENS

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Introduction

Serious Illness Conversations (SICs) are designed to help patients with life-limiting conditions articulate their values and care preferences. While patient readiness has been identified as critical for meaningful engagement, little is known about the psycho-emotional and cognitive barriers that hinder readiness in real-world clinical contexts. This study aimed to clarify what constitutes meaningful engagement in SIC and to examine the factors that impede patients' readiness to participate.

Methods

This qualitative study is a secondary analysis of data from a pilot implementation of the Serious Illness Care Programme in outpatient oncology and palliative medicine clinics in Singapore. 18 patients with advanced cancer (stage III/IV) who had participated in at least one SIC with their clinicians were interviewed. Interviews were guided by interpretative phenomenological analysis (IPA) and supplemented with observational fieldnotes. Analysis focused on how patients made sense of their SIC encounter and their capacity to articulate goals and values.

Results

Meaningful engagement in SIC comprised three actions: recollection (drawing on past experiences), construction (making sense of self

in the present), and projection (envisioning the future). While most participants ($n=10$) were able to engage meaningfully, eight patients struggled. From their narratives, we identified four response patterns that impeded readiness: disorientation (emotional confusion hindering sense-making), dislocation (fixation on past suffering), deficit fixation (pervasive hopelessness about the future), and disengagement (avoidance of future-oriented reflection). These patterns were linked to maladaptive coping strategies such as denial, avoidance, and rumination, though such strategies were not uniformly detrimental across all participants.

Conclusions

Patient unreadiness for SIC is best understood as a dynamic interplay of emotional states, beliefs, and coping strategies that obstruct narrative coherence across past, present, and future. These findings challenge static notions of readiness. Interventions that evaluate patient's readiness and enhance coping strategies may improve SIC engagement.

PALL-048

PRESCRIPTION MONITORING PROGRAM REVIEW AND PREDICTORS OF ABERRANCY IN PATIENTS WITH CANCER RECEIVING OPIOIDS

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Introduction

Prescription monitoring programs (PMPs) are widely implemented to support safe opioid prescribing, yet evidence describing their use and interpretation in patients with cancer is limited. We examined PMP utilization and predictors of aberrant PMP findings among patients with cancer receiving opioids in a safety-net palliative medicine clinic.

Methods

We performed a retrospective analysis of consecutive adult patients with cancer who received opioid prescriptions and were seen in a safety-net palliative care clinic between September 2015 and December 2019. Demographic, clinical, and psychosocial characteristics were abstracted from the electronic health record. PMP completion at consultation and during follow-up was recorded. PMP aberrancy was defined by clinician documentation. Univariable and multivariable logistic regression analyses were used to identify factors associated with PMP aberrancy.

Results

Among 906 patients, 809 (89%) had documented PMP review at the initial consultation, and 844 (93%) had PMP review at any time during follow-up. PMP review at consultation differed by race and ethnicity,

with Black non-Hispanic patients more likely and White non-Hispanic patients less likely to undergo PMP review ($p=0.025$). Other demographic, cancer-related, and symptom characteristics did not differ by PMP review status. Overall, 31 of 844 patients (4%) demonstrated aberrant PMP findings. In multivariable analysis, aberrant PMP findings were independently associated with history of illicit drug use (OR 6.30, 95% CI 2.35–17.06), family history of illicit drug use (OR 5.42, 95% CI 0.96–25.04), opioid use for non-malignant pain (OR 19.49, 95% CI 6.24–60.90), and higher morphine equivalent daily dose (OR 1.06 per 10 mg increase, 95% CI 1.01–1.10).

Table 1. Patient Demographics by Completion of PMP Review at Consultation.

Demographic Characteristics	Total $n = 906$ (%) [*]	PMP Review at Consultation		P-value
		No $n = 97$ (11%)	Yes $n = 809$ (89%)	
Age (in years), Median (range)	56 (18–93)	57 (30–93)	56 (18–89)	0.11
Sex, n				
Male	433 (48)	45 (46)	388 (48)	0.83
Female	473 (52)	52 (54)	421 (52)	
Race and Ethnicity				
White, Non-Hispanic	204 (23)	32 (33)	172 (21)	0.025
Black, Non-Hispanic	239 (26)	16 (16)	223 (28)	
Hispanic, any race	420 (46)	45 (46)	375 (46)	
Other race, Non-Hispanic	23 (3)	2 (2)	21 (3)	
Marital Status				
Married	301 (33)	39 (40)	262 (32)	0.14
Single**	605 (67)	58 (60)	547 (68)	
Cancer type				
Gastrointestinal	312 (35)	26 (27)	286 (35)	0.05
Respiratory	105 (12)	19 (20)	89 (11)	
Gynecological	105 (12)	12 (12)	93 (12)	
Genitourinary	94 (10)	15 (16)	79 (10)	
Breast	90 (10)	7 (7)	83 (10)	
Head and neck	54 (6)	10 (10)	44 (6)	
Hematological / Other	113 (12)	6 (6)	105 (13)	
Cancer stage: metastatic				
Not metastatic	297 (33)	33 (34)	264 (33)	0.57
Metastatic	609 (67)	64 (66)	545 (67)	
NMOU Risk Factors				
History of illicit drug***	160 (18)	19 (20)	141 (17)	0.57
History of marijuana use	197 (22)	19 (20)	178 (22)	0.70
History of tobacco use	456 (50)	59 (61)	397 (49)	0.02
History of excessive alcohol use	173 (19)	20 (21)	153 (19)	0.66
Psychiatric depression on meds	158 (18)	15 (16)	143 (18)	0.67
Family history of illicit drug use	17 (2)	1 (1)	16 (2)	>0.99
Personal history of criminal activity	54 (6)	12 (13)	42 (5)	0.26
Contact with persons involved in criminal activity	35 (4)	8 (8)	27 (3)	0.35
Inconsistent pain presentation	15 (2)	2 (2)	13 (2)	0.67
Use for non-malignant pain	36 (4)	4 (4)	32 (4)	0.79
ESAS at consult only, median				
Pain	6	5	6	0.21
Tiredness	6	6	6	0.50
Nausea	0	0.5	0	0.69
Depression	0	0	1	0.71
Anxiety	1	1	1	0.56
Drowsiness	1	0	2	0.93
Appetite	4	4	4	0.56
Well-being	4	3	4	0.90
Shortness of breath	1	1	1	0.56
Family distress	0	0	0	0.39
Spiritual distress	0	0	0	0.65
Constipation	1	0.5	1	0.54
Sleep	5	5	5	0.43

* Unless otherwise specified

** Single category includes unmarried, divorced, separated, and widowed

*** Excluding marijuana

Abbreviations: Prescription Monitoring Program, PMP; NMOU, non-medical opioid use; ESAS, Edmonton

Symptom Assessment System

P=0.20 were included in the AIC multivariable

Table 2. Predictors of PMP aberrancy

Demographic Characteristics	Univariate analysis		Multivariable analysis	
	Unadjusted Odds Ratio (95% Confidence Interval)	P-value	Adjusted Odds Ratio (95% Confidence Interval)	P-value
Age (per year increment)	0.95 (0.94-1.01)	0.13	0.96 (0.92-1.00)	0.05
Sex				
Male	Ref			
Female	0.74 (0.56-1.53)	0.42	-	-
Race and Ethnicity				
White, Non-Hispanic	Ref			
Hispanic, any race	0.52 (0.17-0.89)	0.02	0.53 (0.17-1.66)	0.28
Other race, Non-Hispanic	0.97 (0.42-1.29)	0.94	0.95 (0.3-2.66)	0.92
Marital Status				
Married	Ref			
Single**	2.56 (1.05-7.62)	0.06	2.73 (1.03-9.49)	0.07
Cancer type				
Respiratory	1.55 (0.47-4.50)	0.43	-	-
Gynecological	1.20 (0.32-3.65)	0.77	-	-
Genitourinary	1.79 (0.54-6.20)	0.30	-	-
Breast	0.65 (0.10-2.42)	0.61	-	-
Prostate and none	1.54 (0.41-4.72)	0.48	-	-
Cancer stage				
Nonmetastatic	Ref			
Metastatic	0.76 (0.37-1.63)	0.48	-	-
Risk factors of NMOU				
History of illicit drug use*	6.17 (2.96-12.97)	<0.001	6.50 (2.39-17.06)	<0.001
History of Marijuana use	4.01 (1.95-8.34)	<0.001	-	-
History of Tobacco use	2.63 (1.19-6.54)	0.02	-	-
History of Alcohol use	2.08 (0.92-4.35)	0.07	0.44 (0.13-1.29)	0.15
History of Depression	1.34 (0.52-3.00)	0.51	-	-
Family history of illicit drug use	6.62 (1.15-21.90)	<0.001	5.42 (0.95-29.04)	0.04
Personal history of criminal activity	3.10 (1.20-7.10)	0.01	-	-
Contact with persons involved in criminal activity	3.60 (1.40-9.44)	0.01	-	-
Inconsistent pain presentation	11.94 (3.11-35.14)	<0.001	-	-
Use for non-malignant pain	10.91 (4.23-26.17)	<0.001	19.49 (6.24-60.90)	<0.001
MEDD (10 mg increment)	1.04 (0.99-1.08)	0.05	1.06 (1.01-1.10)	0.01
ESAS Pain at consult	1.13 (0.98-1.29)	0.08	1.52 (0.59-4.44)	0.40

*Excluding marijuana
**Single category includes unmarried, divorced, separated, and widowed
Abbreviations: Prescription Monitoring Program, PMP; NMOU, nonmedical opioid use; ESAS, Edmonton Symptom Assessment System

Conclusions

Aberrant PMP findings were uncommon among patients with cancer receiving opioids and were strongly associated with established NMOU risk factors and higher opioid dosing. These results suggest that PMP findings in cancer populations reflect high-risk features and should be interpreted within a clinical context when guiding opioid stewardship in palliative care.

PALLI-049
END-OF-LIFE SYSTEMIC THERAPY FOLLOWING FIRST-LINE IMMUNE CHECKPOINT INHIBITOR-BASED THERAPY IN ADVANCED NON-SMALL CELL LUNG CANCER

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Introduction

Immune-checkpoint inhibitor (ICI)-based regimens have improved survival outcomes in patients with advanced non-small cell lung cancer (NSCLC). Although end-of-life (EOL) systemic therapy use is considered suboptimal care and is not recommended, the impact of ICI-based therapy on the patterns of EOL systemic therapy remains unclear. We aimed to investigate EOL systemic therapy patterns and their association with the efficacy of first-line ICI-based therapy.

Methods

We retrospectively reviewed patients with advanced NSCLC without actionable driver alterations who received first-line ICI-based regimens at our hospital between April 2019 and March 2024. Patients with confirmed death events were included in the analysis. We evaluated baseline characteristics, details of treatment, and systemic therapy use within 90 days of death. We also assessed the association between progression-free survival (PFS) of first-line therapy and the treatment-free interval until death (TFI).

Results

Sixty-two patients were included (median age 70.5 years; 76% male; ECOG PS 0-1 in 87%). The median PFS of first-line therapy was 5.1 months, and the median number of treatment regimens was two. Forty patients (65%) received systemic therapy within 90 days of death, with a median TFI of 57 days. PFS was positively correlated with TFI (Spearman's $\rho = 0.32$, $p = 0.011$). Patients with shorter PFS (<5.1 months) had a shorter TFI compared to those with longer PFS (≥ 5.1 months) (median 39 vs 100 days, $p = 0.003$), and the majority of patients discontinued treatment due to deterioration of PS in both groups (75 vs 90%, $p = 0.19$).

Conclusions

Approximately two-thirds of the patients with advanced NSCLC continued systemic therapy close to death, and a shorter PFS of first-line ICI-based therapy was associated with a limited TFI. Further studies are warranted to determine the optimal timing of discontinuing systemic therapy other than PS deterioration, particularly in patients with early resistance to first-line ICI-based therapy.

PALLI-050
HOW USEFUL IS A PRESCRIPTION MONITORING PROGRAM IN PATIENTS WITH CANCER ON OPIOIDS? DATA FROM A SAFETY-NET PALLIATIVE MEDICINE CLINIC

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Introduction

Prescription monitoring programs (PMPs) are commonly used in the US to monitor non-medical opioid use (NMOU); however, it remains unclear how useful PMPs are in identifying patients with NMOU behaviors, particularly in oncology patients. The objective of this study is to examine the type of PMP aberrancy identified and the ability of PMP to identify NMOU behaviors compared to clinical review and UDT (Urine Drug Test) screening.

Methods

This was a retrospective analysis of consecutive cancer patients seen in a palliative clinic, receiving opioids at a safety-net hospital over 4 years. Demographic, clinical, and psychosocial risk factors for NMOU were extracted from the health record. PMP aberrancy was based on prescriber documentation. PMP aberrancy was compared against aberrant NMOU behaviors from clinical review (history of illicit drug use, family history of illicit drug use, opioid use for non-malignant pain) and UDT.

Results

Among 906 patients, 844 (93%) had PMP review at either consultation or follow-up visit (median age 56, female 473 (52%). Of these, 31/844 (4%) demonstrated PMP aberrancy, including multiple prescribers ($n = 39$, 83%), early refills ($n = 7$, 15%) and not filling prescriptions ($n = 1$, 2%). Among 813 patients with documentation of all three: review of clinical history for NMOU behaviors, UDT and PMP review, 166 (20%) were identified as having NMOU behaviors based on clinical review; in contrast, PMP review identified only 31 (4%) patients with NMOU behaviors, and 2 (6%) were missed by clinical review.

Conclusions

PMP aberrancy rate was low in cancer patients. Clinical review identified most patients with NMOU behaviors with limited contribution from PMP review. Reliance on PMP alone likely underestimates the prevalence of opioid misuse. Further research is needed to determine how to best integrate PMP with other risk-mitigation measures

to improve detection of NMOU without compromising access to pain management in cancer care.

PALLI-052 IMPLEMENTATION STRATEGIES TO DELIVER EARLY PALLIATIVE CARE (CARE PLUS) AS STANDARD OF CARE

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Introduction

Despite established benefits, early palliative care is not routine for patients with cancer. Barriers to care include uncertainty around timing, patient and clinician misperceptions of palliative care and services not structured to provide 'early' engagement. New translational approaches are required to move the field forward from demonstrating effect to delivering real-world impact and reducing variation in care. We developed Care Plus, an evidence-based model of early palliative care tailored to address these barriers (Table 1). Care Plus involved introduction of outpatient palliative care at consensus-defined transition points in the illness for each cancer type as standard of care; three outpatient consultations, at minimum monthly; and primary care case conferences to discuss salient concerns and coordination. Within a multi-site implementation trial of Care Plus, this study explored participants' perceptions of effective implementation strategies.

Table 1: How the Care Plus model addresses barriers to early palliative care

Barriers to early palliative care	Care Plus response
Uncertainty about timing	- All patients reaching consensus-defined 'trigger' point in illness are referred - Improves identification and reduces variation
Fear /hesitancy	- Care Plus positioned as normal, routine, high quality care. - Language and mentored training supporting clinicians introducing referrals
Service structures not fit for purpose	- Outpatient Care Plus delivery aligns with cancer treatment; more time/cost effective than home visits - Embedding Care Plus clinics within cancer centres ensures part of usual cancer care; builds intercollegiate relationships

Methods

Qualitative semi-structured interviews were conducted across four hospitals. Interview transcripts were analysed using inductive and deductive approaches, informed by RE-AIM Implementation Evaluation Framework domains.

Results

In total, 231 patients across five cancer streams received the Care Plus. Fifty-one interviews were conducted with patients (n=11), carers (2)

cancer and palliative care physicians (n=19), nurse consultants/practitioners (n=16) and other hospital staff (n=3). Care Plus was acceptable and uptake effective through: use of consensus-defined transition points prompting timely early access [Reach]; positioning Care Plus delivery in outpatient cancer settings facilitated uptake [Effectiveness]; engagement of haematology teams in planning the Care Plus implementation program [Adoption]; training and resources to support introducing Care Plus facilitated referrals [Implementation]; and embedding of Care Plus within routine cancer care physically (in cancer centres) and through language (referring as care pathway) consolidated clinical relationships [Maintenance].

Conclusions

Care Plus enhanced timely, acceptable access to palliative care for cancer patients. For clinicians the Care Plus model provided an opportunity to 're-imagine' how palliative care may be delivered. Implementation package available www.careplusau.org

PALLI-053 THE GENERAL PUBLIC'S PERCEPTIONS OF ADVANCE CARE PLANNING (ACP) IN THE ASIA-PACIFIC REGION: A SYSTEMATIC REVIEW

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Introduction

Advance Care Planning (ACP) is an important activity to help prepare for future healthcare needs. Within the context of the Asia-Pacific region, this review aimed to explore awareness of, attitudes towards, experiences of, and the needs, wishes, and/or expectations related to ACP/Advance Directives (AD) of the general public.

Methods

The systematic review protocol was registered with PROSPERO (December 17, 2023): CRD42023491109. PubMed, CINAHL, PsycINFO, Embase, and Emcare databases were searched 2013 to 2023 for primary research, of any design, that reported perspectives and experiences of the general adult public of the Asia-Pacific region relating to their awareness, attitudes, experience, and expectations of ACP/AD. Selected studies were quality appraised using the Mixed Methods Appraisal Tool. Findings were synthesised using Cochrane's narrative synthesis approach.

Results

Out of 3105 records retrieved, 11 studies were included in this review. This review found that awareness of ACP/AD among the general public in the Asia-Pacific region is relatively low and it was not uncommon for them to know nothing about substitute decision maker decision makers and other terms related to ACP/AD. While they believe ACP is necessary and important, only a minority have had previous discussions regarding ACP and the reported completion of AD was minimal. Various factors that influence people's willingness to engage in ACP/AD were found, such as wanting legal parameters to protect patient autonomy. Expectations of medical professionals to have good communication skills when discussing ACP were highlighted as well as the need for legal parameters to support ADs.

Conclusions

This review highlights that awareness of ACP/AD among the general public in the Asia-Pacific region is low. Such studies would inform the best ways to move forward in improving the awareness and knowledge of, and to improve attitudes towards, ACP/AD to ensure people's treatment decisions are discussed, documented, respected and enacted.

PALLI-054**PUBLIC AWARENESS AND EXPERIENCES OF, ATTITUDES TOWARDS, AND PREFERENCES FOR ADVANCE CARE PLANNING: A CROSS-SECTIONAL SURVEY IN AUSTRALIA AND THAILAND**

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Introduction

Advance care planning (ACP) supports individuals to record their values and preferences for future medical care. This study compared public awareness, experiences, attitudes, and preferences toward ACP in Australia and Thailand and examined associated sociodemographic factors.

Methods

A cross-sectional online survey was conducted with adults in Australia (n = 691) and Thailand (n = 751) using a 72-item questionnaire incorporating the Advance Care Planning Questionnaire (ACPQ) and researcher-developed items on ACP experiences and preferences. Descriptive statistics, chi-square tests, t-tests, and logistic regression analyses were applied to examine differences and predictors.

Results

Australians reported significantly higher ACP awareness (90.2%) than Thais (68.2%) and more had completed an advance directive (29.7% vs. 18.6%). Attitudes toward ACP were generally positive in both countries, although Australians expressed stronger agreement with ACP discussions across serious illness scenarios. Thai participants more frequently reported limitations to engaging in ACP included feeling healthy, avoiding discussions of death, or relying on family or physicians for decisions. Preferences for ACP processes also differed. Australians favored early initiation, written documentation, and shared decision-making, whereas Thais preferred verbal communication and greater involvement of healthcare providers. Logistic regression identified that being Australian, working in healthcare, being Buddhist, having a higher income, and living alone were associated with more positive ACP awareness, experiences, attitudes, and preferences.

Conclusions

Cross-national differences highlight the influence of cultural and systemic factors on ACP engagement. Findings highlight the need for culturally sensitive, system-specific strategies to promote ACP, including integrating ACP into routine healthcare in Australia and strengthening public education in Thailand.

PALLI-056**DEFINING WHEN AND WHAT TO DISCUSS: INTERNATIONAL CONSENSUS ON PALLIATIVE CARE COMMUNICATION WITH ADOLESCENTS AND YOUNG ADULTS WITH CANCER**

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Introduction

Early, developmentally appropriate palliative care communication is an international standard for adolescents and young adults (AYAs) with cancer, yet remains inconsistently implemented. Clinicians report uncertainty about when different palliative care topics are appropriate and how to navigate these conversations. This study aimed to establish consensus on timing, communication content and clinician training priorities to support coordinated and individualised palliative care for AYAs.

Methods

An international three-round Delphi study was conducted with multidisciplinary health-professionals who had worked with at least five AYAs who had died from cancer. Participants rated the appropriateness of introducing four palliative care communication topics at different prognosis levels and treatment timepoints. Participants also rated the importance of clinician training topics, likelihood of attending different training modalities and barriers to training participation. Consensus was defined a priori as $\geq 80\%$ agreement.

Results

Seventy-seven experts from 14 countries completed the final Delphi round. Consensus indicated emotional and existential issues were appropriate at all stages of care, including early in treatment. Comparatively, end-of-life-related medical decisions were considered appropriate later, most commonly following relapse, disease progression or poor prognosis. Discussions about prognosis, goals of care and quality of life were generally considered appropriate once cure was uncertain. Timing of conversations was the only clinician training topic to reach consensus as a priority (85.8%). No training modality reached consensus, and lack of time was the most frequently endorsed barrier to clinician participation in training.

Conclusions

This study provides clear, internationally derived guidance on when different palliative care topics should be discussed with AYAs with cancer and identifies timing as the primary area where clinicians require additional support. This consensus is now being used to define and implement an age-appropriate model of palliative care within Australian paediatric and AYA oncology services, integrating palliative care communication alongside active cancer treatment at key points across the care continuum.

PALLI-060**PERIPHERAL EDEMA IN ADVANCED CANCER: MECHANISMS AND MANAGEMENT – A SCOPING REVIEW**

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Introduction

Peripheral edema is a common but under-researched complication in advanced cancer, negatively impacting quality of life. It arises from

diverse causes beyond lymphatic dysfunction, necessitating an etiology-based management approach. The purpose of this study was to characterize the etiologies, treatments, and outcomes of peripheral edema in patients with advanced cancer.

Methods

A predefined protocol was registered on the Open Science Framework. A five-step scoping review was conducted, including studies of adults with peripheral edema related to advanced cancer, its treatments, or comorbidities. MEDLINE, Embase, and the Cochrane Library were searched from 2010 to June 30, 2023. Two reviewers independently screened records, extracted data, and assessed the quality of observational cohort studies using the Effective Public Health Practice Project tool.

Results

Of 426 publications, 31 met inclusion criteria: 10 observational cohort studies (2,128 patients), 5 case series (79 patients), and 16 case reports (16 patients). Edema etiologies were categorized as medical conditions (23 studies), medication-related adverse events (7), and procedure-related adverse events (1). Most studies noted patients with limited prognoses (days to months). The 10 cohort studies' quality ratings were moderate (6/10) or weak (4/10). Among these studies, the causes of peripheral edema were reported to be artificial/overhydration in 3, multiple risk factors in 2, malignant inferior vena cava obstruction in 2, radioembolization adverse events in 1, lymphedema with hypoalbuminemia in 1, and an advanced cancer state in 1 study. Treatments included stenting for vena cava obstruction (2 studies), guideline-based hydration with diuretics (2), medication management (2), and supportive physical therapy with diuretics (1). Seven of 10 cohort studies discussed treatment strategies—three employing multi-modal approaches—guided by underlying pathophysiology.

Conclusions

Peripheral edema in advanced cancer often occurs in patients with limited prognoses and is addressed in a few moderate- to low-quality studies, reporting pathophysiology-guided, sometimes multi-modal, treatment approaches.

PALLI-061

SURVEY OF PATIENTS' KNOWLEDGE, ATTITUDES, AND BELIEFS TOWARDS PSYCHEDELICS IN MANAGEMENT OF DISTRESS IN PALLIATIVE CARE

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Introduction

Patients with advanced cancer often experience significant psychosocial distress. Psychedelics, which alter thoughts and perceptions, may help relieve refractory distress in this population. This study examined advanced cancer patients' knowledge of and attitudes toward the medical use of psychedelics.

Methods

In this one-time survey, we enrolled adult patients with advanced cancer who were seen inpatient in consultation by Supportive Care team at our tertiary cancer center. Patients completed a 17 question survey on their attitudes and beliefs about psychedelics and its potential for use as medical intervention in cancer patients. Patients answered using a 5-point Likert scale from "strongly agree" to "strongly disagree." "Agree" or "Strongly agree" were combined and considered as agreement.

Results

Eighty patients completed the survey. Very few were aware of psychedelics (6.3%) prior to this survey. Majority of patients supported the use of psychedelics to treat depression (71.3%), anxiety (68.8%), uncontrolled pain (73%), end of life care (60.8%), and fear about the future (58.2%) in cancer patients. The majority (58.2%) would be interested in receiving this therapy by a medical team if it would not interfere with cancer treatments. Most patients (87.3%) felt there should be more research on the drug for use in cancer patients.

Characteristics	Mean (SD)	N (%)
Age	56.7 (15.7)	
Gender		
Female		38 (47.5)
Male		42 (52.2)
Ethnicity		
White		43 (53.8)
Hispanic		18 (22.5)
African American		17 (21.3)
Asian		1 (1.2)
Hawaiian or other pacific islander		1 (1.2)
Other		0 (0)
Marital status		
Single/Never married		9 (11.3)
Single/lives with partner		4 (5)
Married		45 (56.3)
Divorced		11 (13.8)
Widowed		9 (11.3)
Separated		2 (2.5)
Education level		
Some high school or less		10 (12.5)
Completed high school / tech school		21 (26.3)
Some college		12 (15)
Completed college		26 (32.5)
Advanced degree		11 (13.8)
Employment status		
Full time		15 (18.8)
Part-time		3 (3.75)
Unemployed		18 (22.5)
Retired		35 (43.8)
Homemaker		1 (1.3)
Other		8 (10)

Questions	N (%)
Have you heard of psychedelic drugs before today?	
Yes	75 (93.8)
No	5 (6.3)
Have you heard of psychedelic drugs being used in a controlled setting as part of medical treatment?	
Yes	44 (55)
No	34 (42.5)
If yes, where have you heard about psychedelics being used for medical treatments? Select all that apply.	
News	23 (28.8)
Movies, films, or documentaries	21 (26.3)
Social media	25 (31.3)
Family or friends	17 (21.3)
Healthcare provider	5 (6.3)
I think psychedelic treatments should be legal as a medical treatment for patients with life-threatening cancer.	52 (65)
I support the medical use of psychedelics for depression in cancer patients	57 (71.3)
I support the medical use of psychedelics for anxiety in cancer patients	55 (68.8)
I support the medical use of psychedelics for uncontrolled pain in cancer patients	57 (73)
I support the medical use of psychedelics for spiritual pain in cancer patients.	36 (45.6)
I support the medical use of psychedelics for end-of-life care in cancer patient.	48 (60.8)
I support the medical use of psychedelics for cancer patients struggling with fear about the future.	46 (58.2)
I would like scientists to perform more research to better understand the utility of psychedelics for cancer patients.	69 (87.3)
I would be interested in receiving treatment with psychedelics by a medical team if it would not interfere with my cancer treatment and my doctors thought it was a safe option for me.	46 (58.2)
Psychedelics can help patients achieve relief that they cannot find with current therapies.	32 (40.5)
Treating oncology patients with psychedelics is against my religion.	10 (12.7)
Treating oncology patients with psychedelics is against my values or culture.	16 (20.3)
Have you utilized any of the following complementary or alternative treatments below to help deal with your cancer and associated symptoms? Check all that apply.	
Acupuncture	9 (11.3)
Cannabidiol (CBD)	24 (30.0)
Marijuana	23 (28.8)
Herbal treatments or supplements	23 (28.8)
Crystal therapy	0 (0.0)
Other	15 (18.8)
None	28 (35.0)
Do you use or have you ever taken psychedelic drugs in the past?	
No, never	60 (75.9)
Yes, but more than one year ago	16 (20.3)
Yes, in the past one year	3 (3.8)

Conclusions

Patients with advanced cancer were very interested in the use of psych-
edelics for treatment of distressing symptoms if it would not interfere
with cancer treatments, and these results support further research into
this drug class.

PALLI-063
STABILITY OF MORPHINE SULPHATE, HALOPERIDOL
AND HYOSCINE BUTYLBROMIDE COMBINATIONS IN
POLYPROPYLENE SYRINGES FOR SUBCUTANEOUS
INFUSION

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Introduction

Medication delivery by continuous subcutaneous infusion (CSCI) is
common in palliative care. However, stability data is absent even for
common combinations and doses. Usually CSCIs run for 24 hours,
however with increasing pressure on the workforce, there is increasing
advocacy for CSCIs to be left insitu for a longer duration.
This study aims to determine the stability of common dose combina-
tions of morphine sulphate with haloperidol and hyoscine butylbromide
in polypropylene syringes with polyvinylchloride (PVC) tubing.

Methods

Morphine sulphate (10mg, 50mg, 100mg), haloperidol (1mg, 2.5mg, 5
mg), and hyoscine butylbromide (60mg, 80mg, 120mg) combinations
were drawn into 20mL polypropylene syringes and diluted with sodium
chloride 0.9% to a total volume of 18mL. PVC tubing was attached. The
solutions were stored in a stability chamber at 25±2°C and protected
from light. Samples were drawn from the end of the tubing and tested
by high-performance-liquid-chromatography (HPLC). Testing was per-
formed on duplicate samples at the time points of 0,1,2,3,4 and 7 days.

Results

Morphine sulphate with hyoscine butylbromide at all combination con-
centrations was stable for 7 days. Morphine sulphate with haloperidol
was stable for 7 days at the higher concentrations, but only 4 days at
the lower concentration. Similarly, when the three medications were
combined, the lower concentration was stable for 4 days while the
higher concentrations were stable for 7 days.

Conclusions

All the tested concentrations of these commonly used medications are sta-
ble for 4 days, supporting the use of longer duration CSCIs. Stability was
affected by concentrations of the medications combined, and the combina-
tions including more dilute solutions of haloperidol were less stable. This
demonstrates the need for consideration and reporting of concentrations in
tables summarising stability of medication combinations used in CSCIs.

PALLI-064
DISPARITIES IN PALLIATIVE CARE SERVICE PROVISION
AND MEDICINE ACCESSIBILITY BETEEN COMMUNITY AND
NON-COMMUNITY HEALTHCARE INSTITUTIONS IN CHINA

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Introduction

The demand for palliative care is rising globally and in China. This
study aims to systematically investigate the current status of palliative
care service provision in Chinese healthcare institutions and to analyze

the differences between community and non-community institutions
in terms of service delivery, medication accessibility, and influencing
factors, thereby providing empirical evidence for optimizing resource
allocation and improving policy support systems.

Methods

A nationwide cross-sectional online survey was conducted among
healthcare professionals in China from June 2025 to July 2025. A self-
administered questionnaire assessed demographics, palliative care
training, service provision, availability of 23 essential palliative medi-
cines, and perceived barriers.

Results

Among 293 valid responses, 134 (45.7%) were from community health-
care institutions (CHI, community health centers/community health sta-
tions) and 159 (54.3%) from non-community health care institutions
(NCHI, secondary/tertiary hospitals). Overall, 52.2% of institutions
reported providing palliative care, primarily focused on symptom control
(49.8%) and comfort care (47.8%), with psychological support lagging.
Non-community institutions had significantly higher service provision
rates (60.4% vs. 42.5%, p<0.01), more comprehensive services, and
offered more inpatient care (59.7% vs. 33.6%, p<0.001). Striking dis-
parities were found in medicine accessibility. For instance, morphine
was available in 95.0% of non-community vs. 22.4% of community insti-
tutions (p<0.001). Key barriers to medicine access in community set-
tings were "inadequate storage facilities" (26.1% vs. 6.3%, p<0.001) and
"lack of prescribing guidance" (32.8% vs. 13.2%, p<0.001). "Shortage
of trained professionals" (77.9%) and "inadequate supportive systems"
(57.1%) were the top perceived barriers to service implementation, both
perceived as more severe in community settings (p<0.05).

Table 1: Demographic and Professional Characteristics of Participants from Community and Non-Community Healthcare Institutions (n=293).

Parameter	CHIs (n=134)	NCHIs (n=159)	p
Sex	Male	20 (14.9)	0.006*
	Female	114 (85.1)	
Age (y)	≤30	9 (6.7)	0.128
	31-40	55 (41.0)	
	41-50	51 (38.1)	
	> 50	19 (14.2)	
Education background	College degree and below	17 (12.7)	0.000*
	Bachelor's degree	83 (61.9)	
	Master or Doctor degree	34 (25.4)	
Medical Title	Junior and below	26 (19.4)	0.004*
	Intermediate	81 (60.4)	
	Senior	27 (20.2)	
Years of working (y)	< 10	23 (17.2)	0.000*
	10-19	60 (44.8)	
	≥20	51 (38.1)	
Position	Doctor	72 (53.7)	0.000*
	Nurse	47 (35.1)	
	Others	15 (11.2)	

Data are presented as n (%). *p<0.05.

Table 2: Comparison of Palliative Care Service Provision between Community and Non-Community Institutions.

Parameters		CHIs (n=134)	NCHIs (n=159)	p
Providing palliative care service				
Service type	symptom management for terminal illness	57 (42.5)	96 (60.4)	0.002*
	comfort care	51 (38.1)	95 (59.7)	0.000*
	bereavement counseling	39 (29.1)	70 (44.0)	0.008*
	family support	41 (30.6)	78 (49.1)	0.001*
	Others	1 (0.7)	1 (0.6)	0.903
Service forms	Inpatient	45 (33.6)	95 (59.7)	0.000*
	Home Service	42 (31.3)	50 (31.4)	0.985
	Daytime Service	28 (20.9)	46 (28.9)	0.115
Initiation of service	Requested by patients	45 (33.6)	65 (40.9)	0.199
	Requested by family	45 (33.6)	72 (45.3)	0.042*
	When symptoms worsen and the institution cannot solve the problems	33 (24.6)	54 (34.0)	0.081
	Take the initiative to suggest	38 (28.4)	70 (44.0)	0.006*
	No relevant guidance has been followed	7 (5.2)	6 (3.8)	0.548
Providing supportive care service for cancer patients				
Service type	Nutritional intervention	78 (58.2)	154 (96.9)	0.000*
	Symptoms management	58 (43.3)	144 (90.6)	0.000*
	Adverse effects management	62 (46.3)	150 (94.3)	0.000*
	Rehabilitation Care	50 (37.3)	144 (90.6)	0.000*

Data are presented as n (%). *p<0.05.

Figure 1: Accessibility of Essential Palliative Medicines in Community vs. Non-Community Institutions.



Conclusions

Significant disparities in palliative care capacity exist between community and non-community healthcare institutions in China, with community settings disadvantaged in service provision, essential medicine access, and systemic support. To achieve equitable palliative care, targeted strategies must address these grassroots-level bottlenecks through integrated training, innovative medicine supply models, and cross-sectoral policy reform.

PALLI-065
VIEWS OF PRIMARY CARE DOCTORS IN DELIVERING PALLIATIVE CARE IN SINGAPORE: A QUALITATIVE STUDY

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Introduction

Due to the rapidly ageing population and rising chronic disease burden, there is an increasing number of people living with life-limiting illnesses who may have palliative care needs. Primary care physicians (PCP) are potentially well placed to address these needs. However, in Singapore, where palliative care is usually delivered in tertiary care, it is important to explore PCP's views, perceptions and readiness in providing palliative care before its implementation. The aim of this study was to explore the views of PCPs in providing palliative care for patients with life-limiting illnesses.

Methods

A qualitative study was conducted in 2023 at two public primary care clinics in Singapore. Individual in-depth interviews and focus group discussions were conducted using an interview guide. Twenty PCPs were purposively sampled based on their position and experience. The interviews were audio-recorded, transcribed verbatim, checked and analysed using a thematic approach. The data was managed using the NVivo software.

Results

The PCPs had mixed views on providing palliative care in their practice. Some felt that PCPs had limited role in the provision of palliative care; they were concerned that patients might not see them as capable of providing palliative care and the specialists in the tertiary centres were not aware of the real-world challenges PCPs were facing. Conversely, some PCPs identified their potential roles in palliative care, including: conducting needs assessments, managing symptoms, facilitating advance care planning and end-of-life discussions, providing psychosocial support and advocacy.

Conclusions

PCPs had conflicting views on their roles in palliative care. Their views were likely to be attributed to their confidence, support and collaboration with specialists in delivering palliative care. These concerns must

be addressed for successful implementation of palliative care in the primary care setting in Singapore.

PALLI-067
PROFILING PALLIATIVE CARE NEEDS AT THE TIME OF AN ADVANCED CANCER DIAGNOSIS: TARGETS FOR EARLY ACTION

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Introduction

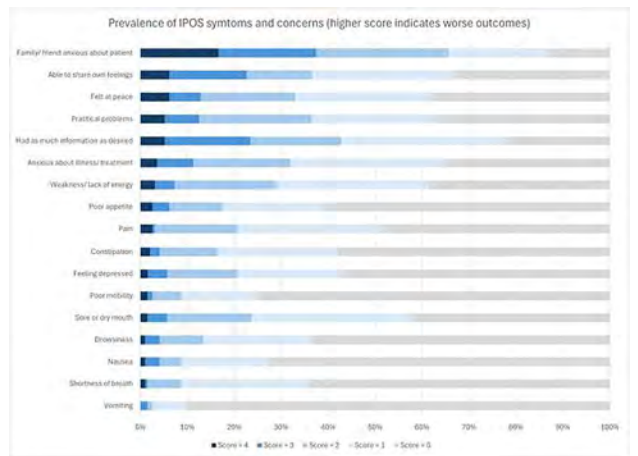
Upon diagnosis of advanced cancer, symptoms, distress, and information needs often surge, creating a brief window when early palliative care can shape care trajectories. Profiling these concerns provides an empirical map to prioritize domain-specific interventions or coordinated multi-component responses. We aim to quantify the prevalence and pattern of patient-reported palliative care symptoms and concerns at diagnosis to inform proactive palliative care.

Methods

We performed a cross-sectional analysis of baseline data available as of September 2025 from an ongoing randomized controlled trial at the National Cancer Centre Singapore. Adults newly diagnosed with advanced cancer completed the Integrated Palliative care Outcome Scale (IPOS) at enrollment. Each of the 17 items were scored on a 0-4 Likert scale, with higher scores indicating greater distress. Outcomes were the IPOS total and domain scores and the prevalence of moderate to severe problems defined as item score ≥ 2 .

Results

A total of 194 patients were analyzed. The mean age was 59.9 years (SD 12.3), patients were predominantly female (51.5%), Chinese (80.9%), married (73.2%), and had post-secondary education (51.6%). Common tumor types were gastrointestinal (28.9%), lung (19.6%), and breast (17.0%). The mean IPOS total score was 15.0 (SD 9.2), with domain mean scores of 5.9 (SD 5.5) for physical, 5.0 (SD 3.5) for emotional, and 4.0 (SD 2.9) for communication/practical. The most prevalent moderate-to-severe concerns were family/friend anxiety (65.6%), unmet information needs (42.7%), difficulty sharing feelings with others (36.6%), not feeling at peace (33.0%), and anxiety about illness/treatment (32.0%). Leading physical symptoms were weakness (28.9%), sore or dry mouth (23.7%), and pain (20.6%).



Conclusions

Patients newly diagnosed with advanced cancer reported substantial palliative care needs, dominated by psychosocial, communication, and practical concerns. These findings could be used to develop a proactive

early palliative care strategy centered on psychoeducation, structured information, and practical coping skills for patients to address immediate needs.

PALLI-068

A DESCRIPTIVE STUDY ON PATIENTS WITH NEN REFERRED TO THE PALLIATIVE CARE TEAMS OF TERTIARY CARE CENTERS

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Introduction

Neuroendocrine neoplasm (NEN) is a rare disease, but its prevalence and incidence have increased in recent years. However, data on palliative care interventions for patients with NEN, particularly the involvement of palliative care teams (PCTs) in tertiary care centers, remain limited. This study aimed to describe the clinical characteristics of patients with NEN referred to PCTs at tertiary care institutions.

Methods

We conducted a multicenter retrospective observational study of adult patients (≥ 18 years) with pathologically confirmed neuroendocrine neoplasm referred to PCTs between January 2017 and June 2025 at two tertiary care centers. Patients were classified into well-differentiated neuroendocrine tumor (NET) or poorly differentiated neuroendocrine carcinoma (NEC) based on pathological findings. Patient characteristics, reasons for PCTs consultation, outcomes after intervention, pain intensity, opioid use, and equivalent oral morphine dose (EOMD) were evaluated.

Results

Among 3,190 patients with malignancies referred to PCTs, 48 patients (1.5%) had NEN, including 32 with NET and 16 with NEC. Pain was the most common reason for PCTs consultation, accounting for 81.3% (39/48) of cases. Comparisons between patients with NET and NEC showed differences in the interval from NEN diagnosis to PCTs referral, duration of PCT involvement, pain management strategies, and outcomes. Among patients referred for pain management, opioid use at the end of PCTs intervention was 69.7% in patients with NET and 87.2% in patients with NEC. Patients with NEC required higher median EOMD than those with NET at the time of consultation and immediately after PCTs intervention.

Conclusions

Pain was the primary reason for referral to PCTs among patients with NEN at tertiary care centers. Differences between NET and NEC were observed in the timing and duration of palliative care involvement, pain management strategies, and outcomes. These findings suggest that pathological classification should be considered when planning palliative care for patients with NEN.

PALLI-069

USE AND MEASUREMENT PERFORMANCE OF THE EORTC QLQ-BM22 IN CLINICAL STUDIES OF BONE METASTASES: A SYSTEMATIC REVIEW

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Introduction

This systematic review assesses the use and measurement performance of the European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire Bone Metastases 22 (QLQ-BM22), a validated and internationally field-tested quality-of-life measure for bone metastases, to identify opportunities for improving the module.

Methods

A comprehensive literature search was conducted using MEDLINE, Embase, and CENTRAL from inception to 7 November 2025. Two independent reviewers screened English-language articles reporting on the development, psychometric evaluation, or clinical application of the QLQ-BM22. Studies using the module solely as an outcome measure without psychometric data were excluded. Data regarding reliability, validity, responsiveness, and feasibility were extracted and synthesised.

Results

A total of 49 publications were included. While available in 31 languages, clinical use was identified in 13. Internal consistency was generally high (Cronbach's $\alpha > 0.70$), though variability was observed in the Painful Sites subscale (range $\alpha = 0.34\text{--}0.93$). Test-retest reliability was excellent (ICC > 0.90). Construct validity was supported by weak correlations (< 0.40) with unrelated QLQ-C30 domains, confirming the module's specificity. Feasibility was high (completion 10–15 minutes; missing data $< 5\%$). Responsiveness was strongest in palliative radiotherapy settings, although evidence in surgical and systemic therapy settings remains limited.

Conclusions

The QLQ-BM22 is a widely adopted, psychometrically sound measure. However, limitations include inconsistent reliability of the Painful Sites subscale, reliance on historical validation data, and limited cross-cultural psychometric testing. Future research should prioritise large-scale, multinational validation, prognostic validity, and shorter or computer-adaptive versions of the bone metastases module to reduce patient burden.

PEDIA-001

HEALTHCARE PROVIDERS' PERSPECTIVE AND EXPERIENCE OF GUT HEALTH AMONG CHILDREN WITH CANCER: A QUALITATIVE PHENOMENOLOGICAL STUDY

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Introduction

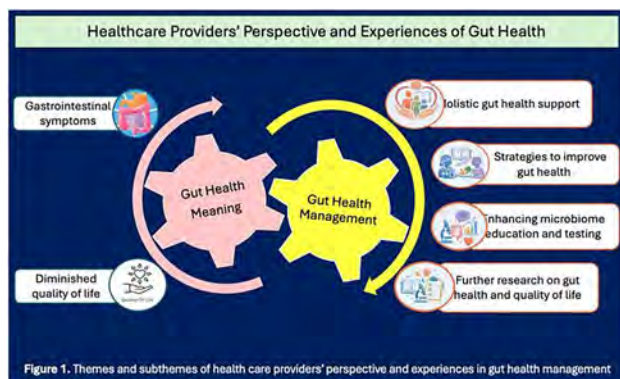
Children undergoing cancer treatment frequently experience gastrointestinal symptoms and a disrupted gut microbiome, negatively affecting care outcomes. Despite growing recognition of gut health as a therapeutic target, its meaning and management in pediatric oncology remain poorly understood. Understanding healthcare providers' (HCP) experiences is essential to inform the development of a whole-person-centered approach to gut health that supports symptom management. This study aims to understand HCPs' perspective and experiences with gut health management.

Methods

This qualitative phenomenological study employed semi-structured interviews with seven HCPs (e.g., oncologists, nurses, advanced practice providers, and dietitians). HCPs were recruited from a pediatric oncology center in the Southeastern US. All interviews were completed before transcription, coding, and analysis began. Interview transcripts were analyzed using conventional content analysis using NVivo for data management.

Results

Interviews with HCPs revealed one major theme describing the gut health perceived meaning for cancer patients and four themes regarding gut health management (Figure 1). The gut health meaning theme highlighted the negative impact of treatments on gut health, including gastrointestinal symptoms and diminished quality of life. Themes related to gut health management included: (1) Support for pediatric cancer patients experiencing gut problems (e.g., health education and involvement of nutritionists); (2) suggested strategies to improve gut health, such as interdisciplinary care, family education, and psychological support; (3) HCPs' knowledge of the gut microbiome, emphasizing the need for expanded education, microbiome testing, and clinical guidance; and (4) calls for further research to better understand the severity of treatment-related impacts on gut health and their influence on quality of life.



Conclusions

These findings reveal gut health as a clinically meaningful and experientially salient aspect of pediatric oncology supportive care, emphasizing its impact on symptoms and quality of life and the need for coordinated, multidisciplinary approaches, enhanced provider education, and further research.

PEDIA-002

ADAPTING A MIND DIET SCORE AND EXAMINING ITS RELATIONSHIP WITH PSYCHONEUROLOGICAL SYMPTOMS IN PEDIATRIC CANCER SURVIVORS

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Introduction

Pediatric cancer survivors experience psychoneurological symptoms (PNS, e.g., cognitive difficulties, fatigue, anxiety, and depression). The Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) diet is associated with reduced PNS in adults, but evidence in pediatric survivors remains limited. This study aimed to adapt a MIND diet score from an existing dietary tool and examined its association with PNS among pediatric cancer survivors.

Methods

80 pediatric solid tumor survivors dietary intake was measured using the 41-item Block Kids Food Screener (BKFS). The MIND diet score was computed by mapping 22 BKFS items to 11 MIND components. Each MIND component scored 0, 0.5, or 1 (total 0-11, higher score means healthier). PNS were assessed using the PROMIS self-report. Chi-square and Pearson correlational tests examined associations between MIND components and PNS. Cluster analyses identified dietary patterns and assessed their alignment with the original MIND diet score.

Results

Demographics included male (56%), white (59%), and brain tumor diagnosis (52%). Higher bean ($p=0.003$) and berry ($p=0.04$) intakes were associated with lower depression, while fast food intake was associated with greater cognitive dysfunction ($p=0.03$) [Table 1]. Cluster analyses identified a healthy dietary pattern (e.g., vegetables, beans, fish, $n=35$) and an unhealthy pattern (e.g., cheese, sweets, fried foods, $n=45$). Survivors with healthy pattern ($n=35$, 44%) reported better cognitive function ($n=26$), and lower fatigue ($n=21$), anxiety ($n=19$), and depression symptoms ($n=27$); survivors with unhealthy pattern ($n=45$, 56%) reported poorer cognitive health ($n=12$), and higher fatigue ($n=19$), depression ($n=16$), and anxiety symptoms ($n=18$) [Table 2].

Table 1. Pearson Correlation Between MIND Dietary Components and Symptoms

Dietary Component	Cognitive Function	Depression	Anxiety	Fatigue
Berries	$r = 0.06$	$r = -0.2^*$	$r = -0.18$	$r = 0.01$
Beans	$r = 0.13$	$r = -0.3^*$	$r = -0.16$	$r = 0.1$
Fast food	$r = -0.23^*$	$r = 0.1$	$r = 0.02$	$r = 0.05$

Note. Values represent Pearson correlation coefficients (r). * indicates statistically significant correlations ($p < 0.05$). No other dietary components were significantly associated with symptoms.

Table 2. Distribution of Dietary Patterns Across Symptom Groups

Symptom Domain	Diet Pattern Healthy $n=35$ (44%) Unhealthy $n=45$ (56%)	Low Symptoms Group	High Symptoms Group
Cognitive Function	Healthy: 26 (32.5%) Unhealthy: 33 (41.2%)	9 (11.2%)	12 (15.0%)
Depression	Healthy: 27 (33.7%) Unhealthy: 29 (36.2%)	8 (10.0%)	16 (20.0%)
Anxiety	Healthy: 19 (23.7%) Unhealthy: 27 (33.7%)	16 (20.0%)	18 (22.5%)
Fatigue	Healthy: 21 (26.2%) Unhealthy: 26 (32.5%)	14 (17.5%)	19 (23.7%)

Note: Values are presented as n (%). Dietary patterns identified using cluster analysis are shown across symptom groups.

Conclusions

This study demonstrated the feasibility of the MIND diet score adapted from the BKFS. These scores accurately reflected adherence to the

MIND diet. Components were associated with PNS, consistent with adult literature. Future research will explore the psychometric properties of the adapted MIND components and their association with symptoms in pediatric cancer survivors.

PEDIA-006

PROVISION OF INFORMATION AND RESOURCES AFTER CHILDHOOD CANCER TREATMENT: ‘WHAT HAPPENS NOW?’

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Introduction

With ongoing progress in childhood cancer therapies, most children diagnosed today can expect to survive. As survivorship increases, greater attention is needed to support families during the transition from active treatment to ongoing care. Understanding what information families need, and when, is essential to improving supportive care at end of treatment.

Methods

This qualitative study explored the perspectives of healthcare professionals and caregivers associated with a tertiary children's hospital in Australia. Semi-structured interviews were conducted with clinicians, regional case managers, general practitioners, and caregivers involved in the RECOVER (Responding to Late Effects in Survivors of Childhood Cancer) intervention. Transcripts were analysed using content analysis.

Results

Thirty-three interviews were completed with tertiary hospital clinicians (n=15), regional case managers (n=3), general practitioners (n=2), and caregivers (n=13). Clinicians reported that families experience a range of challenges at the end of treatment, including ongoing needs, lack of knowledge and inconsistencies of care. Emerging findings indicate a desire among clinicians for more standardised practices that still recognise the unique circumstances of each family. Primary care providers highlighted the importance of good communication across services. All groups reported that end of treatment is a time of heightened emotions as carers process what they have been through, and children adjust to their new normal. Families valued clear, concise written information in the form of a treatment summary and a care plan outlining short term needs and potential late effects which can be revisited over time.

Conclusions

Timely, accessible, and individualised information is critical to supporting families as they transition from active treatment to survivorship care following childhood cancer.

PEDIA-007

THEORY-INFORMED IMPLEMENTATION STRATEGIES FOR INTEGRATING TRADITIONAL, COMPLEMENTARY, AND INTEGRATIVE MEDICINE (TCIM) INTO PEDIATRIC PALLIATIVE CARE

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Introduction

TCIM is increasingly used among children with life-limiting conditions, yet guidance on integrating TCIM into pediatric palliative care (PPC) at the implementation level remains limited. A previous meta-analysis and Delphi survey identified several evidence-based modalities for PPC, including massage for pain and anxiety, music therapy for pain and anxiety, *Tuina* for constipation, and acupuncture for sleep disorders. This study aimed to develop theoretically informed implementation strategies for incorporating these TCIM modalities into PPC services in Hong Kong.

Methods

Semi-structured interviews were conducted with 35 stakeholders: pediatricians and nurses trained in PPC (n=10), TCIM practitioners (n=10), NGO staff (n=5), health administrators (n=5), and caregivers (n=5). The Theoretical Domains Framework was applied to identify barriers and facilitators, guiding both interviews and analyses using ATLAS.ti. Behavioral diagnoses derived from these findings informed the development of implementation strategies using the COM-B (capability, opportunity, motivation-behavior) model, constructed with behavior change techniques (BCTs) based on the established BCT taxonomy.

Results

Analysis identified 30 facilitators and 28 barriers. Key facilitators included: (1) perceived effectiveness of TCIM for symptom relief in PPC, (2) positive attitudes toward TCIM use, and (3) recognition of professional roles and responsibilities in promoting TCIM. Key barriers included: (1) insufficient inter-professional communication and collaboration, (2) lack of clinical guidelines for TCIM services, and (3) concerns about cost and potential side effects, such as herb-drug interactions, heavy metal intoxication, and nutritional imbalance. All barriers were mapped to COM-B system components.

Conclusions

This study generated actionable recommendations to promote evidence-based TCIM in PPC at the policy level, including: (1) collaboration with special schools and NGOs for service delivery, (2) establishing a registry of TCIM providers in PPC, (3) commissioning a multidisciplinary team to develop clinical practice guidelines, (4) use of government-supported healthcare vouchers to subsidize PPC services, and (5) a commissioned research scheme to advance TCIM implementation in PPC.

PEDIA-008

AUSTRALIA'S TOP 10 RESEARCH PRIORITIES FOR CHILD AND ADOLESCENT CANCER - A NATIONAL COMMUNITY-DRIVEN PARTNERSHIP

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Introduction

Despite significant improvements in overall survival, childhood cancer remains a challenging experience throughout the treatment journey and

beyond. To improve evidence that guides care and outcomes, research must be prioritised to align with the real-world needs of children, families, and clinicians.

Methods

In Australia, the first national Priority Setting Partnership (PSP) was conducted to identify the top 10 research priorities in childhood cancer, engaging children and adolescents diagnosed with cancer before age 19, caregivers, and clinicians. We used the multi-phase James Lind Alliance methodology (Figure 1). A national steering group of 24 members, representing all stakeholder categories, oversaw the process.

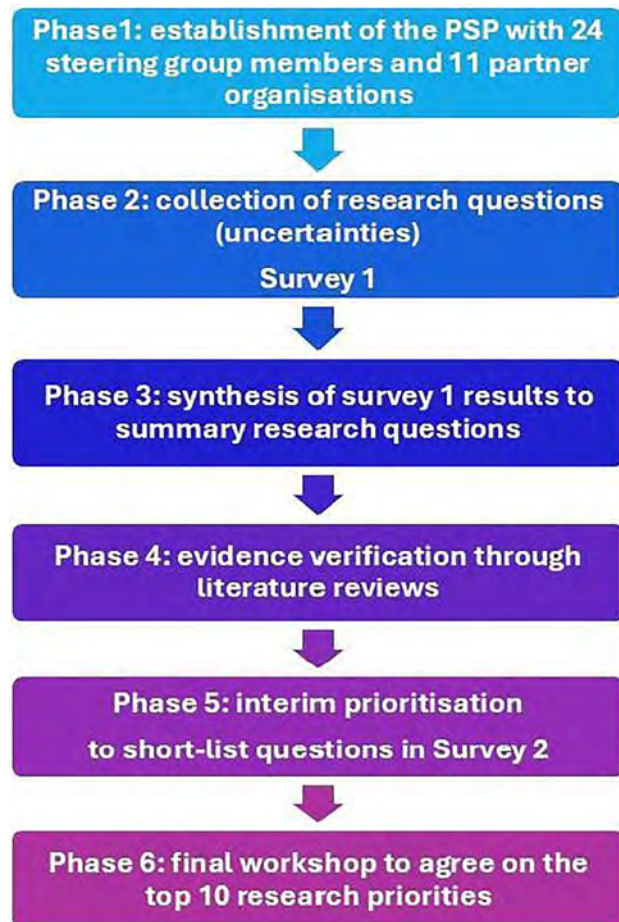


Figure 1: A schematic overview of the process

Results

In the first national online survey, 229 respondents (43 patients/survivors; 117 caregivers; 69 clinicians) submitted 602 in-scope research questions spanning the full continuum of care. These were mapped into 49 summary questions, each verified as a true uncertainty through a literature review. In the second online survey, 474 respondents (32 patients/survivors; 289 caregivers; 139 clinicians) voted and ranked these questions, identifying their top 19. A final workshop involving 27 purposively selected participants (7 survivors, 9 caregivers, 11 clinicians) was held to agree on the final top 10 research priorities (Table 1) based on their experience and insight. Identified priorities spanned treatment, survivorship, physical and psychosocial support, and health services research. They highlight the urgent need to improve access to safe, personalized care that is both culturally sensitive and geographically equitable, and support the needs of both young patients and caregivers.

1	How can the development of cancer treatments and equitable access to treatment be optimised for children and young people so that treatments are safer, less toxic, less traumatic, and more effective?
2	What are the best ways to prevent, identify and manage the long-term effects of cancer and its treatment in children and young people on physical and psychological health?
3	What are the best ways to support children and young people through transitions from active cancer treatment to follow-up and everyday life? (e.g., re-engagement with education and communities and transition to adult healthcare)?
4	What is the effect of cancer survivorship programs for children and young people on health outcomes and healthcare costs?
5	How can psychosocial interventions that prevent or minimise the trauma of cancer treatment in children and young people be better integrated to care?
6	How can health and community services better engage with First Nations children and young people with cancer, their kin and families to provide culturally safe care and support services?
7	How can a more personalised and tailored approach to childhood cancer treatment be developed and delivered to meet the unique needs of each person?
8	How can children and young people with cancer from regional, rural and remote locations of Australia, and their families, access better support services? (e.g. when travelling for treatment, living away from home or seeking services)
9	What are the psychosocial effects of cancer in children and young people, and their families, during and after treatment, and how can these effects be addressed?
10	What factors contribute to the risk of cancer relapse or treatment resistance in children and young people? Can identifying these factors early help personalise treatment to improve outcomes?

Table 1: Final top 10 research priorities for childhood cancer in Australia

Conclusions

Priorities address the clear gap in child and adolescent cancer research in Australia, shifting the research lens from disease eradication to holistic well-being, having the potential to drive meaningful improvements in care and outcomes. They offer a structured framework for future research, funding, and policy, grounded in both lived and clinical experience. Delivering on these priorities is a shared responsibility of the research community.

PEDIA-009

RESEARCH PRIORITISATION IN CHILDHOOD CANCER: A SCOPING REVIEW

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Introduction

Research priorities for childhood cancer are continuously evolving and are crucial for progressing the field. This scoping review maps

global evidence on research prioritisation processes in childhood cancer.

Methods

We searched MEDLINE, Embase, PubMed, Scopus, and CINAHL for studies from 2015 to 2025 that elicited research priorities for childhood cancer. Prioritisation processes were synthesised by methodology, and the reporting quality of the included studies was assessed using the 32-item Reporting guideline for PRIority-Setting of health research (REPRISE) framework. Research priorities were mapped according to the themes and subthemes of the Common Scientific Outline (CSO) criteria (<https://www.icrpartnership.org/cso>).

Results

We screened 1,793 titles and included 12 studies, ten of which were conducted in high-income countries. Studies used multi-phase methods; five adopted the James Lind Alliance survey-and-workshop approach, five utilised mixed-method stakeholder consultations (focus groups, nominal group technique, Delphi), and two drew on literature reviews. Eight studies engaged multiple stakeholder groups, while three involved only health professionals, and one recruited exclusively young people with cancer (Figure 1).

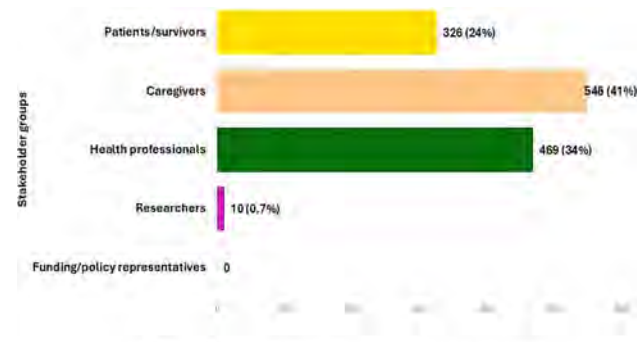


Figure 1: Proportions of stakeholder involvement in prioritisation processes

None of the included studies fully met the 32-item REPRISE criteria. Considerations around the governance, funding, and implementation of the priorities were poorly described by all studies (Figure 2).

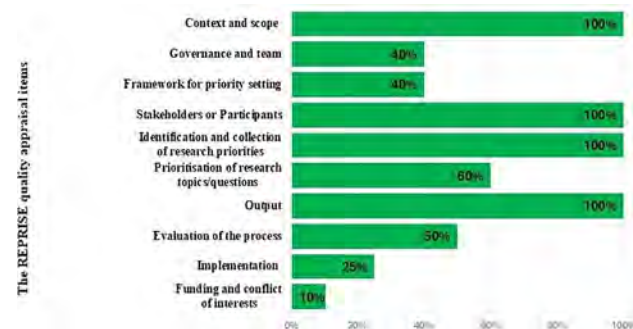


Figure 2: Proportion of studies (n=12) meeting quality appraisal objectives in reporting¹

We collated the 93 priorities into seven CSO categories, the most common theme was an emphasis on survivorship and outcome research; an overinclusive CSO category that lack granularity to differentiate distinct research priorities (Figure 3).

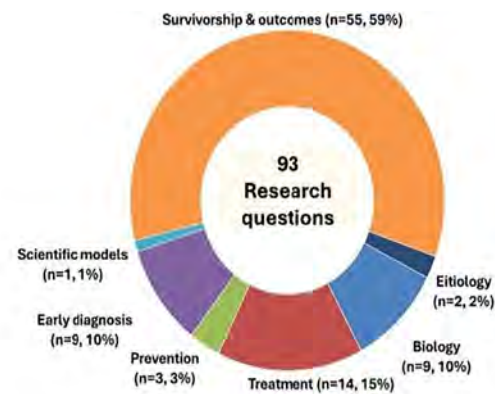


Figure 3: Distribution of research priorities across all studies (n=12) based on the CSO framework

Conclusions

Research priority-setting in childhood cancer has produced a range of agendas, with survivorship and outcomes consistently highlighted as the key concern. Although systematic methodologies are increasingly applied to identify research priorities, gaps persist in stakeholder involvement, particularly the meaningful engagement of young people. Greater focus is also needed on evaluating prioritisation to ensure their methodological rigour and sustained capacity to translate priorities into actionable research, thereby shaping funding and policy decisions.

PEDIA-010

THE POWER OF PARTNERSHIP: REDEFINING RESEARCH IN PAEDIATRIC HAEMATOPOIETIC STEM CELL TRANSPLANTATION

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Introduction

Research in paediatric hematopoietic stem cell transplant (HSCT) is hampered by small patient populations and funding constraints, making it challenging to prioritise future studies and efficiently allocate resources. How can researchers best identify the most

critical areas for investigation given these limitations? This project addresses the critical need to identify the most impactful research questions in this field.

Methods

Employing the James Lind Alliance (JLA) priority setting partnership methodology, a comprehensive survey was conducted, with over 140 respondents. This yielded over 600 individual concerns and 80 potential research questions. Key themes included treatment strategies, toxicity management, communication effectiveness, psychosocial support, nutritional guidance, exercise programs, and pain management. Following rigorous evidence checking of the research questions raised, 50 research questions advanced to a second survey.

Results

The top 30 questions were then discussed and prioritised at a full day workshop involving patients, families and healthcare professionals to identify the top 10 research priorities.

Conclusions

This collaborative approach successfully identified the top 10 research priorities for paediatric HSCT. Stakeholder analysis revealed shared priorities across all groups. These prioritised questions are publicly available internationally for researchers and funding bodies, maximising the impact of limited resources and accelerating progress towards improving outcomes for children undergoing HSCT.

PEDIA-011

KITE FOR KIDS: THE POWER OF PEER SUPPORT AND CONNECTION IN IMPROVING PSYCHOSOCIAL OUTCOMES FOR CHILDREN IMPACTED BY CHILDHOOD CANCER

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Redkite

Introduction

Children diagnosed with cancer and their siblings face profound emotional and psychosocial challenges. Redkite's *Kite for Kids* Program is a structured group support program designed to enhance the psychosocial wellbeing of children and young people impacted by paediatric cancer. Kite for Kids is delivered in a safe digital space to allow participants to connect in a fun, playful way and openly share their experiences and challenges. The program brings a psychoeducational focus, assisting children to build resilience in a safe and confidential environment facilitated by Social Workers.

Methods

Kite for Kids was initially piloted in 2022, followed by a full schedule of groups in 2023 and 2024 involving over 40 children between the ages of 6 and 12. Groups were delivered separately to children diagnosed with cancer and siblings in response to their different needs. The groups use a mixture of stories, games and activities to engage the children and facilitate skill development. Insights regarding the program's impact have been captured through various sources, including Redkite's National Client Satisfaction Survey (n=307) and follow-up calls with participants and their parents.

Results

Recent insights demonstrate the program is delivering positive psychosocial outcomes for both child participants and their parents, as evidenced by the 92% program satisfaction rating in Redkite's latest client survey. The program is highly valued for giving children a voice, allowing them to verbalise their thoughts and feelings around theirs or their sibling's cancer diagnosis, in addition to giving them practical tools and strategies in which to cope.

Conclusions

Kite for Kids illustrates how group peer support interventions play a crucial role in the delivery of comprehensive paediatric oncology care. Future directions for the program include expanded evaluation with

children through novel participatory methods, and the strengthened inclusion of narrative therapy approaches to foster child resilience and wellbeing.

PEDIA-013

DEVELOPMENT OF AN INTERPROFESSIONAL, EVIDENCE-BASED GUIDELINE FOR TREATMENT-RELATED ORAL MUCOSITIS IN A TERTIARY PAEDIATRIC HOSPITAL IN ASIA

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Introduction

Treatment-related oral mucositis (OM) affects 20–40% of children receiving chemotherapy, and poor oral health increases OM risk. OM can lead to reduced nutritional intake, increased pain and secondary infections, and a decreased quality of life. However, current paediatric OM guidelines do not provide a unified algorithm incorporating oral health status, mucositis grading, and pain scores, and care recommendations such as dietary advice remain inconsistent across disciplines. We aim to develop a practical, collaborative OM guideline that provides a standardised treatment algorithm to support coordinated management of OM in paediatric oncology patients.

Methods

An interprofessional team, consisting of dentists, doctors, nurses, a pharmacist and a dietician at KK Women's and Children's Hospital (KKH), Singapore, developed the Interprofessional Oral Care for Children with Cancer Oral Health Programme in 2024. Following a literature review, the team reached consensus for five key topics through interprofessional meetings: 1) oral assessment, 2) oral care management and dental referral, 3) dietary management, 4) pain management, and 5) OM treatment algorithm.

Results

The interprofessional team developed the KKH's OM guideline and the KKH's modified Oral Assessment Guide (K-OAG). The K-OAG was modified from Eilers et al., with photos suited to the paediatric population and sub-gradings for teeth and gums, to enable more accurate visual oral assessment and appropriate dental referrals respectively. Uniquely, the guideline incorporated K-OAG score, Common Terminology Criteria for Adverse Events mucositis grade and pain score into one treatment algorithm, providing HCPs with standardised recommendations for oral care, dietary, and pain management modifications at each severity stage.

Conclusions

The KKH's OM guideline provides a standardised, evidence-based approach, and an integrated treatment algorithm for paediatric oncology patients. This guideline may be adapted by other centres with similar goal. The validity of the K-OAG, and the attitudes of HCPs to the guideline, will be further evaluated in a mixed-methods study.

PEDIA-014

ADAPTING ADULT FRAILTY FRAMEWORKS FOR PAEDIATRIC ONCOLOGY: DEFINING THE PHYSICALLY VULNERABLE CHILD WITH CANCER

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Introduction

Children undergoing cancer treatment often show early signs of frailty, associated with long-term morbidity and reduced survival. In adult oncology, frailty frameworks guide supportive care and help identify patients needing targeted intervention; however, paediatric equivalents are lacking. A clearer understanding of physical vulnerability in childhood cancer—and how adult frailty concepts may be adapted—is needed to strengthen supportive-care pathways. The aim of this study was to explore the concept of the “physically vulnerable child” in paediatric oncology, describe key clinical features, contributing factors and mechanisms, and novel approaches to assessment and management.

Methods

A qualitative exploratory study using a constructivist design captured diverse clinician perspectives. Two focus groups were conducted with international physiotherapists, exercise physiologists, and exercise oncology researchers with more than five years’ experience in acute paediatric cancer care. Data were analysed thematically using an inductive approach to identify and characterise core concepts.

Results

Ten clinicians participated across two focus groups. Three overarching themes captured how experts conceptualise physical vulnerability: (1) clinical presentation, (2) contributing factors, and (3) strategies for monitoring and intervention. Physically vulnerable children were described as having limited physical and psychological reserves, reduced tolerance to treatment cycles and complications, increased reliance on caregivers and medical supports, and restricted participation in normal activities. Contributors to physical vulnerability spanned treatment-related toxicities, child and family characteristics and behaviours, the treatment environment and culture of the clinical team. Participants highlighted the importance of proactive detection, recommended a structured surveillance model of care and outlined potential avenues for early, targeted intervention.

Conclusions

Physical vulnerability in paediatric cancer is a multifaceted and dynamic construct shaped by medical, psychosocial, and contextual influences. Adult frailty frameworks offer valuable foundations but require careful modification for paediatric relevance. Findings will inform development of a paediatric cancer-specific physical vulnerability framework and guide future supportive-care interventions for at-risk children.

PEDIA-015

USING BEHAVIOUR CHANGE THEORY TO DESIGN PRE/REHABILITATION SERVICES FOR CHILDREN AT RISK OF TOXICITY: DESIGN AND APPLICATION OF THE POPP FRAMEWORK

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Introduction

Childhood cancer survivors face a high risk of chronic disease, accelerated aging, and premature mortality. Current knowledge highlights the importance of physical activity (PA) for children with cancer, yet many receive little to no support to remain active during treatment. Critical gaps exist in clinical services, and no overarching framework guides the development of interventions to prevent functional decline. This study aims to **1**. Describe the design and components of the **PAEDIATRIC ONCOLOGY PHYSICAL ACTIVITY PROMOTION (POPP)** framework – a theoretical guide for implementing services that enhance PA and physical function in paediatric oncology, and **2**. Show how the framework has been used to design rehab/prehabilitation programs.

Methods

Primary studies in paediatric cancer included two systematic reviews, a qualitative study, theoretical design of a PA behaviour change intervention (CanMOVE), and a feasibility trial. The POPP framework design synthesised these results with behaviour change theory, literature, and existing guidelines. The framework was applied using co-design principles, involving children, families, and clinicians, to develop targeted pre/rehabilitation programs for three high-toxicity risk groups.

Results

The POPP framework (Figure 1) proposes PA-informed models of care that implement *family education; environmental and organisational strategies to promote PA; routine screening of physical impairments; and structured pre/rehabilitation pathways for high-risk toxicity groups*. PA support needs to be: **Proactive**: offered from diagnosis; **Needs-based**: tailored to the child’s needs; **Ongoing**: available throughout all treatment/post-treatment phases; and **Integrated**: embedded across multidisciplinary teams as standard care. Using these principles, pre/rehabilitation programs are being designed and piloted for three high-risk groups at the Royal Children’s Hospital: children with early muscle toxicity (sarcopenia), prehabilitation prior to Hematopoietic Stem Cell Transplantation admission, and children with cardiotoxicity.

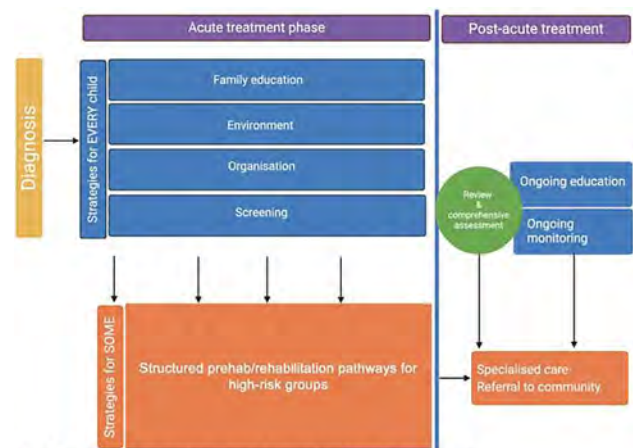


Figure 1: The PAEDIATRIC ONCOLOGY PHYSICAL ACTIVITY PROMOTION (POPP) framework

Conclusions

The POPP framework provides a stepped approach to guide health service design to enhance physical function and improve PA engagement for children with cancer, reducing treatment-related toxicity and improving long-term outcomes.

PEDIA-017

A RANDOMISED CONTROLLED TRIAL IN THE USE OF MEDICINAL CANNABIS IN CHILDREN WITH ADVANCED CANCER - HOMECARE AND RURAL CONSIDERATIONS

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Pharmacy, Brisbane, ⁷Royal Children's Hospital, Palliative Care, Melbourne, ⁸Mater Health Services, Supportive and palliative Care, Brisbane, ⁹Children's Health Queensland, Anaesthetics, Brisbane, ¹⁰University of Sydney, Lambert Initiative, Sydney, ¹¹ANZCHOG, National Patient Carer and Advisory Group, Melbourne

Introduction

There is significant interest from both patients/families and clinicians in the use of medicinal cannabis to control symptoms in children with advanced cancer. Access to trials for patients living in rural locations and optimizing care at home are important to consider for this cohort of patients.

Methods

To determine the optimal dose and type of medicinal cannabis to effectively manage symptoms. Adverse effects were monitored prospectively. Efficacy was evaluated through the MSAS (Memorial Symptom Assessment Scale). This Randomised Controlled Trial (RCT) is comparing two plant-based formulations of medicinal cannabis (MC), CBD 10mg/ml: THC 10mg/ml (balanced) and CBD 100mg/ml: THC 1mg/ml (CBD dominant).

Results

To date 15 patients have been recruited to the study, with 10 patients receiving the investigational product. There are a variety of reasons for why children and their parents declined to enroll on the study including being on concurrent studies, concerns about survey burden or blood tests and already being on a medicinal cannabis product. Low performance status and rapid disease progression also reduced the number of patients eligible for the study or able to commence the product. The trial was able to adapt to support patients in rural locations (through the use of telehealth, couriering the MC to the patient's home, and e-consent). Homecare was supported through telehealth, home visiting, and the option to opt out of blood tests and components of the physical examination.

Conclusions

This feasibility study, almost completed, offers insights into the recruitment and outcomes measured of a clinical trial of medicinal cannabis in children with advanced cancer. Facilitation of access to patients living in rural locations and those predominantly being cared for at home has been an important consideration in conducting this RCT.

PEDIA-021

STRENGTH, MUSCLE MASS AND CARDIORESPIRATORY FITNESS DEFICITS IN SURVIVORS AGED UNDER 18: A REPORT FROM THE ST. JUDE LIFETIME COHORT STUDY

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Introduction

Childhood cancer survivors experience reduced muscle strength and cardiorespiratory fitness, hindering physical activity and increasing long-term health complication risks. The contributions of muscle mass and strength to exercise tolerance remain unclear yet are critical for informing targeted exercise interventions.

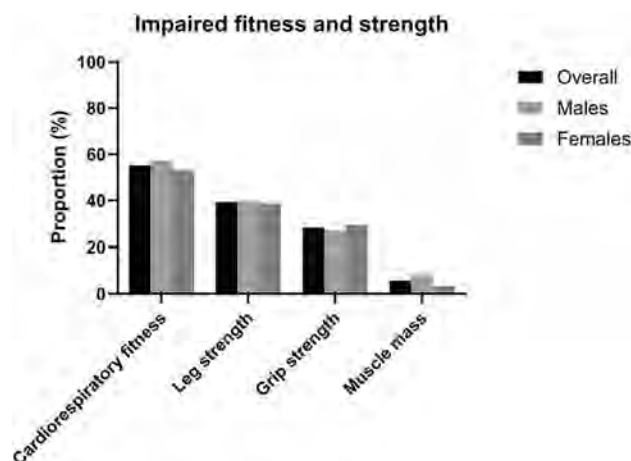
Methods

Participants in the St. Jude Lifetime Cohort Study (SJLIFE) <18 years and ≥5 years post-diagnosis completed maximal cardiopulmonary

exercise testing. Exercise intolerance was defined as peak oxygen uptake <85% of predicted values. Reduced lean muscle mass (dual-energy X-ray absorptiometry) and muscle strength (knee: isokinetic dynamometry; upper body: handgrip dynamometry) were defined as age and sex z-scores <-1.5 SD. Multivariable logistic regression was used to evaluate associations between exercise intolerance and muscle mass and strength, adjusting for age, sex, physical activity, treatment, and comorbidities. Anxiety, peer relations, fatigue, and mobility assessed using the PROMIS questionnaire were compared between impaired and non-impaired groups in muscle mass, strength, and exercise intolerance using two-sided T-tests.

Results

Participants (N= 478) were 50% female and aged 13.6±2.8 years. Exercise intolerance was prevalent in 55.2% (peak VO2max=0.83±0.24), reduced lower body strength in 39.3% (mean z-score=-0.82±1.9), reduced upper body strength in 28.2% (mean z-score=-0.75±1.23), and reduced lean muscle mass in 5.7% participants (mean z-score=0.29±1.19). Exercise intolerance was associated with impaired handgrip strength (OR=2.23, 95% CI: 1.39-3.60, p=0.001), impaired knee extension strength (OR=2.24, 95% CI: 1.45-3.46, p<0.001), and low lean muscle mass (OR=3.30, 95% CI: 1.16-9.38, p=0.026). Exercise intolerance and impaired handgrip and knee strength were associated with worse peer relations and mobility (all p<0.05), whereas lean mass showed no significant associations with patient-reported outcomes.



Conclusions

Impaired muscle strength is a key determinant of exercise intolerance in childhood cancer survivors and partially mediates diagnosis and treatment effects. Physical activity remains strongly protective, highlighting the need for strength-focused exercise interventions which may enhance fitness and quality of life.

PEDIA-022

IMPROVING PAEDIATRIC ONCOLOGY SUPPORTIVE CARE WITH PHARMACOGENOMICS

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Introduction

Children with a cancer diagnosis, or undergoing haematopoietic cell transplant (HCT), are often prescribed multiple supportive care

medications in addition to chemotherapy, increasing the risk of adverse drug reactions. Using pharmacogenomics (PGx) to guide prescribing of supportive care medications could lead to improved medication safety and efficacy. Here, we describe the frequency of high-risk PGx phenotypes identified in a diverse Australian cohort of paediatric oncology patients and estimate how often PGx medications are prescribed.

Methods

14 genes affecting medications commonly prescribed in paediatric oncology were analysed. Genome sequencing data was obtained from 180 patients and PGx phenotypes were predicted for *CYP2C19*, *CYP2D6*, *CYP3A5*, *G6PD*, *HLA-A*, *HLA-B*, *MT-RNR1*, *ABCG2*, *NUDT15* and *TPMT*. Paired supportive care medications included allopurinol, sertraline, omeprazole, voriconazole, ondansetron, tramadol, tacrolimus, flucloxacillin and amikacin. Electronic medical records were used to estimate how often PGx medications were prescribed in a paediatric oncology cohort, including in paediatric HSCT patients.

Results

More than 90% of patients had at least one high-risk PGx phenotype, 58% for *CYP2C19* and 49% for *CYP2D6*. 30% had high-risk phenotypes for both *CYP2C19* and *CYP2D6*. Most patients (89%) were prescribed ondansetron and a significant number prescribed omeprazole (38%), pantoprazole (19%) and voriconazole (15%). Opportunities for prescribing intervention were highest amongst patients taking omeprazole, voriconazole and sertraline. Of the 44 paediatric HSCT patients included in the cohort, ondansetron was prescribed in 71%, voriconazole in 39%, pantoprazole in 41%, omeprazole in 14%, tacrolimus in 9% and tramadol in 9%.

Conclusions

We have demonstrated that clinically relevant high-risk PGx phenotypes are prevalent in an Australian paediatric oncology cohort. Many oncology supportive care medications are likely to be affected, including some that are frequently prescribed. These results highlight the potential for PGx guided prescribing to improve medication efficacy and reduce toxicity in paediatric oncology and HSCT settings.

PEDIA-023

CO-DESIGN THROUGH JOURNEY MAPPING: DEVELOPMENT OF THE AUSTRALIAN FAMILY HANDBOOK FOR CHILDHOOD BRAIN TUMOUR

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Introduction

The diagnosis of a childhood brain tumour impacts the psychological wellbeing of parents who experience high levels of post-traumatic stress. This study aimed to identify malleable causes of distress in the trajectory of care, to inform a resource addressing these underlying mechanisms.

Methods

The co-design process followed the double diamond design framework, incorporating problem exploration and definition, solution development, and integration into practice. A journey-mapping activity was undertaken with parents of children with a brain tumour in an online focus group and through written submissions. Parents

identified core milestones in their experience and the associated emotional and informational needs at each time. Research poetry was used to present parent quotes, connecting the audience to families' lived experience. Parental narratives were investigated using framework analysis to map experiences of traumatisation and trauma-informed care across time. Identified needs were addressed through a multi-phase co-design process with parents and clinicians, incorporating a co-design workshop, local and national iterative review, and an online survey to identify preferences for information delivery mode.

Results

Nine mothers mapped experiences of their child's brain tumour care, describing their emotional and informational needs. Eight milestones were identified, supported by research poetry. Issues relating to navigating the child's treatment, and emotional and social components of the experience were raised. The co-design workshop utilised these findings to identify the content and tone of a resulting resource, before the handbook was drafted and refined through iterative review. Preference for multimodal delivery informed the development of physical, digital, and audio versions of the handbook, which will be distributed through treating hospitals and available online.

Conclusions

Mapping traumatisation across the care trajectory can guide improvements to education and communication strategies which address underlying concerns. Awareness of these issues informed a publicly available resource to enhance transparency, psychoeducation, and clinical communication.

PEDIA-025

EVALUATING THE ACCEPTABILITY AND USABILITY OF A CO-DESIGNED DECISION AID FOR PAEDIATRIC FERTILITY PRESERVATION

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Introduction

Young cancer patients may face treatment-related infertility, which is a significant concern for patients and families. Providing timely, evidence-based fertility preservation information is important to support informed decision-making. Decision aids (DAs) can address information gaps by summarising evidence-based information and clarifying options. This study updated an existing fertility preservation DA (FPDA) for children, adolescents and young adults (CAYA) with cancer and their families using a co-design approach.

Methods

A FPDA was developed in 2016 in accordance with International Patient Decision Aid Standards; however, previous research indicated the need for revision and expansion to better support CAYA cancer patients and survivors. Between 2023-2025, we undertook an iterative, multifaceted, three-stage co-design process. Stage 1: Systematic review evidence update of the content of the tool. Stage 2: Acceptability testing of updated content through focus groups with survivors and clinicians, using theoretical framework of acceptability (TFA). Stage 3: FPDA website update.

Results

Stage 1 identified areas for scientific content update through review of 69 papers. Stage 2, comprised a focus group with 12 survivors (aged 18–25 years) and interviews with two oncology clinicians. Overall, the FPDA was perceived as acceptable. Key recommendations for improvement included a quick-guide version, better accessibility (e.g., for visually impaired and diverse communities), improved fertility preservation content, and opportunities for online communication with experts. In stage 3, the FPDA was redesigned and updated based on findings from Stages 1 and 2. Design change includes users can choose the descriptors relevant to them (e.g. young adult, parent, male, female), and concise summaries have been added to each page.

Conclusions

Co-designing a web-based FPDA stakeholder ensures relevance, acceptability, and readiness for implementation. The next step is a randomised control trial to assess the effect of the FPDA on unmet fertility information needs.

PEDIA-026

DEVELOPMENT OF A SUPPORTIVE CARE SCREENING MODEL FOR CHILDREN AND ADOLESCENTS RECEIVING CANCER TREATMENT

Kate Vandenberg

Monash Children's Hospital

Introduction

With growing evidence into the pivotal role comprehensive supportive care plays in improving treatment tolerance and optimising quality of life, there is a clear need to address the knowledge gap and unmet needs of patients. Supportive care screening is fundamental to identify and prioritise these needs. Assessing health-related quality of life using validated tools offers valuable insight into the effects of the illness and the burden of treatment from the perspectives of the child and/or parent. The aim of this study was to implement a supportive care model to provide personalised, evidence-based care guided screening, allowing for early interventions, education and development of individualised care plans.

Methods

A total of 50 patients participated. The PedsQL Generic Core Scales, Cancer Module and Multidimensional Fatigue Scale were administered to families (25 child or adolescent self-reports; 50 parent reports). During the consult patients and advanced practice nurses participated in a supportive care process that involved screening, discussing problems, and provision of a supportive care plan. Completed screening tools were reviewed senior members of the nursing and allied health care team to triage results.

Results

A total of 50 reports were completed. The age ranges were 2–4 years, 5–7 years, 8–12 years and 13–18 years, 30%, 18%, 16%, 36% respectively. The majority of diagnoses were leukaemia and lymphoma patients 66%. Patient domains with the lowest quality of life score included physical functioning, problems with nausea, anxiety about the procedures, communication and general fatigue.

Conclusions

This project provided local insight into implementing supportive care screening, highlighting the effects of illness and the burden of treatment. The domains of physical functioning, problems with nausea, anxiety about the procedures, communication and general fatigue were highlighted as areas of concern. Implementation of QOL screening allows for early intervention, education and development of individualised care plans to meet unmet needs.

PEDIA-027

UTILITY OF A NOVEL RAPID DIAGNOSTIC TOOL TO DIAGNOSE PULMONARY COMPLICATIONS IN A COHORT OF CHILDREN POST ALLOGENEIC STEM CELL TRANSPLANTATION

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Introduction

Pulmonary complications due to infection contribute significantly to post-haematopoietic stem cell transplant (HCT) morbidity and mortality. Standard microbiological investigations, when performed on bronchoalveolar lavage (BAL) fluid, can take days to weeks to confirm a diagnosis. We aimed to determine the diagnostic performance of the BioFire FilmArray pneumonia panel plus (FA-PP), a multiplex polymerase chain reaction (PCR) panel that detects 18 bacterial and nine viral targets, when applied to BAL obtained by flexible bronchoscopy, in children undergoing HCT, with results available within two hours.

Methods

We performed a single-centre prospective observational study in children undergoing allogeneic HCT, who underwent BAL pre- and post-HCT. To determine the diagnostic performance of the FA-PP, we measured the positive and negative concordance, sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV), compared with standard microbiological investigations, which was considered the gold standard. The clinical impact of the FA-PP was also qualitatively measured.

Results

This study enrolled 16 children who had 31 BAL samples collected, both pre- and post-HCT. In total, there were seven patients who underwent eight BALs while symptomatic, with 50% (4/8) of these results concordant between FA-PP and standard microbiological investigations. In the 13 patients who had 23 BALs collected while asymptomatic, 78% (18/23) of these results were concordant. In the cohort as a whole, sensitivity, specificity, PPV and NPV were 100%, 78%, 54% and 100%, respectively. We also showed that in the children who underwent a symptomatic BAL during the study, the FA-PP resulted in a clinical change in half of these patients.

Conclusions

This is the first prospective evaluation of the clinical impact of the FA-PP in a paediatric HCT cohort. The availability of a more rapid diagnosis has the benefit of leading to faster implementation of targeted antimicrobial therapy and more rapid exclusion of certain infections that are essential for a non-infectious pulmonary complication diagnosis.

PEDIA-028

VIRAL INFECTION IN CHILDREN WITH LEUKAEMIA: A RETROSPECTIVE COHORT STUDY ACROSS TWO TERTIARY PAEDIATRIC HOSPITALS

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Introduction

Children undergoing chemotherapy for acute leukaemia experience profound immunosuppression, predisposing them to opportunistic infections. While bacterial and fungal infections are well-characterised, data on viral infections outside the haematopoietic stem cell transplant (HSCT) setting remain limited. This study aimed to describe the prevalence, clinical manifestations, and outcomes of cytomegalovirus (CMV), Epstein-Barr virus (EBV), and adenovirus (AdV) infections in paediatric patients receiving chemotherapy for leukaemia.

Methods

We conducted a retrospective, cohort study of children diagnosed with *de novo* acute leukaemia across two Australian tertiary hospitals between January 2017 and June 2020. Medical records were reviewed for viral PCR testing, viral load, duration of viraemia, clinical features, treatment, and outcomes. Data were entered into a secure REDCap database and analysed using descriptive statistics.

Results

Among 254 patients (median age 5 years; 48% female), 78% had acute lymphoblastic leukaemia (Table 1). Blood PCR testing was performed in 54%, 49%, and 41% of patients for CMV, EBV, and AdV, respectively. CMV viraemia occurred in 9.6% (13/136), EBV in 3.2% (4/125), and AdV in 2.9% (3/103) of those tested (Table 2). Most infections occurred in high-risk ALL patients. Fever was the predominant symptom; CMV was associated with pneumonitis, hepatitis, and thrombocytopenia in some patients. Antiviral therapy was administered in four patients with CMV; none of EBV or AdV received directed therapy. Invasive fungal infection was identified in 35% of patients who experienced viraemia (Table 2).

Table 1: Patient demographic data

Total patients studied	254
Median age (IQR)	5.0 (2.3-9.0)
Sex	
Male n(%)	131 (51.6)
Female n(%)	123 (48.4)
Cancer diagnosis	
ALL n(%)	199 (78.3)
T-Cell ALL n(% of ALL)	60 (18.1)
pre B-Cell ALL n(% of ALL)	158 (79.4)
ALL by risk	
High risk n(% of ALL)	124 (62.3)
Standard risk n(% of ALL)	75 (37.7)
AML n(%)	47 (18.5)
Other n(%)	9 (3.1)
Serostatus at leukaemia diagnosis	
CMV IgG positive n(% tested)	103/234 (44.0)
EBV IgG positive n(% tested)	107/235 (45.5)

Table 2: Details of viral testing and outcomes

	CMV	EBV	Adenovirus
Patients assessed for viraemia, n(% total)	136 (53.5)	125 (49.2)	103 (40.5)
Total number of tests	923	892	672
# of tests per patient, median(IQR)	1.5 (1-4)	1 (1-3.5)	1 (1-9)
Viraemia detected, n(% tested)	13 (9.6)	4 (3.2)	3 (2.9)
Those with positive serology, n(%)	9 (81.8)	3 (75)	NA
Viraemia by cancer type, n(% viraemic)			
HR ALL	9 (69.2)	1 (25)	1 (33.3)
SR ALL	4 (30.8)	2 (50)	2 (66.7)
AML	0 (0)	1 (25)	0 (0)
Other	0 (0)	0 (0)	0 (0)
Preceding steroid exposure, n(% viraemic)	9 (69.2)	2 (50)	2 (66.7)
Lymphopenia at detection, n(% viraemic)	8 (61.5)	2 (50)	3 (100)
Neutropenia at detection	4 (30.8)	2 (50)	2 (66.7)
Symptomatic, n(% viraemic)	13 (100)	4 (100)	2 (66.7)
Mean duration of viraemia (if ≥1 test performed)	12.2	Unknown	26
Number treated, n(% viraemic)	4 (30.7)	0 (0)	0 (0)
Number with viraemia and invasive fungal infection, n(% viraemic)	3 (23.1)	2 (50)	2 (66.7)

Conclusions

CMV, EBV, and AdV infections are prevalent in children receiving chemotherapy for leukaemia, particularly in high-risk ALL. While severe disease was uncommon, these viruses were frequently identified during febrile episodes, and may provide an explanation when no other cause is identified. Prospective studies are warranted to clarify the role of routine viral surveillance and to assess whether viral detection serves as a signal of exaggerated immune suppression and heightened host vulnerability.

PEDIA-029

ASSESSMENT AND BARRIERS OF TRANSITIONAL CARE PRACTICES FOR PEDIATRIC CANCER SURVIVORS: RESULTS FROM A MULTINATIONAL MASCC-SIOP SURVEY

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Introduction

Improved survival in pediatric oncology has led to a growing population of childhood cancer survivors requiring lifelong follow-up care. Structured transition from pediatric to adult-centered care is critical. The Six Core Elements of Health Care Transition

(6CE-HCT) framework provides a standardized model, yet its implementation varies globally. This study presents multinational survey findings evaluating transition practices and barriers.

Methods

Three structured questionnaires were developed for: 1) healthcare professionals (HCPs) in pediatric oncology; 2) survivors aged ≥ 18 years who completed therapy; and 3) caregivers. Surveys assessed experience in 6CE-HCT domains (policy, tracking/monitoring, readiness, planning, transfer of care, and completion) and barriers using Likert-scale items (1–5 points). The survey was distributed through MASCC and SIOP networks (Jan–Feb 2026). Subgroup comparisons were performed by stakeholder group and World Bank income classification (high-income [HICs] vs. low-/middle-income countries [LMICs]).

Results

Sixty-five respondents from 19 countries were included in this analysis (51 HCPs, 7 survivors, 7 caregivers). Structured transition care models were reported by 35 HIC participants (62.5%), whereas none from LMICs reported adopting a formal model. Compared with survivors/caregivers, HCPs rated better transition care setting (i.e., higher scores) for policy (mean 3.4 vs. 2.6, $P=0.044$), tracking/monitoring (3.2 vs. 2.3, $P=0.011$), planning (3.5 vs. 2.4, $P=0.003$), transfer of care (3.7 vs. 2.6, $P<0.001$), and completion (3.1 vs. 2.4, $P=0.046$). Survivors/caregivers rated readiness more favorably (4.3 vs. 3.3, $P=0.001$). Regarding barriers, respondents from LMICs reported less favorable conditions in staffing (1.9 vs. 2.7, $P=0.048$), financial support (2.0 vs. 3.2, $P=0.012$), multidisciplinary services (2.3 vs. 3.4, $P=0.013$), emotional needs (2.0 vs. 2.9, $P=0.030$), family support (2.4 vs. 3.5, $P=0.011$), and discontinuity (2.3 vs. 3.4, $P=0.011$) than HICs.

Table 1. Characteristics of overall participants, and grouped by stakeholder roles

	Overall (n=65)	Healthcare Professionals (n=51)	Survivors/Caregivers (n=14)
Gender			
Male	21 (67.7)	16 (31.4)	5 (35.7)
Female	44 (32.3)	35 (68.6)	9 (63.3)
Age			
18–25	2 (3.1)	0	2 (14.3)
26–35	7 (10.8)	4 (7.8)	3 (21.4)
36–45	26 (40.0)	23 (45.1)	3 (21.4)
46–55	16 (24.6)	15 (29.4)	1 (7.1)
56 or above	14 (21.5)	15 (29.4)	5 (35.7)
Income classification^f			
HICs	56 (86.2)	44 (86.3)	12 (85.7)
LMICs	9 (13.8)	7 (13.7)	2 (14.3)
Type of institutions			
Specialized pediatric oncology center	22 (33.8)	18 (35.3)	4 (28.6)
General hospital with pediatric oncology services	18 (27.7)	12 (23.5)	6 (42.9)
Cancer center serving both children and adults	17 (26.2)	15 (29.4)	2 (14.3)
Community hospital or clinic	4 (6.2)	3 (5.9)	1 (7.1)
Others	4 (6.2)	3 (5.9)	1 (7.1)
Transition approach			
Structured transition model	35 (53.9)	33 (64.7)	2 (14.3)
No formal model	30 (46.1)	18 (35.3)	12 (85.7)
Attitude towards implementation of transition practice			
Positive	43 (66.2)	40 (78.4)	3 (21.4)
Neutral	19 (29.2)	10 (19.6)	9 (64.3)
Negative	3 (4.6)	1 (2.0)	2 (14.3)

^f World Bank classification.

HICs: high-income countries, including Australia, Belgium, Canada, Germany, Greece, Ireland, Italy, Romania, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

LMIC: low-/middle-income countries, including Bangladesh, China, Egypt, India, Nigeria, and Uganda.

Conclusions

The results suggested that global variation and stakeholder perception gaps exist in transitional care practices. Addressing structural and psychosocial barriers, particularly in LMIC settings, is critical to advancing equitable transition models.

PEDIA-030

THE EQUAL ASPERGILLOSIS SCORE TO ASSESS GUIDELINE-CONCORDANT MANAGEMENT OF INVASIVE PULMONARY ASPERGILLOSIS IN IMMUNOCOMPROMISED CHILDREN

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Introduction

Invasive pulmonary aspergillosis (IPA) remains a major cause of morbidity and mortality in children undergoing treatment for cancer. Optimising diagnosis and management in alignment with evidence-based guidelines has the potential to improve clinical outcomes. To quantify guideline adherence in management of IPA, the European Confederation of Medical Mycology has developed the EQUAL Aspergillus score: a 16-item scoring tool comprising imaging and microbiological diagnosis, initial treatment and follow up of pulmonary aspergillosis. This score has yet to be validated as a predictor of outcomes in a paediatric cohort.

Methods

All proven/probable IPA cases from two cohort studies of children treated at Australian oncology units were analysed (PACIFIC (2017–2021) and TERIFIC (2004–2014) studies. Data for each case were collated including demographics, antifungal prophylaxis, microbiological investigation, management, and follow up imaging. The EQUAL Aspergillus score was calculated for each patient. Guideline compliance was compared between groups with favourable and unfavourable IPA outcome at 6 months.

Results

Overall, 72 IPA cases (26 proven, 46 probable) were included, median age was 9.7 years. Acute lymphoblastic leukaemia (59.7%, $n=43$) and acute myeloid leukaemia (23.6%, $n=17$) were the most common underlying diagnoses. Few patients received a maximum EQUAL score for bronchoalveolar lavage diagnostic testing (11.1%, $n=8$), antifungal therapy (37.5%, $n=27$) and follow up imaging (9.7%, $n=7$). For 62 non-refractory IPA cases, median EQUAL score was 45.5% (IQR 28.4–59.1%). For 10 refractory cases, median EQUAL score was 62.0% (IQR 52.9–69.8%). EQUAL score did not differ significantly between those with favourable compared with unfavourable outcome.

Conclusions

Overall, guideline compliance as measured by EQUALS Aspergillus score was sub-optimal amongst children with IPA during cancer treatment. Although the score was not predictive of outcome, these results highlight the potential for improvement in IPA management in this context, particularly in microbiological testing, antifungal therapy and follow-up imaging.

PERSO-003

EXPERIENCES OF CARE COORDINATION AMONG WOMEN WITH BREAST CANCER RECEIVING CHEMOTHERAPY

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Introduction

Over 60% of women diagnosed with breast cancer receive chemotherapy with glucocorticoids. Glucocorticoid use during chemotherapy has been found to cause hyperglycemia, a key driver of type 2 diabetes. Thus, comorbid breast cancer and diabetes is common. Managing these comorbidities is complex and requires coordination across healthcare specialties. This research aimed to examine breast cancer patient experiences and provider perceptions of care coordination during chemotherapy.

Methods

Patients with breast cancer ($N=26$) beginning a chemotherapy regimen including glucocorticoid administration were recruited using a purposive sampling method: $n=6$ low-risk (BMI 25–30, HgbA1c < 5.7%), $n=10$ prediabetes (BMI >30 and/or with pre-diabetes [HgbA1c 5.7–6.4%]), $n=10$ type 2 diabetes (HgbA1c $\geq 6.5\%$ or on anti-glycemic medications for diabetes). Patients completed questionnaires about care coordination at enrollment and 8 weeks later. Additionally, interviews with medical providers who care for this patient population ($N=6$) were conducted.

Results

At enrollment, 54% of participants reported their healthcare is not well-organized; 32% reported feeling abandoned and/or lack of leadership in their care; 25% felt they had to self-organize their healthcare; 21% felt their health had suffered. Reasons for these difficulties included: lack of access to a regular doctor/clinic, difficulty identifying provider in charge, lack of communication between providers, and uncertainty regarding next steps. At follow-up, participants reported similar difficulties with care organization, revealing ongoing issues over the 8-week period. Interviews with providers indicated several difficulties in care coordination, including lack of communication between providers, limited personnel/time, and competing care priorities.

Conclusions

Patients with cancer experience significant gaps in care coordination during chemotherapy in the context of comorbidities like diabetes. For these patients, poorly managed diabetes is associated with increased toxicity, longer hospital stays, chemo-resistance, cancer recurrence, and progression. Research on shared understanding and accountability for healthcare teams is critically needed to improve patient outcomes and quality of life.

PERSO-004

IMPACT OF SPECIALIST TOXICITY MANAGEMENT ON ADVERSE EVENTS AND TREATMENT CONTINUITY IN EARLY-PHASE ONCOLOGY TRIALS

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Introduction

Precision oncology has expanded the role of Early Phase Clinical Trials (EPCTs), defined as dose-finding phase I/II studies, beyond traditional safety assessments to include therapeutic efficacy. With the

rise of targeted therapies and immunotherapies, Treatment-Related Adverse Events (TRAEs) have become increasingly diverse, often requiring specialist input. Limited integration of specialist services may contribute to symptom escalation and treatment interruption. This study identified toxicity and specialist referral patterns in EPCTs and examined associations between specialist involvement, trial continuity, and high-grade TRAEs (defined as Common Terminology Criteria for Adverse Events (CTCAE) grade ≥ 3). Ultimately, this study provides foundational insights to support coordinated specialist involvement in TRAE management within EPCTs.

Methods

This retrospective single-centre study of 125 participants from a tertiary academic EPCT unit extracted demographic, clinical, and trial data applying descriptive statistics to characterise any patterns. Specialist involvement was examined against trial impact (no impact, dose modification/interruption, discontinuation) using multinomial logistic regression, and against number of high-grade TRAEs using negative binomial regression.

Results

TRAEs occurred in 73.6% of participants, most commonly gastrointestinal, dermatological, and laboratory abnormalities. Over a third of participants required specialised care, primarily to dermatology, endocrinology, and neurology. High-grade TRAEs significantly increases the likelihood of participants requiring dose modification/interruption (OR 4.52, $p=0.004$) or discontinuation (OR 8.34, $p<0.001$). Participants not requiring specialist referral were less likely to require dose modification/interruption (OR 0.26, $p=0.058$) or discontinuation (OR 0.12, $p=0.010$). The incidence rate ratio of high-grade TRAEs for participants not requiring specialist referral was 0.60 ($p=0.115$).

Conclusions

TRAEs significantly impact patient experience and treatment continuity in EPCTs. Specialist involvement in the current study was potentially reactive to high-grade TRAEs rather than proactive to prevent escalation. These findings support evaluation of early coordinated specialist input to optimise TRAE management, preserve trial continuity, and potentially accelerate efficiency in the development of novel anticancer therapeutics.

PERSO-006

STARTING IT RIGHT - SELECTING EVALUATION OUTCOMES FOR THE FIRST MEDICAL ONCOLOGY NURSE PRACTITIONER IN A LARGE METROPOLITAN HEALTH SERVICE

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Introduction

With increasing investment in cancer nursing in Australia and globally, evaluation of the value and impact of these roles is paramount. Yet there are currently no standard evaluation metrics for advanced practice nursing (APN) roles. We aimed to develop an evaluation plan based on current evidence for the first Medical Oncology Nurse Practitioner (MONP) role which became operational in November 2025 at a large metropolitan health service in Melbourne, Victoria.

Methods

Exploratory consultations were conducted with 25 members of the multidisciplinary and operational teams to understand key service gaps and corresponding clinical and performance indicators. Other well-established nurse practitioner models and methods of evaluation within Alfred Health and across other health services were examined. A desktop literature review was conducted to identify relevant nurse sensitive outcomes and optimal care pathway (OCPs) indicators. The practicability of collecting and extracting data from electronic medical records was also explored, along with real-time digital dashboard reporting.

Results

A set of nurse-sensitive outcomes and quality indicators were identified as applicable to the MONP role: Referrals into the MONP (number and source); access to APN care, supportive care screening rates and referrals, geriatric oncology screening and assessment; patient experience; acute care usage; clinic capacity; time to first appointment and time to treatment according to OCPs.

Preliminary results for the first month show that 19 referrals have been received including 13 for non-prostate genito-urinary cancer patients that did not previously have access to an APN. This has released 12 hours capacity in medical oncology clinics.

Conclusions

Measuring nurse-sensitive outcomes and quality indicators in real-time from the commencement of cancer APN roles ensures accountability and enables demonstration of the value and impact of these roles. This approach can be used as a template for other cancer APN roles and contributes to the discussion for establishing standardised approaches to APN role evaluation.

PERSO-009

IMPLEMENTATION OF A MULTIDISCIPLINARY SUPPORTIVE CARE PATHWAY FOR POSTOPERATIVE LUNG CANCER PATIENTS UNDERGOING LOBECTOMY

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Introduction

To develop and implement a structured supportive care pathway for postoperative lung cancer patients undergoing lobectomy, focusing on pain control, psychological distress management, and functional recovery, and to evaluate the effectiveness of a multidisciplinary team approach in enhancing symptom control and self-management.

Methods

A standardized supportive care pathway was implemented for patients undergoing lung lobectomy. The multidisciplinary team included thoracic surgeons, nurses, rehabilitation therapists, pharmacists, and psychological support personnel. Interventions included: (1) routine pain assessment each shift using a numeric rating scale with stepwise multimodal analgesia and patient-controlled analgesia when indicated; (2) non-pharmacological interventions such as music listening (2–3 sessions daily, 30 minutes per session) and aromatherapy massage (30 minutes per session, 1–2 times per week); (3) daily respiratory training including diaphragmatic breathing and incentive spirometry; (4) early mobilization and progressive ambulation under rehabilitation guidance; and (5) psychological assessment using the Distress Thermometer with family involvement and counseling support as needed. Patient education and discharge planning were integrated to promote continuity of care.

Results

Following implementation of the pathway, postoperative pain scores decreased from moderate levels (6–7/10) to mild levels (1–3/10). Oxygenation improved with effective breathing training, and early mobilization was achieved without complications. Psychological distress scores decreased to ≤ 4 prior to discharge. Patients

demonstrated improved understanding of disease management, increased rehabilitation adherence, and enhanced self-management confidence. Family engagement contributed to reduced anxiety and improved coping

Conclusions

A structured multidisciplinary supportive care pathway effectively improves symptom management, psychological adaptation, and functional recovery in postoperative lung cancer patients. Integrating pharmacological and non-pharmacological interventions, early mobilization, respiratory training, and distress screening provides a replicable model for optimizing supportive oncology care and enhancing patient-centered outcomes

PERSO-010

DEVELOPMENT OF PATIENT-REPORTED OUTCOME-DRIVEN SUPPORTIVE CARE NAVIGATION PATHWAYS INCORPORATING INTEGRATIVE ONCOLOGY

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Introduction

There is a lack of standardized frameworks to triage patient-reported outcome (PRO) alerts in cancer supportive care, and integrative oncology is not yet operationalized within standard supportive care workflows. To support patient navigation geared by PRO alerts, we developed a guidebook for navigators to facilitate PRO-driven supportive care pathways that incorporate integrative oncology into routine clinical practice.

Methods

A three-phase process was taken. First, we reviewed National Comprehensive Cancer Network (NCCN) survivorship guidelines and Society for Integrative Oncology-American Society of Clinical Oncology (SIO-ASCO) guidelines to identify evidence-based interventions for common symptoms. Second, these guidelines were translated into flowcharts where severity thresholds, defined by standard deviations from the population mean using the PROs Measurement Information System (PROMIS) T-score, trigger navigation action. Finally, a panel of oncologists and an integrative oncology specialist reviewed the guidebook to ensure the contextualization within existing clinical workflows.

Results

We identified 4 specific symptoms: anxiety, depression, fatigue, and pain for pathway development based on current support of SIO-ASCO guidelines. Each symptom follows a logic where routine screening identifies symptoms as mild, moderate, or severe. For each symptom, foundational support such as addressing contributing factors or providing patient education is outlined. Based on severity assessed by PROMIS, for example, severe anxiety may trigger referrals to a psychologist for therapy or a physician for medication evaluation. Finally, navigators discuss integrative oncology options as adjuncts, such as mind-body intervention for anxiety.

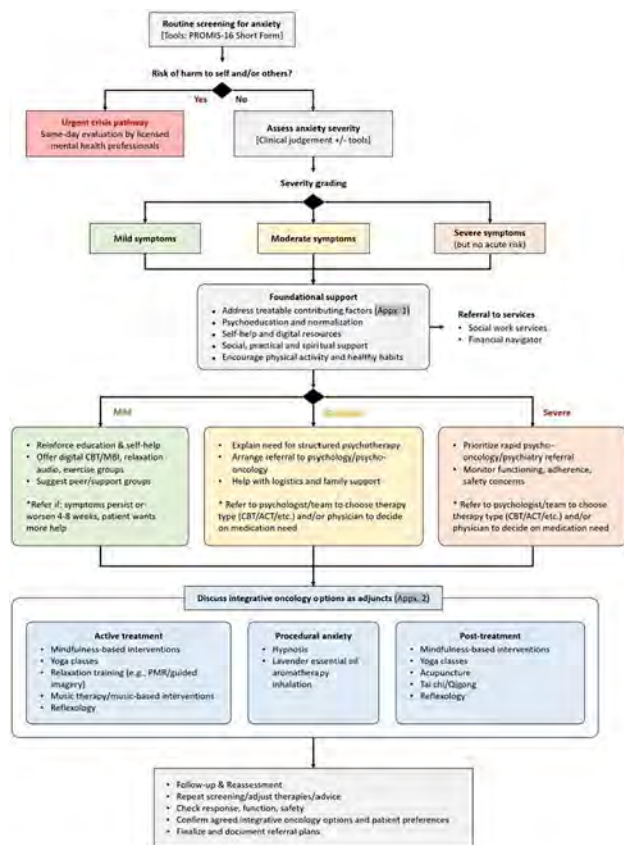


Figure 1. Example of PRO-driven supportive care pathways: anxiety clinical flowchart
 *CBT: Cognitive Behavioral Therapy; MBI: Mindfulness-Based Interventions; ACT: Acceptance and Commitment Therapy; PMR: Progressive Muscle Relaxation.

Conclusions

By linking PRO measures to supportive care interventions that incorporate integrative oncology modalities, our guidebook provides a foundation for clinical trials to evaluate the effectiveness of PRO-driven supportive care navigation in improving access to comprehensive supportive care. This guidebook operationalizes complex guidelines into a practical and severity-stratified tool for patient navigators. While we initially focus on four domains, this framework establishes a scalable model for developing flowcharts across additional symptoms.

PERSO-011 EXPLORING THE IMPACT OF AUSTRALIA'S MYMEDICARE PATIENT REGISTRATION SCHEME ON CANCER SURVIVORS' CONTINUITY OF CARE

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Introduction

Continuity of care (CoC) refers to the extent to which individuals experience a consistent and coordinated healthcare journey across providers and settings. CoC depends on effective information sharing, collaborative person-centred care, and trusting relationships between patients and providers. MyMedicare, Australia's voluntary patient registration scheme, aims to improve CoC for individuals with chronic conditions,

but has not been evaluated for its use among cancer survivors. This study explored its implications for cancer survivors' CoC.

Methods

A cross-sectional qualitative study was conducted using semi-structured interviews. Purposive sampling recruited participants, and information power guided sample size. Interviews were audio/video recorded, transcribed verbatim, and analysed using inductive thematic analysis.

Results

Ten cancer survivors, four cancer care specialists, and three general practitioners (GPs) participated. Preliminary findings indicate: (i) participants found MyMedicare difficult to understand and reported a lack of clear information on benefits of registration for cancer survivors as a barrier to enrolment; (ii) GPs and specialists acknowledged that the scheme supports GP-led chronic disease management plans but noted a lack of financial incentives for specialists contributing to these plans; (iii) technological infrastructure was identified as a significant barrier to information sharing between GPs and specialist settings, hindering CoC; and (iv) maintaining consistent relationships with a single GP or cancer care specialist was particularly challenging for cancer survivors residing in regional areas, negatively impacting CoC.

Conclusions

Preliminary findings suggest that MyMedicare's intended role in improving CoC for people with chronic conditions, such as cancer is not fully realised. A range of strategies should be explored to realise the opportunity of MyMedicare that span individually tailored information and guidance, data access and sharing via digital systems, and the incentive models that include specialist participation are needed. The findings highlight the need for policy and system-level reforms to ensure equitable and effective continuity of care for cancer survivors.

PERSO-012 BAYESIAN NETWORK ANALYSIS PREDICTORS DIRECTLY ASSOCIATED WITH DIFFERENT 5-FLUOROPYRIMIDINE-BASED CHEMOTHERAPY TOXICITIES

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Introduction

5-fluoropyrimidine (5-FU)-based chemotherapy toxicities are common, encompass different toxicity types and vary in severity. Our previous combined toxicities Bayesian network (BN) analysis revealed direct links between toxicities and genetic and non-genetic predictors. However, this analysis did not investigate differences in predictors linked to each toxicity type or *MTHFR* genetic variability as a genetic predictor. Hence, this study aimed to determine differences in the BNs of each toxicity and investigate if *MTHFR* genetic variants were linked to toxicities in the identical population.

Methods

Demographics, comorbidities, and types of cancer, 5-FU-based chemotherapy regimens and toxicities were obtained for 155 Australian White participants from clinical records. Genetic data were either available from previous analysis or determined using TaqMan assays (*MTHFR* gene). BN analysis was undertaken using a score-based method of learning with Hill-Climbing methodology and BN criterion to generate the best direct acyclic graph determined by the lowest BIC score.

Results

Regarding the directly linked predictors, the treatment hospital was common to overall GI toxicity, diarrhoea, mucositis, cardiotoxicity, fatigue, and general pain; chemotherapy regimen was common to hand-foot syndrome and neuropathy, and type of cancer was common to diarrhoea and neuropathy (P-values: 3.3×10^{-6} - 0.08). Genetic predictors were directly linked to overall GI toxicity (*IL2*), constipation (*OPRM1*, *IL6R*), mucositis (*CRP*),

nausea/vomiting (*IL6R*, *MTHFR*), hand-foot syndrome (*MTHFR*) and neuropenia (*BDNF*) (P-values: 0.037 - 0.1). Finally, comorbidity predictors were directly linked to cardiotoxicity (asthma, diabetes), fatigue (smoker), general pain (asthma) and skin toxicity (smoker) (P-values: 0.007 - 0.07).

Conclusions

The BN for each toxicity was unique with regard to the directly linked predictors identified, however there were also some common treatment, genetic and comorbidity predictors. Interrogation of these BNs is ongoing regarding both the differences and similarities to inform potential use of these BNs to personalise supportive care during 5-FU-based chemotherapy treatment.

PERSO-013
REGIONAL CANCER PATIENTS' INFORMATION NEEDS FOR DECISION-MAKING: A MIXED METHODS STUDY IN THE AGE OF SOCIAL MEDIA.

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Introduction

Navigating treatment decision-making (TDM) in regional cancer care is a complex process. With an increase in patient-centered care, the need to understand how patients navigate TDM is vital to ensure information is well received. Therefore, this study explores the information needs and approaches used by regional cancer patients over 50 to support information consolidation during decision-making.

Methods

This mixed-methods study purposefully recruited 10 cancer patients from a regional health service in Victoria between April and July 2024. Eligible participants were aged over 50 and had a confirmed solid tumour diagnosis. Semi-structured interviews explored participants' information needs, support networks, and social media use for TDM. The Epstein and Street's framework for patient-centred communication informed the interview guide and a validated health literacy questionnaire (HLQ) was used to examine the role of health literacy (HL) in TDM. Qualitative interview data were analysed thematically in NVIVO14. Quantitative HLQ score distribution and variability were analysed using descriptive statistics, in Excel and SPSS.

Results

Participants needs for information varied whilst also desiring varying levels of input from healthcare providers (HCP) and family members. Trust in HCPs enhanced decision satisfaction, although reliance on HCPs limited patient engagement in TDM. While online information was useful, barriers such as digital divides and distrust were identified. All participants had low HL in scales 2, 3 and 5, struggling with information overload and complex terminology.

Conclusions

The use of tailored communication strategies can support person-centered care by addressing individual needs during decision-making. This study highlights how HCPs can support informed, patient-centred care.

PERSO-014
IMPLEMENTING PROMS AND PREMS IN ROUTINE ONCOLOGY CARE: A PRE-POST QUALITATIVE EVALUATION OF HEALTHCARE PERSONNEL

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Introduction

Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) are related to improved quality of care and survival outcomes for people with cancer. Despite strong evidence supporting their benefits, routine integration into oncology practice remains inconsistent. This study explored healthcare personnel perspectives before and after implementation to identify perceived barriers, real-world impacts, and sustainability challenges.

Methods

A qualitative study was conducted at a large Australian oncology service using semi-structured interviews with healthcare personnel. Nineteen participants from clerical, nursing, and medical roles, with 1 to 40 years of professional experience took part in pre-implementation (n = 14), post-implementation (n = 17), or both interview phases. Interviews were conducted face-to-face or online. All eligible and available staff were invited to participate, rather than sampling to data saturation. Interview transcripts were analysed using framework analysis.

Results

Pre-implementation concerns included: (1) limited time and resources; (2) integration challenges integrating with existing clinical systems; (3) difficulties achieving staff engagement and buy-in; and (4) patient barriers, particularly digital access and computer literacy. Post-implementation findings contrasted these concerns, with participants reporting: (1) positive impacts on clinical consultations, with PROMs and PREMs informing and structuring discussions; (2) clinical value in identifying unmet needs, especially psychosocial concerns; (3) enhanced communication and collaboration between patients and clinicians; (4) minimal impact on consultation length; and (5) ongoing concerns regarding sustainability due to insufficient organisational and structural support beyond the study period. Representative participant quotes across both pre-implementation and post-implementation interviews are included in Table 1

Table 1. Representative quotes from participants.

	Administrators	Nurses	Oncologists
Pre	"It gets quite busy on the desk, and I don't think we can really be helping patients, because you know, it's not usually a quick fix with someone elderly using an iPad." (F,31,6YRS)	"Time, and I guess resources. So, I guess people available to go through it with them, staffing, and completing the actual questionnaire." (F,35,3.5YRS)	"So, it just might be hard to completely integrate it into the consultation when we're already sort of running short on time." (F,38,5.5YRS).
Post	"Because it's not impinging on our workload, which is really excellent cause, yeah, you've probably seen that some of those clinics, it's flat out." (F,58,6.5YRS)	"Fantastic. I would prefer all patients have them, because it really helped target the assessment and the oncology review. In terms of, you could prioritise what to concentrate on addressing." (F,52,5.5YRS)	"That's probably cost saving in time. I was concerned it was gonna take a lot of time, but it doesn't." (F,50,15Yrs) "I think on occasion it's also brought up issues that the patient doesn't report in the actual consultation, mainly related to mental health, so low mood, anxiety, those things don't tend to come up." (F,38,6Yrs)

Pre: representative quotes from qualitative study participants prior to the implementation study; Post: representative quotes from qualitative participants after engaging in the PROMS/PREMS implementation study

Conclusions

Implementation of PROMs and PREMs was viewed positively by healthcare personnel and enhanced patient-centred clinical practice. Many anticipated pre-implementation barriers did not materialise following real-world use. However, sustainable integration requires health service-level investment to address structural and system-level gaps that extend beyond short-term implementation initiatives.

PERSO-015

MEDICAL CANNABIS EXTRACTS FOR CANCER-RELATED SYMPTOMS: RESULTS OF A POSITIVE PATIENT-CENTRED AGGREGATE N-OF-1 CLINICAL TRIAL

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Introduction

There is little clinical trial evidence to support the now widespread taking of medical cannabis oils for cancer-related symptoms.

Methods

In this patient-centred aggregate N-of-1 study each participant took one of four blinded oils sublingually up to every 4 hours for 4 consecutive days in randomized sequence, for up to 3 cycles (48 days total). Response was an at least 20% improvement in a 7-point Patient Global Impression of Change scale over the response to placebo for each participant. Participants were recruited to three arms depending on their “most troublesome symptom”: Pain, Sleep disturbance or Anxiety at $\geq 4/10$. A revised Edmonton Symptom Assessment System including sleep disturbance and night sweats, was also assessed.

Results

Ninety-two participants provided evaluable data. The overall clinically important response rate to at least one oil was 50%. On average there was no statistically significant difference between oil effectiveness but there was a clear preference for most participants. The response rates for the three arms were Pain 50%, Sleep Disturbance 55% and Anxiety 62%. Those with night sweats also responded well. Based on the PGIC, the threshold for Minimally Clinically Important Difference in overall symptom burden as assessed by a modified Edmonton Symptom Assessment Scaler (revised) was -5.

Conclusions

This patient-centred study with three different extracts allowed the potential benefits of medical cannabis oils to be clearly seen. Patients can be advised that there is a ~ 50% chance of benefit from at least one kind of oil. They should be guided to try a THC-predominant, CBD-predominant and 1:1 oil before choosing their preferred oil to continue if one is helpful. For both THC and CBD 2.5mg q4h prn alone or (a total of 5mg when combined) are safe starting doses.

PERSO-016

"IT IS THE HARDEST THING WE HAVE EVER DONE": EXPLORING THE EXPERIENCES OF CAREGIVERS OF INDIVIDUALS WITH HEAD AND NECK CANCER

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Introduction

Head and neck cancer (HNC) is a devastating disease. In 2022, approximately 20 million individuals were diagnosed with HNC worldwide, and this is expected to become 35 million by 2050. HNC treatments are often complex, and their associated side effects can result in substantial functional challenges and visible changes for patients. Recovery from these treatment side effects can last

weeks to months or even longer, requiring considerable care, and caregiving tasks can be challenging for the caregivers. To date, little is known about the experiences of the informal caregivers of individuals with HNC around the world, including Australia, to identify their support needs.

Methods

This study used interpretive inquiry to explore the caregiving experience of informal caregivers for HNC patients at a metropolitan tertiary hospital in New South Wales (NSW), Australia. Fifteen participants were recruited for this study from 2020 to 2022. Semi-structured individual interviews were conducted with four males and 11 females, via telephone due to the social restrictions imposed by the COVID-19 pandemic. The interviews were audio-recorded, transcribed, and analysed using thematic analysis.

Results

The overall experiences of caregivers were captured in the overarching theme of ‘It is the hardest thing we have ever done’. Becoming a caregiver for someone with HNC was a life-changing responsibility, and this transition was emotionally and psychosocially challenging, making caregiving one of the most difficult roles participants had ever assumed. This overarching theme consisted of three major themes: ‘our lives have changed,’ ‘caregiver as a coach’ and ‘managing familiar and unfamiliar care needs’.

Conclusions

This study explored the experience of caregivers of patients with HNC and how these experiences have transformed their lives. The findings also offer valuable insights for healthcare practice, emphasizing the need for ongoing support for caregivers to manage their roles effectively without neglecting their psychosocial and informational needs.

PERSO-017

SUPPORTIVE CARE FOR PATIENTS WITH HIGH GRADE GLIOMAS

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St George Public Hospital, Supportive care, Sydney

Introduction

High grade gliomas are life altering diagnoses. Patients frequently experience high levels of functional and cognitive morbidity resulting in negative quality of life sequelae and an impact on families and carers.

There is evidence that early supportive care involvement including proactive multi-disciplinary input is beneficial for these patients.

We commenced our Supportive Care Service (SCS) in a tertiary teaching hospital in Sydney Australia in 2023; our scope was to provide multi-disciplinary home-based care to patients with life-limiting illnesses including those with a high-grade glioma.

Methods

We collected data on all high-grade glioma patients who were linked to our service over a 26-month period. We recorded demographic information and details on symptom burden, the involvement of allied health professionals, rates of Advanced Care Planning (ACP) uptake, and ultimately, place of death.

Results

Over the 26 months, we cared for 18 patients with high grade glioma; 56% were male. The median age of our patients was 71 years (range 27-80).

The most common symptoms experienced were functional decline and cognitive changes. All patients were seen by the palliative care specialist (Dr) and clinical nurse consultant (CNC). Most of the patients were seen by physiotherapy (PT), occupational therapy (OT), social work (SW), speech pathology (SP), pharmacy (pharm) and dietetics (DT). Table 1.

SCS Clinician	Number of patients seen (%)
Dr	18 (100)
CN	18 (100)
OT	15 (83)
SP	14 (78)
SW	13 (72)
Pharm	12 (67)
PT	11 (61)
DT	10 (56)

61% of our patients had ACP discussions documented in the medical record, information that was shared with the referring doctor.

Of the 15 patients who have died, 2 were in the acute hospital and 13 died at home or in the palliative care unit (PCU).

Conclusions

The introduction of a SCS provides high grade glioma patients with multi-disciplinary support at home, allowing them to plan for their future and enabling them to avoid unnecessary acute hospitalisations. ACP discussions were facilitated which helped to plan end of life care.

PERSO-018

MANAGING MULTIMORBIDITY IN CANCER: RESULTS OF CONSULTATION WITH AUSTRALIAN CONSUMERS AND HEALTHCARE PROFESSIONALS TO INFORM A CLINICAL PATHWAY

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Introduction

Multimorbidity (co-occurrence of two or more long-term conditions) impacts all stages of cancer care, increases prognosis uncertainty and care complexity, and is associated with adverse outcomes. This study aimed to understand Australian stakeholder experiences and recommendations for a model of care to manage multimorbidity in people with a history of cancer.

Methods

Adult consumers with a history of cancer and multimorbidity or relevant caregiving experience, and healthcare professionals involved in cancer/multimorbidity care participated in qualitative semi-structured focus groups or interviews. Reflexive thematic analysis was used to identify key themes and inform a prototype clinical pathway.

Results

Consumers (n=30) and healthcare professionals (n=26) reported challenges including fragmented care due to siloed systems, poor communication across settings, ineffective digital systems, consumer difficulty in self-management/navigation, inadequate psychological screening/treatment, inadequate resources/referral pathways for emerging chronic conditions. Follow-up care was difficult in tertiary centres and access to primary care was limited during and after cancer treatment.

Identified needs suggested a clinical pathway for multimorbidity in cancer requires ongoing navigation and referral support, coordinated by a designated healthcare professional/team with a whole-person approach from diagnosis through to post-treatment. To meet needs of survivors with multimorbidity, the pathway should address pre-existing and emerging conditions, including psychological morbidity, through comprehensive assessment, repeated screening, and sustained engagement with non-cancer specialists including primary care and allied health. Post-treatment/ongoing care should include guidance for consumers and healthcare professionals on late effects, including clear consumer advice on symptom management and who to contact if concerned.

Resources identified as necessary included improved capacity for specialist nursing coordination, expanded psycho-oncology services, improved access to primary care, fit-for-purpose digital health applications, and enhanced chronic disease management plans.

Conclusions

Effective multimorbidity management in cancer requires comprehensive survivorship care with emphasis on interdisciplinary collaboration, navigation, and follow-up. Further implementation-focused research, policy reform, and resourcing are essential.

PERSO-019

ASSOCIATIONS BETWEEN PROMS COMPLETION AND SUPPORTIVE CARE REFERRALS IN ONCOLOGY CLINICS

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Introduction

Patient-reported outcome measures (PROMs) support the identification of symptoms and unmet needs, enabling timely supportive care for people with cancer. The routine use of electronic, real-time PROMs in outpatient oncology clinics may enhance referral to supportive care and allied health services, yet evidence of their impact on clinical practice remains limited.

Methods

Patients attending breast and lung oncology outpatient clinics were invited to complete electronic PROMs prior to scheduled consultations. Measures included the EQ-5D-5L, Edmonton Symptom Assessment System-Revised, and Supportive Care Needs Survey-Short Form (SCNS-SF34). Medical record data were extracted for both PROMs completers and non-completers, including supportive care and allied health referrals. Between-group comparisons were conducted using chi-squared and t-tests.

Results

Data were analysed from 1,732 consultations involving 677 patients (54% breast cancer; 46% lung cancer). PROMs completion was 69% among breast cancer patients (mean age 62 years; 99% female; 61% metastatic) and 65% among lung cancer patients (mean age 68 years; 44% female; 72% metastatic). The most frequent referrals were to nursing (breast 77%; lung 85%), palliative care (breast 5.7%; lung 7.9%), and social work (breast 4.9%; lung 2.6%). For both cohorts, consultations with completed PROMs were more likely to result in at least one supportive care referral compared with non-completed consultations (breast 26.2% vs 18.4%; lung 19.9% vs 9.6%; all p<0.01). Among breast cancer patients, supportive care referrals were significantly associated with lower mean EQ-5D-5L self-rated health scores, higher mean scores on multiple EQ-5D-5L dimensions and ESAS-R symptoms, and greater unmet needs across multiple SCNS-SF34 domains, (Table 1 and Table 2, all p<0.05).

Table 1. Associations between breast cancer patients reported mean EQ-5D-5L and ESAS-R scores and whether a supportive care referral was recorded at consultations.

Dimension/Item	Mean score (SD)		
	Referred	Not referred	p-value
EQ-5D-5L Mobility (n = 451)	1.75 (0.95)	1.64 (0.91)	0.30
EQ-5D-5L Self-care (n = 425)	1.33 (0.70)	1.27 (0.61)	0.36
EQ-5D-5L Usual activities (n = 450)	2.03 (1.05)	1.79 (0.97)	0.03
EQ-5D-5L Pain/discomfort (n = 427)	2.22 (0.96)	2.04 (0.87)	0.07
EQ-5D-5L Anxiety/depression (n = 452)	2.13 (0.86)	1.70 (0.82)	<0.001
EQ-5D-5L Self-rated health score (n = 391)	63.8 (22.2)	68.3 (21.2)	0.03
ESAS-R – Depression (n = 432)	3.36 (2.72)	2.53 (2.48)	0.003
ESAS-R – Anxiety (n = 434)	3.73 (2.72)	2.72 (2.49)	<0.001
ESAS-R – Tiredness (n = 437)	4.85 (2.73)	4.25 (2.54)	0.03
ESAS-R – Drowsiness (n = 437)	3.88 (2.67)	3.14 (2.63)	0.01

Table 2. Associations between breast cancer patients reported mean SCNS-SF34 Domain Standardised Summated Scale scores and whether a supportive care referral was recorded at consultations.

SCNS Domain Standardised Summated Scale	Mean score (SD)		
	Referred	Not referred	p-value
Psychological (n = 416)	47.2 (25.1)	33.8 (22.2)	<0.001
Health System and Information (n = 404)	39.9 (25.0)	29.8 (22.4)	<0.001
Patient Care and Support (n = 412)	31.1 (23.3)	22.9 (21.1)	<0.001
Physical and Daily Living (n = 415)	42.8 (25.6)	33.1 (23.9)	<0.001
Sexuality (n = 399)	22.1 (27.5)	18.2 (24.0)	0.17

Conclusions

Completion of electronic PROMs prior to breast and lung oncology consultations was associated with increased supportive care and allied health referrals. These findings support the role of PROMs in facilitating more responsive, collaborative, and patient-centred cancer care.

PERSO-020

PROACTIVE SYMPTOM MONITORING AND INTERVENTION TARGETING USING BAYESIAN NETWORKS AND PREDICTIVE MODELING: BREAST CANCER SURVIVORSHIP

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Introduction

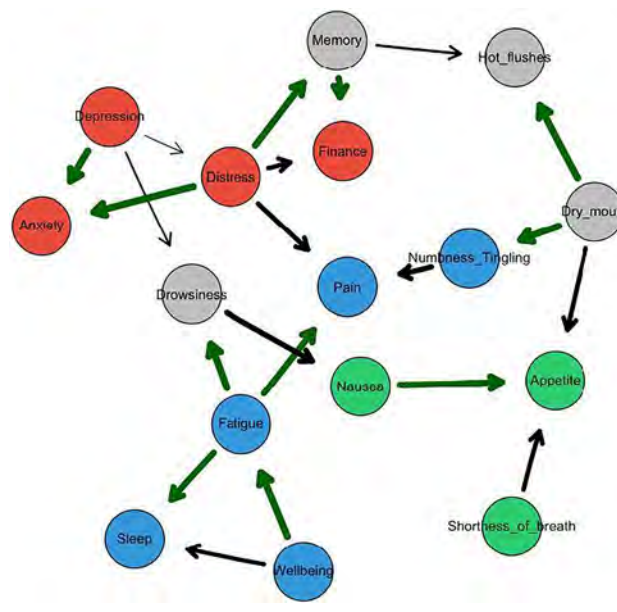
Symptom clusters in breast cancer survivorship represent complex inter-relationships with directional dependencies. Existing clinical frameworks approach the occurrence of concurrent symptoms as independent co-occurrences rather than interdependent symptoms with directional potential. Bayesian networks can model these conditional directional probabilities, enabling prediction of symptom occurrence and severity, and support proactive symptom monitoring and intervention targeting.

Methods

Edmonton Symptom Assessment Scale (ESAS) was collected from breast cancer survivors at Chris O'Brien Lifecare, Sydney, Australia. Statistical analysis was performed using R. Missing data were handled using multiple imputation methods. Covariate adjustment via residualization controlled for treatment status and age. Bayesian network structure learning used IAMB

algorithm with bootstrap model averaging (1,000 networks), with maximum likelihood parameter fitting. Conditional probability predictions used likelihood weighting with n=10,000 samples to estimate symptom probabilities and severity impacts when symptoms are clinically significant ($\geq 4/10$).

Results



Path	Psych	Health	Info	Support	Physical	Daily	Sexuality	Depression	Anxiety	Distress	Fatigue	Sleep	Drowsiness	Wellbeing	Pain	Nausea	Appetite	Shortness of breath	Hot flushes	Dry mouth	Numbness/Tingling
Psych	1.00																				
Health	0.42	1.00																			
Info	0.13	0.43	1.00																		
Support	0.14	0.25	0.29	1.00																	
Physical	0.26	0.26	0.24	0.24	1.00																
Daily	0.27	0.15	0.15	0.18	0.17	1.00															
Sexuality	0.16	0.16	0.14	0.14	0.14	0.14	1.00														
Depression	0.42	0.42	0.42	0.42	0.42	0.42	0.42	1.00													
Anxiety	0.13	0.43	0.13	0.13	0.13	0.13	0.13	0.13	1.00												
Distress	0.14	0.25	0.29	0.29	0.29	0.29	0.29	0.29	0.29	1.00											
Fatigue	0.26	0.26	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	1.00										
Sleep	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00									
Drowsiness	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00								
Wellbeing	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00							
Pain	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00						
Nausea	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00					
Appetite	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00				
Shortness of breath	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00			
Hot flushes	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00		
Dry mouth	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00	
Numbness/Tingling	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00

Path	Psych	Health	Info	Support	Physical	Daily	Sexuality	Depression	Anxiety	Distress	Fatigue	Sleep	Drowsiness	Wellbeing	Pain	Nausea	Appetite	Shortness of breath	Hot flushes	Dry mouth	Numbness/Tingling
Psych	1.00																				
Health	0.42	1.00																			
Info	0.13	0.43	1.00																		
Support	0.14	0.25	0.29	1.00																	
Physical	0.26	0.26	0.24	0.24	1.00																
Daily	0.27	0.15	0.15	0.18	0.17	1.00															
Sexuality	0.16	0.16	0.14	0.14	0.14	0.14	1.00														
Depression	0.42	0.42	0.42	0.42	0.42	0.42	0.42	1.00													
Anxiety	0.13	0.43	0.13	0.13	0.13	0.13	0.13	0.13	1.00												
Distress	0.14	0.25	0.29	0.29	0.29	0.29	0.29	0.29	0.29	1.00											
Fatigue	0.26	0.26	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	1.00										
Sleep	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00									
Drowsiness	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00								
Wellbeing	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00							
Pain	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00						
Nausea	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00					
Appetite	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00				
Shortness of breath	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00			
Hot flushes	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00		
Dry mouth	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00	
Numbness/Tingling	0.27	0.15	0.15	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.00

Analysis included 507 breast cancer survivors between 2022–2025 (median age 53 years, 22% active treatment). Depression and fatigue are among the symptoms with highest impact on the network. Prediction models demonstrate when fatigue is clinically significant (score ≥ 4), the probability of sleep also being clinically significant is 52.98% (probability increasing by 33.77%, and mean severity increasing by 2.36 points), wellbeing 48.75%, and pain 44.2%. For depression, the probability of anxiety being clinically significant is 76.88% and distress 63.22%. Moreover, the models enable prediction of specific symptom cluster combinations. When both fatigue + sleep is ≥ 4 , probability of drowsiness being ≥ 4 is 42.8%, and anxiety 28.79%. Detailed prediction tables are being interpreted to identify optimal intervention targets (Figure 1, Table 1, 2).

Conclusions

Bayesian networks reveal conditional directional probabilities between symptoms, enabling prediction of symptom occurrence

and severity. Prediction models support proactive monitoring by identifying which symptoms predict others, supporting personalized symptom management strategies in breast cancer survivorship care.

PERSO-021

PATIENT AWARENESS, KNOWLEDGE, AND WILLINGNESS TO PARTICIPATE IN CANCER GENETIC RESEARCH FOR PERSONALIZED CARE IN NIGERIA

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Introduction

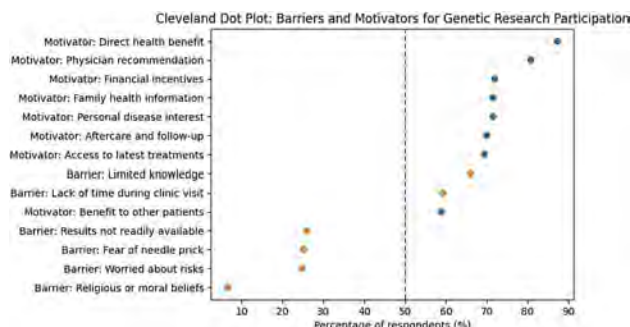
Personalized cancer care increasingly relies on genetic research to inform risk stratification, treatment selection, and supportive care planning. However, patient engagement in cancer genetic research remains limited in many low- and middle-income countries. Understanding patient-reported barriers and motivators is essential for designing supportive care strategies that enable the equitable implementation of personalized oncology.

Methods

We conducted a cross-sectional survey among 520 adult patients attending outpatient clinics of a Nigerian tertiary hospital. A structured questionnaire assessed awareness and knowledge of cancer genetic research, willingness to participate, and perceived barriers and motivators relevant to personalized care delivery. Knowledge was measured using an 11-item score. Descriptive analyses quantified the proportion of respondents endorsing each barrier and motivator, with emphasis on factors exceeding a 50% endorsement threshold. Predictive analysis determined the predictors of participants' willingness.

Results

Awareness of cancer genetic research was reported by 42.3% of respondents, and 46.1% demonstrated good knowledge, yet 69.6% expressed willingness to participate. Tertiary education was independently associated with good knowledge (AOR = 7.67; 95% CI: 2.87–20.27; $p = 0.001$), while increasing age was associated with willingness to participate (AOR = 1.02; 95% CI: 1.00–1.03; $p = 0.022$). Only two barriers exceeded a 50% endorsement threshold—limited knowledge (66.0%) and lack of time during clinic visits (59.2%). In contrast, key motivators were highly endorsed, led by perceived direct health benefit (87.3%) and physician recommendation (80.8%). Nearly all respondents (94.4%) expected the return of personal genetic results, underscoring the importance of integrated counseling and supportive care pathways.



Conclusions

Personalized cancer care increasingly relies on genetic research to inform risk stratification, treatment selection, and supportive care planning. However, patient engagement in cancer genetic research remains limited in many low- and middle-income countries. Understanding patient-reported barriers and motivators is essential for designing supportive care strategies that enable the equitable implementation of personalized oncology.

PERSO-024

HEALTH PROFESSIONALS' ALIGNMENTS AND DIVERGENCES IN UNDERSTANDING CANCER PATIENT TREATMENT REFUSAL: A Q-METHODOLOGICAL APPROACH

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Introduction

In patient-centred healthcare, where patients are actively involved in treatment decisions, their beliefs, perceptions and preferences may lead to choices that diverge from clinical recommendations. Such differences between patient and health professional perspectives regarding treatment carry an increased risk of conflict, potentially compromising the delivery and efficacy of care. Studies have shown that in some populations living with cancer, as many as 20% of patients choose to refuse conventional cancer treatment recommendations. Recent work has sought to understand the basis of such choices from a patient perspective, but few studies have explored health professionals' understanding of them.

Methods

Using Q-methodology, we recruited 35 health professionals (age = 41.1 ± 11.5 years) from Australia, the UK, and USA, who had worked with cancer patients. Participants completed demographic measures and the Q-sort, which required organising and ranking 44 statements on potential treatment refusal motivations.

Results

Eight factors, accounting for 66% of total variance, were identified. These were (1) Cancer treatment viewed ineffective, (2) Too old to be cancer patient, (3) Distrust of medical system, (4) Prognosis not good enough, (5) Heal cancer naturally, (6) Live without treatment interference, (7) Conventional treatment detrimental to mental health, and (8) Spiritual acceptance. Comparisons of our results to previous studies examining patient perspectives on treatment refusal, show strong alignment for prognosis concerns, natural healing preferences, and age-related considerations. However, health professionals overlooked financial burden as a standalone motivator and the distinction between passive religious/spiritual influence versus active healing beliefs. Conversely, health professionals identified treatment ineffectiveness beliefs and mental health concerns as motivators, not previously identified as factors in patient reports.

Conclusions

While considerable overlap exists between patient and health professional understanding, key gaps were found. Clinicians may benefit from assessing financial barriers separately from trust issues and distinguishing between types of religious/spiritual influence when discussing treatment refusal with patients.

PERSO-026

PROSPECTIVE STUDY ON THE EFFICACY AND SAFETY OF NEPA (NETUPITAN-PALONOSETRON) IN PROPHYLAXIS OF NAUSEA AND VOMITING INDUCED BY ABDOMINAL RADIOTHERAPY

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Introduction

Abdominal tumors are among the most common malignancies. Radiotherapy, a standard treatment for these patients, frequently causes nausea and vomiting. This study aims to evaluate the efficacy of netupitant-palonosetron (NEPA) in preventing these symptoms in abdominal tumor patients undergoing radiotherapy.

Methods

This single-center, single-arm, prospective study enrolled adult patients with abdominal malignancies scheduled to receive radiotherapy. They received oral NEPA (netupitant 300 mg combined with palonosetron 0.5 mg) one hour before weekly radiotherapy. The primary endpoint was the proportion of patients achieving no vomiting during radiotherapy. Safety was assessed according to CTCAE v5.0. This study received ethical approval from the hospital's ethics committee (Approval No. KY2024SL071-01).

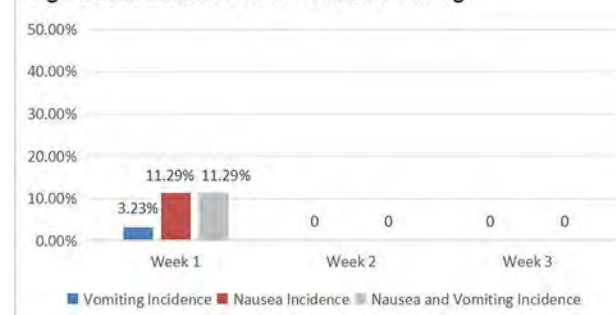
Results

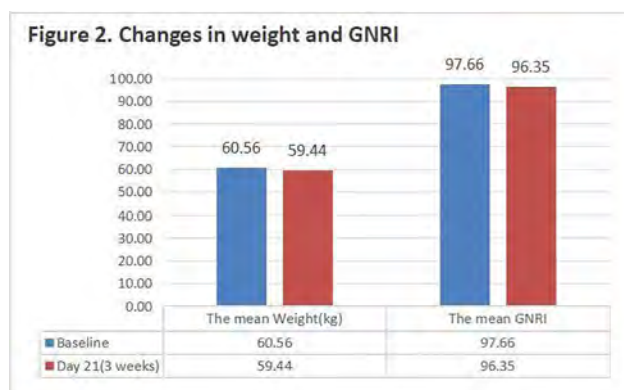
All patients had completed three weeks of the treatment regimen. Interim data analysis included 62 patients for safety and efficacy evaluations. The overall efficacy results showed only two patients experienced vomiting and five experienced nausea alone in the first week, none of whom required rescue antiemetic medication. No nausea or vomiting occurred in weeks 2 and 3. The mean GNRI (Geriatric Nutritional Risk Index) at the end of week 3 was 96.35, showing no significant difference from the baseline mean of 97.66 ($P > 0.05$), indicating well-controlled nausea and vomiting under the clinical study regimen. However, the incidence of nausea and vomiting was significantly higher in patients receiving concurrent chemoradiotherapy compared to radiotherapy alone ($P < 0.05$). Most treatment-related adverse events were mild to moderate, with constipation being the most common (4.8%). Isolated adverse reactions such as dizziness and abdominal distension were reported and alleviated with symptomatic treatment.

Table 1. Baseline characteristics

Variable	N	(%)
Gender	-	-
Male	49	79.03
Female	13	20.97
Age	-	-
≤ 65 years	30	48.39
> 65 years	32	51.61
Diagnosis	-	-
Gastrointestinal tumors	51	82.26
Non-gastrointestinal tumors	11	17.74
Stage	-	-
Stage I	1	1.61
Stage II	4	6.45
Stage III	10	16.13
Stage IV	47	75.81
Combination Chemotherapy	-	-
Yes	26	41.94
No	36	58.06
Antiemetic Level	-	-
Low	44	70.97
Medium	13	20.97
High	5	8.06
GNRI (Geriatric Nutritional Risk Index)	-	-
No nutritional risk (GNRI > 98)	32	51.61
Low nutritional risk (92 ≤ GNRI ≤ 98)	13	20.97
Moderate nutritional risk (82 ≤ GNRI < 92)	10	16.13
High nutritional risk (GNRI < 82)	7	11.29
ECOG Score before Chemotherapy	-	-
0	9	14.52
1	36	58.06
2	16	25.81
3	1	1.61

Figure 1. The incidence of nausea and vomiting





Conclusions

For abdominal tumor patients undergoing radiotherapy, the weekly administration of NEPA appears to be both effective and safe in preventing nausea and vomiting. These findings support NEPA as an effective antiemetic option for managing RINV and provide a rationale for future randomized controlled studies.

PERSO-029

IMPACT AND LIMITATIONS OF SHARED CARE BY PCPS AND ONCOLOGISTS IN POSTOPERATIVE CRC FOLLOW-UP UNDER UNIVERSAL HEALTH COVERAGE AND FREE-ACCESS SYSTEM

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Introduction

Lost to follow-up (LFU) after definitive cancer treatment is associated with delayed recurrence detection and worse survival. Shared care between primary care physicians (PCPs) and oncologists may improve continuity of care. However, its impact in Japan, where a universal health coverage and free-access system shape care delivery, remains unclear. Because insurance-related barriers contribute to LFU in other countries, rates in Japan may be comparatively low.

Methods

We retrospectively analyzed patients with colorectal cancer who completed adjuvant chemotherapy at a single Japanese center between April 2013 and March 2018. PCP involvement was identified from electronic health records around the time of surgery. The primary endpoint was completion of guideline-recommended follow-up, analyzed using Cox models. Secondary endpoints included LFU, patient-initiated discontinuation, second primary malignancy, recurrence, and death. LFU was analyzed using Fine-Gray competing risk models and overall survival (OS) using Cox models.

Results

Among 134 patients, 78 had PCP involvement and 56 did not. Median age was 66 versus 60 years ($p < 0.001$). There were no significant differences in completion of follow-up (59% vs. 63%, $p = 0.82$), LFU (5% vs. 0%, $p = 0.65$), or detection of second primary malignancies (10% vs. 4%, $p = 0.15$). The overall LFU rate was 4%. Patient-initiated discontinuation was significantly lower with PCP involvement (0% vs.

5%, $p = 0.04$). Five-year OS did not differ (hazard ratio 1.14, $p = 0.72$). Event counts were low.

Conclusions

Under Japan's universal health coverage and free-access system, LFU after colorectal cancer treatment was very low, suggesting that health system characteristics influence long-term retention. In this setting, PCP involvement was not associated with follow-up completion, LFU, or OS, but was linked to reduced patient-initiated discontinuation, indicating a potential role in sustaining patient engagement. Prospective studies assessing the quality of shared care and including international comparison across health systems are warranted.

PERSO-030

TRENDS OF INSULIN PUMP DISPARITIES IN CANCER AND LOWER INCOME POPULATIONS: AI PROPENSITY SCORE ANALYSIS OF 48 MILLION HOSPITALIZATIONS ACROSS 7 YEARS

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¹Mayo Clinic, ²

Introduction

Insulin pumps can improve diabetes (DM) control including in cancer through personalized and coordinated care, thereby often improving patients' eligibility and response to more cancer treatments and overall survival. Yet little is known about their national trends.

Methods

The United States' largest all-payor inpatient dataset, the National Inpatient Sample (NIS), was utilized with Quantum Bayesian Machine learning-augmented Propensity Score translational (QBAM-PS) statistics.

Results

Of the 235,522,075 adult hospitalizations from 2016-2022, 20.68% (48,588,204) had DM, of whom 1.21% (589,861) had an insulin pump. Pump usage in diabetes rose steadily from 2016 (0.96%) to 2017 (1.14%) to 2018 (1.17%) to 2019 (1.26%) to 2020 (1.27%) to 2021 (1.32%) to 2022 (1.38%). But in cancer with diabetes, pumps fluctuated from 2017 (3.39%) to 2018 (3.36%) to 2019 (3.71%), before decreasing to 2020 (3.65%) to 2021 (3.51%) to 2022 (3.50%). In QBAM-PS multivariable regression controlling for clinical confounders, active cancer significantly decreased the odds of pump usage (OR 0.72%, 95%CI 0.65-0.79). Within cancer, African American (OR 0.37, 95%CI 0.27-0.51, $p < 0.001$) and Hispanic race (OR 0.30, 95%CI 0.19-0.47) compared to Caucasian decreased the odds of pump usage, while the highest income quartile (OR 2.12, 95%CI 1.56-2.88), third highest (OR 1.57, 95%CI 1.18-2.08), and second highest (OR 1.34, 95%CI 1.02-1.74) compared to the lowest quartile increased the odds of pump usage in a stepwise manner (all $p < 0.04$). Within cancer, pumps significantly decreased the odds of acute myocardial infarction (OR 1.77, 95%CI 1.16-2.72, $p = 0.009$), but not stroke or death, nor total hospitalization costs.

Conclusions

This nationwide AI analysis suggests patients with cancer and diabetes are significantly less likely to receive and use insulin pumps (despite increasing use among non-cancer diabetics), as are lower income diabetes patients with cancer. Insulin pumps in patients with cancer appear to even significantly and independently reduce AMI without increasing costs.

PERSO-031**BREAKING BARRIERS IN CANCER CARE: SAFE AND INCLUSIVE PRESCRIBING FOR TRANSGENDER, GENDER DIVERSE & NON-BINARY PATIENTS**

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Introduction

Holistic, evidence-based healthcare for transgender, gender diverse, and non-binary (TGDNB) people is an emerging and essential field, with potential relevance to all aspects of cancer care. TGDNB people frequently experience barriers to optimal healthcare, and these may be exacerbated when they intersect with overlapping forms of discrimination or social/geographic disadvantages. **In Australia, TGDNB individuals represent an estimated 2.2% of the population.** Understanding their needs is critical to ensuring health equity and patient safety at all stages of cancer care.

Methods

To address this, the British Oncology Pharmacist Association (BOPA) partnered with OUTpatients, the UK's LGBTIQ+ cancer charity, to develop **TRANScribing**—a review and practical guide of available evidence for safe prescribing in TGDNB cancer patients undergoing gender transition. Launched in 2024 in the UK, first disseminated internationally in 2025, and currently undergoing an update for 2026, the document provides a comprehensive resource, including a respectful disclosure flowchart, pharmacokinetic considerations, and drug interaction guidance.

Results

In rural and remote contexts, where access to specialist services is limited for these underserved populations, the document's recommendations extend beyond cancer care, offering practical tools to promote safe, inclusive care. Recognising this need, **Cancer Australia** has partnered with the TRANScribing authors to integrate these principles into the **Optimal Care Pathway for LGBTIQ+ communities.**

Conclusions

While significant progress has been made in assessing TGDNB patients and initiating hormone therapy, more collaborative, holistic and innovative approaches are required to ensure equitable cancer care. This begins with strong communication skills and culturally competent practice. By embedding evidence-based recommendations into routine care, multidisciplinary cancer care teams can be instrumental for optimal TGDNB cancer patients care.

PERSO-032**PROACTIVE RISK FACTOR SCREENING TO ENHANCE CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING MANAGEMENT: AN ONCOLOGY OUTPATIENT STUDY**

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Introduction

Chemotherapy-induced nausea and vomiting (CINV) remains a significant burden for patients despite antiemetic regimen aligned with international guidelines. While patient-specific risk factors for CINV have been well described, their application in clinical practice has not been widely explored. The purpose of this study was to implement pro-active and personalised screening of CINV risk factors to facilitate collaborative review and optimisation of CINV management in accordance with guidelines.

Methods

This prospective, pre- and post-intervention study evaluated the impact of implementation of personalised screening of CINV risk factors. Outcomes were compared between pre- and post-implementation. The intervention consisted of risk factor assessment on the day of chemotherapy, provision of a chemotherapy side effects tracking tool, and structured telephone follow-up 4 to 7 days after treatment.

Results

Data from 20 patients was analysed (pre-implementation phase n=16; post-implementation phase n=4). There were no significant differences in the incidence and severity of nausea and vomiting between the two cohorts. Patient satisfaction to supportive care was high in both cohorts ($\geq 75\%$). The interventions required minimal time, generally less than five minutes per patient, which did not require additional staff resources. Risk factor assessment prompted three pharmacist-led interventions to escalation antiemetic therapy, including addition of olanzapine for prevention of delayed CINV (n=2), and ondansetron for treatment of delayed CINV (n=1). Qualitative feedback from patients in the post-implementation cohort was positive.

Conclusions

This study demonstrated implementation of pro-active screening of CINV risk factors and personalisation of antiemetic regimen is feasible, safe and potentially effective. Despite these interventions, patients continued to experience CINV, highlighting the ongoing need for improved and multidisciplinary supportive care strategies. Further studies are warranted to determine how personalised risk assessment can be best integrated into comprehensive CINV management.

PERSO-033**ECONOMIC EVALUATION OF A SPECIALIST LUNG CANCER NURSE MODEL OF CARE IN AUSTRALIA**

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Introduction

Timely diagnosis of lung cancer is critical to outcomes; however, complexity within the diagnostic pathway frequently contributes to delays in diagnosis and subsequent treatment, with only 52% of patients commencing treatment within the recommended 42-day timeframe. Lung Foundation Australia's (LFA) Specialist Lung Cancer Nurse (SLCN) Program has operated across three Australian states since 2022; however, the economic value of these roles has not previously been evaluated.

Methods

Eleven SLCN roles were piloted, delivering care with a focus on pre-diagnosis, timely care coordination. An economic evaluation was subsequently undertaken to assess the impact of these roles. The evaluation examined SLCN activities to identify components of the role associated with the greatest impact for patients and health services, and to estimate the overall benefit–cost ratio (BCR) of an SLCN aligned with LFA's Model of Care.

Results

The SLCN Model was cost-saving, with a BCR of 1.82 for 1 SLCN, indicating that for every AUD\$1 invested, the health system received AUD\$1.82 in direct economic benefits. When potential quality-of-life gains were included (AUD\$883,000 per SLCN, equivalent to 3.2 life-years gained), the BCR increased to 6.03. Ten SLCNs generated an estimated AUD\$3.8 million in savings while supporting 1,465 people affected by lung cancer. Cost-effectiveness is expected to improve with scale as indirect fixed costs are distributed across a larger workforce. Key cost-saving components included the symptom management and survivorship clinic (BCR 3.12) and complex care coordination (BCR

2.72), assuming prevention of two emergency department presentations per patient per year.

Conclusions

Most economic benefits accrued from complex care coordination's ability to prevent emergency presentations, reflecting the SLCN's ability to support patients across the full lung cancer pathway, particularly pre-diagnosis. These findings support targeted investment to expand the SLCN Model, particularly its role in pre-diagnosis and care coordination to improve timeliness of diagnosis and treatment.

PERSO-034

A COMPARISON OF CLINICAL PRACTICE GUIDELINES (ASTRO, ESTRO, NICE) FOR THE MANAGEMENT OF METASTATIC SPINAL CORD COMPRESSION (MSCC)

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Introduction

Metastatic spinal cord compression (MSCC) is a time-sensitive emergency. Delays in diagnostic imaging or treatment are associated with increased risk of morbidity and neurologic impairment. Clinical practice guidelines aim to provide evidence-based recommendations for the management of MSCC. This study presents a comparative analysis of international guidelines addressing MSCC diagnosis and treatment.

Methods

A search was performed on Google and Pubmed to identify relevant clinical practice guidelines for bone metastases and/or MSCC published after 2020. Recommendations were extracted and comparatively examined across predefined clinical decision-making domains, including urgency of intervention, criteria for surgical management and radiation therapy, and post-treatment care considerations. The level of evidence and grade of recommendation for each recommendation were compared. Concordance and discordance across guidelines were assessed qualitatively within each domain.

Results

Three international guidelines (ASTRO, ESTRO, NICE) for the management of bone metastases and/or MSCC were identified. Concordance was strongest regarding the urgency of MSCC as an oncologic emergency and support for surgical intervention in selected patients. While all guidelines recommended single-fraction regimens of 8 to 10 Gy, NICE favored it for larger treatment volumes or higher risk of side effects, ASTRO recommended tailoring fractionation based on radiosensitivity and prognosis, and ESTRO did not specify alternatives. Discordance was also identified in surgical eligibility criteria, with ESTRO emphasizing use of a validated spinal stability tool and NICE emphasizing early multidisciplinary-led decision-making. ASTRO and ESTRO reported explicit levels of evidence and recommendation grading, whereas NICE did not formally grade recommendations.

Conclusions

This comparative analysis of ASTRO, ESTRO, and NICE guidelines highlights both shared principles and notable differences in MSCC management. Variability in recommendations for surgical eligibility and radiotherapy fractionation underscores the need for further research to guide clinical decision-making. Awareness of these differences can help clinicians tailor care to patient needs and resources, promoting timely, evidence-based management and improved outcomes.

PERSO-035

THE SYMPTOMS PATHWAYS PROJECT: A CO-DESIGNED HEALTH SYSTEMS INTERVENTION TO SUPPORT MULTI-DISCIPLINARY SYMPTOM MANAGEMENT IN OUTPATIENT ONCOLOGY CARE

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The University of Queensland Centre for Clinical Research

Introduction

Research demonstrates that patient reported outcome measures improve the reliability of symptom assessment, alongside improved health service outcomes. However, within routine care of complex oncology contexts, these potential benefits may be inhibited when systems are put under pressure. It appears that further work may also be needed that supports reliable symptom management. 'The Symptoms Pathway Project' was initiated to co-design and pilot test such an intervention.

Methods

There were three phases. The Medical Research Council Complex Intervention Theoretical Framework scaffolded the methodological approach across the entire project. This work took place in an oncology outpatients service in a large Australian public hospital health service. Phase 1 included qualitative focus groups and structured interviews with oncology teams. Surveys were also collected from staff and patients. Positive Deviance Theory informed data collection and Framework Methodology for analyses. The aim was to identify the core components of the intervention.

Phase 2 was a modified Delphi Study conducted over three rounds with multi-disciplinary clinical experts, consumer representatives and researchers. The aim was to co-design the intervention using consensus. Phase 3 was a single site pilot feasibility study in two oncology outpatients' clinics. The aim of this phase was to investigate feasibility for future research and clinical implementation.

Results

The final intervention design included (i) early assessment in the patient treatment pathway; (ii) multi-modal tailored patient and carer information resources; (iii) interdisciplinary knowledge sharing; (iv) structured communication pathways between clinical teams. 123 patients participated from two clinics. The intervention components were feasible (75%-92% were completed) and acceptable (76%-91% of clinical teams reported acceptability). Clinical resource constraints were perceived to be a key influence of feasibility. Further research is needed to understand patient experience.

Conclusions

'The Symptoms Pathway' intervention was feasible within a complex oncology outpatients' service. An effectiveness study with health economics assessment is warranted.

PERSO-037

TREATMENT AND SUPPORTIVE CARE DELIVERED AT HOME FOR PATIENTS WITH BLOOD CANCERS: AN AUSTRALASIAN SURVEY

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Introduction

Interest in moving care closer to, or in the home, is increasing due to rising inpatient care costs and in recognition of patient-centeredness. Patients with blood cancers can receive outpatient treatment and supportive care at home, such as transfusion and chemotherapy, but availability varies. This study aims to describe home-based care offered in Australia and NZ, with a focus on home transfusion.

Methods

Researcher-developed, cross-sectional survey of healthcare practitioners in haematology or Hospital-in-the-Home (HITH) services in Australia and NZ. Ethics approval was granted by Monash University, and the survey distributed through haematology and HITH professional groups between Oct 2025 and Jan 2026. Data were collected using the Qualtrics online survey platform. Quantitative data were analysed descriptively, while open-ended responses were analysed using a content analysis approach.

Results

55 respondents completed the survey: the majority were nursing staff (82%) from inner metropolitan (38%) or middle/outer metropolitan (38%), public (94%) and tertiary (90%) healthcare services with a small proportion of private or community services. Current clinical services offered at home for blood cancer patients are seen in Figure 1. Desired services to offer in the future are seen in Figure 2. Commonly identified barriers to commencing these at home included capacity and lack of funding, staffing, education and geographical distance. Identified barriers to commencement of a home-based blood product transfusion service are depicted in Figure 3, with safety and deliverability being primary concerns. Free text responses included concerns about staffing capacity and education, travel times, transportation of blood products and infusion length.

Figure 1: Current services offered at respondents' healthcare services

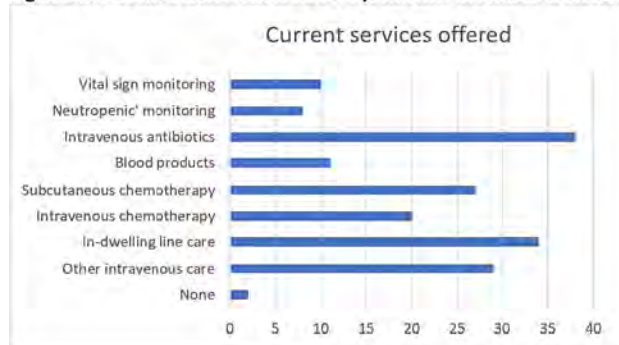


Figure 2: Identified desirability of potential future services

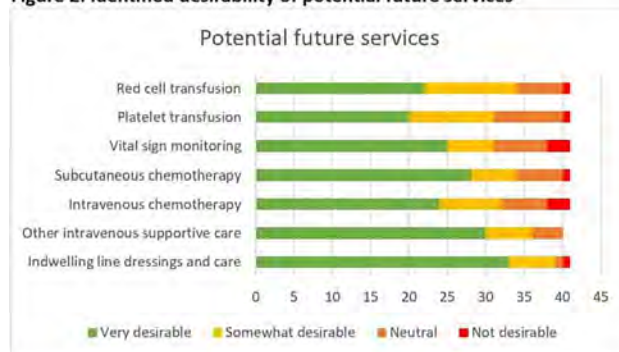
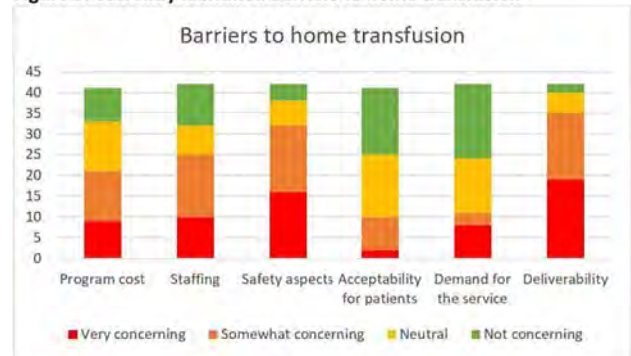


Figure 3: Currently identified barriers to home transfusion



Conclusions

Among survey respondents, there was variability in care provided at home as well as in identified barriers to commencing other home care. Part 2 of this study involves semi-structured interviews of the services performing home transfusion, to ascertain their logistics, barriers, safety aspects and funding models.

PERSO-038

PROFILING THE UTILITY OF BROAD-PANEL PHARMACOGENOMIC SCREENING AGAINST SYMPTOM BURDEN AND TOXICITY IN CANCER CARE: INSIGHTS FROM THE PRECISION TRIAL

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Sciences, Parkville, Australia,¹⁷Peter MacCallum Cancer Centre, Peter Mac Laboratory Research (Campbell), Melbourne, Australia & The University of Melbourne, Sir Peter MacCallum Department of Oncology, Melbourne, Australia,¹⁸Border Medical Oncology Research Unit, Department of Medical Oncology, Albury, Australia,¹⁹Peter MacCallum Cancer Centre, Health Services Research, Melbourne, Australia & The University of Melbourne, Sir Peter MacCallum Department of Oncology, Melbourne, Australia,²⁰Royal Melbourne Institute of Technology, Department of Health and Biomedical Sciences, Melbourne, Australia,²¹Melbourne, Australia

Introduction

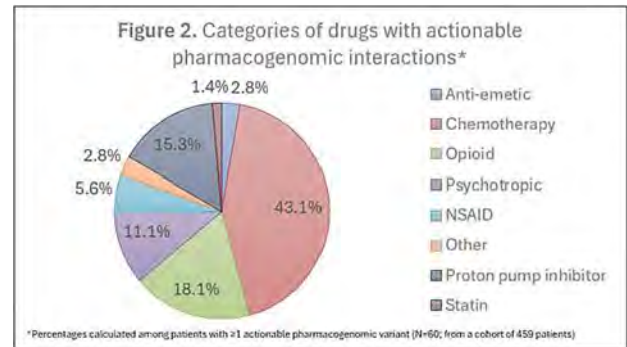
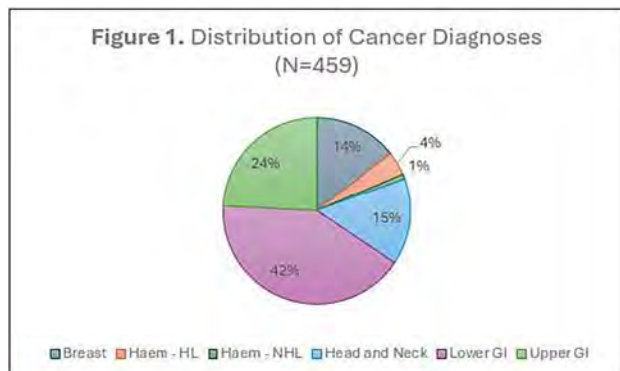
Broad-panel germline pharmacogenomic (PGx) testing is increasingly proposed to personalise cancer care. However, the prevalence of actionable drug–gene interactions and their association with symptom burden and toxicity under standard-of-care prescribing are poorly characterised. Profiling these relationships contextualises the role of PGx within supportive oncology frameworks.

Methods

Patients with cancer enrolled in a multicentre interrupted time-series trial (ACTRN12624000079549; MRFMMIP000011) underwent pre-emptive multigene PGx testing. Symptom burden and toxicity (grade ≥ 2 , clinician-assessed CTCAE) from chemotherapy and supportive care were captured at five timepoints within 12 weeks of treatment initiation. Findings from time-series 1 (usual care including DPYD- and UGT1A1-guided chemotherapy optimisation) are reported descriptively using unadjusted within-group (McNemar's) and between-group (Fisher's exact) comparisons, ahead of planned adjusted longitudinal analyses.

Results

Across 6 Australian hospitals (2023–2025), 459/462 enrolled patients were analysed. Median age was 62 years; 54% were male; 45% metastatic disease; majority solid tumours (Figure 1). Overall, 95% carried ≥ 1 PGx variant with major prescribing recommendations; actionable pharmacogenomic (aPGx) interactions occurred in 13%. These involved chemotherapy (DPYD, 28.3%; UGT1A1, 28.3%) and supportive care medicines (CYP2D6, 30%; CYP2C19, 26.6%; CYP2C9, 6.6%) (Figure 2). Across 2,116 assessments, 1,676 symptom or toxicity events occurred (median three per patient per timepoint, IQR 1–6). The proportion experiencing ≥ 1 grade ≥ 2 event increased after treatment initiation (12.2% baseline vs 29.1% week 4; $p=0.002$). At week 4, grade ≥ 2 toxicity did not differ significantly by aPGx status, although rates were numerically higher in the aPGx group (31.7% vs 22.6%, $p=0.142$). The proportion of patients experiencing ≥ 1 all-cause hospitalisation within 12 weeks was observed to be higher among patients with aPGx (63.3% vs 38.3%, $p<0.001$).



Conclusions

Clinically meaningful toxicities were common under standard-of-care prescribing, with higher hospitalisation rates among patients with aPGx. These findings position PGx as one component of a broader supportive care strategy.

PERSO-039

IMPLEMENTING CTDNA COMPREHENSIVE GENOMIC PROFILING ACROSS METROPOLITAN AND REGIONAL CENTRES: A HYBRID EFFECTIVENESS-IMPLEMENTATION STUDY

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Introduction

As comprehensive genomic profiling (CGP) becomes integral to cancer care, supportive service-models are required to address barriers to access, clinician workload, and variable genomic expertise, particularly in underserved and regional settings. Beyond clinical yield, success CGP implementation must consider patient understanding, clinical-support and sustainable design. This study evaluated the effectiveness and implementation of CGP service models designed to support oncologists and patients outside a comprehensive cancer centre (CCC).

Methods

We conducted a multisite hybrid effectiveness–implementation trial assessing ctDNA pan-cancer panel-testing across metropolitan and regional centres linked to a central CCC. Blood samples were collected locally and transported for centralised testing and molecular tumour board (MTB) review. Education, consent, and results disclosure were delivered via three models: (1) Independent (local oncologist without central support), (2) Local Super User (LSU; a designated, upskilled oncologist with central support), and (3) Telehealth (TH; CCC-led consultations). A mixed-methods approach evaluated clinical-effectiveness, costs, patient and oncologist experiences through surveys and semi-structured interviews.

Results

Among 194 patients, 131(67%) had ≥ 1 detected variant, 68% deemed actionable by MTB; no significant differences were observed between models. Survey completion rates were high for patients(91% baseline; 55% follow-up) and oncologists(100% baseline; 87% follow-up). Interviews included 11 patients and 28 oncologists. Across all models, oncologists reported increased workload, 70% requesting additional education or resources and over 60% anticipating longer consultations. Patients at independent sites reported lower understanding of results. LSU sites demonstrated streamlined workflows, lower costs and high pt acceptance but increased burden for the local oncologist. TH reduced local workload but was less acceptable to patients, with two-thirds preferring in-person discussions with known providers.

Conclusions

All three models enabled CGP delivery across distance with comparable clinical effectiveness. However, each model presented distinct supportive-care challenges and enablers for patients and clinicians. Tailored, locally-responsive strategies, supported by central-expertise, are essential to optimise patient understanding, clinician-workload, and sustainable CGP implementation in routine care.

PERSO-040

THE EXPERIENCE-BASED CO-DESIGN OF SERVICE IMPROVEMENT PRIORITIES AND STRATEGIES TO ENHANCE OUTPATIENT HEMATOLOGY SYMPTOM MANAGEMENT CARE

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Introduction

Patients with hematologic malignancies experience a high symptom burden and may not consistently receive evidence-informed symptom management care. Building on a qualitative study, the aim of this project was to identify the top priorities and strategies necessary to improve evidence-informed symptom management care delivery in an outpatient malignant hematology unit.

Methods

Using an integrated knowledge translation and experience-based co-design approach, a Steering Group of patient, caregiver, and health system partners (n=12) engaged in a series of virtual meetings. Based on experience touchpoints and contextually relevant implementation determinants previously identified through qualitative interviews (n=27), care deliverers and recipients co-designed mechanisms to improve symptom management and support the implementation of symptom management guidelines into nursing workflows. Potential strategies were rated based on perceived impact and feasibility, then categorized using an Impact/Feasibility Matrix and discussed with the Steering Group.

Results

A total of seven improvement priorities and 36 potential strategies were identified. The highest ranked priorities included clarifying individual symptom management roles and the aims of the model of care, supporting patients and caregivers to be better informed and engaged in symptom management, standardizing symptom screening and assessment, and enhancing nursing practice through symptom management guideline implementation. Strategies with the highest potential for impact and feasibility included tailoring evidence-based symptom management protocols to the outpatient unit, modifying the electronic health record to include symptom resources and recommendations, educating patients and nurses

about symptom management strategies, and preparing patients to be active participants in their symptom management care. The Steering Group prioritized developing integrated systems for symptom monitoring, communication, and management across professionals and care environments.

Conclusions

Interdisciplinary collaborations, system integration, and multifaceted strategies targeting patients, caregivers, and nurses are required to support evidence-informed symptom management in the outpatient malignant hematology setting. Experience-based co-design is valuable for generating contextually relevant system-level improvements and implementation strategies.

PERSO-042

“AT THAT POINT I KNEW I WAS ON MY OWN”: IDENTIFYING GAPS IN SUPPORTIVE CARE FOR PEOPLE WITH MULTIPLE MYELOMA – AN EXPLORATORY MIXED METHODS STUDY

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Introduction

The supportive care needs of people living with the incurable cancer - multiple myeloma (MM) and its precursor - smouldering myeloma (SMM) - are unique and evolving, reflecting the adoption of new life-prolonging therapies, which have drastically extended survivorship. We aimed to understand the modern needs of this unique population, identify the gaps in supportive care and barriers to accessing psychological support, with the goal to better understand how supportive care frameworks can be best optimised.

Methods

Qualitative thematic analysis of semi-structured interviews identified key themes, which then informed a subsequent national survey. A comprehensive panel of validated measures were used to assess quality of life (MYPOS), mental wellbeing (SWEMWBS, PTGI), psychological distress (GAD-7 and PHQ-9), service satisfaction aligned to the Supportive Care Framework for Cancer Care.

Results

Interviews with twenty-five people with MM (n=21) and SMM (n=4) identified themes of communication breakdowns, inconsistent information and navigating services, with many describing loneliness, uncertainty and feeling the burden of coordinating their own care. Survey data, obtained from 192 respondents (MM n=159, SMM n=33), reinforced these findings. Participants were predominantly aged 60-75 (70%), female (71%), Caucasian/European descent (97%) and living in metropolitan Australia (67%). Respondents met the criteria for clinically significant anxiety (17%) and depression (20%), with 33% reporting infrequent conversations about their prognosis, despite 68% reporting it was very important. Key barriers to person-centred support included pressures on healthcare professionals, fragmented systems, and insufficient navigation assistance.

Conclusions

Supportive care for people with MM and SMM remains inconsistent and poorly integrated into routine medical practice possibly due to the dominant focus on treatment efficacy and survival. Hence, strategies that assist patients navigate care pathways and access existing supports in a timely manner are required. Equally important is educating clinicians to recognise when patients are ready to discuss prognosis ensuring these conversations occur sensitively and strengthen with person-centred care.

PERSO-043

CHINESE EXPERT CONSENSUS STATEMENTS ON ONCOLOGY MULTIMORBIDITY MANAGEMENT

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Introduction

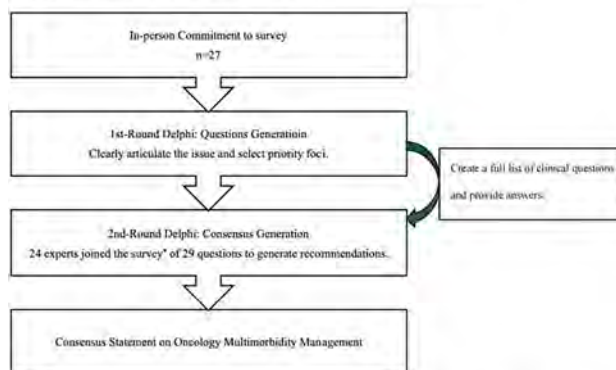
Against the backdrop of accelerated population aging, the rise of comorbidities in patients with malignant tumours has presented a significant challenge to clinical oncology. The awareness of oncology

multimorbidities varies significantly among specialists at different levels of healthcare institutions in China, and a comprehensive management workflow for patients with cancer and multimorbidities is lacking.

Methods

After conducting a systematic review of the literature, the Chinese Society of Clinical Oncology (CSCO) Committee of Experts on Cancer Supportive and Rehabilitation Therapy convened a multidisciplinary panel of experts to develop the consensus statement. The two-round Delphi method was applied to assess the degree of consensus among the author panel regarding the statements developed.

Figure 1. Workflow of the two-round Delphi method to reach consensus

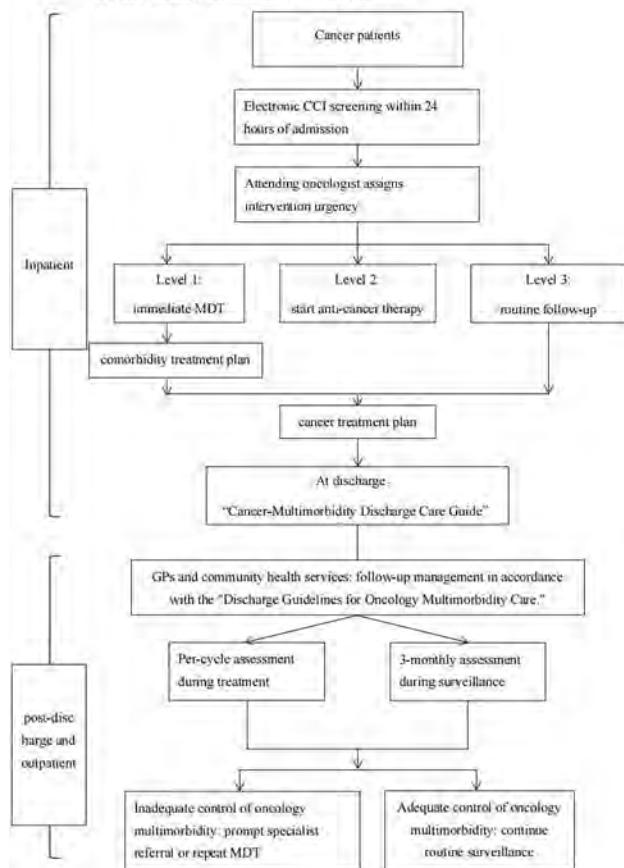


*: Experts voted by using a 5-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). Strength of recommendation is categorised as "Strong" and "Weak" (Strong: $\geq 80\%$ "strongly agree"; Weak: $\geq 80\%$ "strongly agree" + agree, but $< 80\%$ "strongly agree").

Results

The consensus delineates the primary spectrum of oncology multimorbidities requiring clinical attention and addresses twenty-nine core issues in the standardised, comprehensive management of oncology multimorbidities across the gastrointestinal, respiratory, cardiovascular, endocrine, and nervous systems. Emphasising the patient-centric paradigm, an inpatient and post-discharge framework, with multidisciplinary cooperation, was developed for essential decision-making and long-term follow-up.

Figure 2: Oncology Multimorbidity Follow-up Workflow



Conclusions

Grounded in the prevailing realities of clinical practice in China, evidence-based, specialty-specific recommendations on the diagnosis, treatment, and multidisciplinary coordination of oncology multimorbidities are needed. Through early identification of multimorbidity-related risks, dynamic monitoring of disease, optimisation of therapeutic strategies, and intensified longitudinal follow-up, the consensus aims to synchronise antineoplastic therapy with comorbidity control, thereby improving the overall survival and quality of life of cancer patients.

PERSO-044

PHENOCONVERSION OF CYP3A4, CYP2C19 AND CYP2D6 IN PAEDIATRICS, ADOLESCENTS AND YOUNG ADULTS WITH LYMPHOMA: THE PEGASUS STUDY

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Introduction

Phenoconversion describes the change in a person's drug metabolism phenotype from gene-predicted phenotype, caused by non-genetic factors. While the phenomenon is documented, it remains underexplored in paediatric, adolescent, and young adult (AYA) oncology - a population highly vulnerable to treatment-related toxicities. The PEGASUS study aims to assess the feasibility and acceptability of phenoconversion measuring of CYP3A4, CYP2C19 and CYP2D6 enzyme activities

in clinical settings using sub-therapeutic probe medications. This early report summarises the initial implementation experience and feasibility findings from the first six participants.

Methods

This prospective, single-arm, single-blind, non-randomised feasibility study will enrol 20 patients aged 6-25 years with newly diagnosed Hodgkin or non-Hodgkin lymphoma, recruited from one paediatric and one adult quaternary referral hospitals in Melbourne Australia (NCT06383338). At enrolment, participants undergo genotyping for CYP3A4, CYP2C19, and CYP2D6 enzymes. To assess potential phenoconversion, longitudinal phenotyping is conducted at up to 6 timepoints during chemotherapy using two oral, sub-therapeutic probe drugs: omeprazole and dextromethorphan. Samples are analysed using LC-MS/MS, and metabolic ratios are interpreted against validated thresholds to classify enzyme activity. Study acceptability is evaluated through surveys administered to patients and parents/guardians.

Results

Consecutive patients were screened for eligibility from 11 June 2025. Of the first 6 eligible patients, 3 adolescents have consented to participation from the adult enrolling site and completed baseline genotyping and 4 phenotyping timepoints. 3 paediatric patients aged 7, 16 and 17 years met the eligibility criteria, with parental consent declined in all cases. Probe drugs were well tolerated, with no adverse events observed. Recruitment of paediatrics seems challenging, citing logistical barriers and concerns about additional non-essential medications, whereas AYA participants demonstrated greater acceptability and scheduling flexibility.

Conclusions

Phenoconversion measurement using probe drugs appears safe and acceptable in the AYA oncology population at the current stage. However, recruitment barriers in paediatrics might underscore the need for burden-minimising workflow.

PERSO-045

REINVENTING THE PCOC DASHBOARD FOR BETTER PATIENT CARE

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Introduction

The Palliative Care Outcomes Collaboration (PCOC) supports providers in improving the quality of care for patients with life-limiting illnesses through the systematic collection of point-of-care data. These data are aggregated into dashboards that enable services to monitor performance against benchmarks and drive quality improvement in patient care and outcomes. Locally, a dashboard modeled on the Australian PCOC framework has been implemented. However, the utility and relevance of specific dashboard components for inpatient supportive and palliative care services have not yet been systematically evaluated.

Methods

In November 2025, we conducted a cross-institutional survey across healthcare institutions under SingHealth that uses PCOC. We evaluated current dashboard utilization, perceived purpose, and clinician preferences for future iterations

Results

Six responses were obtained, with all respondents reporting regular departmental reviews of the PCOC dashboard. Key findings include:

- **Utility:** The dashboard is viewed as a quality benchmark for symptom management and service responsiveness.
- **Current Focus:** Frequently reviewed components include demographics and responsiveness in breathlessness management.
- **Gaps:** Anticipatory indicators were noted as less relevant for Integrated Hospital-Palliative Care Services (IHPCS).

Future Needs: Respondents requested AKPS distribution (pie charts) at phase start and end, expanded responsiveness indicators for more symptoms, case-mix reporting, and visualization of data volume across months

Conclusions

While institutional engagement is high, the dashboard requires refinement to reflect inpatient priorities. As our institutions transition to new clinical management platforms, we will:

1. Co-design a revised dashboard incorporating AKPS distributions and expanded symptom indicators.
2. Pilot enhanced visualization tools for longitudinal trends.
3. Benchmark against international standards using the Australian PCOC model's emphasis on responsiveness and quality improvement prompts.

These efforts aim to strengthen clinical governance and ensure the dashboard remains a driver for patient-centered care.

PERSO-046

“WORTH THEIR WEIGHT IN GOLD”: EVALUATION OF A NATIONAL TELEHEALTH OVARIAN CANCER SUPPORTIVE CARE PILOT PROGRAM IN AUSTRALIA

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Introduction

People with ovarian cancers experience unique physical, practical, psychosocial and information needs. A nationwide nurse-led telehealth case management program was established providing personalised supportive care to individuals and families. The Pilot ‘Teal Support Program’ was evaluated for impact and effectiveness.

Methods

An observational, embedded mixed methods design was utilised comprising a prospective cohort study. Participants completed four surveys over 12 months assessing a range of symptom, psychological and quality of life measures. Service experiences were further explored through interviews.

Results

From August 2020 to February 2022, 652 individuals enrolled in the program, of which 112 participated in program evaluation. Participants’ median age was 61 years (range 28-85 years) and median time since diagnosis was 13 months. Most were diagnosed in later stages (n=83/111, 75%) and undergoing initial treatment (n=39/112, 35%). One third (n=37/112, 33%) lived outside major cities.

Frequently reported baseline problematic symptoms included fatigue (n=69/106, 65%), anxiety (n=59/106, 56%), sleep (n=53/106, 50%), and numbness/tingling (n=47/105, 45%). Clinically significant psychological distress was reported by 43% (n=46/102).

Significant improvements observed across a 12-month evaluation of 85 participants were overall wellbeing (p=0.047) and information needs (p=0.03). Types of support provided are detailed in Table 1; notably 31% (n=32/102) received specialist psychosocial support. Quantity of services provided were associated with various self-reported outcomes.

Table 1. Utilisation of Pilot Teal Support Program services by participants (n=102*)

Purpose of TSP service	No. of episodes	No. of participants (%)	No. of episodes per participant Median (range)
Ongoing support (scheduled)	1661	101 (99)	12 (1-83)
Information support	542	82 (80)	5 (1-27)
Care coordination	114	40 (39)	3 (1-11)
Psychosocial support	256	34 (33)	5 (1-24)
Crisis support (Non-scheduled)	90	32 (31)	1 (1-17)
Other purposes	118	39 (38)	1 (1-10)
Total TSP services	2781	102 (100)	23 (1-111)

Note: From each participant’s enrolment in the TSP until the end of the 12-month follow-up period.

* TSP service records were available for 102 participants, excluding initial assessment.

Qualitative data revealed consistently positive program experiences with value placed on being seen and heard as a whole person, receiving trusted information and advice, experiencing meaningful emotional support and accessing flexible and timely services via the telehealth modality (Figure 1)



Figure 1. Themes from Pilot Teal Support Program Experiences

Conclusions

This program of supportive ovarian cancer care delivered via telehealth aligned with observable improvements in patient-reported outcomes consistent with reported positive participant experiences. These findings highlight the need for continued investment in flexible models of supportive cancer care that prioritise emotional wellbeing, symptom management, and quality of life.

PERSO-047

INTEGRATING IVIG IN HOSPICE FOR NEUROLOGICAL PALLIATION: A COLLABORATIVE MODEL AND SCOPING REVIEW

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Introduction

Patients with advanced small cell lung cancer (SCLC) complicated by paraneoplastic Lambert-Eaton myasthenic syndrome (LEMS) may experience severe, refractory weakness and bulbar dysfunction, resulting in substantial symptom burden and impaired quality of life. Intravenous immunoglobulin (IVIG) can palliate neurological symptoms; however its use within hospice care is rarely described and may pose as a barrier to hospice enrolment.

Methods

We implemented a hospice–acute palliative care unit (APCU) collaborative model for palliative IVIG. A patient with metastatic SCLC presented in May 2025 with subacute fatigue, generalized weakness, areflexia, dysarthria, ophthalmoplegia, and drowsiness, who was then diagnosed with paraneoplastic LEMS. Despite being bed-bound and tube-fed, IVIG was started in June 2025 (with prednisolone and amifampridine) which improved alertness and upper limbs strength. He was admitted to inpatient hospice in November 2025. The model included: (1) shared neurology–APCU–hospice planning; (2) APCU-based IVIG infusion with monitoring; (3) hospice-led pre-/post-infusion assessment. A scoping review (PubMed/Embase) was conducted to identify use of immunoglobulin for palliative care.

Results

IVIG was given in the APCU without adverse reactions, with the patient demonstrating sustained alertness and upper limb movements that enabled meaningful communication and maintenance of quality

of life. Amifampridine exacerbated oropharyngeal secretions despite feeding adjustments; discontinuation reduced secretion burden. The scoping review found no reports of IVIG use within hospice care. Existing literature described use of immunoglobulin for immunodeficiency in hematological malignancies or for neurological stabilization outside hospice. No prior studies described a APCU–hospice collaborative model for immunoglobulin in cancer-related neurological syndromes.

Conclusions

This is the first reported model enabling IVIG for neurological palliation within hospice, addressing a literature gap. It demonstrates that selected immunomodulatory therapies can be integrated into goal-concordant end-of-life care through structured collaboration and net benefit assessment, challenging the paradigm that hospice requires cessation of all disease-modifying treatments.

PRECL-001

CATALPOL REVERSES DOXORUBICIN-INDUCED COGNITIVE DECLINE, NEUROINFLAMMATION AND RESTORES SYNAPTIC INTEGRITY

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Introduction

Cancer therapy-related cognitive impairments (CRCI) are detrimental for millions of cancer survivors. Chemotherapy induces neuroinflammation and reduces synaptic integrity, which contributes to CRCI. Our past pre-clinical animal studies showed synaptic loss and compromised neuron structure, including PSD-95, synaptophysin, and dynamin-1, that were associated with CRCI. Our human observational data showed reduced dynamin-1 among breast cancer patients receiving chemotherapy. Since these proteins promote synaptic plasticity and synaptogenesis that contributes to cognitive function, augmenting and protecting synaptic integrity represents a viable solution to reverse CRCI. Catalpol, a phytochemical, isolated from *Rehmannia glutinosa* plant root, has been shown to increase PSD-95, synaptophysin, and dynamin-1 in aged rat brains. We tested the neuroprotective impact of oral catalpol treatment using the mouse model of CRCI.

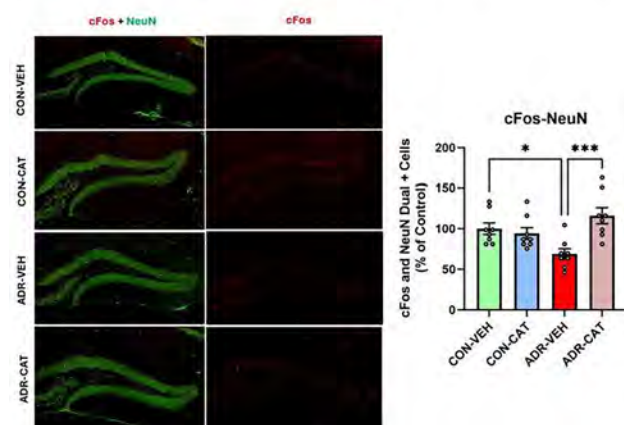
Methods

Adult WT male mice were treated with either vehicle or doxorubicin (Adriamycin®, ADR, 3 mg/kg) 1x/week for 4-weeks. 72h after the last ADR injection, mice were treated with Catalpol (0.5 mg/ml corresponding to 50 mg/kg) for 1-month in drinking water. After completion of catalpol treatment, mice underwent cognitive function testing including object location memory (OLM), fear extinction memory consolidation (FE) and puzzle box (PB) testing. After completion of behavior testing, brains were collected to determine the neurobiological alterations post-treatments.

Results

Catalpol treatment to ADR-exposed mice significantly improved cognitive performance in the OLM and FE tests. ADR did not induce significant deficits in the PB testing. Dual- and triple-immunofluorescence staining, laser-scanning confocal microscopy, and 3D algorithm-based volumetric quantification analyses on the hippocampal tissues revealed that catalpol treatment significantly reduced microglial activation, gliosis, and prevented loss of synaptic machinery proteins including dynamin-1 and PSD-95 in the ADR-exposed brains. Catalpol also restored hippocampal neurogenesis and neuronal plasticity-related IEG, cFos (Figure 1).

Figure 1: Oral administration with Catalpol restores neuronal plasticity in the chemotherapy-exposed mouse hippocampus. Chronic chemotherapy (Adriamycin) significantly reduced NeuN+ neuronal expression of a plasticity-related immediate early gene (IEG), cFos, expression that was restored following Catalpol treatment (* $P < 0.01$, ** $P < 0.001$, Two-way ANOVA and Bonferroni's multiple comparison test).



Conclusions

This data provides compelling pre-clinical evidence of a translationally feasible, oral administration of a phytochemical in reversing CRCI.

PRECL-002

FDA-APPROVED RILUZOLE REVERSES BREAST CANCER CHEMOTHERAPY-RELATED COGNITIVE IMPAIRMENT

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Introduction

Cancer survivors experience cognitive impairments post-chemotherapy that significantly reduce their quality of life and represents a substantial unmet medical need. Our clinical studies demonstrated decreased blood BDNF (brain-derived neurotrophic factor) in breast cancer patients receiving doxorubicin and cyclophosphamide (Adriamycin®, ADR + CYP). Pre-clinical mouse studies showed reduced brain BDNF, suggesting that BDNF augmentation presents a promising therapeutic approach for treating cancer-related cognitive impairments (CRCI). Female mice receiving ADR monotherapy exhibited impaired cognitive function, reduced BDNF levels, elevated neuroinflammation, loss of neural stem cells, and neuronal plasticity. To alleviate CRCI, we tested Riluzole (RZ), an orally active, FDA-approved BDNF-enhancing medication currently used for ALS treatment. Neuroprotective efficacy of RZ was tested in a clinically relevant breast cancer CRCI model.

Methods

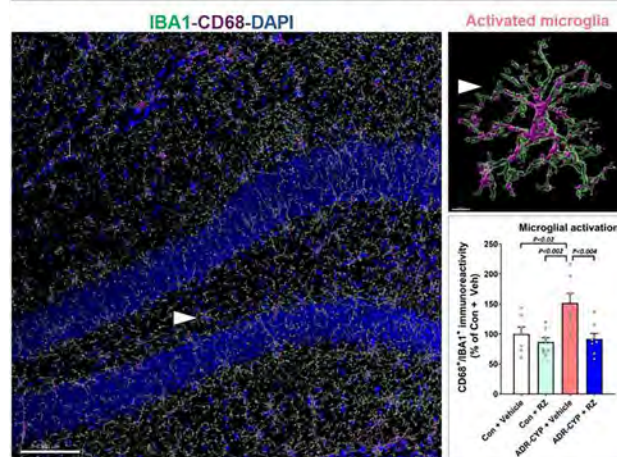
Adult WT female, induced with orthotopic (mammary fat pad) breast cancer using murine Py230-luc cell line, were subsequently treated with chronic ADR+CYP (once weekly for four weeks). 48h after the completion of chemotherapy, mice received RZ (13 mg/kg) in drinking water for 1-month. After completion of RZ treatment, mice underwent cognitive function testing including object location memory, fear extinction memory and puzzle box testing, and then brains were collected for the neurobiological and molecular studies.

Results

Breast cancer-bearing mice treated with ADR+CYP showed impaired neurocognitive function in learning, memory, and executive function tasks. Notably, RZ treatment in ADR+CYP-treated cancer and

non-cancer mice significantly improved neurocognitive indices. Dual/triple immunofluorescence analyses showcased reduced neuroinflammation as indicated by reduced volume of phagocytotic microglial in vivo (Fig. 1). RZ also enhanced neuronal plasticity and preserved neurogenesis in the ADR + CYP-exposed brains. Importantly, BDNF quantification in the hippocampus corroborated these neuroprotective effects of RZ in a CRCI model.

Fig. 1: Microglial activation in the chronic chemotherapy (Adriamycin, ADR + cyclophosphamide, CYP)-treated mice hippocampus. IBA1⁺ (green) microglia showing elevated expression of a lysosomal phagocytotic marker CD68 (magenta) in the DAPI⁺ (nucleus) mouse hippocampus (arrow, 3D magnified microglial model). Riluzole treatment to the ADR + CYP-treated mice significantly reduced microglial activation *in vivo* (Scale bars, 100 μ m left, 1 μ m, right).



Conclusions

RZ represents a translatable and safe therapeutic intervention to reverse CRCI and reduce neuroinflammation through BDNF augmentation, offering potential clinical benefits for cancer survivors experiencing cognitive impairments.

PRECL-006

NANOPARTICLE DELIVERY OF OXALIPLATIN AND APX3330 REDUCES DOSING FREQUENCY AND ENHANCES TREATMENT EFFICACY IN A PRE-CLINICAL MODEL OF COLORECTAL CANCER

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Introduction

Oxaliplatin-based chemotherapy remains a standard treatment for colorectal cancer (CRC) but is frequently limited by cumulative toxicity and intensive dosing schedules, which contribute to treatment burden and reduced tolerability. Strategies that reduce administration frequency while maintaining therapeutic effectiveness are therefore particularly relevant to supportive cancer care. This study evaluated a nanoparticle-based co-delivery system for oxaliplatin and APX3330, a novel APE/Ref-1 inhibitor, as an approach to optimise treatment scheduling, systemic tolerability and reduce side-effects in a pre-clinical CRC mouse model.

Methods

PEGylated liposomal nanoparticles (NPs) co-loaded with oxaliplatin and APX3330 were developed, including an epidermal growth factor receptor (EGFR)-targeted formulation to enhance drug delivery to tumour localisation. The NPs showed a consistent size distribution

of 200–250nm. In an orthotopic murine CRC model, free oxaliplatin (intraperitoneally (i.p.), three times weekly) and free APX3330 (i.p., twice daily) were administered for 14 days. NP formulations were administered i.p. three times weekly, with cumulative exposure matched to the free drug. Endpoint measurements included tumour progression, body weight, faecal hydration, renal and hepatic histopathology, and brain platinum biodistribution.

Results

Treatment with NP formulations achieved anti-tumour efficacy comparable to free drug combinations, despite fewer administrations. Mice treated with NP formulations maintained stable physiological parameters throughout the treatment period, with preserved renal and hepatic tissue architecture on histological assessment. Platinum biodistribution analysis indicated significantly lower platinum accumulation in brain tissue compared with the free oxaliplatin regimen ($p < 0.001$). EGFR-targeted NPs further supported tumour-associated localisation without increasing detectable systemic exposure and significantly reduced tumour progression compared with free oxaliplatin treatment ($p < 0.001$).

Conclusions

This pre-clinical study shows that nanoparticle co-delivery of oxaliplatin and APX3330 reduces administration frequency while enhancing anti-tumour efficacy. By lowering dosing burden and limiting off-target exposure, this approach supports improved tolerability and practical feasibility for the treatment of CRC and other cancers.

PRECL-007

THE NEUROTOXIC ANTI-MYELOMA DRUG, BORTEZOMIB, CAUSES ALTERED GASTROINTESTINAL MOTILITY AND NEUROINFLAMMATION IN THE NODOSE GANGLIA IN MICE

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Introduction

Bortezomib is a mainstay drug in the treatment of the incurable blood cancer multiple myeloma. Gastrointestinal side effects are reported in over 50% of people treated with the drug and are associated with lower survival rates. However, the underlying pathobiology remains largely unknown. Given bortezomib's neurotoxicity in the peripheral nervous system, we hypothesise that autonomic neuropathy may underpin gastrointestinal dysfunction associated with the drug.

Methods

Here, C57BL/6 specific-pathogen free mice were treated with bortezomib (1 mg/kg) or vehicle control (DMSO), twice/week for two weeks (intravenously, N=5-11/group). Total gastrointestinal transit time (TGITT) was determined using an *in vivo* Evans blue gastric assay. Mice were sacrificed via cardiac bleed, and stomachs were resected and weighed. Vagal nerve and nodose ganglia (pairs) were excised, and processed for toluidine-blue staining and RT-PCR analysis, respectively. Nerve injury was quantified using the serum biomarker, neurofilament light chain (NfL).

Results

Bortezomib caused an increase in serum NfL ($P < 0.0001$) and full stomach weight ($P < 0.01$), which were positively correlated ($r = 0.55$, $P = 0.033$), while TGITT was decreased after bortezomib ($P < 0.05$). Whereas histological analysis revealed no overt changes in vagus nerve morphology after bortezomib, increased gene expression of macrophage marker, F4/80 ($P = 0.001$) was observed in nodose ganglia. There was a trend towards increased pro-inflammatory marker expression of TNF- α , IL-1 β , and IL-6 in nodose ganglia, however these did not reach statistical significance.

Conclusions

The concurrent presentation of decreased gastric motility (enlarged stomachs) and increased intestinal motility (decreased TGITT) is consistent with disorders characterised by vagal nerve dysfunction (e.g. irritable bowel syndrome). The positive relationship between nerve damage and gastric dysmotility suggests bortezomib-induced nerve damage is associated with gastrointestinal dysfunction. Together with evidence of neuroinflammation in the nodose ganglia, these data collectively provide the first evidence to support an autonomic neuropathy aetiology of bortezomib-induced gastrointestinal dysfunction.

PSYCH-005

EMOTIONAL REPERCUSSION OF PATIENT LOSS IN ART THERAPY GROUP PROGRAM FOR CANCER PATIENTS: A FOLLOW-UP QUALITATIVE ANALYSIS AND MANAGEMENT STRATEGIES

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Introduction

Group art therapy fosters emotional expression, mutual support, and community among cancer patients. However, the death of a group member may destabilize group cohesion and affect both patients and clinicians involved in longitudinal care. This follow-up study examines the psychosocial impact of losses in our established outpatient art therapy program and our institutional management.

Methods

The original cohort included 27 adult patients, 18 or older, with solid and hematologic malignancies who participated in weekly group art therapy, which involved knitting, crocheting, painting, and choir singing. Over the past three years, four group members died, leading to intermittent disruptions in attendance and group dynamics. Semi-structured interviews and focus groups were conducted with surviving patients and physicians who had built longitudinal relationships. Informed consent was obtained and data were analyzed using thematic analysis to identify grief-related themes and barriers to attendance. Interventions included allowing time for grief, memorial art projects, and restructured group sessions.

Results

Peer loss was associated with decreased motivation to attend and fear of recurrence. Following each loss, attendance dropped by approximately 65%, describing "incompleteness" without their peers. Physicians reported emotional strain and symptoms consistent with burnout related to shared supportive bonds formed through the art groups. After implementation of support strategies, attendance returned to baseline, and themes of "collective healing" emerged, with 88% of participants reporting renewed motivation.

Conclusions

Patient mortality represents a significant challenge to art therapy program continuity and staff resilience. Proactive grief management, adaptation of session format, and creating new activities help reinforce the group's cohesion and motivate caregivers to support long-term psychosocial cancer care.

PSYCH-006

THE WEIGHT OF THE 'K-ELDEST DAUGHTER': A QUALITATIVE STUDY ON YOUNG FEMALE CARERS FOR PATIENTS WITH CANCER IN SOUTH KOREA

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Introduction

In South Korea, young carers may assume substantial caregiving responsibilities during critical developmental stages of life. The term “K-eldest daughter” reflects a culturally embedded and gendered expectation, rooted in filial piety, that daughters—especially eldest daughters—should take primary responsibility for family care. This study explored the lived experiences of young women caring for parents with cancer, focusing on the cultural and psychosocial dimensions of caregiving burden.

Methods

A qualitative content analysis was conducted. Eleven women aged 20–39 years who had cared for a parent with cancer were recruited through online cancer support communities. Data were collected through semi-structured, in-depth interviews conducted between September and December 2022 and analyzed inductively to identify key themes.

Results

A central theme was the internalization of caregiving as a daughter's duty, leading participants to prioritize their parent's treatment and daily care over their own education, employment, and personal lives. Another prominent theme was the distress of bearing primary caregiving responsibility with limited involvement from other family members, reflecting gendered family expectations. Participants also described multiple caregiving-related burdens, including limited access to trustworthy medical information, financial hardship related to non-covered treatment costs, physical exhaustion from frequent hospital visits, and social isolation from peers. Despite these challenges, some participants reported personal growth, including greater emotional maturity, changed life priorities, and strengthened family relationships.

Conclusions

The findings suggest that the burden experienced by young female carers is shaped not only by caregiving demands themselves, but also by the internalization of caregiving as a daughter's duty and the unequal concentration of responsibility within the family. Oncology professionals should provide accessible and reliable information and adopt whole-family approaches that promote shared caregiving responsibility. Policy and psychosocial support systems are needed to reduce the invisible burden placed on young female carers and to better support their developmental, emotional, and social well-being.

PSYCH-007

MEN'S SHEDS: A HANDS-ON SOCIAL PRESCRIBING APPROACH TO IMPROVING PSYCHOSOCIAL WELLBEING

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Introduction

A cancer diagnosis and associated treatment can be isolating, negatively impacting patient and carer wellbeing. Social isolation is more common among men, as they are less likely to engage with health services and actively seek out supportive care services. To address this, a Men's Shed was established within a comprehensive cancer centre in partnership with Melbourne Men's Shed. It operates as a social prescribing-aligned community-based wellbeing initiative, promoting social connection by offering a non-clinical, safe and welcoming space for patients, carers and families to connect with others facing similar experiences.

Methods

People with disability, Aboriginal and Torres Strait Islander people and people from Culturally and Linguistically Diverse (CALD) backgrounds are at greater risk of social isolation. The Men's Shed

is building on its existing foundations through a dedicated project to improve accessibility for people with disability from diverse backgrounds. Four co-design workshops were completed with people with disability, CALD community members, and carers (n=27) to explore what makes community spaces feel safe, welcoming and inclusive and barriers to community participation.

Results

Findings highlighted four key priority areas to increase accessibility of community spaces, like a Men's Shed. These included accessible communication and information; establishing welcoming and inclusive pathways; providing physically accessible spaces; and community inclusive practices. We are implementing 15-20 targeted interventions across these priority areas. Preliminary results indicate 100% of participants have experienced an increase in community connection and empowerment since June 2025. Satisfaction and responsiveness scores have also risen, reaching 100% at multiple points. We will share the complete data set at the conference.

Conclusions

This work demonstrates how hospital-led social prescribing initiatives can support wellbeing and reduce social isolation during treatment while building individuals confidence to engage with community services, supporting long-term health and social connectedness.

PSYCH-008

UNSEEN HARM: CANCER RELATED STIGMA AND ITS IMPACT ON MOROCCAN PATIENTS' LIVES. A MOASCC STUDY

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Introduction

Cancer-related stigma amplifies symptom burden, psychological distress, and social vulnerability, yet remains underrecognized in routine oncology—especially in supportive care. We investigated the predominant forms of perceived stigma among Moroccan adults with cancer and their associations with physical symptoms, mental health, and social outcomes.

Methods

We conducted a six-month cross-sectional study across day-hospital and outpatient settings. Adults with cancer completed a structured survey in French or Moroccan Arabic, including the Cancer Stigma Scale (CASS), PHQ-9, and GAD-7. Culturally adapted Likert-scale modules assessed physical, psychological, and social domains. Perceived stigma during the care pathway was captured with a direct item. At analysis, 204/380 eligible patients had completed the questionnaire.

Results

- Cohort: 74.0% women; 70.1% married; breast cancer was most frequent, followed by prostate cancer.
- Primary stigma drivers: visible physical changes (alopecia, surgical scars, amputation), followed by social/family exclusion, sexual difficulties, and financial hardship.
- Age-related patterns: Anxiety correlated with higher overall physical/psychological burden (p=0.045). Patients aged 40–60 reported more sexual problems, guilt, pain, perceived social status concerns, and alopecia (all p<0.05), indicating heightened vulnerability. Patients ≥60 had lower depression scores, possibly reflecting coping strategies, social support, or reporting differences.
- Post-treatment subgroup (n=48): Persistent moderate–severe symptoms were frequent—anxiety 66.6%, fatigue 62.5%, cognitive difficulties 54.2%, depressive symptoms 47.9%, financial toxicity 33.3%; sexual function was severely impaired (66.6% scored 0).

Conclusions

Cancer-related stigma is tightly linked to physical and psychological burden and persists beyond active treatment, with pronounced effects in midlife patients. Systematic screening for stigma and age- and culture-tailored interventions- education, psychological support, sexual health care, financial counseling, and holistic supportive care—are urgently needed to identify at-risk patients and improve quality of life.

PSYCH-009

A QUALITATIVE STUDY EXPLORING THE PSYCHOSOCIAL IMPACTS OF CANCER-RELATED IMPAIRMENTS ACQUIRED IN YOUNG AUSTRALIAN ADULTS AND SUPPORT EXPERIENCES

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Introduction

Cancer-related impairments (CRI) exacerbate and maintain poor mental health outcomes in people with cancer. No qualitative studies have explicitly examined psychological experiences of people living with CRIs acquired in young adulthood (15–39 years); hence, this study aims to explore this among Australians, in addition to factors shaping these experiences and supports that influence psychological wellbeing.

Methods

People aged 18–55 years, living in Australia, who self-identified as having CRI, diagnosed with cancer between 15–39 years (> one year since diagnosis), and not on active treatment were eligible. Participants completed an online questionnaire including a self-report measure of disability severity - World Health Organisation Disability Assessment Schedule (WHODAS; scores range 0–100%, higher percentage indicates greater severity), and participated in a consumer-led (RBG) semi-structured interview. Reflexive thematic analysis was used to identify key themes.

Results

Participants (N=17, 11 female; aged 22–53 yrs, *Mdn*=36; age at diagnosis 17–34 yrs, *Mdn*=25; time since diagnosis 2–32 yrs, *Mdn*=9; WHODAS scores 8.3%–66.7%, *Mdn*=20.8%) reported a range of psychological concerns. Psychological experiences of people who acquire CRIs as young adults are characterised by frustration, grief, and anxiety due to the persistent nature/emergence of health issues, and subsequent burden of self-advocacy/care coordination. CRIs disrupt personal identity and development, leading to social isolation, guilt and reduced self-worth. Psychological experiences of CRIs are influenced by perceived unsupportive medical care, uncertainty and perceived societal pressure/expectations. Psychological care, social support, meaningful activities, and allied health engagement, support people to manage associated psychological impacts of CRIs.

Conclusions

The psychological impact of CRIs acquired as young adults can be profound and may be improved by provision of clear information regarding potential CRIs, late-effects screening and integrated allied health services, including psychological care. Future research should prioritise the development of long-term, comprehensive, AYA-specific multidisciplinary care that responds to the enduring complex needs of people who develop CRIs as young adults.

PSYCH-010

UNDERSTANDING THE NEEDS, PREFERENCES AND IDEAS FOR A PEER SUPPORT GROUP FOR WOMEN WITH CANCER AND WOMEN CARERS: CO-DESIGN PHASE 1

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Introduction

Women affected by cancer frequently report a high need for psychosocial support and experience distinct challenges that shape their preferences for connection and care. Peer support groups offer a promising model for fostering psychosocial support for this population. While interest in participating in cancer peer support groups is high, particularly among women, it is not clear what delivery model best meets the unique needs and preferences of women in Australia. To address this, this study investigated the needs and preferences for a cancer peer support group for women in Queensland.

Methods

Focus groups were conducted with three groups: 1) women with cancer, 2) women caring for someone with cancer, and 3) health professionals. Stakeholders were recruited using various channels and purposive sampling was used to facilitate a diverse sample. Focus group were analysed using framework method, a type of codebook thematic analysis.

Results

Overall, there was 17 women with cancer, 12 women caring for someone with cancer, and 13 health professionals. Findings suggest a women's only cancer peer support group, co-facilitated by a peer and a health professional, can be used to provide much needed connection, support, and education for women affected by cancer. Themes such as flexibility, accessibility and ownership were considered important in a peer support group for women. Participants also highlighted having separate groups for those with cancer and those caring for someone with cancer is crucial so the women can share openly and authentically in each group.

Conclusions

This study emphasises the importance of understanding the preferences and needs of women affected by cancer for supportive care services. From these findings, a list of recommendations to provide guidance for effectively designing cancer peer support groups for women has been generated. These findings have also informed a new women's peer support program to be delivered statewide by Cancer Council Queensland.

PSYCH-011

EVALUATION OF A COMMUNITY-BASED CANCER COUNSELLING SERVICE FOR PEOPLE AFFECTED BY CANCER: A MIXED METHOD STUDY

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Introduction

Community-based support services are key partners in delivering optimal cancer care. This study evaluated a community-based, cancer-specific counselling service for people affected by cancer using a mixed-methods approach to explore clients' experiences of the service.

Methods

Clients who engaged with the service between 2021 and 2024 were invited to complete an online survey. Based on their experience with the service, survey respondents rated their level of agreement with 15 statements across 6 domains reflecting principles for recovery-oriented mental health practice. At the end of the survey, respondents could express interest in a follow-up semi-structured interview exploring their experiences with the service. Survey data

were analysed using descriptive statistics and interview transcripts were analysed using template analysis, a form of thematic analysis.

Results

Of 1,824 clients invited, 201 (11%) responded (64% patients, 36% caregivers; 32% born overseas; 25% living in a rural area). Additionally, 35 interviews were conducted (60% patients, 40% caregivers). At least 75% of survey respondents agreed with 13 of the 15 recovery principle statements, with interviews demonstrating most clients experienced the service aligning with each principle. The highest-rated statement was related to 'attitudes and rights' (94%) while the lowest-rated statement was related to 'evaluating recovery' (61%) domain. Barriers to participation in the service include: i) delayed entry, ii) inconsistent wait times, iii) issues with telehealth, iv) hesitancy to access service. Facilitators to participation include: i) free service, ii) suitability of delivery modes, and iii) option to choose delivery method. Among other health services, clients expressed a need for peer support programs in addition to counselling.

Conclusions

This study demonstrates that a community-based, cancer-specific counselling service can facilitate a recovery-oriented, holistic mental health service for people with cancer and their caregivers. Findings also demonstrate the importance of considering accessibility relevant to the cancer experience when designing and implementing supportive care services.

PSYCH-013

BONE MARROW TRANSPLANT (BMT) BUCKS: UTILIZING A TOKEN ECONOMY TO INCREASE ACTIVITIES OF DAILY LIVING (ADL) ADHERENCE FOR PEDIATRIC PATIENTS

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Introduction

The Bone Marrow Transplant (BMT) Bucks Program at the Children's Hospital of Philadelphia (CHOP) is a token economy that reinforces completion of activities of daily living (ADL) with daily and weekly rewards to facilitate adherence. Similar programs have been shown to reduce the risk of infection (e.g. skin, oral, line, bloodstream) and muscular deconditioning in pediatric patients. Prior BMT Bucks studies at CHOP established significant acceptability, feasibility, and efficacy. This study closely examines performance across ADL, age group, and in relation to central line-associated bloodstream infections (CLABSI).

Methods

The CHOP BMT Bucks program targets four ADL: weight by 9am, three doses of mouth care, two instances of physical activity, and one chlorhexidine gluconate (CHG) bath. Patients earn stickers as immediate reinforcers that correspond to BMT Bucks that they can then exchange for toys and gift cards at the end of each week. The weekly behavior charts are documented to track ADL adherence throughout the transplant admission. Medical records were reviewed to obtain CLABSI data.

Results

279 (44.4% female) patients participated in the BMT Bucks program since March 2021. The overall ADL adherence for participants on the program was 80.83%, representing a 65.30% increase from the control group. Older age in patients was associated with higher mouth care adherence ($r = .13$, $p = .032$). Further, patients who experienced CLABSI showed lower adherence to physical activity ($r = -.14$, $p = .022$). Notably, there were no statistically significant differences in ADL adherence by gender.

Figure 1. BMT Bucks Participant ADL Adherence

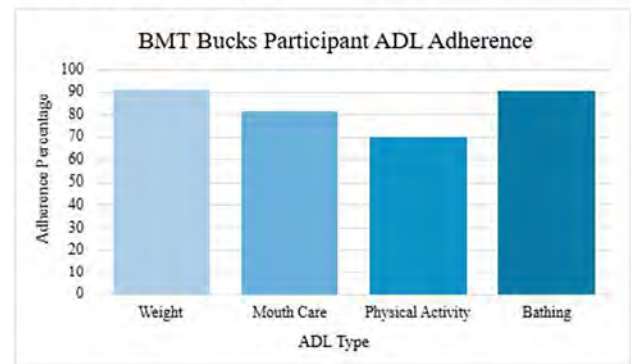


Table 1. Pearson correlations of ADL Adherence with Age and CLABSI

	1	2	3	4	5	6
Age	—					
CLABSI	.02	—				
Overall Adherence	.09	-.11	—			
Weight	.08	-.05	.67**	—		
Mouth Care	.13*	-.08	.93**	.57**	—	
Physical Activity	.04	-.14*	.87**	.42**	.66**	—
Bath	-.02	-.04	.76**	.81**	.69**	.49**

Conclusions

The BMT Bucks program is an engaging program that has shown incremental improvements in adherence to ADL and has become standard of care on the BMT unit at CHOP. More research is needed to investigate the relationship between physical activity and CLABSI incidents. Future directions will include quality improvement studies to maximize patient safety and engagement.

PSYCH-016

PATIENTS WITH ORAL CANCER: PSYCHOSOCIAL AND CLINICAL FACTORS ASSOCIATED WITH POSTOPERATIVE COMMUNICATION ABILITY

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Introduction

Patients with oral cancer often experience postoperative communication difficulties that are influenced by both psychosocial and clinical factors, potentially limiting their engagement in supportive care and shared decision-making. Impairments in communication may hinder understanding of medical information, reduce patient-provider interaction, and negatively affect psychosocial well-being and rehabilitation. This study aimed to identify psychosocial and clinical factors associated with communication ability among postoperative oral cancer patients.

Methods

A cross-sectional study was conducted among postoperative patients with oral cancer in Taiwan. Communication ability was assessed using the validated Chinese version of the Voice Handicap Index (VHI).

Clinical characteristics and psychosocial variables, including self-efficacy and psychological distress, were collected. Multiple linear regression analysis was performed to examine factors associated with communication ability.

Results

A total of 110 patients were included. The mean VHI score was 16.88 (SD = 11.70), with 65.5% of participants reporting some degree of voice handicap. Regression analysis showed that lower self-efficacy ($\beta = -0.29, p < 0.01$), advanced cancer stage ($\beta = 0.25, p < 0.01$), and higher psychological distress ($\beta = 0.20, p < 0.05$) were significantly associated with poorer communication ability, explaining 21.9 % of the variance in VHI scores.

Conclusions

Communication difficulties are common among postoperative oral cancer patients and are shaped by both disease severity and psychosocial factors. Importantly, self-efficacy and psychological distress—both modifiable targets within supportive care—were significantly associated with communication ability. These findings underscore the need to integrate psychosocial assessment and communication-focused supportive care to facilitate patient–provider interaction, shared decision-making, and rehabilitation engagement.

PSYCH-018

ASSOCIATIONS BETWEEN RESILIENCE AND LOW ANTERIOR RESECTION SYNDROME IN PATIENTS WITH NEWLY DIAGNOSED RECTAL CANCER

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Introduction

More than 70% of patients diagnosed with rectal cancer (RC) experience the challenges of low anterior resection syndrome (LARS). Previous research has demonstrated that resilience plays a vital role in helping patients cope with colorectal cancer and its associated difficulties. However, no studies have specifically explored resilience in patients with RC. Therefore, this study aimed to examine the relationship between resilience and LARS in patients WITH newly diagnosed RC.

Methods

A longitudinal study was conducted at a medical center in northern Taiwan. Patients with newly diagnosed stages I–IV RC who were scheduled to receive rectal-related treatments were enrolled. A structured questionnaire was used to assess demographic and clinical characteristics, as well as levels of resilience and LARS at four time points: prior to treatment (T0), one month after treatment (T1), two months after treatment (T2), and three months after treatment (T3). Generalized estimating equations (GEE) were used to examine the relationship between resilience and LARS.

Results

Among the 84 patients, the mean age was 58.7 years. Patients reported higher levels of LARS ($M = 24.2$; $SD = 14.6$) at two months after receiving rectal-related treatment. Overall, patients demonstrated high levels of resilience before treatment and moderate levels of resilience after treatment. Across the five dimensions of resilience, patients consistently reported the highest scores in the purpose subdomain and the lowest scores in the authenticity subdomain at all time points. GEE analyses showed that self-reliance ($\beta = -1.251, p = .016$), purpose ($\beta = -1.659, p = .005$), and equanimity ($\beta = -2.109, p = .013$) were significantly associated with LARS.

Conclusions

The findings highlight the important role of resilience, particularly the subdomains of self-reliance, purpose, and equanimity. These results underscore the need for healthcare professionals to implement

resilience-based interventions to improve the management of LARS in patients newly diagnosed with RC.

PSYCH-020

DIGITAL SUPPORT FOR PARENTS OF CHILDREN & ADOLESCENTS WITH CANCER: LESSONS FROM THE COMPASS PROGRAM PILOT

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Introduction

Parents of children and adolescents diagnosed with cancer experience profound psychological stressors that impact parenting confidence and family functioning. Despite these well-evidenced needs, few interventions address these unique challenges during treatment and into survivorship. This study reports findings from a pilot evaluation of the Compass Online Parenting Program, co-developed by the Australian Child and Youth Cancer Alliance and families with lived experience. Compass comprises of an online clinical program and a set of live facilitated group sessions. Focus areas include adjusting to changes in family life, managing parental emotions, and responding to children's emotions and challenging behaviours.

Methods

A mixed-methods evaluation assessed the feasibility, acceptability, and preliminary outcomes of the Compass pilot throughout 2025. Data was collected via online surveys at registration and 12 weeks post-intervention, complemented by in-depth interviews. Digital utilisation metrics were then triangulated with these findings to provide a more comprehensive understanding of program uptake.

Results

Sixty-one parents enrolled in Compass (85% aged 26–44; 98% female), with 61% reporting their child was on treatment and 89% caring for a child under 11 years. At registration, 74% reported clinical distress, and just over half (58%) felt confident in their parenting skills. While there was strong motivation to participate, uptake varied: 21% completed at least one online module and nine attended live sessions. Among those who responded to the post-program survey ($n=22$), 86% reported improved communication, better behaviour management, and feeling less isolated. Satisfaction was extremely high, with 100% recommending Compass. Time constraints were the most common barrier to participation, with parents suggesting that ongoing reminders, flexible scheduling, and minor adaptations to the program design may improve engagement.

Conclusions

Compass is a feasible and acceptable digital intervention that addresses gaps in psychosocial support for parents impacted by childhood cancer. Future implementation should focus on strengthening engagement and addressing barriers to participation.

PSYCH-021

THE CONTENT AND PSYCHOMETRIC PROPERTIES OF MEASURES ASSESSING CANCER SCREENING-RELATED ANTICIPATORY ANXIETY: A SYSTEMATIC REVIEW

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Introduction

Anticipatory anxiety refers to negative, future-oriented affective distress, and has been shown to deter and facilitate participation in cancer screening tests. Systematic review evidence suggests that a variety of measurement tools have been used to assess anticipatory anxiety related to cancer screening; however, the quality of these tools is currently unknown. This review aimed to assess the content and psychometric properties of measures used to assess cancer screening-related anticipatory anxiety in average-risk adults.

Methods

Online database searches (PsycINFO, MEDLINE) and reference list scanning were used to identify papers describing the original development and validation of measures used to assess screening-related anxiety. Measures were eligible for inclusion if they were self-reported, available in English, administered to individuals at average risk of cancer, and had at least one scientific, peer reviewed article describing their development or validation in the context of cancer screening. Measure characteristics, including the number of validated subscales, were extracted. The content of each of the validated subscales was assessed against the conceptual definition of anticipatory anxiety. The COSens-based Standards for the selection of health Measurement Instruments (COSMIN) criteria were used to assess the psychometric properties of each measure.

Results

A total of 19 measures were eligible for inclusion, all of which contained individually relevant scale items, but only 47% (n=9) included relevant validated scale domains. Of the nine scales including relevant domains, eight were related to generalised anxiety, with only one scale (Self-Regulatory Questionnaire for Lung Cancer Screening) including a validated domain assessing anxiety specifically related to cancer screening.

Conclusions

The lack of psychometrically robust, screening-specific domains among commonly used measurement tools may contribute to inconsistent findings regarding the role of anxiety in screening participation. Conceptually grounded, screening-specific measures of anticipatory anxiety are required to support accurate assessment of screening-related anxiety and inform development of interventions to improve cancer screening participation.

PSYCH-024

STRENGTHENING PSYCHOSOCIAL SUPPORT IN PAEDIATRIC ONCOLOGY THROUGH REDKITE'S FAMILY WELLBEING AND TRANSITION PROGRAM

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Introduction

Childhood cancer patients and their families face significant, often unseen, psychosocial needs that can affect wellbeing throughout

treatment and beyond. Addressing these challenges requires holistic supportive care that empowers families and supports hospital teams. Redkite's Family Wellbeing and Transition Program (FWTP) is an innovative partnership with two major children's hospitals, embedding a Redkite Wellbeing Coordinator into the paediatric oncology ward to work collaboratively alongside the hospital team. The program aims to provide timely financial and psychosocial services and support to families, thereby improving psychosocial wellbeing, fostering resilience, and enhancing continuity of care across hospital and community settings.

Methods

An evaluation of the program was conducted in 2024/2025 using semi-structured in-depth interviews with 14 healthcare professionals and 17 parents, randomly selected from the paediatric cancer centres at The Children's Hospital at Westmead and The Royal Children's Hospital Melbourne. The results were analysed thematically to assess program impact and identify enablers and barriers to scale-up.

Results

The FWTP was found to be an accepted, effective, and scalable model of integrated psychosocial care. Parents reported that the FWTP increased their confidence in managing treatment and post-treatment challenges, improved their emotional wellbeing, and enhanced their access to financial and community support. Hospital teams noted that the program strengthened their capacity to deliver holistic, person-centred psychosocial care through bridging hospital-based and community-based support.

Conclusions

Key enablers of success including staff integration, structured communication, and collaborative partnerships, provide a solid foundation for the program's future implementation across other children's cancer treatment centres within Australia. Identified areas for improvement offer practical guidance to strengthen partnerships and ensure sustainable, equitable, and effective delivery across diverse hospital settings. Redkite's innovative partnership model complements existing hospital care and, when implemented more widely, can improve psychosocial outcomes for more families and help close gaps in access to support.

PSYCH-025

UNRAVELING THE BURDEN FACED & ANALYZING COPING STRATEGIES USED BY PRIMARY CAREGIVERS OF PEDIATRIC CANCER PATIENTS: A TERTIARY CARE CENTRE BASED STUDY

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Introduction

Caregivers of pediatric cancer patients often suffer silently due to the significant time commitment and emotional demands requirement which is an unpaid and unrecognised role. The objectives are to assess caregivers' burden, to determine the coping strategies and to examine changes over time and other factors associated with caregiving.

Methods

Caregivers' burden was assessed through the Caregivers' Burden Scale-Indian Population (CBS-IP). The Brief COPE questionnaire was used to determine coping strategies. The mean scores for each domain were compared between the multiple visits where the information was collected from the participants using an assessment tool, by performing repeated measures ANOVA.

Results

Seventy-three primary caregivers were included in the analysis. The median caregiving duration was 12 months (range 1–62). The majority resided in rural areas with no formal education. Occupationally, housewives and labourers formed the bulk of caregivers. From CBS-IP,

psychological burden showed the highest mean score (55.6), followed by time burden (54.7), social burden (53.8), financial burden (51.8) and physical burden (46.9). BRIEF-COPE showed, active coping, planning, acceptance, religion, and use of instrumental support emerged as the most commonly used coping strategies. Emotion-focused coping had the highest overall domain score (mean 19.52), followed by problem-focused coping (mean 16.33) and avoidant coping (mean 11.97). The high reliability values of Cronbach's alpha indicate that the items within each coping domain are highly correlated and consistently measure the coping construct they represent. The standardised alpha values further confirm this robustness and the evidence of strong internal reliability.

Conclusions

The overall burden score among caregivers was moderate to high. They relied heavily on emotional regulation and support-seeking, which reflects limited use of maladaptive strategies such as denial, disengagement, or substance use. They tended to adopt constructive, problem-solving-oriented approaches. These findings can subsequently lead to customizing the support to cater to the unique needs of caregiving.

PSYCH-026

REFRAMING THE HOSPITAL EXPERIENCE: A QUALITATIVE STUDY OF WOMEN'S EXPERIENCES IN THE "HEALTH IN THE MIRROR" SUPPORTIVE CARE PROGRAM

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Introduction

"Health in the Mirror" (Salute allo Specchio), established in 2013 at Ospedale San Raffaele (Milan, Italy), is a multidisciplinary supportive care program for women undergoing cancer treatment. Grounded in a humanized and person-centered approach, it integrates clinical care with psychosocial and relational interventions. This study explores participants' lived experiences, examining the program's psychological, social, and behavioral impact, with particular attention to everyday self-care practices, re-signification of the hospital space, and group belonging.

Methods

A qualitative study was conducted with 262 women (aged 19-79) diagnosed with breast, gynecological, or other types of cancers who participated in the program (2013-2023). Transcripts from group reflection sessions were analyzed using thematic analysis (Braun & Clarke, 2006), to identify and interpret key themes related to well-being, illness experience, and peer support.

Results

Three key themes emerged:

- (1) *Recovery of vitality and everyday agency*: self-care practices enhanced psychological well-being, energy, and perceived self-efficacy.
- (2) *Reframing the hospital experience*: participants described the hospital as a supportive and generative space, marked by empathy and professional competence, facilitating growth beyond illness identity.
- (3) *Sense of belonging and relational reactivation*: the group context nurtured mutual recognition, validation, and reconnection with family and social networks, strengthening social identity and shared resilience.

Conclusions

Findings indicate that the program's core components – self-care as empowerment, hospital re-signification, and relational belonging – operate as active psychosocial mechanisms promoting well-being and

quality of life. Participants reported transformative processes involving renewed agency, identity reconstruction, and strengthened interpersonal connections. These findings underscore the need to integrate structured psychosocial and relational interventions within oncology treatment, emphasizing supportive care frameworks that harmonize relational depth with humanized, evidence-based clinical practice.

PSYCH-027

STIGMA AND THE SILENT BURDEN OF CANCER: A MIXED-METHODS STUDY OF SELF-REPORT AND INTERVIEWER ASSESSEMENT

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Introduction

Cancer-related stigma is an underrecognized determinant of psychological distress, social isolation, and delayed engagement with supportive care. Cultural norms and limited health literacy may influence how patients perceive, understand, and report stigma-related experiences, particularly in low- and middle-income settings. Our study aims to explore cancer-related stigma discrepancies between self-reported questionnaires and the interviewer's observations and conceptual understanding of stigma-related beliefs using preliminary data from an ongoing study.

Methods

This ongoing cross-sectional mixed-methods study is conducted over six months in inpatient and outpatient clinic settings. Adult cancer patients, 18 or older, with solid and hematological malignancies, completed a structured questionnaire in French or Moroccan Arabic dialect incorporating validated instruments, including the Cancer Stigma Scale (CASS), Patient Health Questionnaire-9 (PHQ-9), and Generalized Anxiety Disorder-7 (GAD-7). Additionally, culturally adapted questionnaires were delivered, assessing physical, psychological, and social dimensions using Likert-scale items. During questionnaire administration, trained interviewers documented qualitative and quantitative observations related to patients' verbal responses, non-verbal cues, and illness narratives.

Results

To date, 204 of 380 eligible patients have participated. Cancer-related stigma emerged as a multidimensional burden affecting emotional well-being, body image, social identity, and daily functioning. Anxiety, fatigue, and perceived social devaluation were frequently reported as moderate to severe. Interviewers noted frequent minimization or denial of psychological distress and substantial variability in patients' understanding of items in the questionnaires. 64% of patients self-reported lower levels of depressive symptoms compared with the severity estimated by the interviewers. Similarly, experiences of shame and guilt related to the illness were attenuated and underexpressed by 33% in patient self-reports. Many patients described stigmatizing experiences without labeling them as stigma, suggesting lived stigma without conceptual recognition.

Conclusions

These preliminary findings highlight a gap between the lived experience, self-reported measures, and the conceptual understanding of stigma, underscoring the need for culturally adapted psychosocial assessments and interviewer-informed supportive care strategies.

PSYCH-028

DOES ADDING GUIDANCE TO FINDING MY WAY-ADVANCED INCREASE FEASIBILITY FOR WOMEN WITH METASTATIC BREAST CANCER? A QUALITATIVE INVESTIGATION

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Introduction

Women living with metastatic breast cancer (MBC) face an array of psychosocial challenges, yet there is no consensus surrounding the most effective intervention to address this population's psychological needs. Promisingly, there is emerging evidence for low-intensity digital interventions, however augmentation strategies to optimise engagement and effectiveness are still being established. Hence, this study qualitatively explored the feasibility and acceptability of adding human support to the *Finding My Way-Advanced (FMW-A)* program via three different modalities (email, telephone-call, video-call).

Methods

Qualitative study participants (n=20) were recruited from a larger randomised controlled trial of Australian women living with MBC who had been randomized to receive *FMW-A*+human support via either email (n=8), phone-call (n=7), or video-call (n=5). Semi-structured feedback interviews were conducted, with recruitment ceasing once content saturation was reached. Transcripts were analysed via framework analysis using both inductive analysis and deductive analysis of *a priori* domains.

Results

Participants were aged 37–84 years ($M = 58.85$), with seven (35%) having de novo MBC. Emerging themes suggest that across modalities, adding human support increased *acceptability*; yet within modalities satisfaction varied by age, digital literacy, and what participants perceived human support to be. Phone-call guidance was frequently endorsed as participant's preferred modality to receive support. Consistently, there was a high *demand* for guidance, with participants reporting increased *practicality* in regard to using the program and resources, as well as higher motivation to engage with the program.

Conclusions

Preliminary findings suggest women living with MBC found guidance feasible, yet satisfaction with the support itself varied across and within modalities. Overall, the optimal modality and dosage of human support will likely depend on individual factors, emphasising the need to flexibly tailor guidance in practice.

PSYCH-029

FAMILY RELATIONSHIP CHANGES ARE ASSOCIATED WITH ONLINE SUPPORT USE AMONG CANCER PARENTS RAISING CHILDREN: A CROSS-SECTIONAL STUDY IN JAPAN

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Introduction

A cancer diagnosis in a parent often changes family relationships as members adapt to new roles and responsibilities. These changes may influence how families seek external support. Online support can provide flexibility and accessibility during treatment while caring for children. This study investigated the association of family relationships with online support utilization among parents with cancer raising school-age children.

Methods

In June 2024, a cross-sectional survey was conducted in Japan using a web-based questionnaire. Eligible participants were parents aged 30–59 years with a history of cancer who underwent treatment while parenting children aged 6–12 years. We measured the impact of five domains of cancer treatment on daily life, including changes in family

relationships, and assessed the use of eight types of online support services. Associations were analyzed using the chi-square test. This study was approved by the university's ethics review board.

Results

Among 194 respondents (mean age 47.2 ± 5.0 years; 61.9% female), 20.1% experienced changes in family relationships following a cancer diagnosis. This subgroup showed higher online support utilization: 59.0% had accessed online services, compared with 25.2% of those without such changes ($P < 0.001$). Participants experiencing increased financial strain showed higher utilization (40.8% vs. 26.8%, $P = 0.044$). Other treatment-related impacts included psychological distress, reduced energy, and decreased time spent with children, experienced by 67.0%, 51.0%, and 28.9% of respondents, respectively; nonetheless, these factors were not significantly associated with utilization. Although 82.0% intended to use online support, only 32.0% used these services.

Conclusions

Changes in family relationships showed the strongest association with online support utilization among parents with cancer, suggesting that, when family relationships change, parents may seek information and connections from sources outside the family. Healthcare providers should consider assessing family functioning and providing information on online resources, particularly for individuals experiencing relational changes.

PSYCH-031

PSYCHOSOCIAL BURDEN AMONG PRIMARY CAREGIVERS AND ITS IMPACT ON QUALITY OF LIFE AND DISTRESS IN HEAD AND NECK CANCER PATIENTS

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Introduction

Head and neck cancer (HNC) is a major public health issue in India, accounting for approximately 26% of cancers in males and 8% in females. Facial disfigurement, impaired communication, and feeding difficulties place a substantial psychosocial burden on caregivers, who often experience stigma, misconceptions, anxiety, stress, depression, and collusion. While patient psychosocial states influence adherence, recovery, and survival, limited evidence examines how caregiver-related factors directly affect patient outcomes. This study examined the prevalence of caregiver psychosocial burden and its association with patient psychological distress, quality of life, and clinical outcomes.

Methods

This prospective observational study included 50 caregiver-patient dyads undergoing radiotherapy at a tertiary cancer centre in South India. Caregivers completed the Cancer Stigma Scale, DASS-21, and Caregiver Collusion Questionnaire, while patients completed the SRQ-20 and UW-QOL v4. Assessments were conducted at two time-points: pre- and post-radiotherapy. Clinical outcomes including treatment compliance, infection rates, disease progression, remission, and survival were extracted from medical records. Correlation, paired, and regression analyses were performed, adjusting for patient age, disease stage, comorbidities, and patient distress.

Results

Clinically significant depression, anxiety, and stress were observed in 32%, 30%, and 36% of caregivers respectively; 54% had high stigma and 26% high collusion. Common misconceptions included the belief that radiation therapy works by burning cancer externally (48%) and that eating sugar makes cancer grow faster (26%). Caregiver stigma showed a strong negative

association with patient quality of life ($r=-0.447$, $p=0.0012$). Caregiver depression correlated with higher patient distress ($r=0.294$, $p=0.038$). Both associations remained significant after adjusting for confounders. Over time, patient quality of life declined significantly ($p < 0.0001$), alongside worsening caregiver depression, anxiety, and patient distress.

Conclusions

Caregiver psychosocial burden, particularly stigma, remains independently associated with adverse patient outcomes in HNC. Integrating routine screening and targeted psychosocial interventions for caregivers into supportive oncology care may meaningfully improve patient-centered outcomes.

PSYCH-032

PSYCHOSOCIAL NEEDS OF ONCOLOGY INPATIENTS IN SINGAPORE

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Introduction

The Department of Psychosocial Oncology (DPO) located within National Cancer Centre Singapore provides psychosocial support services towards oncology inpatients warded in Singapore General Hospital, as part of holistic supportive care. Oncology inpatients and caregivers requiring psychosocial support are identified by inpatient ward staff such as doctors, nurses and allied health professionals, who then refer these patients and caregivers to DPO. Of note, inpatients tend to be physically weaker than outpatients (who are usually medically stable), making them a more vulnerable group as compared to the outpatients. In view of this, trends amongst inpatient referrals for psychosocial support were charted.

Methods

Presenting concerns highlighted in inpatient referrals received within the year of 2024 were analysed.

Results

Our department received 935 inpatient referrals in 2024. Among these, 104 were referred for psychosocial support.

The rates of referral were similar between cases new to our department and cases already known to our department - 51 out of 455 new cases (11%) were referred for psychosocial support, as compared to 53 out of 480 known cases (also 11%).

The subcategories of presenting concerns included (but were not limited to): adjustment issues, anxiety and depression, caregiver stress, grief/bereavement, family issues/mediation, interpersonal issues, psychoeducation of illness and management, as well as treatment and compliance issues.

Amongst these subcategories, the top 3 most common referrals were for: 1) caregiver stress, 2) psychoeducation of illness and management, 3) anxiety and depression.

Conclusions

Mental health professionals should be equipped to address a wide range of psychosocial needs amongst oncology inpatients and their caregivers. Psychosocial interventions such as providing psychoeducation relating to cancer and its management could warrant multidisciplinary collaboration with other healthcare professionals such as doctors and nurses, demonstrating that the duty of providing psychosocial interventions is not confined towards mental health professionals only.

PSYCH-035

HEALTH AND SOCIAL CARE PROFESSIONALS' EXPERIENCES OF PROVIDING FAMILY-CENTRED CARE FOR FAMILIES LIVING IN DEPRIVATION: A GLOBAL QUALITATIVE STUDY

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Introduction

Globally, one-in-five children experience the death of a significant adult before adulthood. Deprivation is a key driver for health inequalities with cancer-related deaths greater for families living in deprivation. This study aimed to explore health and social care professionals' (professionals) experience of providing family-centred supportive cancer care to families living in deprivation, when an adult with significant caregiving responsibilities for children (<18) has incurable cancer.

Methods

A qualitative study involving one-to-one semi-structured interviews with 44 professionals from 23 countries. Over 40% of interviews were conducted with professionals from low-and-middle-income countries. Data were analysed using reflexive thematic analysis.

Results

Professionals understood deprivation as multi-faceted with various dimensions intersecting. This included religious, cultural, financial, educational, environmental and social factors influencing a family's incurable cancer experience. Professionals identified a range of unmet basic needs for families living in deprivation that must be addressed prior to addressing broader psychosocial issues, such as conversations about the children's understanding and involvement in the adult caregiver's incurable cancer experience. More often, professionals felt challenged in their clinical role about how best to support families living in deprivation, perceiving social workers, charities and Non-Government Organisations as best placed to provide family-centred supportive cancer care to this population. Findings are discussed under two themes: (1)intersectionality shaping the incurable cancer experience for families living in deprivation, and (2)providing family-centred supportive cancer care to families living in deprivation.

Conclusions

Stronger ties are needed between healthcare systems and social care and community organisations to enable clear, accessible pathways to address basic needs of families living in deprivation experiencing incurable cancer. This includes providing food and housing security, as well as emotional, social, financial and practical support such as ensuring legal guardianship for children. There is a need for professionals to provide culturally sensitive family-centred communication that aligns to the person's beliefs, values and social realities.

PSYCH-036

FLUCTUATING IDENTITY THROUGH THE LENS OF FEMININITY AMONG YOUNG ADULT FEMALE CANCER PATIENTS

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Introduction

Cancer diagnosis and treatment during young adulthood (AYA generation) profoundly impact more than physical health; they also influence women's self-perception and identity. This study aimed to elucidate the nature of identity disruption experienced by young adult female cancer patients from the perspective of femininity.

Methods

We conducted unstructured interviews with ten female cancer survivors who were diagnosed and treated between the ages of 18 and early 20s. Interviews were transcribed verbatim. Using a phenomenological analytical approach, we examined participants' narratives to clarify the meaning structures of their lived experiences.

Results

Identity fluctuation expressed itself through experiences deeply intertwined with femininity. Four primary thematic domains emerged: Physical Self-Image Disruption: Changes in appearance (e.g., mastectomy, alopecia) challenged participants' perceptions of their feminine bodies. Reevaluation of Femininity in Life Course: Concerns related to fertility and future life planning prompted reconsideration of life stage expectations tied to womanhood.

Self-Positioning in Relation to Others: Participants' sense of self as a woman was shaped through social comparison and relationships with peers and fellow patients.

Conflict with Female Roles: Balancing treatment with social and societal roles led to internal conflicts about expected gender roles.

Despite these disruptions, processes of self-reconstruction were observed, wherein participants actively engaged in treatment decisions and reframed their experiences, allowing a reconfiguration of self that includes femininity.

Conclusions

Identity fluctuation among young adult female cancer patients permeates bodily, psychological, and social dimensions through the lens of femininity. Supportive care that incorporates sensitivity to femininity can be essential in understanding and facilitating the patient's journey of identity reconstruction.

PSYCH-037

EVALUATING A HIERARCHICAL TAXONOMY OF PSYCHOPATHOLOGY (HiTOP) INFORMED DIMENSIONAL MODEL OF PSYCHOPATHOLOGY IN CANCER

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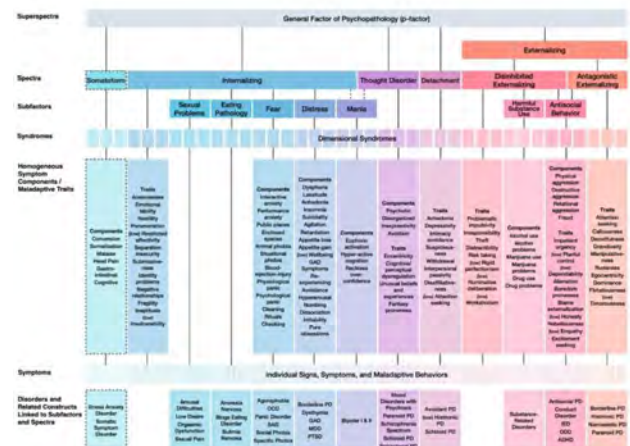
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Introduction

Cancer survivors have some of the poorest mental health outcomes of any population. Categorical diagnostic systems, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM), remain dominant in psycho-oncology despite concerns about reliability, validity, and clinical utility for this population. Dimensional frameworks, such as the Hierarchical Taxonomy of Psychopathology (HiTOP; Figure 1), offer a more precise alternative by capturing psychopathology hierarchically and along continuous dimensions of severity, facilitating tailored and person-centred care; however, they have not been applied in cancer survivor populations to date.

Aims were to (1) determine the homogeneity and reliability of the HiTOP-Self Report (HiTOP-SR) in cancer survivors, (2) examine if the scales detect elevations in psychopathology among cancer survivors, (3) develop a dimensional model of psychopathology in a combined sample of cancer survivors and non-cancer specific groups, (4) examine non-invariance of the factors of psychopathology between the samples, and (5) explore external validity of the resultant model in cancer survivors.

Fig.1



Methods

Data from 1,389 participants across 28 countries (n=728 cancer survivors; n=661 psychiatric and general population) were collected using the 405-item HiTOP-SR, alongside demographic, clinical, and cancer-specific measures. Analyses included parametric, non-parametric, and exploratory and confirmatory factor analytic approaches.

Results

HiTOP-SR scales demonstrated homogeneity ($uSRMR \leq .067$; $ALRC \leq .17$) and reliability ($\omega \geq .99$) in cancer survivors. Cancer survivors showed significant elevations across Internalising and Somatoform spectra, with current cancer associated with additional elevations in Thought Disorder and components of Disinhibited and Antagonistic psychopathology. An 11-dimension model was developed (Figure 2), showing no clear evidence of configural non-invariance, though metric invariance varied. External validity was strong (Figure 3).

Fig.2

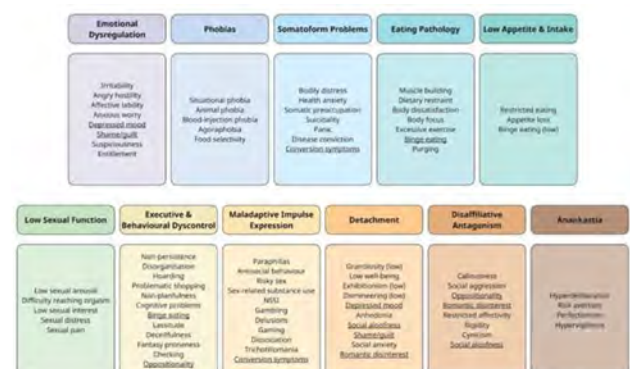
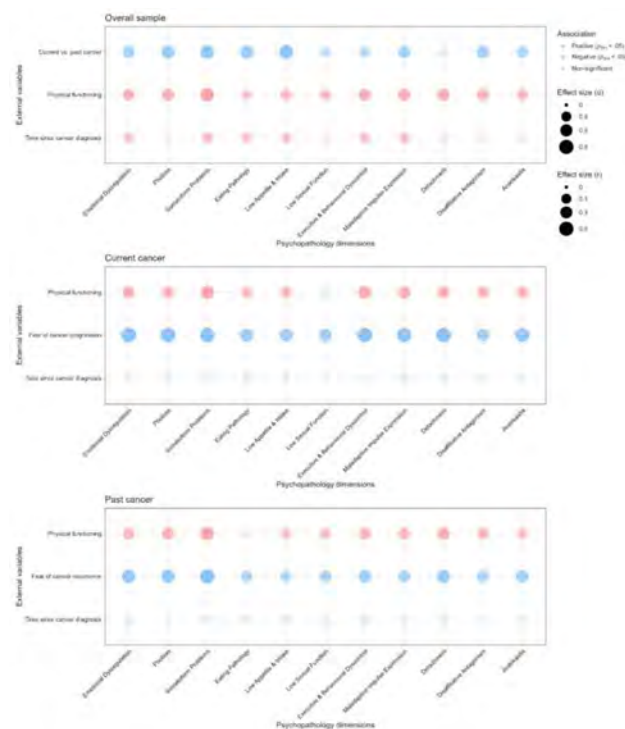


Fig.3

Conclusions

The HiTOP-SR appears reliable within cancer survivors and provides utility in quantifying a broad array of psychopathology. The results highlight the potential applicability and utility of dimensional models to improve cancer research and clinical practice in psycho-oncology.

PSYCH-038

SUPPORTIVE CARE NEEDS OF PATIENTS AND CARERS IMPACTED BY UPPER GASTROINTESTINAL CANCERS IN AUSTRALIA: A NATIONAL CONSUMER CONSULTATION

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Introduction

People affected by upper gastrointestinal (GI) cancers face complex physical, psychosocial, informational and practical challenges. Despite the recognised importance of supportive care, there is limited national, Australian, consumer-driven evidence detailing unmet needs across the disease experience.

Methods

Pancare Foundation conducted a national consumer consultation between April and December 2025. The study comprised a literature scan and desktop audit of existing resources; an online survey of patients (n=48) and carers (n=85); in-depth interviews with patients and carers (n=16); and a workshop with a multidisciplinary Expert Reference Group. Quantitative survey responses were analysed descriptively. Qualitative interview and workshop data were analysed thematically to identify key unmet needs and service gaps.

Results

Participants reported a broad range of supportive care needs spanning physical, informational, emotional, social and practical domains. The

most common physical concerns were digestive symptoms, altered eating and taste, fatigue, and unintentional weight change. Although many respondents reported receiving general information, significant gaps existed regarding treatment side effects, nutrition management, clinical trials, molecular tumour testing, genetic risk, and prehabilitation. Emotional distress—manifesting as anxiety, uncertainty, grief and depression—was highly prevalent among both patients and carers. Carers additionally described burden related to care coordination, meal preparation, financial strain, and emotional well-being. Access to specialist upper GI cancer nurses, allied health services (including dietetics and exercise physiology), psychosocial support and culturally appropriate peer support varied substantially by geographic location and service awareness. Awareness of available supportive care resources was frequently delayed or absent.

Conclusions

This national, consumer-led consultation highlights substantial, multi-dimensional, unmet supportive care needs for people affected by upper GI cancers and their carers. Findings emphasise the need for early, tailored, and accessible supportive care; improved service awareness; and strengthened models of care that integrate specialist nursing, psychosocial, nutritional, and practical supports. These insights provide an evidence base for co-designed service development and policy advocacy.

PSYCH-039

EFFECT OF INTERNET-BASED SUPPORT ON PREPAREDNESS FOR CAREGIVING IN INFORMAL HEAD AND NECK CANCER CAREGIVERS: A RANDOMISED CONTROLLED TRIAL

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Introduction

Informal caregivers (ICs) of patients with head and neck cancer (HNC) often feel unprepared for caregiving, which can increase caregiver burden and reduce well-being. This study will evaluate the effects of *Carer eSupport*, an Internet-based support intervention, on ICs' preparedness for caregiving.

Methods

Our research group has expertise in HNC clinical care, caring sciences, and human-computer interaction. To safeguard high quality and scientific rigour, the intervention was developed in accordance with the UK Medical Research Council's complex interventions framework. *Carer eSupport* is based on the Social Cognitive Theory, the Unified Theory of Acceptance and Use of Technology and co-created with end users (ICs of patients with HNC). Subsequently, the recruitment process, the usability and feasibility of *Carer eSupport* were tested. Currently, a multicentre randomised controlled trial is conducted with ICs of patients undergoing treatment for HNC. Based on a priori power calculation, 110 participants are randomised (1:1) to either *Carer eSupport* or support as usual (control). A possible high attrition ($\leq 50\%$) due to ICs strained situation and/or unfamiliarity with digital technology was accounted for in the power calculation. Outcomes are assessed at baseline (pre-randomisation) and after 18 weeks (i.e., post-intervention). The primary outcome is preparedness for caregiving, assessed using the *Preparedness for Caregiving Scale*. Secondary outcomes include health-related quality of life, caregiver burden, anxiety and depression. Intention-to-treat analyses will be conducted in the full trial sample using mixed-effects models and multiple linear regression.

Results

To date, 94 ICs have been randomised. Of these, 73 have reached the 18-week follow-up. The main analysis will include data from baseline and 18 weeks. Results will be presented.

Conclusions

By using a novel approach to support ICs, Carer eSupport is expected to improve preparedness for caregiving among ICs of patients with HNC.

PSYCH-040

UNDERSTANDING PEER TO PEER SUPPORT FOR TEENAGERS AND YOUNG ADULTS WITH CANCER: A REVIEW OF THE KEY COMPONENTS AND OUTCOMES

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Introduction

Peer-to-peer support is recommended for teenagers and young adults (TYA) with cancer, yet evidence on its components and outcomes remains limited. To gain an overview of the existing evidence we conducted a systematic review and further to explore the accuracy of artificial intelligence (AI) in supporting systematic review processes, both AI and traditional research methods were applied.

Aims:

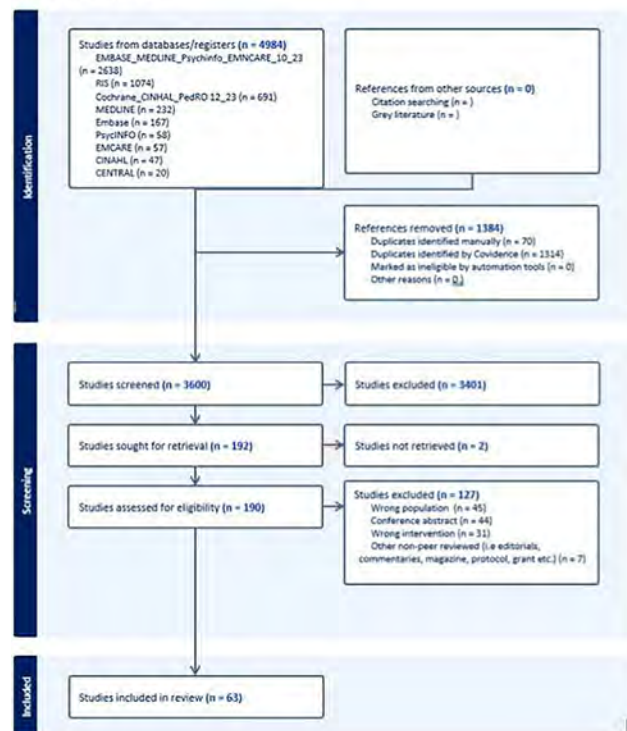
1. Identify key components and outcomes of peer-to-peer support for TYA with cancer.
2. Examine how AI tools can be integrated into systematic review processes.

Methods

We searched eight databases for peer-reviewed articles on peer-to-peer support interventions for TYA diagnosed 13–39 years, published up to October 2025. Results were imported into Covidence and screened by two reviewers. An AI prompt was developed to extract data and Copilot-generated outputs were exported to Microsoft Excel. All articles were then manually reviewed, corrected, and

rated for extraction accuracy. Where possible, studies were categorized by mean age at diagnosis (13–24 and 25–39 years) reflecting international TYA definitions. Quality appraisal was guided by the QuADS tool.

Figure 1 PRISMA Diagram



Results

The search yielded 6,300 articles; 199 underwent full-text review, and 63 studies (~3,000 TYA participants) were provisionally included [Fig-1]. The most common exclusion reason was wrong or unclear age at diagnosis. The USA had the highest publication volume. Peer-support delivery and outcomes measurement were heterogeneous. Benefits to TYA included improved wellbeing, psychological adjustment, knowledge, and social connection. Barriers included logistical challenges, emotional discomfort, and variable engagement. Some studies reported no or non-significant effects. AI extraction was partially accurate but included missing, misinterpreted, and false data. Review is ongoing; full results will be presented.

Conclusions

Peer support in TYA oncology care is widely recommended but poorly defined. Emerging evidence suggests benefit, but inadequate and inconsistent reporting (particularly age at diagnosis) hinders synthesis. AI tools offered useful assistance, but low fidelity highlighted the need for human verification.

PSYCH-041

CO-DESIGNING A BIBLIOTHERAPY INTERVENTION FOR CHILDREN WITH CANCER

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Introduction

Bibliotherapy is a successful adjunct therapy to support emotional wellbeing in adults with cancer. Comparable benefits are expected in paediatric populations; however, how to effectively adapt current practices remains unclear.

This study aimed to co-design a bibliotherapy intervention by integrating published evidence with the lived experience of children with cancer, their families, health professionals, teachers, librarians and volunteers in South Australia.

Methods

The co-design process was consistent with the broad stages outlined in the Experience Based Co-Design Toolkit for Australia and included 1) building relationships with stakeholders and establishing a multi-disciplinary research team, 2) undertaking a scoping review, 3) conducting a series of workshops to understand the needs of all stakeholders and 4) seeking feedback and refinement of the proposed intervention in a second round of workshops. The final stage will involve pilot testing and evaluating the resulting intervention.

Results

The opportunity for a bibliotherapy program within the hospital to provide distraction from pain, symptoms, or side-effects, and to provide opportunities for fun, comfort, and connection was identified. An extension of an existing program at the Women's and Children's Hospital in South Australia with hospital volunteers was proposed and feedback sought in a second round of workshops. This received support from all stakeholders, while acknowledging the particular challenges of meeting the needs of adolescents.

Conclusions

A co-design process involving children with cancer, their families, health professionals, teachers, librarians, and volunteers identified the potential for a bibliotherapy program to improve emotional wellbeing of children on a paediatric oncology ward. The program involves volunteers reading books with children, based on their interests, age, clinical and personal needs. An evaluation of the proposed read-aloud program using hospital volunteers will conclude the co-design process, though there is support for the program to continue.

PSYCH-042

FEASIBILITY OF A DIGITAL NURSING INTERVENTION FOR PSYCHOLOGICAL DISTRESS MANAGEMENT IN NEWLY DIAGNOSED PATIENTS WITH LUNG CANCER

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Introduction

Patients with newly diagnosed lung cancer often experience significant psychological distress, while structured psychosocial support is frequently lacking after diagnosis. With broader access to digital health technologies, digital nursing interventions may provide timely and appropriate psychosocial care. This study evaluated the feasibility and preliminary outcomes of a digital nursing intervention for psychological distress management in newly diagnosed lung cancer patients.

Methods

This study was conducted at a tertiary hospital in South Korea from April 2024 to March 2025. Thirteen patients with advanced-stage lung cancer, within 12 weeks of initiating chemotherapy, participated in the intervention. The 4-week intervention included: 1) six video modules on psychological distress management based on Transition Theory, 2) a self-assessment for symptoms, and 3) a self-encouragement message. Feasibility was assessed using retention and engagement metrics (e.g.,

videos viewed, self-assessments frequency, message use). Psychological distress (primary outcome) and quality of life (secondary outcome) were measured before and after intervention using the Hospital Anxiety and Depression Scale (HADS) and the Functional Assessment of Cancer Therapy-Lung (FACT-L). Descriptive statistics and the Wilcoxon signed rank test were performed using SPSS 29.0.

Results

Twelve of 13 participants (92.3%) completed the study. The mean age was 59.9 years (range 32–76), and nine participants were male. The average video completion rate was 98.61%. Six participants completed self-assessments on five or more days (mean: 25.83%), and five wrote encouragement messages on 10 or more days (mean: 26.95%). Anxiety scores decreased from 8.58 to 7.17, depression scores increased from 8.42 to 9.42, and quality of life improved from 83.83 to 85.00, although these changes were not statistically significant.

Conclusions

This study demonstrated the feasibility of a digital nursing intervention for newly diagnosed patients with lung cancer. Larger randomized controlled trials are warranted, and a longer intervention period may be necessary to improve psychological outcomes.

PSYCH-045

ASSOCIATIONS OF PHYSICAL ACTIVITY, SEDENTARY BEHAVIOR, AND WALKING WITH DEPRESSIVE SYMPTOMS BY CANCER STATUS

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Introduction

While advancements in early diagnosis and treatment have significantly extended cancer survival, depression remains a pervasive complication that adversely affects clinical outcomes and mortality. Given South Korea's exceptionally high rates of depression and suicide, identifying modifiable lifestyle factors to mitigate this burden is a critical public health priority. This study evaluated the associations of physical activity (PA), sedentary behavior (SB), and walking with depressive symptoms, comparing individuals with a history of cancer diagnosis with the general population.

Methods

We analyzed data from 16,193 adults in the 2014–2022 Korea National Health and Nutrition Examination Survey. Cancer status was self-reported, and depressive symptoms were defined as PHQ-9 scores ≥ 10 . PA was categorized by volume (0, 1–599, 600–1199, and ≥ 1200 MET-min/week), while SB and walking time were classified into tertiles. Multivariable logistic regression estimated odds ratios (ORs) after adjustment for demographics, health behaviors, chronic conditions, and occupation. Restricted cubic splines (RCS) modeled the non-linear dose-response relationship between moderate-to-vigorous PA (MVPA) and depressive symptoms among the cancer group.

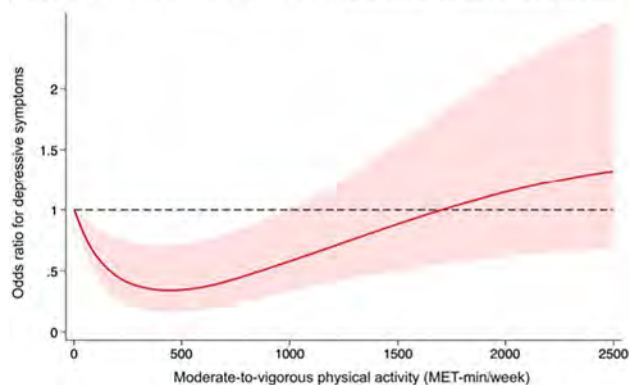
Results

Among 1,097 patients with cancer, the lowest odds of depressive symptoms were observed at 1–599 MET-min/week (OR 0.36, 95% CI 0.19–0.73) compared with inactive. High SB was associated with increased risk in both the cancer group (1.97, 1.10–3.53) and the non-cancer group (1.69, 1.39–2.04). Higher walking levels were associated with lower risk in both the cancer group (0.51, 0.27–0.95) and the non-cancer group (0.75, 0.62–0.90). RCS analyses within the cancer group revealed a non-linear association, with a steep risk reduction up to 300–500 MET-min/week.

Table 1: Odds ratios (95% CIs) for depressive symptoms according to physical activity, sedentary behavior, and walking stratified by cancer status

	Non-cancer	Cancer
Physical activity level		
Inactive (0 MET-min/week)	1 (Ref)	1 (Ref)
Insufficiently active (1–599 MET-min/week)	0.84 (0.70–1.02)	0.36 (0.19–0.73)
Active (600–1199 MET-min/week)	0.89 (0.71–1.11)	0.61 (0.30–1.27)
Highly active (≥ 1200 MET-min/week)	0.97 (0.79–1.19)	0.99 (0.51–1.94)
Sedentary behavior tertiles		
Low	1 (Ref)	1 (Ref)
Moderate	1.20 (1.00–1.43)	0.77 (0.40–1.47)
High	1.69 (1.39–2.04)	1.97 (1.10–3.53)
Walking tertiles		
Low	1 (Ref)	1 (Ref)
Moderate	0.81 (0.68–0.96)	0.56 (0.31–1.02)
High	0.75 (0.62–0.90)	0.51 (0.27–0.95)

Figure 1: Dose–response association between MVPA and depressive symptoms in cancer survivors



Conclusions

Sedentary behavior and walking are robustly associated with mental health regardless of cancer status. However, within the cancer group, MVPA shows a distinct non-linear pattern, suggesting that even moderate activity volumes may yield maximal psychological benefits. These findings provide a basis for understanding lifestyle-related factors associated with mental health among cancer survivors.

PSYCH-046

IDENTIFYING AND MEETING THE PSYCHOSOCIAL NEEDS OF CANCER CARERS: RESULTS FROM A WORLD FIRST DIGITAL DISTRESS SCREENING AND STEPPED CARE PATHWAY

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Introduction

Family and friend carers of people with cancer experience high levels of psychological distress, yet pathways to identify and address their needs remain limited. To address this, we developed the CarersCanADAPT Pathway—an online distress screening and stepped-care model for Australian cancer carers. We aimed to evaluate the CarersCanADAPT Pathway and provide insights into carers' psychosocial functioning, to inform future support strategies.

Methods

Australian carers of adults with cancer (>12 months life expectancy) were recruited via social media, advocacy groups, and hospitals. Baseline measures captured demographic and clinical/caregiving characteristics, plus psychosocial measures including carer burden (ZBI-22) and carer fear of recurrence (CARE-FCR). Carers completed distress screening (Distress Thermometer; DT) through an online portal. Those scoring ≥ 4 on the DT completed anxiety (GAD-7) and depression (PHQ-9) measures. Based on distress levels, carers were allocated to one of four stepped-care pathways ranging from low (Step 1) to severe (Step 4) distress.

Results

Baseline measures were completed by 261 carers (M age = 55.4; 83.5% female). Carer burden and FCR were moderate overall (M=34.9/88 and M=48.6/92 respectively). Burden was highest among brain, lung, and colorectal cancer carers; FCR was also higher for these groups plus upper GI cancer carers. N=225 carers (86.2%) accessed the CarersCanADAPT portal to complete screening, with N=164 (72.9%) scoring ≥ 4 on the DT. Half of carers reported mild-moderate anxiety/depression (50.8%; Step 3) and 18.7% reported severe or very severe anxiety/depression (Step 4). Implementation and efficacy outcomes of the pathway are being concurrently evaluated.

Conclusions

This study demonstrates the feasibility and early utility of an online screening and stepped care pathway to improve psychosocial care for cancer carers. Results indicate significant need for tailored support options, including those which specifically address FCR. The online delivery of stepped care addresses key health system barriers and shows promise for scalable, community-linked psychosocial support.

PSYCH-047

FEASIBILITY OF A GROUP ACCEPTANCE AND COMMITMENT THERAPY INTERVENTION: A MULTI-SITE PILOT RANDOMIZED CONTROLLED TRIAL

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Introduction

Self-Help Plus (SH+), a WHO program based on Acceptance and Commitment Therapy, teaches five core skills (grounding, unhooking, acting on values, being kind, and making room) via standardized audio lessons and illustrations, and can be delivered by minimally trained

non-specialists. We translated and adapted SH+ for Vietnamese as vSH+, retaining the five skills but condensing delivery into four brief sessions with integrated slide decks, audios, illustrations, and facilitator notes. Nurses and peers (i.e. cancer survivors) were trained to deliver vSH+ as facilitators and co-facilitators, respectively.

Methods

We conducted a randomized controlled trial among newly diagnosed breast/gynecologic cancer patients in six hospitals in Viet Nam, allocating participants to enhanced usual care or vSH+. Primary outcomes were depression (PHQ-9) and anxiety (GAD-7); secondary outcomes were quality of life and functioning (EQ-5D-5L, FACT-G), psychological flexibility (AAQ-2), and social support (MOS-SSS). Surveys occurred at baseline (T0), 1-2 weeks post-intervention (T1), and 4-month follow-up (T2).

Results

The control group (n=51) showed no significant changes. The vSH+ group (n=54) improved from baseline to 4-month follow up in depression, psychological flexibility, quality of life, functioning, and social support (all $p < 0.05$). Linear mixed models detected a between-group difference in depression at 4-month follow-up ($p = 0.038$; Cohen's $d = 0.35$), indicating a potential small-to-medium treatment effect. Anxiety did not differ between groups.

Conclusions

This pilot RCT suggests that SH+/vSH+—a brief, skills-based, task-shifted intervention—can reduce depressive symptoms and support broader psychosocial recovery early in cancer care. Larger, longer trials should test durability, anxiety, cost-effectiveness, and scalable implementation across oncology settings. Given its brevity and delivery by minimally trained facilitators, vSH+ is a promising, scalable adjunct to usual care that could help address the mental health treatment gap in Viet Nam and other low-resource cancer care contexts.

PSYCH-048

A STRESS MANAGEMENT INTERVENTION TO ENHANCE SOCIAL SUPPORT IN PEOPLE WITH CANCER: RESULTS FROM A MULTI-CENTER RANDOMIZED CONTROLLED TRIAL

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Introduction

Social support—emotional encouragement and tangible assistance—is a core component of supportive cancer care. We evaluated whether Vietnamese Self-Help Plus (vSH+), a culturally adapted version of WHO Self-Help Plus, enhances perceived social support for adults with cancer in Viet Nam.

Methods

We conducted a parallel-group randomized trial in adults with cancer in Viet Nam: the Vietnamese Self-Help Plus (vSH+) Study. Participants were assigned to vSH+ or enhanced usual care. Social support was assessed using the Medical Outcomes Study-Social Support Survey (MOS-SSS) and administered at baseline (T0), 1-2 week post-intervention (T1), and at 4-month follow-up (T2). Within-in and between-group changes between timepoints (T0 to T1, T0 to T2) in social support summary index and support subscales (tangible, affection, emotional, positive) were calculated. We also analyzed using difference-in-difference (DIFF) analyses.

Results

vSH+ produced significant improvements from baseline to 4-month follow-up, in the Social Support Summary Index ($p = 0.005$), as well as in tangible support ($p = 0.007$) and emotional support ($p = 0.007$) among patients in Viet Nam. DIFF analyses showed changes in

also the social support summary index ($p = 0.008$), tangible support ($p = 0.025$), emotional support; and between-group changes for affectional support were significant ($p = 0.045$).

Conclusions

Language- and culture-adapted, low-intensity self-help interventions can strengthen social connectedness in supportive cancer care. Low-resource health systems could deploy SH+/vSH+ to address social support during treatment and survivorship. Future trials should assess effects on distress, symptom burden, quality of life, and healthcare utilization; examine heterogeneity across sociodemographic subgroups; and evaluate implementation and cost-effectiveness.

PSYCH-049

THE FINANCIAL BURDEN OF CHILDHOOD BRAIN TUMOURS ON FAMILIES IN AUSTRALIA AND FINANCIAL SUPPORT RECEIVED

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Introduction

Families of children with cancer face substantial financial burdens, even in high-income countries with universal healthcare. Indirect expenses are rarely incorporated into cost-effectiveness analyses, and little is known about the extent to which financial aid programmes offset these costs when a child has cancer. Childhood brain tumours, both benign and malignant, are of particular concern due to their complex treatment needs, high morbidity, and mortality.

Methods

Parents/carers of children diagnosed with brain tumours receiving care at a children's cancer centre in Australia, were surveyed from 2020 to 2024. The Family Costing Survey was administered at baseline (6–12 weeks post-diagnosis), 12 months, and 24 months to capture out-of-pocket costs, productivity losses, and reimbursements. Data were analysed by cost category and by time using descriptive statistics, non-parametric tests, and generalised linear mixed models (GLMM) to identify demographic and clinical characteristics associated with financial burden.

Results

Ninety-seven families were represented. Median per-hospital visit financial burden remained high across time points, driven by productivity losses, travel, and accommodation. Only a minority of families received reimbursements, which typically covered less than one-quarter of total costs. GLMM analysis identified geographical location and treatment type as the strongest predictors of financial burden – regional families had 106% higher costs and rural families 87% higher costs compared with metropolitan families.

Conclusions

Families of children with brain tumours face substantial, persistent financial burdens, with minimal relief from existing aid programmes. There needs to be improvements in financial support schemes, and societal costs should be incorporated into economic evaluations of paediatric cancer care.

PSYCH-050

FINANCIAL RELIEF FOR FAMILIES AFFECTED BY CHILDHOOD CANCER: A DISCRETE CHOICE EXPERIMENT

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Introduction

Financial hardship is a significant challenge for families of children with cancer, often exacerbated by reduced income and increased expenditure. This study aims to identify the preferences of families regarding financial aid for childhood cancer, and explore heterogeneity in these preferences based on demographic factors using a discrete choice experiment (DCE).

Methods

A DCE survey was conducted with parents and carers of children diagnosed with cancer in Australia within the past 10 years. Attributes and levels were identified through a scoping review and qualitative study. Five key attributes were selected: modality of financial aid information, personalised information, amount of information provided, application assistance, and support timing and amount. Choice tasks presented two unlabelled alternatives containing these attributes across 27 tasks divided into three blocks. Pre-testing and a pilot study evaluated survey functionality and provided coefficient estimates for a Bayesian D-efficient design. A mixed multinomial logit model was employed to assess the importance of each attribute and identify preference heterogeneity.

Results

The most valued attributes were support timing and amount, and personalised information. Respondents preferred a centralised electronic platform with tailored information, a moderate amount of information, some application assistance, and lump sum payments with fast-track provisions for urgent needs. Preference heterogeneity was found, with low-income families favouring staged support with smaller, periodic disbursements over one-off payments.

Conclusions

Findings suggest that timely, tailored financial aid programmes may improve financial aid effectiveness. These insights can help charities and policymakers design more responsive and equitable support systems for families navigating childhood cancer.

PSYCH-051

WHAT DO PEOPLE NEED FROM A SARCOMA WELL-BEING GUIDE?: CONSUMER FEEDBACK

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Introduction

Sarcoma, a rare cancer, can cause significant psychological distress for those diagnosed and for their informal carers. This can include depression, anxiety and post-traumatic stress symptoms. Despite this, psychological resources for people affected by sarcoma remain limited. To address this gap, we developed a sarcoma well-being guide to provide people affected by sarcoma resources tailored to their needs.

Methods

Semi-structured workshops ($N = 3$) and interviews ($N = 5$) were conducted with 18 participants, including people diagnosed with sarcoma ($N = 6$; aged 16–80 years; up to 15 years post-active treatment), informal carers ($N = 7$; aged 18–80 years; bereaved and non-bereaved), and

clinical psychologists ($N = 5$), to obtain feedback on the draft sarcoma well-being guide.

Results

Six themes were constructed using an abductive thematic analysis: *Acceptability*; *Adoption*; *Appropriateness*; *Feasibility*; *Fidelity*; and *Diversity*. These themes emphasised ways that the guide could be changed to be more engaging, approachable, relatable, relevant and highlighted how the guide would or would not be used as intended. Suggested changes included ways to increase relatability, additional accessible and diverse psychological strategies (e.g., cognitive, written and visual strategies) and the inclusion of a sarcoma specific glossary.

Conclusions

The draft sarcoma well-being guide is a promising start. The suggested changes and feedback provided by participants will inform the research team to adapt sections of the sarcoma well-being guide, helping to facilitate increased engagement and relevance. These changes will also assist with implementation of the guide in real-world settings, such as sarcoma community groups and healthcare settings (e.g., hospitals).

PSYCH-052

ILLNESS REPRESENTATIONS, SYMPTOM BURDEN, AND PSYCHOLOGICAL DISTRESS IN NEWLY DIAGNOSED HEPATOCELLULAR CARCINOMA PATIENTS AFTER INITIAL TREATMENT

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Introduction

Hepatocellular carcinoma (HCC) is the sixth most common cancer worldwide and a leading cause of cancer-related mortality. Newly diagnosed patients often experience significant uncertainty and psychological stress during the diagnostic and initial treatment phases. The aggressive nature and high recurrence rate of HCC may further intensify psychological distress. However, evidence regarding psychological distress and its associated factors in newly diagnosed HCC patients remains limited. This study aimed to assess psychological distress after first treatment and to identify associated demographic, clinical, symptom-related, and illness representation factors.

Methods

A cross-sectional descriptive correlational design was employed. A convenience sample of 94 patients with HCC within six months of completing their first treatment was recruited from a regional teaching hospital in eastern Taiwan. Data were collected using self-administered questionnaires assessing psychological distress (DASS-21), symptom burden (NFHSI-18), and illness representations (IPQ-R).

Results

The mean age of participants was 67.6 years; most were male (77.7%), married (73.4%), and classified as Barcelona Clinic Liver Cancer stage A (52.1%). The mean total DASS-21 score was 9.13 ($SD = 13.03$), indicating a low overall level of psychological distress, with depression being the most prominent subscale. The mean symptom burden score was 48.41 ($SD = 14.11$). Participants reported varying levels across illness representation dimensions. Stepwise linear regression analysis showed that age ($\beta = -0.229$), symptom burden ($\beta = -0.222$), emotional representation ($\beta = 0.768$), treatment control ($\beta = -1.013$), and illness coherence ($\beta = 0.651$) were significant predictors of psychological distress, collectively explaining 44.2% of the variance.

Table 2
Participants' illness perception, psychological distress, and symptom burden (*n*=94)

Variable	mean	SD	Minimum	Maximum	Possible range
Illness perception (Belief)					
Chronology	18.17	4.09	10	28	6-30
Cyclical	10.22	3.33	4	18	6-30
Consequences	16.29	5.42	6	30	6-30
Controllability	18.34	4.83	6	30	5-25
Treatment control	21.06	2.95	11	25	4-20
Illness Coherence	16.09	4.98	7	25	6-30
Emotional representation	16.60	5.98	6	30	6-30
Symptom burden					
Physical Symptoms	34.01	9.24	5	48	0-48
Emotional Symptoms	4.96	2.43	0	8	0-8
Treatment Side Effect	2.95	1.20	0	4	0-4
Well-Being	6.50	3.61	0	12	0-12
Psychological distress					
Depression	3.77	5.53	0	30	0-42
Anxiety	1.87	3.55	0	16	0-42
Stress	3.49	5.69	0	32	0-42

Note, SD, standard deviation.

Table 1
Participants' demographics and clinical characteristics (*n*=94)

Variables	n	%	Mean	SD	Minimum	Maximum
Age			67.64	10.79	49	91
Sex						
Male	73	77.7				
Female	21	22.3				
Marital status						
Married	69	73.4				
Single	25	26.6				
Education levels						
Lower school or below	30	31.9				
Middle school	24	25.5				
High school	29	30.9				
College or above	11	11.7				
Employment						
Employed	30	31.9				
Retired	43	45.7				
Unemployed	21	22.3				
BCLC stage						
A	49	52.1				
B	25	26.6				
C	20	21.3				
Initial treatments						
Surgery	25	26.6				
Local therapy	46	48.9				
Systemic therapy	23	24.5				
Disease duration (day)			76.83	51.08	6	179
CCI (with age)			3.21	1.38	0	6
CCI (without age)			0.85	0.70	0	3

Note, SD, standard deviation; CCI, Charlson Comorbidity Index.

Table 3
Stepwise linear regressions for predicting psychological distress of patients with hepatocellular carcinoma

Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Collinearity	VIF
Standardized coefficients (β)							
Emotional representation	0.543***	0.378***	0.333**	0.435***	0.768***	0.465	2.150
Cure		-0.295**	-0.287**	-0.299**	-1.013*	0.614	1.628
Age			-0.185*	-0.200*	-0.229*	0.915	1.093
Illness coherence				0.200*	0.651*	0.636	1.573
Symptom burden					-0.222*	0.505	1.979
Model summary							
R ²	0.293	0.355	0.387	0.413	0.442		
Adjusted R ²	0.238	0.341	0.366	0.387	0.411		
R ² Change	0.295	0.060	0.032	0.027	0.029		
F Change	38.54***	13.93***	5.67*	4.06*	4.59*		

Note. Dependent Variable: Psychological distress; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Conclusions

Psychological distress may emerge early among newly diagnosed HCC patients. Illness representation beliefs and symptom burden play critical roles, while stronger treatment control beliefs and older age serve as protective factors. These findings highlight the importance of early, integrated psychological assessment and targeted interventions.

PSYCH-055

“LIFE ON HOLD”: AN AUSTRALIAN STUDY OF THE ECONOMIC BURDEN OF CHILDHOOD CANCER AND GAPS IN SUPPORTIVE CARE FOR IMPACTED FAMILIES

Axelle Marjolin, Shelley Dennis, Rhiannon Edge
Redkite

Introduction

Families impacted by pediatric cancer are vulnerable not only due to the disease's rarity, but because of the significant financial burden it imposes. Prolonged medical and non-medical out-of-pocket expenses, together with lost income from long-lasting employment disruptions can severely impact families' financial stability. Without appropriate support, the financial strain can place families' lives “on hold” with long-term effects on their wellbeing.

Methods

A mixed-methods approach was used to examine the economic burden of childhood cancer, its social and economic impacts on families over time and their experiences of relevant support services. Data was collected through an online survey of 520 bereaved and non-bereaved parents/guardians followed by semi-structured interviews with 9 diverse survey participants.

Results

Despite Australia's publicly funded healthcare system, many families incur considerable out-of-pocket costs across all stages of their cancer experience. Findings also highlight the long-term employment disruptions and substantial household income losses families experience due to childhood cancer. These economic pressures negatively impacted families' psychosocial outcomes. Significantly, 73% experienced high levels of emotional distress due to the economic burden of their child's cancer, and 59% were unable to meet regular financial obligations in the past year. Further, findings suggest a growth in unmet financial needs among families impacted by pediatric cancer with 69% of respondents indicating an unmet financial need whilst their child was on treatment, compared to 45% in 2020. In parallel, existing supports – particularly from government – were often perceived to be insufficient.

Conclusions

This study confirms that many families affected by childhood cancer face economic hardship. Out-of-pocket expenses, lost income from employment disruptions, and inadequate financial support services expose families to persistent financial and psychosocial challenges. These findings underscore the critical need to integrate financial support into supportive care frameworks and develop more tailored interventions to address the specific needs of families affected childhood cancer.

PSYCH-056**SUPPORTIVE CARE SCREENING IN CANCER SERVICES: REFERRAL OUTCOMES, AND IMPLICATIONS FOR INTEGRATED CARE**

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Introduction

Supportive care screening is widely used in cancer services to identify distress and to prompt referral to appropriate services. Less is known about where patients are referred following screening and whether referrals are directed to hospital services that are accessible and responsive to diverse groups. This study examined referral outcomes following screening and implications for supportive care service planning and resourcing.

Methods

Six months of routine screening data were collected from a large public medical oncology service. Referral outcomes were extracted from records, including whether a referral occurred and its destination. Demographic variables were examined in relation to referral outcomes.

Results

A total of 768 screenings were completed, with 82 patients declining. Among those screened, 54% reported clinically significant distress. Overall, 36% of patients received at least one referral. Non-English speakers were referred more often than English speakers ($p = 0.017$), while females were referred less often than males ($p = 0.041$). Referral rates did not differ by age ($p = 0.58$). Many referrals were directed to external community services rather than hospital-based programs. Each one-point increase in distress score was associated with a 2.9 percentage point increase in likelihood of referral ($p < 0.001$). Referral numbers and destinations are presented in the accompanying table.

Table 1. Referrals Made Following Screening

Service	Number of referrals made to this service	% of overall referrals
Cancer Council Victoria	183	41.4
Physical Support*	119	30.2
Social Work	39	9.9
Palliative care	22	5.6
Cancer support nurses	22	5.6
Practical Support*	16	4.1
Cancer-specific services*	8	2.0
Psycho-oncology	5	1.3

*Referrals have been categorised as follows: physical support referrals (dietician, dentist, pain service, diabetes nurses, rehab, physiotherapy, Quit line), practical support referrals (My Aged Care, transport services, refugee services and Department of Veterans Affairs), and cancer-specific services (Lung Foundation, PanCare, Look Good Feel Better).

Conclusions

Supportive care screening identifies high levels of distress and increased likelihood of referral as distress rises, demonstrating its clinical utility. However, most patients did not receive a referral, indicating missed opportunities for timely support. Differences by language and gender suggest potential inequities, and reliance on external services may limit accessibility and continuity. These findings support investment in integrated hospital-based supportive care, using screening data to guide service planning, workforce allocation, and resourcing to ensure needs are met within routine cancer care.

PSYCH-058**BUILDING THE CASE FOR INVESTMENT: DEMONSTRATING THE VALUE OF CANCER SUPPORT SERVICES IN AUSTRALIA**

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Introduction

Access to quality information and support is vital for people impacted by cancer. Cancer Council Victoria's nurse-led telephone support service (131120) provides information, navigation, and emotional support, yet the broader economic and social value of this service remains underexplored. Social Return on Investment analysis quantifies benefits and informs value for money. Initial steps focused on identifying outcomes that hold significance for people affected by cancer, families, communities, and wider society, and assigning monetary values to these outcomes to inform the cost-benefit ratio.

Methods

A Theory of Change was developed through focus groups and interviews (N=16). Artificial Intelligence and Natural Language Understanding were applied to 18,336 call recordings to identify needs and benefits. Thematic analysis of focus groups and interviews (N=31) explored in-depth benefits for callers. These data informed a contingent valuation survey (N=404) assessing willingness to pay for the identified outcomes among people living with cancer and carers.

Results

Most callers were people affected by cancer (42%), carers (30%), and the general public (27%). Key outcomes included increased knowledge, empowerment, reduced distress, improved healthcare navigation, decreased isolation, enhanced wellbeing, reduced carer burden, and greater social participation. Medium and longer-term impacts included improved quality of life (QoL), survival benefits, and increased investment in services. At least half of respondents were willing to pay for improvements in outcomes. The unadjusted average amount people were willing to pay was between \$241 for a 3-month improvement in QoL (n=203) and \$985 for having needs met (n=175).

Conclusions

The studies identified short-, intermediate-, and long-term outcomes from contacting 131120. The results suggest the service provides access to quality care for a diverse range of patients, carers, and community members who place substantial value on the benefits provided.

PSYCH-061**BEYOND PHYSICAL SYMPTOMS: PSYCHOLOGICAL AND RELATIONAL IMPACTS OF INDUCED MENOPAUSE IN YOUNGER BREAST AND GYNAECOLOGICAL CANCER PATIENTS**

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Introduction

Beyond physical symptoms, menopause induced by cancer treatment commonly affects psychological, social, and emotional wellbeing. Yet, these impacts, particularly in younger women, remain under-explored and insufficiently addressed. This qualitative study comprehensively

examined psychosocial consequences of premature and early induced menopause from patient and healthcare professional (HCP) perspectives, with novel inclusion of psychosocial clinicians' insights.

Methods

Thirty breast and gynaecological cancer patients with self-identified experience of premature or early induced menopausal symptoms, and 27 HCPs (11 nurses, 9 clinical psychologists, 2 social workers, 2 oncologists, a breast surgeon, an endocrinologist, and a counsellor) involved in the care of younger women with breast and gynaecological cancers completed semi-structured interviews. Participants were recruited via hospital sites, social media, or via purposive sampling/snowballing.

Results

Patient participants ranged in age from 28–52 years. Most were partnered ($n=23$), and predominantly diagnosed with breast cancer ($n=25$), being 3 years post-diagnosis, on average. HCPs had a mean of 22 years professional experience (range: 2–49 years) and practiced within both public and private health settings. Four inter-related themes were identified: 1) *Changed Body, Changed Mind*- capturing the interconnected physical, psychological and emotional changes associated with induced menopause, 2) *Altered Sense of Self*- reflecting the pronounced emotional and existential impact of experiencing menopause at a younger age, including shifts in identity and self-perception, 3) *Relational Upheaval*- capturing disruptions in existing and future interpersonal relationships, and 4) *Menopause in the Cancer Context*- highlighting the interrelated nature of cancer and menopause experiences.

Conclusions

Induced menopause appears to deeply shape many younger women's psychological, emotional and relational worlds, often redefining identity and impacting relationships in complex ways. Experiences of menopause within the cancer context were highly individual, highlighting the need for tailored evidence-based psychosocial support that recognises and addresses the nuanced psychosocial challenges of induced menopause alongside physical symptom management.

PSYCH-062

SERVICE UTILISATION OVER TWO YEARS OF THE FIRST AUSTRALIAN HOSPITAL BASED PSYCHOLOGICAL SERVICE FOR CARERS

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Introduction

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Aims

Carers of people with cancer experience significant distress and up to 40% experience a diagnosable mental health problem yet very few services address this need. The aim was to evaluate utilisation and impacts of a pilot clinical psychology service to address the unmet needs of carers over two years.

Methods

A carers clinical psychology service was established in March 2023 in metropolitan Melbourne. A retrospective file audit was conducted of service provision (referral rates, appointment number, presenting problem, intervention provided), carer and patient characteristics and psychological pre- and post-outcome data between 11 February 2023 and 31st of January 2025. Service provision and carer and patient

characteristic data were summarised as counts and percentages. Outcome data were analysed using t-tests.

Results

One hundred and twenty-eight carers were referred to the clinic. Carers were predominantly female (70%) and caring for their spouse/partner (66%). Twenty-three percent of carers lived regionally. Common presenting concerns were anxiety, grief, low mood, and relationship difficulties. Common interventions provided were, cognitive behavioural therapy, acceptance and commitment therapy, existential intervention and communication skills training. Evaluation data showed that carers found the service acceptable. Pre- and post-outcome data indicated significant improvements in anxiety ($t(39) = 7.17$, $p < .001$) and depression ($t(36) = -7.22$, $p < .001$) and carer quality of life ($t(39) = 5.00$, $p < .001$).

Conclusions

Carers experience significant rates of psychological distress and impacts on quality life. Brief psychological intervention for cancer carers is accessible and acceptable. Preliminary data suggest psychological interventions for carers may improve mental health and quality of life, supporting carers to manage in their caring role.

PSYCH-063

EVALUATION OF THE CARER SUPPORT PROGRAM AT A COMPREHENSIVE CANCER CENTRE: A MIXED-METHOD

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Introduction

Carers of people with cancer experience significant emotional, practical, and psychosocial burden, often with limited access to tailored support. The Carer Support Program (CSP) was established at a tertiary cancer centre to address these needs through a Carer Support Officer (CSO) service and Carer's Circle peer support group. This study evaluated the benefits, uptake, and areas for improvement of these services. A Carer Psychology Clinic is part of the CSP and results are reported in a separate abstract.

Methods

A mixed-methods design was used, incorporating a retrospective audit of CSO service data (July 2023–June 2024) and two prospective surveys of carers who accessed the CSO ($n=33$) or attended Carer's Circle ($n=20$) between June 2024–December 2025. Quantitative data described demographics, service usage, and satisfaction; qualitative data explored perceived benefits and improvement opportunities.

Results

Audit data showed most carers accessing the CSO were female (77%), over 50 years (76%), and caring for a spouse/partner (67%). Emotional support (41%) and information needs (33%) were the most common presenting concerns. Survey findings indicated high satisfaction with both services. Carers reported feeling validated, heard, and supported, with improved confidence in navigating resources. Carer's Circle was valued for fostering connection, reducing isolation, and providing practical strategies. Key improvement areas included increased availability for the CSO and more flexible delivery for Carer's Circle, including more time for sharing/discussion and opportunities for interaction outside the group.

Conclusions

The CSP provides highly valued emotional, practical, and peer support, enhancing carers' wellbeing and capacity to sustain their role. Findings support the integration of structured carer support into routine cancer care and highlight opportunities to improve accessibility and inclusivity. Continued investment in these services is critical to meeting carers' needs across diverse contexts.

PSYCH-064**THE PSYCHOLOGICAL AND PSYCHOSOCIAL BURDEN ASSOCIATED WITH HAEMATOPOIETIC STEM CELL TRANSPLANTATION IN THE ACUTE HOSPITAL SETTING: A SCOPING REVIEW.**Emma Munro¹, Morgan J Farley², Brigid Scanlon²¹Royal Brisbane & Women's Hospital, ²Centre for Healthcare Transformation, School of Nursing, Queensland University of Technology, Brisbane**Introduction**

The treatment of haematological malignancies has advanced substantially in recent decades, leading to significant improvements in patient outcomes and survival. However, intensive therapies such as Haematopoietic Stem Cell Transplantation (HCT) continue to produce challenging treatment-related toxicities and side effects. Consequently, supportive care has largely prioritised the management of physical symptoms, reflecting the acute nature of treatment and the frequent need for intensive clinical intervention. There is emerging evidence that the intensity and duration of these therapies impose a substantial psychological and psychosocial burden, which remains relatively underexplored in the acute inpatient setting.

Methods

A detailed protocol and search strategy were developed a priori, following the Joanna Briggs Institute Reviewer's Manual. Systematic searching was conducted via PubMed, CINAHL, EMBASE, PsycINFO, Web of Science and Scopus, resulting in 56 studies included in the final analysis.

Results

The majority of studies demonstrated that overall quality of life (QOL) generally improved over time following HCT, although it was significantly impaired during treatment and early recovery. There was significant heterogeneity in assessment tools utilised, with the FACT-BMT and QLQ-C30 the most commonly used to assess QOL. Psychological outcomes included elevated rates of depression, anxiety, fatigue, sleep disturbance, cognitive impairment, and distress related to isolation and loss of social connection. Mixed emotional responses regarding fear and hope were reported, with modest differences observed between autologous and allogeneic transplant recipients. Symptom burden most frequently peaked during inpatient treatment or within the first month following transplantation, characterised by persistent, inadequately controlled symptoms that interfered with engagement in psychologically meaningful activities.

Conclusions

HCT places substantial physical, psychological, and psychosocial burdens on both patients and their families. There is a critical need to understand and characterise the psychological and psychosocial needs during the acute treatment phase, including the identification of appropriate assessment tools to effectively inform supportive clinical care.

PSYCH-066**MEMORY IMPAIRMENT AND RESTLESSNESS PREDICT REDUCED EMPLOYMENT AMONG WORKING-AGE AMERICAN CANCER SURVIVORS**Reem Nasr, Julia Trudeau, Brandon Xie, Joi Li, Carolyn Nguyen, **Alexandre Chan**

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Introduction

Neuropsychiatric symptoms, including cognitive impairment, anxiety, and psychological distress, may be associated with challenges in workforce reintegration. Here, we explored neuropsychiatric symptoms that

may predict employment status among working-age American cancer survivors using a large-scale US-based health database.

Methods

This cross-sectional analysis utilized data from the NIH *All of Us* (AoU) Research Program Controlled Tier Dataset (v8). Adult cancer survivors diagnosed with cancer, aged 18-65 years, and who completed the *Behavioral Health and Personality Survey* were included. The primary outcome is employment status, which was self-reported by participants. Neuropsychiatric symptoms evaluated included attention deficits, mood shifts, panic/anxiety, fear, and recurring thoughts. Multivariate logistic regression models examined associations between individual symptoms and employment status, adjusted for age, education, household income, and cancer diagnosis. Results were reported as adjusted odds ratios (aOR) with associated 95% CI and p-values.

Results

A total of 861 cancer survivors were included, with a median age of 57 years (IQR: 12). Most participants were female (72.9%), non-Hispanic White (79.7%), married (61.1%), college educated (61.4%), and currently employed (63.1%). Common diagnoses included breast (26.7%), hematologic (11.4%), and endocrine (9%) cancers. In multivariate models, older age and lower household income were associated with lower odds of employment ($p < 0.05$).

Survivors who reported difficulty remembering appointments or obligations had significantly lower odds of employment (aOR = 0.44, 95% CI: 0.19–0.98, $p = 0.04$). Restlessness, measured by fidgeting or squirming when seated for long periods, was also associated with reduced odds of employment (aOR = 0.47, 95% CI: 0.27–0.82, $p = 0.008$). Hyperactivity, social withdrawal, and public anxiety demonstrated non-significant trends toward lower odds of employment.

Conclusions

Memory deficits and restlessness in cancer survivors are associated with reduced employment. Clinicians should routinely assess these symptoms during survivorship care and consider targeted interventions to improve work reintegration in this growing population.

PSYCH-067**ACCEPTANCE AND COMMITMENT THERAPY IMPROVES ADHERENCE TO ERECTILE DYSFUNCTION TREATMENT IN MEN WITH PROSTATE CANCER**

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Introduction

For many men with prostate cancer, difficulty with sexual dysfunction, in particular erectile dysfunction (ED), can trigger a psychological process which leads to avoidance of utilizing sexual dysfunction treatments. This study tests a novel psychological intervention based on Acceptance and Commitment Therapy (ACT) concepts to help men utilize these treatments.

Methods

This study recruited men with prostate cancer starting intracavernosal injection therapy (ICIT) for the treatment of ED. Subjects were randomized to ICIT + ACT (ACT), which focused on reducing avoidance, or ICIT + Enhanced Monitoring and Education (EME), which included enhanced follow-up. Both groups received ICIT plus 3 sessions (30-45 min) and 10 booster sessions (10 min). The interventions were delivered over the course of a year. Subjects were assessed at entry and every 6 months (m) for two years. The primary outcomes were the number of penile injections/week (verified by syringe count), and compliance (defined as ≥ 2 injections/week). Secondary outcomes assessed psychosexual variables. Preliminary 6m and 12m data is presented. Effect sizes (d) are reported

for secondary variables ($d=0.2$, small effect; $d=0.5$, medium effect; $d=0.8$, large effect).

Results

196 men were recruited, 131 have completed the 6m assessment (ACT $n=64$, EME $n=67$) and 112 completed the 12m assessment (ACT $n=53$, EME $n=57$). Mean age at baseline was 60 ± 7 years. At 6m and 12m, the ACT group utilized more injections/week vs. the EME group (6m: median 1.8 vs. 1.2, $p=0.01$; 12m: median 2.0 vs. 1.4, $p=0.01$) and were more compliant with ICI vs. the EME group (6m: 65% vs. 35%, $p=0.01$, $RR=1.86$; 12m: 79% vs. 41%, $p=0.01$, $RR=1.93$). At 6m and 12m, the ACT group reported greater satisfaction with ED treatment ($d=0.6$, $p<0.05$) and lower depressive symptoms ($d=0.4$, $p<0.05$).

Conclusions

This RCT demonstrates an ACT based psychological intervention significantly increases ICI use, while increasing men's satisfaction with injections and reducing depressive symptoms.

PSYCH-068

MEDICATION AND MEDICAL SERVICE UTILISATION FOR MENTAL HEALTH IN WOMEN WITH BREAST CANCER

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Introduction

There is limited data comparing the burden of disease and needs for mental health services before and after cancer diagnosis to inform planning and delivery of services that target cancer survivors with greatest needs. This study examined the patterns of medication and medical service use for mental health in women with breast cancer pre- and post-diagnosis.

Methods

We conducted this retrospective cohort study using population-based South Australian Cancer Registry linked with medication prescriptions and medical services data for all women with breast cancer diagnosed between April/2013 and March/2014. The patterns of medication and medical service use for mental health were analysed in one-yearly intervals between one-year before and five-years after breast cancer diagnosis. Generalised estimating equations models with binary logistic distribution was used to examine characteristics associated with medication and medical service use for mental health.

Results

The study included 1143 women with breast cancer. The proportion of people who had a prescribed medication for mental health increased from 23% one-year pre-diagnosis to 29% in the first year of diagnosis and remained stable at 29-30% throughout five years post-diagnosis. The prevalence of medical service use for mental health increased from 7% one-year pre-diagnosis to 13% in the first year of diagnosis, although the percentage decreased gradually over time post-diagnosis. A higher burden of comorbidity and time period after breast cancer diagnosis were associated with increased likelihood for medication and medical service use for mental health, whereas older age, residing outside of major cities and receipt of radiotherapy were associated with decreased likelihood of mental health service use.

Conclusions

There is an apparent increase in medication and medical service use for mental health in the first year of breast cancer diagnosis. Our findings support the importance of early mental health screening to identify at-risk individuals for targeted intervention.

PSYCH-069

PARTNERING WITH PATIENTS ON ENHANCING GOALS OF CARE CONVERSATIONS

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Introduction

Advance care planning (ACP) amongst cancer patients have historically been a challenge. Part of the challenge is provider-centered, but equally patient's apprehension of engaging in ACP conversations, and surrogate understanding of patient's wishes.

Methods

Our health system invested in a patient-participation platform which will allow individuals to document their treatment preferences, values, and goals privately in their own homes to reduce the logistical and psychological constraints of time-limited clinical encounters. Patients can reflect on their wishes, revisit their decisions, and consult family members at their own pace, behaviors associated with more stable and clearly articulated preferences. These documents will be legal as they will be notarized as well. This presentation will focus on how to successfully achieve downstream utilization; combine technology with workflow integration, enhance clinician training and buy-in, and ensure organizational support.

Results

Digital ACP tools are most effective when integrated into the electronic health record, enabling clinicians to access goals-of-care (GOC) information during critical decision points. Evidence shows that digitally documented goals are more likely to be viewed and acted upon when incorporated directly into clinical workflows. Having this information available will not only lead to better care alignment for the patient but also facilitate earlier identification of supportive-care needs and trigger palliative care referral.

Conclusions

Other than being aware of a patient's wishes, preferences, and goals, another strength of this approach is the inclusion of surrogate designation features, decision aids, and educational materials that support shared decision-making. By improving surrogate preparedness and reducing decisional uncertainty, digital tools strengthen alignment across patients, families, and clinicians. Taken together, patient-participation platforms represent a promising strategy for achieving earlier, more equitable, and more consistent delivery of GOC. The impact is greatest when embedded into a comprehensive system that ensures patient-reported goals are visible, interpretable, and actionable across the continuum of care.

PSYCH-071

LAYERS OF DISTRESS: PSYCHOSOCIAL CHALLENGES FOR WOMEN MANAGING METASTATIC BREAST CANCER IN ABUJA, NIGERIA: INSIGHTS FROM A QUALITATIVE INQUIRY

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Introduction

Metastatic breast cancer (MBC) remains a life-altering diagnosis that reshapes women's emotional, social, and economic realities. In Nigeria—where psychosocial services are limited and health-seeking behaviors are influenced by cultural and systemic constraints—the psychosocial burden can become particularly complex. This study introduces an in-depth qualitative exploration of how women

living with MBC in Abuja experience and navigate psychosocial distress, highlighting often-overlooked dimensions of their lived experience.

Methods

Using an innovative narrative-centered qualitative design, we conducted semi-structured interviews with 36 women diagnosed with MBC, recruited from oncology clinics and support networks across Abuja. Thematic analysis enabled the extraction of key patterns of distress, coping, and meaning-making within their illness journeys.

Results

Participants described layered psychosocial distress shaped by emotional turbulence, social disconnection, and financial vulnerability. Persistent fears, anxiety, depressive episodes, and an overwhelming sense of uncertainty were central emotional themes. These were deepened by stigma, caregiving burdens, and the disruption of everyday roles. Financial toxicity—driven by high treatment costs and loss of income—emerged as a dominant source of distress. Many women also grappled with debilitating pain and relentless hospital visits. Despite these challenges, the study uncovered innovative coping pathways: strong reliance on spiritual grounding, collective resilience cultivated through support groups, and emerging advocacy identities that helped women reclaim agency.

Conclusions

Women with MBC in Abuja face multidimensional psychosocial distress that extends beyond medical needs into the social, emotional, and economic domains of daily life. There is a pressing need for context-responsive psychosocial interventions that integrate counseling, pain management, financial support, and community-based care models. Strengthening health policies and promoting culturally sensitive public awareness could reduce stigma and create more inclusive support ecosystems. This study underscores the importance of designing psychosocial care frameworks that reflect the complexity of women’s lived experiences with MBC in low-resource settings.

PSYCH-073
PREGNANCY AND POSTPARTUM ASSOCIATED CANCERS:
THE PATIENT EXPERIENCE IN AUSTRALIA

Rachelle Panitz
So Brave

Introduction

Pregnancy and Postpartum Associated Cancers (PAC) represent a rapidly emerging public health issue in Australia. Despite rising incidence (Safi et al., 2023), women diagnosed with cancer during pregnancy or up to two years postpartum remain a neglected population in research, policy, and supportive care delivery. The aim of So Brave’s study was to identify inequities in diagnosis, treatment, and psychosocial support for women diagnosed with cancer during pregnancy and postpartum to inform the delivery of evidence-based resources for patients and clinicians.

Methods

A mixed-methods design incorporating quantitative and qualitative data collection was adopted. An online survey was distributed nationally to women diagnosed with cancer during pregnancy and the postpartum period. Quantitative data was analysed using descriptive statistics. Qualitative data was gathered through online patient engagement sessions and a national Policy Development Roundtable series and analysed thematically.

Table 1. Participant Engagement Across Study Components

Study Component	Participants (n)	Key Characteristics
PAC Patients Engaged (Overall)	75	Women diagnosed with cancer during pregnancy or the postpartum period, recruited nationally
Patient Survey Respondents	41	Completed the Pregnancy and Postpartum Cancer Patient Survey (quantitative & qualitative)
Patient Engagement Sessions	21	Participated across three lived-experience consultation sessions informing co-design
Stakeholder Roundtable Participants	72	Multi-state participation including clinical, research, policy, psychosocial & lived-experience representatives

Results

Findings demonstrated substantial gaps in diagnostic, psychosocial, and supportive care provision across the cancer care continuum. Quantitative survey data indicated that nine in ten respondents had not been provided with psychosocial support information or resources during their treatment journey. Qualitative responses highlighted isolation, difficulty navigating fragmented care pathways, unmet mental health needs, and limited recognition of the compounded challenges associated with pregnancy, early motherhood, and cancer. At the systems level, stakeholders participating in a Policy Development Roundtable reported variable confidence in identifying and responding to the supportive care needs of this cohort. Prior to one session, 11% of attendees reported being not at all confident; this reduced to 0% following targeted discussion. Qualitative stakeholder feedback underscored the value of lived-experience insights in increasing awareness, challenging assumptions, and strengthening capacity to deliver responsive, patient-centred care.

Conclusions

These findings highlight persistent gaps in psychosocial support for women diagnosed with cancer during pregnancy and early motherhood, demonstrating the value of lived-experience-informed, co-designed interventions in addressing unmet supportive care needs.

PSYCH-074
BRAVESPACE: CO-DESIGNING A DIGITAL MENTAL
HEALTH HUB FOR YOUNG WOMEN AFFECTED BY
CANCER

Rachelle Panitz
So Brave

Introduction

Young women affected by cancer experience significant, persistent psychosocial and mental health challenges across the survivorship continuum, yet tailored, accessible supports remain limited. To address this gap, So Brave undertook a co-design and user testing process to develop **bravespace**, an online mental health resource hub. This abstract outlines the co-design methodology, participant engagement, and iterative testing processes that informed the development of an evidence-based, user-centred digital support platform.

Methods

Supportive care gaps were identified through an online survey of 91 young women with cancer, supplemented by qualitative feedback. The **bravespace** platform was developed using a participatory co-design methodology, guided by a Patient Advisory Committee and a psycho-oncology professional advisory committee. Iterative consultation and user testing were conducted throughout development to inform

platform design, usability, and content. Mental health professionals reviewed materials to ensure clinical accuracy, adherence to evidence-based practice, and accessibility across multiple content formats.

Results

Community consultation identified priority psychosocial challenges for young women affected by cancer, including loneliness and isolation, barriers to accessing mental health care, survivorship concerns, fear of recurrence, and impacts on sexuality, fertility, menopause, body image, cognition, and intimate relationships. These findings, together with input from the Patient Advisory Committee, directly informed content priorities, resource selection, and functional design of **bravespace**. The resulting platform was launched at Parliament House in late November- accessible via **bravespace.org.au** - and has been visited by 498 new users in the period since.

Conclusions

User testing demonstrated that **bravespace** improved participants' ability to locate and navigate relevant mental health information, with users reporting reduced information overload and increased confidence in accessing support. Participants identified the platform as accessible, validating, and responsive to their lived experience, and reported enhanced mental health literacy and a greater sense of connection. Feedback supported the platform's acceptability and perceived usefulness in addressing psycho-social needs across the cancer continuum.

PSYCH-075

WHEN KNOWING HURTS: PERCEIVED PROGNOSIS AND PSYCHOSOCIAL DISTRESS

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City of Hope

Introduction

Patients with advanced malignancy often experience substantial physical and psychosocial distress, which may be influenced by prognostic awareness.

We examined the association between symptom-related distress and perceived prognosis in hospitalized patients with advanced cancer receiving interdisciplinary supportive care and identified symptoms linked to perceptions of poor prognosis.

Methods

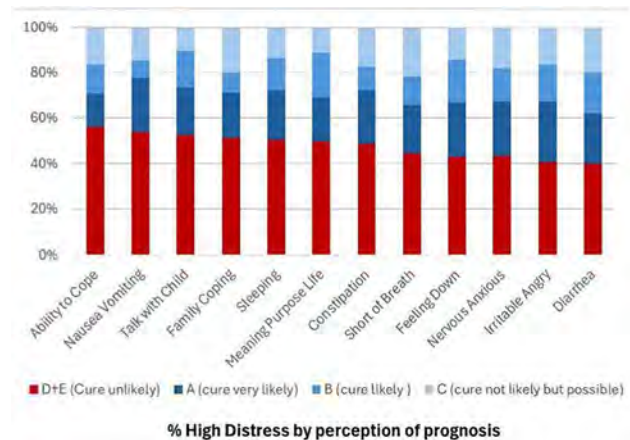
A survey assessed distress score and perceived prognosis (2019–2023). Perceived prognosis was categorized based on likelihood of cure and treatment intent: A: (very likely cure, 76–100%), B: (likely cure, 51–75%), C: (cure not likely but possible, 26–50%), D: (cure not likely, 0–25%, disease control intent), and E: (cure not likely at all, 0–25%, comfort focused care). Distress across physical, psychological, and psychosocial symptoms was rated on a 1–5 scale, with scores ≥ 3 defined as high distress. Patient characteristics were compared using chi-square, t-tests, and distress frequencies were summarized descriptively across prognosis categories. P-values < 0.05 were considered significant.

Table A. Perceived Prognosis Categories

Category	Treatment Intent	Likelihood of Cure	Prognostic Perception N=186
A	Cure very likely	76–100%	40 (21.5 %)
B	Cure likely	51–75%	26 (14.0 %)
C	Cure not likely, though possible	26–50%	35 (18.8%)
D	Cure not likely with disease control as treatment goal	0–25%	40 (21.5%)
E	Cure not at all likely with comfort and quality of life as treatment goal	0–25%	45 (24.2%)

Results

Of 507 patients, 186 completed the survey. Respondents were younger than non-respondents (mean age 56.3 SD = 15.24 vs. 62.2 years SD = 14.82; $p < 0.001$). Mean pain scores did not differ significantly between the two groups (6.22 [SD = 3.21] vs. 7.11 [SD = 2.52]; $p = 0.413$), suggesting pain was unlikely to account for non-completion. Among respondents, 54.3% perceived cure as likely or possible while 45.7% perceived cure as unlikely. Patients in groups D–E reported higher distress across multiple symptoms, with psychosocial distress more prominent than physical symptoms. The most distressing concerns were impaired ability to cope (56%), difficulty talking to children (53%), nausea/vomiting (54%), sleep disturbance (51%), and family coping difficulties (51%).



Conclusions

Psychosocial distress and impaired coping are strongly associated with perceptions of poor prognosis, highlighting the complex impact of prognostic awareness on mental health and overall well being.

PSYCH-076

EXPRESSIVE SUPPRESSION, NOT COGNITIVE REAPPRAISAL, POST CANCER DIAGNOSIS: IMPACT ON SLEEP AND WELLBEING IN WOMEN LIVING WITH CANCER IN AOTEAROA

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Introduction

More than 34% of women living with a cancer diagnosis report sleep disturbance, linked to lower emotional wellbeing and inability to regulate emotions. Associations between emotional regulation and its impact upon sleep and emotional wellbeing is unclear immediately post cancer diagnosis. This study aims to assess whether expressive suppression and cognitive reappraisal mediates the sleep and emotional wellbeing relationship among women living with cancer in Aotearoa, NZ during post diagnosis phase.

Methods

For the current cross-sectional study 164 women diagnosed with cancer in the past 3 years currently living in Aotearoa completed an online survey (mean age of 46.88 years (SD= 9.56)). Data were analysed

producing descriptive and correlations and testing for mediation using linear regression and mediation analyses (PROCESS Model).

Results

A significant relationship between sleep and emotional Wellbeing ($r = .38$; $p < 0.001$) was found, and poorer sleep was significantly associated with both expressive suppression ($r = .28$; $p < 0.001$) and cognitive reappraisal ($r = .20$; $p < 0.001$). Greater use of expressive suppression was associated with emotional wellbeing, while cognitive reappraisal was not. Sleep predicts both mediators ($\beta = 0.26$; $\beta = 0.18$), expressive suppression is found to be stronger predictor of emotional wellbeing. Expressive suppression, but not cognitive reappraisal, mediated the sleep disturbance-emotional wellbeing relationship ($\beta = 0.16$, 95% CI [0.002, 0.087]).

Conclusions

Women recently diagnosed with cancer suppressed emotion when experiencing poor sleep leading to poorer emotional wellbeing. Identifying emotion regulation strategies relating to sleep and emotional wellbeing may provide determinants for developing interventions to support better emotional management and subsequent improved sleep-wellbeing outcomes.

PSYCH-077

UNDERSTANDING THE FERTILITY, SEXUAL HEALTH, AND MENTAL HEALTH NEEDS OF ADOLESCENTS AND YOUNG ADULTS (AYA) WITH CANCER IN EASTERN ONTARIO, CANADA.

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Introduction

Adolescents and young adults (AYA, ages 15-39 years) with cancer face unique challenges due to their life stage that are not addressed by regional cancer programs. This study aimed to evaluate factors that impact fertility, sexual health, and mental health within the AYA population of Eastern Ontario, Canada.

Methods

An anonymous electronic survey, co-designed by AYA patients, was administered through the institutional electronic health record system to AYAs diagnosed between 2015-2023 at the Ottawa Hospital. Questions focused on fertility, sexual health, mental health, cancer diagnosis and treatment, quality of care, cancer care challenges, and access to supportive care. Descriptive statistics were reported. Chi-square test/Fisher's Exact test and independent t-test were used to compare covariates between groups. For statistical tests, two-tailed test was used to determine significance at 5% level.

Results

Three hundred thirteen AYAs completed the survey (response rate 30.2%). Respondents were predominantly women (71.8%), in a relationship at diagnosis (60.4%), and employed fulltime (59.5%). 37.4% were on treatment or active follow up. Median age at diagnosis was 33 years (range 16-39 years). Most respondents had fertility discussions prior to therapy (77.8%); however, men were more likely to be offered fertility preservation (65.9% vs 52%, $p < 0.05$). Negative sexual health impact was associated with age 30-39 years at diagnosis,

being unemployed/on disability, identifying as a woman, and a parent at diagnosis ($p < 0.05$); cancer status (treatment or active follow up vs survivorship) did not have an impact. The majority of respondents identified negative mental health impacts (86.3%).

Conclusions

AYA program development in Eastern Ontario should focus on mental health, addressing fertility preservation discrepancies and sexual health, particularly in older AYA patients, those unemployed/on disability, and parents at diagnosis. Whether these populations are distinct or represent overlapping individuals should be examined in future studies.

PSYCH-078

DOES ADDING THERAPIST GUIDANCE TO FINDING MY WAY-ADVANCED IMPROVE ENGAGEMENT IN WOMEN WITH METASTATIC BREAST CANCER? A FEASIBILITY PILOT.

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Introduction

To evaluate the comparative feasibility and program engagement of different modalities of guidance when added to an online psychosocial intervention for women with metastatic breast cancer (MBC), *Finding My Way-Advanced+* (FMW-A+).

Methods

A feasibility pilot RCT recruited women aged 18+ with MBC, sufficient English, internet access, and life expectancy >6 months. All participants received access to the FMW-A program and were randomly allocated to a minimum of 2 guidance sessions (via email, phone-call or video-call) over six-weeks. Feasibility outcomes included uptake, attrition, adherence, acceptability and fidelity. Program and guidance engagement were assessed via website analytics and objective usage indicators.

Results

64 participants enrolled (21 email, 21 phone, 22 video) from July to November 2025 ($M = 12.8$ enrolled/month). The *a priori* recruitment target (60) was met (66% uptake rate; 97 approached), and attrition was acceptable (8%). On average, participants were aged 57.9 ± 10.42 years and 3.75 ± 8.7 years from diagnosis (44% with de novo MBC). Baseline QOL was poor and distress elevated; a large percentage exceeded clinical thresholds for depression (39%), anxiety (27%), and fear-of-progression (66%), impaired mental-QOL (69%) and physical-QOL (64%). While program engagement was comparable to the main self-guided FMW-A trial (FMW-A+: $M = 3.2 \pm 2.2$ modules accessed, Median=3 vs FMW-A $M = 2.5 \pm 0.2$, Median=2), fewer participants accessed 0 modules (~8% vs ~20%) and more accessed all 6 modules (25% vs ~10%). Furthermore, engagement differed across modalities (Email: $M = 3.4 \pm 2.3$, Median=2.5 vs Phone: $M = 3.6 \pm 1.8$, Median=4 vs Video: $M = 2.5 \pm 2.1$, Median=2). Most participants accessed the first guidance session (86%); engagement reduced in the second guidance session (66%), and few used the optional third (17%), with highest retention in the phone condition.

Conclusions

Adding guidance to FMW-A is feasible and improves trial accrual. While overall program engagement did not increase, this was influenced by the modality of guidance; with phone guidance appearing most acceptable. Data suggests 1-2 sessions of guidance is optimal.

PSYCH-079**ADVANCING RURAL HEALTH EQUITY THROUGH PARTNERSHIPS AND CONSUMER ENGAGEMENT**

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Introduction

Meaningful involvement of people with lived experience of cancer is essential for high-quality, equitable cancer care, particularly in rural and remote Australia where disparities in outcomes persist. The Equitable Cancer Outcomes across Rural and Remote Australia (ECORRA) Program leads a strategic research program aimed at improving equity in cancer outcomes. A core objective of ECORRA is to embed lived experience expertise across all stages of the ECORRA Program's research through a dedicated consumer program.

Methods

Two consumer Co-Chairs were engaged to co-design the ECORRA National Consumer Program charter and recruit members. In 2024, a national expression of interest (EOI) was disseminated via multiple channels to recruit consumers with lived experience of cancer care while residing in rural or remote Australia, either as patients or family carers. EOIs were reviewed, and applicants participated in brief online discussions. Candidate members were prioritised against predefined selection criteria by a consumer Co-Chair in collaboration with ECORRA researchers.

Results

Thirty-two EOIs were received. Seventeen consumers were appointed to the ECORRA National Consumer Program in March 2025. They were predominantly women (n=17), aged over 55 years (n=12), Caucasian (n=12), residing in Victoria (n=11), and highly educated (n=11). In the program's first six months, consumers contributed to 33 research and policy initiatives, including serving as co-investigators on grant applications, co-presenting at national conferences, and co-authoring manuscripts. Consumers also informed multiple policy submissions, ensuring ECORRA's frameworks and recommendations reflected lived experience and priorities of people with cancer in rural and remote communities.

Conclusions

The ECORRA National Consumer Program demonstrates a scalable model for embedding lived experience expertise into rural and remote, equity-focused cancer research. Early impacts include strengthened identification of research priorities, improved contextual interpretation of findings, and development of implementation strategies responsive to local realities, with relevance to supportive care research and policy.

PSYCH-080**PATIENTS' PERCEPTION OF CHEMOTHERAPY SIDE EFFECTS: AGREEMENT BETWEEN BASELINE EXPECTATIONS AND EXPERIENCED TOXICITIES IN THE NOEME STUDY**

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Introduction

Expectations regarding chemotherapy-related side effects may influence patients' perception and reporting of symptoms. The NOEME study is a phase IV trial evaluating the effectiveness and safety of NEPA in chemotherapy-naïve women receiving paclitaxel-carboplatin for endometrial cancer. We present a pre-specified secondary analysis exploring the relationship between baseline expectations of chemotherapy side effects and the symptoms actually experienced during treatment.

Methods

Before initiating chemotherapy, patients rated their expectation of treatment-related symptoms using a 5-point Likert scale (1="I'm sure I won't have it"; 5="I'm sure I will have it"). Scores ≥ 3 were considered high expectation.

Symptoms were assessed using the Memorial Symptom Assessment Scale (MSAS) during first cycle of treatment, evaluating symptom occurrence, intensity, and distress (scores 1–4). Here we report 4 symptoms: nausea, vomiting, constipation, diarrhea. Symptoms were categorized as:

- no event
- low-mild events (intensity/distress 1–2)
- severe-very severe events (intensity/distress 3–4)

Trend tests evaluated associations between expectation level and symptom severity.

Results

Table 1.

Symptom	Expectation	N patients	No event n (%)	Low-Mild event n (%)	Severe-very severe event n (%)	p-trend intensity	p-trend Distress
Nausea	low	11	10 (90.9%)	1 (9.1%)	0 (0.0%)	0.077	0.071
	high	34	20 (58.8%)	5 (14.7%)	3 (8.8%)		
Vomiting	low	18	17 (94.4%)	1 (5.6%)	0 (0.0%)	0.362	0.202
	high	27	20 (74.1%)	1 (3.7%)	0 (0.0%)		
Constipation	low	20	12 (60.0%)	4 (20.0%)	0 (0.0%)	0.014	0.020
	high	25	7 (28.0%)	7 (28.0%)	4 (16.0%)		
Diarrhea	low	24	19 (79.2%)	1 (4.2%)	0 (0.0%)	0.028	0.028
	high	20	10 (50.0%)	5 (25.0%)	0 (0.0%)		

Legenda

Expected (baseline): 0 = low expectation, 1 = high expectation.

Low-Mild event: intensity/distress 1–2.

Severe-Very Severe event: intensity/distress 3–4.

p-trend: test for trend comparing low vs high expectation groups.

Sixty-one patients were enrolled; baseline expectation data were available for forty-five. High expectation of symptoms was common: nausea (75.6%), vomiting (60.0%), constipation (55.6%), diarrhea (45.5%), and alopecia (93.3%).

Severe events of nausea occurred only among patients with high expectation of nausea (3 cases), showing a borderline yet not significant association with expectation (p-trend=0.077). (Table 1). Vomiting events were rare and not significantly associated with baseline expectation (p-trend=0.362). (Table 1)

High expectation was significantly associated with increased symptom severity for constipation (p-trend intensity=0.014; distress=0.020) and diarrhea (p-trend=0.028). (Table 1).

Conclusions

Patients frequently reported high expectations of chemotherapy-related side effects before treatment. Higher expectations were associated with increased severity of some symptoms, particularly constipation and diarrhea. These findings suggest that baseline expectations may influence the subjective experience of some chemotherapy toxicity and highlight the potential role of expectation management in supportive cancer care.

PSYCH-082

GLOBAL QUALITATIVE STUDY OF PROFESSIONALS' PERSPECTIVES OF CARING FOR PEOPLE WITH HEAD AND NECK CANCER EXPERIENCING SUICIDAL IDEATION

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Introduction

Globally, patients with head and neck cancer (HNC) are twice as likely to die by suicide compared to other cancers. To date, most HNC suicidality studies focus on estimating prevalence, with limited research exploring assessment and suicide management within routine cancer care. To address the gap, this study aimed to explore professionals' perspectives of how to optimally identify, refer and manage suicidal ideation for this high-risk population.

Methods

Thirty-nine, one-to-one, semi-structured interviews were conducted with a global range of health and social care professionals caring from patients with HNC. Data were analysed using Braun and Clarke's reflexive thematic analysis.

Results

Three multilevel influences were identified: (1) patient risk factors for suicidal ideation in HNC: from identity disruption to demoralisation, (2) professional navigating role ambiguity and emotional burden within confines of healthcare systems, and (3) societal influences relating to suicidal ideation for people with HNC. There was a divergence in confidence across professional roles in screening and managing patients with HNC experiencing suicidal ideation. Despite this, participants acknowledged a need to screen for suicidal ideation at multiple time-points; prioritising diagnosis, early post-treatment, when late-effects prevalent (12-24 months), alongside trigger-based screening determined by risk factors. Barriers to implementation of interventions were a lack of professional knowledge and confidence in screening, referral pathways with timely access to psychological care. Participants highlighted the emotional demands in providing this aspect of care, identifying the need for suicide prevention training and clinical supervision.

Conclusions

To enhance suicidality management of people with HNC, there is a necessity for the implementation of guidelines on screening and effective stepped-care referral pathways with integration of psycho-oncology services. Alongside this, there is a requirement for suicide prevention training and clinical supervision for professionals. HNC suicide management should be a public health priority, in an ardent effort to reduce suicide rates in HNC.

PSYCH-083

TRAVEL FOR CANCER CARE AND PSYCHOLOGICAL DISTRESS: ANALYSIS OF NATIONALLY COLLECTED ROUTINE DISTRESS SCREENING DATA

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Introduction

While geographic inequities in cancer care require many from regional and remote areas (RRA) to seek treatment at metropolitan centres (MC), little is known about psychosocial consequences of this travel. We examined whether travel for cancer care is associated with greater psychological distress.

Methods

We analysed routinely collected paired Distress Thermometer (DT) scores (n=31,363) collected at start (T1) and end (T2) of treatment across multiple centres. Respondents were classified by residence (metro vs RRA), treatment location (metro vs RRA), and whether they travelled from a RRA to a MC. Change in distress score was calculated as T2-T1 (negative values indicate improvement). We used descriptive statistics, independent samples t-tests and Mann-Whitney test for analysis.

Results

Baseline distress did not differ by place of residence. Amongst respondents, 58% (n=18,297) lived in metropolitan areas and 42% (n=13,006) in RRA. Most (95%, n=17,353) metropolitan residents received care in metropolitan centres, while 34% (n=4431) of regional residents and 93% (n=42) remote residents travelled to MC. Distress improved in all groups. Among RRA respondents, those treated in MC showed greater improvement than those treated locally ($t(12,765)=4.76, p<0.001$). Similarly, among respondents treated at MC, RRA residents showed marginally greater distress reduction than metropolitan residents ($t(21,824)=2.57, p=0.010$). When comparing residential location, there were no differences between metropolitan and RRA residents on change in distress ($t(31,301)=-1.34, p=0.179$), but at T2, RRA respondents treated in MC had marginally lower distress than metropolitan respondents treated locally ($U=38,095,205.50, Z=-3.10, p=.002$).

Conclusions

Our findings indicate implementation of routine distress screening across multiple sites within a national corporate radiation therapy service supports the value of distress screening and supportive care. Travel to MC did not generate poorer psychological outcomes for RRA respondents. Rather, marginally greater distress reduction was observed among RRA respondents travelling for care.

PSYCH-084

DISTRESS TRAJECTORIES DURING RADIOTHERAPY: ANALYSIS OF NATIONALLY COLLECTED ROUTINE DISTRESS SCREENING DATA

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Introduction

Psychological distress is common among people undergoing cancer treatment and is associated with poorer quality of life and health outcomes. Routine distress screening is recommended as part of cancer care. However, systematic implementation of distress screening is challenging and data on how distress changes across treatment and how these trajectories differ by age is lacking. This study reports distress thermometer results from a national dataset.

Methods

We analysed routinely collected paired Distress Thermometer (DT) scores (n=31,363) collected at start (T1) and end (T2) of treatment across multiple centres (n=54). Distress was categorised as low (0-3), moderate (4-6), or high (7-10), and clinically meaningful change was defined as a ≥ 2 -point change on DT. Respondents were grouped by age (<50, 50-70, >70 years), treatment intent (palliative vs curative) and wellbeing plan documented (yes/no). For analysis, we used descriptive statistics, chi-square analyses and logistic regression (adjusted for baseline distress).

Results

At T1, 18.6% (n=5834) of respondents reported high distress, decreasing to 5.2% (n=1616) at T2; 45.9% (n=14,392) achieved clinically meaningful improvement, while 8.9% (n=2788) deteriorated. Those aged <50 reported higher distress at T1 but were more likely to improve (54.4% vs 42% for >70 years), whereas older age was associated with greater increasing distress (10% vs 6.3%) and reduced odds of improvement after adjusting for baseline distress (OR = 0.89, 95% CI 0.84–0.94, $p < 0.001$). Most respondents had a documented wellbeing plan (82.4%, n=25,836), which was associated with lower distress ($\chi^2 = 13.82$, $p < 0.001$), while palliative treatment showed higher distress.

Conclusions

We found most respondents experienced reductions in distress during radiation therapy, but older adults and those undergoing palliative treatment are at higher risk of increased distress. Routine distress screening can identify this and support the delivery of tailored psychosocial care.

PSYCH-085

BEYOND TUMOR CONTROL: CHEMOTHERAPY-RELATED DISTRESS, BODY IMAGE, AND PSYCHOSOCIAL WELL-BEING IN WOMEN WITH BREAST CANCER

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Introduction

Advances in systemic therapy have significantly improved survival in breast cancer. However, tumor control alone does not fully capture patient's psychosocial experience during treatment. These invisible toxicities remain under-recognized in routine oncology care. This study aimed to evaluate distress, body image disturbance, and psychosocial well-being among women with breast cancer undergoing chemotherapy.

Methods

We conducted a cross-sectional study involving 200 women with breast cancer undergoing chemotherapy. Demographic and socio-clinical characteristics data were collected. Distress was measured using NCCN Distress Thermometer. Body image was assessed with Body Image Scale. Psychosocial well-being was evaluated using Patient Health Questionnaire-9 and Rosenberg Self-Esteem Scale. Associations between socio-clinical characteristics data with distress, body image, and psychosocial well-being were analyzed.

Results

Age of subjects ranged from 24 to 74 years (mean 49.7 ± 10.1 years). NCCN-DT showed 35.5% and 7.5% of patients experienced moderate and severe distress, respectively. A total of 29% subjects demonstrating body image disturbance. Depressive symptoms (mild to severe) measured by PHQ-9 were highly common (64%). Consistent with these findings, 79% of subjects demonstrated low self-esteem based on Rosenberg Self-Esteem Scale. Body image disturbance was more frequent in married woman (32.4% vs 19.3%, $p = 0.045$). Contrary to this result, depressive symptoms were more prevalent in unmarried women

(76.9% vs 59.5%, $p = 0.039$). Parental status influence distress levels. Subjects with >2 children reported lower rates of moderate-severe distress compared to those with fewer children (32.9% vs 50.0%, $p = 0.049$). In addition, 72% of subjects experienced fear during chemotherapy, including fear of no-response to treatment (32.6%), side effects (26.4%), social dysfunction (18.8%), and death (17.4%).

Conclusions

Distress and body image disturbance represent critical yet overlooked aspects of breast cancer care. Our findings highlight the need to move beyond tumor-centered outcomes and integrate psychosocial screening and supportive interventions into routine oncology practice to optimize quality of life for women undergoing chemotherapy.

PSYCH-087

ONCOLOGISTS' CHALLENGES WITH FAMILY CAREGIVER INVOLVEMENT IN TREATMENT DECISION-MAKING: A QUALITATIVE SYSTEMATIC REVIEW

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Introduction

Patients and family caregivers widely recognize family caregiver engagement in treatment decision-making (TDM) as important. However, oncologists demonstrate lower agreement regarding family caregiver involvement compared to other stakeholders. Diverse cultural contexts frequently shape these professional perspectives. Despite their significance, the experiences underlying oncologists' reservations about family caregiver influence in TDM remain unexplored. This qualitative systematic review synthesized oncologists' challenges to identify clinical gaps and highlight areas requiring professional support.

Methods

Embase, MEDLINE, PsycINFO, CINAHL, Applied Social Sciences Index & Abstracts, Web of Science, Scopus, and Google Scholar were systematically searched from inception to July 26, 2025, for English articles. Eligible studies qualitatively examined oncologists' perceptions, experiences, and practices when engaging in TDM with family caregivers. Study quality was assessed using the Joanna Briggs Institute checklist. We conducted a qualitative systematic review informed by the Triadic Interactions in Oncology (TRIO) framework, integrating deductive data organization with inductive thematic generation. This study was registered in PROSPERO (CRD420251079771).

Results

Twenty-seven studies met eligibility criteria for data extraction. These studies illustrate oncologists' challenges with TDM involving family caregivers and inform refinements to the existing TRIO framework by incorporating oncologists' perspectives. Four themes characterize oncologists' challenges from patient-oriented and family-oriented perspectives. Patient-oriented challenges included: (1) concerns regarding pressured patients toward altruistic autonomy, (2) experiences of patient exclusion from social networks. Family-oriented challenges comprised: (3) minimizing family burden for economic and ethical protection, and (4) managing emotional strain of family interpretation and limited transparency in information exchange.

Conclusions

Findings underscore the need for specialized communication training addressing oncologists' concerns regarding family caregiver influence on patient autonomy and exclusion. Incorporating professional interpreters of culture and language is essential to alleviate family burden. Providing these professional supports enhances well-being and improves clinical outcomes for patients and family caregivers across diverse cultural contexts.

PSYCH-088**TAILORING MEANING-CENTERED PSYCHOTHERAPY FOR CHINESE CAREGIVERS OF PATIENTS WITH ADVANCED CANCER: CULTURAL-LINGUISTIC ADAPTATION AND PILOT STUDY**Naomi Takemura¹, Arthur Li², Allison J. Applebaum³¹The Hong Kong Polytechnic University, School of Nursing, Hong Kong SAR, ²The University of Hong Kong, LKS Faculty of Medicine, Hong Kong SAR, ³Icahn School of Medicine at Mount Sinai, New York, United States**Introduction**

Over half of common cancer in Hong Kong diagnosed at late stages, intensifying caregiver burden and existential distress. Meaning-Centered Psychotherapy for Cancer Caregivers (MCP-C) is efficacious in Western contexts but requires cultural-linguistic adaptation for Chinese caregivers whose values are shaped by Confucian ethics. We aimed to adapt MCP-C for Chinese caregivers and evaluate feasibility, acceptability, and preliminary efficacy of an online version (eMCP-C).

Methods

Guided by the ORBIT model and Bernal's Ecological Validity Model (EVM), we conducted semi-structured interviews with nine caregivers and eight healthcare professionals (oncologists, nurses, clinical psychologist, social worker). The manual was translated and transcoded into Traditional Chinese, with hybrid deductive-inductive analysis mapped to EVM domains. We then ran a pilot randomized controlled trial comparing eMCP-C to enhanced usual care. Caregivers received seven weekly individual online sessions emphasizing meaning-making and coping; controls received mental health resources and targeted referrals. Feasibility outcomes were assessed through questionnaires and semi-structured interviews at 7-week. Efficacy outcomes were assessed by questionnaire at baseline, 7, and 19 weeks.

Results

Adaptations spanned all seven EVM domains (Fig 1), reframing "meaning" around family roles and filial responsibility; integrating Cantonese idioms; simplifying terminology; rebranding as a "Meaning-Centered Well-being Program"; and enabling online delivery to improve reach. Forty-six caregivers enrolled (26–79 years), among which thirty-seven (80%) completed. Intervention attendance, retention, and satisfaction were satisfactory (Fig 2). Compared with enhanced usual care, eMCP group showed improvements from baseline to post-intervention and three-month follow-up in depression, anxiety, meaning, peace, and self-esteem. Qualitative analysis identified three therapeutic mechanisms: therapeutic alliance as a catalyst for healing; meaning-making through acceptance and action; and empowerment through affirmation and self-determined action.

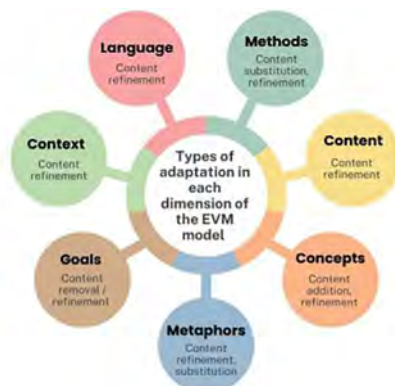


Fig 1. Cultural-Linguistic Adaptation process in each dimension of the Ecological Validity Model (EVM)



Fig 2. Feasibility and effect outcomes of the pilot study

Conclusions

Cultural-linguistic adaptation preserved fidelity while enhancing relevance for Chinese caregivers. eMCP-C was feasible, acceptable, and demonstrated promising benefits, supporting progression to larger efficacy trials and implementation studies.

PSYCH-090**EPIGENETIC AND TRANSCRIPTOMIC MECHANISMS OF INFLAMMATION, NEURODEGENERATION, AND PROLIFERATION ARE ASSOCIATED WITH TRAIT ANXIETY IN CANCER SURVIVORS**Nidhi Thati¹, Julia Ellen Trudeau², Esther Chavez-Iglesias¹, Niharika Dixit³, Anand Dhruva³, Jason Chan³, Raymond Chan⁴, Alexandre Chan², **Kord M. Kober¹**¹School of Nursing, University of California, San Francisco, ²School of Pharmacy & Pharmaceutical Sciences, University of California, Irvine, ³School of Medicine, University of California, San Francisco, ⁴College of Nursing and Health Sciences, Caring Future Institutes, Flinders University**Introduction**

Trait anxiety is a pervasive symptom experienced by cancer survivors, associated with cognitive difficulties and reduced quality of life. Our previous research, using transcriptomics, identified perturbed biological pathways associated with trait anxiety severity in cancer survivors. The purposes of this study were to evaluate gene regulatory aspects of trait anxiety in cancer survivors using methylation data to better understand the overlap with functional transcriptomics data.

Methods

Participants in the Multi-Ethnic Study of Atherosclerosis (MESA), a prospective longitudinal study, were used in this analysis (PHD #39341). Methylation data were available for 977 participants at the first visit. Trait anxiety was assessed at the first visit using a 10-item subset of the Spielberger Trait Anxiety Scale. Survivorship was defined as a self-report of a history of cancer diagnosis. Participants were split into low (≤ 3 rd quartile) and high (> 3 rd quartile) trait anxiety groups. Enrichment of differentially methylated KEGG pathways were evaluated using methylGSA. Pathways common between these epigenetic findings and transcriptomic findings from our previous study were identified using meta-analysis (Fisher's Method, FDR < 0.025).

Results

Sixty-six cancer survivors (low trait anxiety=13, high trait anxiety=53) were included in the final analysis. No differences associated with trait anxiety group were observed for known cardiovascular disease, sex ($n=32$ female), race/ethnicity, and age (mean=67). 865,859 loci were included in the final evaluation of cancer survivors with methylation data. Thirty-seven pathways were common across methylation

and gene expression analyses. Common mechanisms included inflammatory (e.g., Intestinal immune network for IgA production), neurodegenerative (e.g., Alzheimer's disease), and cell proliferation (e.g., Pathways in cancer) pathways.

Conclusions

This study is the first to evaluate epigenetics and transcriptomics underlying trait anxiety in cancer survivors. Our findings identify common biological mechanisms that may underlie the regulatory and functional molecular aspects of trait anxiety in cancer survivors. These pathways offer potential targets for further study and intervention.

PSYCH-091

BEYOND ANXIETY AND DEPRESSION: THE CANCER JOURNEY EMOTIONAL WELL-BEING SCALE (CJEWS) FOR PSYCHOSOCIAL ASSESSMENT IN INDIAN CANCER PATIENTS

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Introduction

Existing psychological assessment tools (HADS, FACT-EWB) assess only anxiety and depression, overlooking cultural, social, and existential dimensions critical to Indian cancer patients, where stigma, financial strain, and social isolation intensify cancer-related distress. This study aimed to develop and validate a culturally tailored instrument for the Indian population.

Methods

The Cancer Journey Emotional Well-Being Scale (CJEWS) was developed to address four dimensions: emotional distress, social stigma and isolation, social support, and existential well-being. It followed a four-phase systematic approach: (1) item generation via literature review and in-depth patient interviews, integrating logotherapy and Lazarus & Folkman's stress-coping theory; (2) expert validation by ten multidisciplinary specialists, including oncologists, social workers, and clinical psychologists; (3) pilot testing with 20 patients with iterative item refinement; (4) psychometric validation in 225 cancer patients across two cancer centers in Kerala. An Exploratory Factor Analysis (EFA) with a Kaiser-Meyer-Olkin measure of 0.784 confirmed the four-factor structure. Internal consistency was assessed using Cronbach's alpha.

Category	Questions	Scoring Interpretation
Category 1: Emotional Distress	1.I felt emotional shock upon receiving my cancer diagnosis.	Reverse Scoring
	2.I worried about the effectiveness of my treatment.	(Q1-14)
	3.My mood fluctuated during different phases of treatment.	Strongly Disagree = 5
	4.I struggled to manage feelings of anxiety about the future.	Disagree = 4
	5.I experienced depressive symptoms during my treatment.	Neutral = 3
	6.I experienced feelings of anger during my cancer journey.	Agree = 2
	7.I felt fear of death while being a cancer patient.	Strongly Agree = 1
	8.I had fears or concerns leading up to each treatment.	
	9.I felt mentally unprepared for my treatment.	
	10.I found it difficult to engage in hobbies during my treatment.	
	11. Financial challenges impacted my emotional well-being.	
Category 2: Social Stigma and Isolation	12.I hesitated to inform others about my cancer diagnosis.	
	13. I felt that my community viewed me differently due to the diagnosis.	
	14.I felt lonely or detached from society during my treatment.	
Category 3: Social Support	15. My family's support provided me with strength during my treatment.	Direct Scoring(Q15-21)
	16.My spouse's support contributed positively to my emotional well-being.	Strongly Disagree = 1
	17.I am supported by my children emotionally throughout my treatment journey.	Disagree = 2
	18.The support from my social circle positively impacted my emotional well-being.	Neutral = 3
	19.Clear communication by the healthcare team helped to strengthen my emotional well-being.	Agree = 4
	20.Psychological intervention helped me to strengthen my emotional well-being.	Strongly Agree = 5
Category 4: Existential Well-being	21.I have been able to find meaning or purpose even amidst the challenges of my cancer journey.	
Total Score Calculation (Range from 21 to 105)	High Emotional Well-being (77-105):	
	Moderate Emotional Well-being (49-76):	
	Low Emotional Well-being (21-48):	

Results

CJEWS demonstrated excellent reliability (Cronbach's alpha = 0.841). EFA extracted four factors explaining 49.82% of total variance with strong, distinct loadings: Emotional Distress (Items 1–3: .502, .413–.711), Social Stigma & Isolation (Items 12–13: .856–.891), Social Support (Item 15: .847), and Existential Well-being (Item 21: .812). Factor correlations revealed that emotional distress was negatively correlated with social support ($r = -.393$), demonstrating the protective effects of supportive networks. Social support is positively associated with existential well-being ($r = .132$), indicating its influence on psychological resilience. Higher emotional well-being is linked to better treatment adaptation; greater stigma predicted social withdrawal and reluctance to seek psychological help.

Item No.	Factor 1 (Emotional Distress)	Factor 2 (Social Stigma & Isolation)	Factor 3 (Social Support)	Factor 4 (Existential Well-being)
1	.502	.112	-.098	.213
2	.413	.067	-.132	.298
3	.711	.029	-.076	-.032
12	-.032	.856	-.052	-.108
13	.049	.891	-.034	.056
15	.056	-.045	.847	.027
21	-.053	.032	.027	.812



Conclusions

CJEWS is a reliable, practical, psychometrically validated, culturally sensitive tool that uniquely assesses emotional health, including distress, resilience, social stigma/support, and existential factors, offering clear advantages over traditional anxiety/depression-focused scales for personalized psychosocial intervention in Indian oncology practice.

PSYCH-092

DISTINCT NEURONAL, PROLIFERATIVE, AND METABOLIC PATHWAYS ARE PERTURBED IN CANCER SURVIVORS WITH DEPRESSIVE SYMPTOMS

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Introduction

Depression is highly prevalent among cancer survivors and can severely impact their quality of life. While emerging preclinical evidence suggests that depression among cancer populations may be biologically distinct, clinical studies investigating mechanisms of depression among cancer survivors remain limited. Thus, the aims of this study were to (1) identify perturbed biological pathways associated with depressive symptom severity in cancer survivors, and (2) investigate whether these pathways are common or distinct to those perturbed in the general population.

Methods

We analyzed cross-sectional self-reported and transcriptomic data from the Multi-Ethnic Study of Atherosclerosis (PHD #39341). Survivors were identified as individuals who self-reported a history of a cancer diagnosis. A non-cancer cohort was identified using nearest-neighbor age matching to the survivors (target ratio 1:2). The 20-item Center for Epidemiologic Studies Depression Scale (CES-D) was used to split participants into low (CES-D<16) and high (≥16) depressive symptom groups. Analyses were conducted separately for survivor and non-cancer cohorts. Differential gene expression between depressive symptom groups was evaluated with adjustments for covariates significantly associated with depression (survivor cohort: BMI; non-cancer cohort: marital status), with pathway impact analysis identifying perturbed pathways (FDR < 0.025).

Results

93 cancer survivors (11.8% with high depressive symptoms) and 176 non-cancer participants (9.7% with high depressive symptoms) were included. 68 and 72 perturbed pathways were associated with depression among survivor and non-cancer cohorts, respectively. 21 of these pathways were perturbed uniquely among cancer survivors, which were related to neurodegeneration (e.g. Alzheimer’s disease), synaptic function (e.g. synaptic vesicle cycle), proliferation (e.g. ErbB signaling), and metabolism (e.g. secretory pathways) (Table 1).

Conclusions

Distinct biological mechanisms related to neurodegeneration, synaptic function, cancer-related proliferative signaling, and metabolism may underlie depression in cancer survivors. Our findings identify these pathways as potential targets and highlight the need for precision medicine in treating depression among cancer survivors.

Table 1. Perturbed KEGG signaling pathways associated with depression distinct to cancer survivors.

Pathway ID	Pathway Name	Cancer Survivors		Non-Cancer Controls	
		Pert. Score ^a	FDR ^b	Pert. Score ^a	FDR ^b
Neuronal Functioning, Neurotransmission, and Addiction					
hsa05016	Huntington's disease	3.98	0.013	-0.95	0.399
hsa05031	Amphetamine addiction	5.02	0.013	1.95	0.079
hsa05034	Alcoholism	5.67	0.014	1.98	0.075
hsa04721	Synaptic vesicle cycle	4.13	0.015	1.31	0.202
hsa05014	Amniotrophic lateral sclerosis (ALS)	4.25	0.017	2.96	0.039
hsa05010	Alzheimer's disease	3.88	0.018	2.70	0.037
hsa04713	Circadian entrainment	4.14	0.021	0.66	0.414
hsa04744	Phototransduction	3.82	0.021	0.48	0.597
hsa05030	Cocaine addiction	3.77	0.021	1.36	0.133
hsa04728	Dopaminergic synapse	3.36	0.024	0.78	0.473
Cell Cycle, Growth, and Proliferation					
hsa04114	Oocyte meiosis	7.34	0.007	-0.48	0.642
hsa04914	Progesterone-mediated oocyte maturation	4.60	0.014	0.53	0.614
hsa04390	Hippo signaling pathway	4.65	0.016	2.09	0.060
hsa05214	Glioma	4.23	0.017	0.70	0.494
hsa05210	Colorectal cancer	3.33	0.024	1.95	0.075
hsa04012	ErbB signaling pathway	3.40	0.025	1.15	0.246
Metabolism and Endocrine Signaling					
hsa04970	Salivary secretion	6.65	0.010	1.38	0.190
hsa04971	Gastric acid secretion	4.81	0.013	1.89	0.081
hsa04972	Pancreatic secretion	2.85	0.025	1.90	0.081
Inflammatory Processes and Immune Signaling					
hsa04668	Fc gamma R-mediated phagocytosis	3.37	0.015	1.06	0.261
hsa05416	Viral myocarditis	3.60	0.020	1.76	0.084

^a Normalized pathway perturbation scores. Higher values represent greater pathway perturbation.
^b Bold indicates significance at a false discovery rate (FDR) of < 0.025.
Abbreviations: KEGG, Kyoto Encyclopedia of Genes and Genomes.

PSYCH-093**USING INTERVENTION MAPPING TO ADAPT AN EVIDENCE-BASED MENTAL HEALTH PROGRAM FOR PEOPLE WITH MULTIPLE MYELOMA AND SMOULDERING MYELOMA**

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Introduction

People with multiple myeloma (MM) and smouldering myeloma (SMM) experience high rates of psychological distress and low quality of life, yet resources to promote mental health and wellbeing remain limited. This gap is exacerbated by the limited number of resources co-designed with individuals with lived experience. Hence, in partnership with lived experience experts and national advocacy organisation, Myeloma Australia, we aimed to adapt an existing, evidence-based mental health program to meet the nuanced and often psychological unmet needs of this vulnerable patient population.

Methods

Twenty people aged 38–72 with MM (n=16) or SMM (n=4), and Myeloma Australia nurses (n=4), formed the lived experience panel and completed the Be Well Plan – a 5-week, group-based, online mental health and wellbeing program delivered by a trained facilitator. Empowerment, mental wellbeing, anxiety and depression were assessed before and after the intervention. The Double-Diamond co-design methodology was used to identify and implement adaptations regarding, content, structure and delivery.

Results

The unadapted Be Well Plan demonstrated encouraging feasibility and acceptability, with significant and substantial improvements in mental wellbeing ($\eta^2 = .243$) and empowerment ($\eta^2 = .246$). No significant changes were reported in anxiety and depression, providing a clear rationale for adaptations and contextualisation for MM and SMM. Qualitative thematic analysis of post-program feedback highlighted key areas for adaptation including the need for slower pacing, simplification of content and myeloma-specific examples; all of which informed program refinements within the Intervention Mapping framework, resulting in a new program – the myWELL Plan.

Conclusions

Rigorous and intentional inclusion of people with lived experience enabled the development of a more tailored mental health program, contextualised for the complex and highly nuanced needs of people with MM and SM. The myWELL Plan is now operational and ready for evaluation in a national RCT.

PSYCH-094**IMPACT OF PSYCHO-ONCOLOGY INTERVENTIONS ON PSYCHOLOGICAL DISTRESS AND ILLNESS PERCEPTION IN ELDERLY CANCER PATIENTS**

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Introduction

A cancer diagnosis is frequently associated with psychological distress, anxiety, depression, insomnia, and maladaptive illness perceptions, particularly among elderly patients. These factors may adversely affect treatment adherence and overall outcomes. Evidence supporting structured psycho-oncology interventions in geriatric oncology within Indian settings remains limited. This study aimed to evaluate the longitudinal impact of psycho-oncology interventions on psychological distress, anxiety, depression, insomnia, and illness perception among newly diagnosed elderly cancer patients.

Methods

A longitudinal study was conducted among 70 newly diagnosed cancer patients aged ≥ 60 years attending the Medical Oncology Outpatient Department of a tertiary care hospital in South India between April 2024 and August 2025. Baseline psychological assessments at diagnosis included the NCCN Distress Thermometer (DT), Geriatric Depression Scale (GDS), Geriatric Anxiety Scale (GAS), Patient Health Questionnaire-9 (PHQ-9), Hospital Anxiety and Depression Scale (HADS), Insomnia Severity Index (ISI), and Brief Illness Perception Questionnaire (BIPQ). Patients reporting moderate to severe distress received structured psycho-oncology interventions during active cancer treatment, while patients with no or mild distress did not receive intervention. Follow-up reassessments were conducted after three months. Statistical comparisons were performed using McNemar and McNemar–Bowker tests.

Results

At baseline, 60% of patients reported moderate to severe distress (mean DT = 4.39). Depression was observed in 28.6% (GDS) and 45.7% (HADS-D), while anxiety was present in 28.5% (GAS) and 51.4% (HADS-A). Clinical insomnia was identified in 55% of patients, and 71% demonstrated high illness threat perception (mean BIPQ = 53.1). After three months, mean DT scores reduced to 1.74, with 79.7% reporting no or mild distress. All patients scored within the normal range on GDS post-intervention ($p = 0.029$). Improvements were also observed in anxiety, insomnia, and illness perception, including enhanced illness understanding and reduced threat appraisal.

Conclusions

Psycho-oncology interventions improved distress, depression, sleep, and illness perception in elderly cancer patients.

PSYCH-095**UNPLANNED HEALTH SERVICE USE AMONG PEOPLE WITH CANCER AND MENTAL HEALTH COMORBIDITY: A MATCHED COHORT STUDY ACROSS THREE AUSTRALIAN STATES**

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Introduction

People living with mental health conditions experience persistent inequities across the cancer care pathway, which may contribute to disproportionate reliance on unplanned acute health services. However,

population-level evidence on unplanned health service use in this group is limited. The objective of this study was to examine predictors of unplanned health service use among people with cancer, with and without mental health comorbidities, using linked administrative data from three Australian states.

Methods

This retrospective matched case–comparison study used linked administrative data from three Australian states (NSW, Victoria, and Queensland), including outpatient oncology records, cancer registry data, hospital admissions, emergency department presentations, outpatient mental health services, and mortality records. Adults aged ≥ 18 years with cancer who had a non-admitted oncology encounter between 2018 and 2020 were included. Individuals with one or more mental health conditions were matched 1:1 to those without mental health conditions using propensity scores. Negative binomial regression models, adjusted for sociodemographic and clinical factors, were used to examine unplanned emergency department presentations and hospitalisations within 12 months.

Results

Of 99,230 people living with cancer, 10,442 (10.5%) had a recorded mental health condition. After matching, individuals with one or more mental health conditions had a 36% higher risk of unplanned ED use (IRR 95% CI 1.32–1.41), 31% higher risk of unplanned hospitalisations (IRR 95% CI 1.26–1.36) and 46% higher risk of cancer-related hospitalisations (IRR 95% CI 1.39–1.53) compared to those without. Virtual care use, digestive and lung cancers (vs breast) and physical comorbidities were also associated with increased unplanned use.

Conclusions

Substantial inequities in unplanned acute care exist for people with cancer and mental health conditions. Tailoring outpatient and virtual models of care to strengthen integration between oncology and mental health services may help reduce avoidable unplanned health service use, improve equity in access to quality care for optimal cancer outcomes.

PSYCH-097

ADVANCING MANAGEMENT OF FAMILY CARER DISTRESS: DEVELOPMENT OF A CLINICALLY RELEVANT MODEL OF CARER FEAR OF CANCER RECURRENCE

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Introduction

Fear of cancer recurrence (FCR) is a key concern reported by cancer survivors and family carers. Findings suggest almost half of carers report clinically significant levels of FCR - equal to levels reported by survivors. In cancer carers, high FCR is associated with poorer psychological outcomes, such as increased levels of depression and anxiety. Despite identified need, no theoretically-derived framework exists that explains carer FCR. We therefore aimed to adapt a leading cancer survivor FCR model, the Cognitive Processing Model, to explain carer FCR development and maintenance.

Methods

Model adaptation for carers was guided by Jabareen's (2009) methodology for conceptual framework development. The process included identification, mapping and categorisation of data sources to identify components for inclusion. Following this, concept labels and definitions were applied and validation of the model was conducted through consumer and expert review.

Results

The adapted model included 8 key components which contribute to carer FCR development and maintenance. Precursors include: (i) vulnerability factors; (ii) lack of information and indirect cancer experience. The life impact of cancer from the carer's perspective and resulting stress responses leading to development of FCR are described, including: (iii) intrusive thoughts/ images related to cancer recurrence; (iv) fear of losing a loved one; and, (v) sense of personal responsibility. Finally, factors hypothesised to maintain high levels of carer FCR are proposed: (vi) unhelpful beliefs about the importance, impact, and control of worry (metacognitions); (vii) communication difficulties and behaviours; and, (viii) problematic information processing styles.

Conclusions

We present a carer-focused adaptation of the Cognitive Processing Model, which is both clinically relevant and reflective of carer-specific experiences of FCR. Importantly, this model focuses on factors contributing to and maintaining carer FCR, providing clear targets for psycho-oncology clinicians and future intervention evaluation.

PSYCH-100

FACTORS ASSOCIATED WITH FEAR OF CANCER RECURRENCE IN ORAL CANCER PATIENTS: A CROSS-SECTIONAL STUDY

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Introduction

Oral cancer survivors face unique physical and psychosocial challenges. Fear of cancer recurrence (FCR) is a major concern, yet distinguishing clinically significant FCR is crucial for targeted intervention. This study aimed to identify independent predictors of high FCR by comparing demographic and psychological characteristics between patients with high and low FCR levels.

Methods

A cross-sectional study was conducted with 93 oral cancer survivors. Data were collected using the Fear of Cancer Recurrence Inventory-Short Form (FCRI-SF), Symptom Severity Scale (SSS), Distress Thermometer (DT), and Cancer Behavior Inventory (CBI). Binary logistic regression analysis was performed to identify independent predictors.

Results

Survivors in the high FCR group reported significantly higher symptom severity ($p < .001$) and psychological distress ($p < .001$), but lower self-efficacy ($p = .009$) compared to the low FCR group. The logistic regression model explained 34.6% of the variance. Three independent predictors were identified: (1) Age (OR = 0.93, 95% CI: 0.87–0.99), indicating younger survivors are at greater risk; (2) Symptom Severity (OR = 1.03, 95% CI: 1.00–1.06); and (3) Psychological Distress (OR = 1.16, 95% CI: 1.01–1.33). Cancer staging and self-efficacy were not significant in the multivariate model.

Table 1 Comparison of The Symptom Severity Scale, Distress, Self-Efficacy, and Fear of Cancer Recurrence Between High and Low Fear Groups (N = 93)

Variables	Overall(N=93)	High Fear of Recurrence (n=55)	Low Fear of Recurrence (n=38)	t	p
The Symptom Severity Scale (SSS)	36.00(15.34)	44.31(27.37)	24.64(17.09)	4.28	<.001 ***
DT					
Total counts	6.38 (5.03)	7.91 (4.95)	4.16 (4.30)	3.79	<.001 ***
Physical Problems counts	2.58 (1.96)	2.96 (2.00)	2.03 (1.78)	2.32	.022*
Emotional Problems counts	2.01 (2.15)	2.60 (2.17)	1.16 (1.84)	3.35	.001**
Social Problems counts	0.43 (0.89)	0.55 (0.88)	0.26 (0.89)	1.51	.135
Practical Problems counts	1.24 (1.51)	1.62 (1.57)	0.68 (1.23)	3.21	.002**
Spiritual/Religious counts	0.12 (0.36)	0.18 (0.43)	0.03 (0.16)	2.12	.018*
CBI					
Total Score	111.14(33.59)	103.62 (33.88)	122.03(30.40)	2.68	.009**
Maintaining independence and positive attitude	36.76 (12.32)	33.58 (12.67)	41.37 (10.30)	5.14	.002**
Participating in medical care	24.34 (6.62)	23.05 (7.31)	26.21 (4.99)	2.31	.023*
Coping and stress management	22.54 (7.50)	21.42 (7.58)	24.16 (7.16)	1.75	.083
Managing effect	27.49 (10.49)	25.56 (9.70)	30.29 (11.08)	2.18	.032*
FCRI-SF					
Total Score	15.34(7.63)	7.95(2.93)	20.45 (5.32)	14.54	<.001 ***

Note. SD = Standard deviation. SSS = The Symptom Severity Scale, DT = Distress Thermometer, CBI = Cancer Behavior Inventory; FCRI-SF = Fear of Cancer Recurrence Inventory-Short Form. Differences were examined using independent sample t-tests. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2 Pearson Correlation of variables (N = 93)

Variable	1	2	3	4	5	
1. Age	1					
2. Months since diagnosis	.136	1				
3. SSS	.107	-.040	1			
4. DT	.186	.002	.548**	1		
5. CBI	-.221*	.124	-.416**	-.434**	1	
6. FCRI-SF	-.093	.075	-.454**	-.393**	-.356**	1

Note: SSS = The Symptom Severity Scale, DT = Distress Thermometer, CBI = Cancer Behavior Inventory; FCRI-SF = Fear of Cancer Recurrence Inventory-Short Form. 1: Age; 2: Months since diagnosis; 3: Distress Total score; 4: Cancer Behavior Inventory Total score; 5: Fear of Cancer Recurrence Inventory-Short Form Total score. * $p < .05$, ** $p < .01$.

Table 3 Multivariate Logistic Regression Analysis Predicting High Levels of Fear of Cancer Recurrence (N = 93)

Predictors	B (SE)	Wald	p	OR	95%CI
Age	-0.75(0.31)	5.90	.015*	0.93	0.874-0.986
Months since diagnosis	-2.68(0.50)	0.29	.590	0.77	0.289-2.026
SSS	0.029 (0.15)	3.87	0.049*	1.03	1.001-1.060
DT	0.14(0.07)	4.44	.035*	1.16	1.010-1.331
CBI	-0.009(0.008)	1.13	.289	0.99	0.98-1.008

Note: SSS = The Symptom Severity Scale, CI = Confidence interval; OR = Odds ratio; SE = Standard error; Ref = Reference category. The dependent variable is the Fear of Cancer Recurrence group (0 = Low fear, 1 = High fear). Model fit statistics: Nagelkerke $R^2 = .346$; Model $\chi^2 (5) = 22.69$, * $p < .05$.

Conclusions

Younger age, physical symptom severity, and psychological distress are critical risk factors for high FCR. While self-efficacy was significant in univariate analysis, its predictive power diminished when controlling for age and distress. Interventions should prioritize younger patients and integrate symptom management with distress screening to effectively reduce FCR.

PSYCH-101

COUPLE-BASED INTERVENTIONS ON INTIMACY AMONG FEMALE CANCER SURVIVORS AND THEIR PARTNERS: A SYSTEMATIC REVIEW

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Introduction

Four types of intimacy, including Emotional, Relational, Physical, and Sexual, are influenced by cancer treatments, which are a vital but often neglected aspect of survivorship for female cancer survivors and their partners. Couple-based interventions (CBIs) aim to strengthen intimacy; however, their effects on specific types of intimacy remain unclear.

Methods

Seven databases were systematically searched to May 2025 for randomized trials of CBIs involving breast or gynecological cancer survivors and their intimate partners. Studies were eligible if they directly engaged both partners and reported at least one outcome related to intimacy. Data were synthesized narratively across four domains: sexual, emotional, relational, and physical intimacy.

Results

Nine randomized trials involving 1,907 participants were included, conducted primarily in Western and East Asian settings, with one European study. Sexual intimacy was the most frequently assessed domain, with most studies reporting short-term improvements for both survivors and partners, some sustained at three months. Relational intimacy demonstrated modest benefits in several trials, although its effects often diminished over time. Emotional intimacy findings were inconsistent, with a few studies suggesting delayed improvements, particularly for partners. Notably, no study assessed physical intimacy, representing a conceptual gap. Intervention delivery varied (face-to-face or hybrid formats), and most were facilitated by trained nurses, psychologists, or trained therapists.

Conclusions

Evidence suggests that CBIs can improve sexual intimacy and offer potential benefits for relational and emotional intimacy among female cancer survivors and their partners. However, effects are less consistent beyond the short term. Future research should incorporate physical intimacy as an outcome, evaluate longer-term effects, and develop culturally adapted interventions to better support diverse survivor-partner populations.

PSYCH-102

STUDY OF BIOMARKERS IN PATIENTS IN SYMPTOM MANAGEMENT CLINIC FOR SUPPORTIVE CARE IN CANCER (SCC)

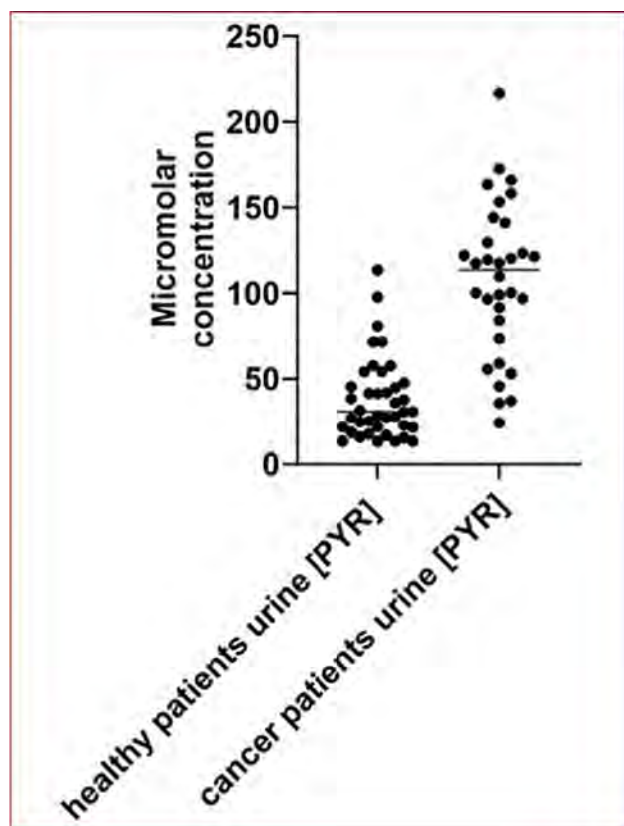
Charity Yarbrough¹, Marie Miguad², Emily Stringfellow¹, Lina Alami³, Emily Stringfellow⁴, Matthew Kang², **Thomas Butler⁵**

¹Whiddon College of Medicine, University of South Alabama, ²USA Mitchell Cancer Institute, ³16 November Clinic of Oncology, ⁴Department of Internal Medicine, University of South Alabama, ⁵University of South Alabama Mitchell Cancer Institute

Introduction

Pyridone riboside (PYR) is an over-oxidized form derived from the vitamin B3 derived cofactor nicotinamide adenine dinucleotide (NAD), and forms more prominently under oxidative stress conditions that promote reactive oxidative species (ROS) formation. Patients treated in supportive care in cancer clinics (SCC) have complex symptoms, and further exploration of pathophysiology of these symptoms is important. Previous studies have identified reactive oxygen and nitrogen species (NOS) as key biomarkers involved in the pathogenesis of symptoms; however, the relationship between cancer-related symptoms (e.g. pain) and ROS or NOS is unclear. This study aims to identify oxidative-stress biomarker correlation with clinical symptoms in the SCC.

Methods



As part of an ongoing investigation of the vitamin B3 metabolites abundance in human urine, we observed a noticeable difference in the absolute amount of PYR when comparisons were made between healthy and cancer patients. Blinded urine samples were obtained for analysis of normal and SCC patients for vitamin B3 metabolites in the urine by liquid chromatography combined with mass spectrometry (MASCC abstract PSYCH 041; 2024/ Figure 1) As a follow-up project these findings were matched with retrospective clinical characteristics from database materials in the SCC.

Results

26 SCC subjects (40 normal volunteers) had urine analyzed as above. There was no trend observed related to age, gender, symptom management medications, or behavioral signals. However, there appeared a trend (not statistically significant) to higher values of PYR in patients not receiving active antineoplastic therapy ($p=0.239$) to those receiving antineoplastic therapy and in Caucasians ($p=0.776$).

Conclusions

The abnormal PYR in patients in the SCC indicates the need for prospective study to clarify the cause of these findings in comparison to normal subjects.

PSYCH-103

AICARE: OUTCOMES OF AN AI-DRIVEN MOBILE APPLICATION FOR CANCER DISTRESS MANAGEMENT -- A 9-MONTH PILOT STUDY

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Introduction

Cancer-related distress negatively impacts quality of life and disease-free survival, yet access to distress management remains limited. Digital health interventions offer a scalable approach to this unmet need. "AICARE" is an AI-driven mobile application for cancer distress management developed at Kangwon National University Hospital, targeting an underserved region of Korea.

Figure 1. Sample Screenshots Of "AICARE" User Interface (Left) And Administrator Interface (Right)



Methods

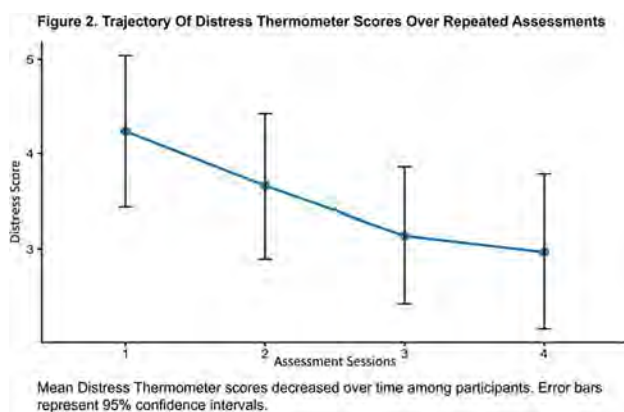
Distress data from AICARE users enrolled between May 2025 and January 2026 were collected and analyzed across repeated assessments. The app prompted weekly self-reporting of distress via the Distress Thermometer (DT), Problem List, PHQ-4, FACT-G, and FcR-1 tools and delivered tailored interventions based on individualized risk profiles across five domains: distress, anxiety, depression, impaired quality of life, and fear of cancer recurrence. Interventions included psychoeducational videos, lifestyle modification guidance, physical activity plans, and one-on-one telehealth counseling on specific topics. Assessments were conducted four times at weekly intervals, and longitudinal changes in scores were analyzed using a linear mixed-effects model.

Table 1. Linear Mixed-effects Model Examining Changes In Distress Thermometer Scores Over Repeated Assessments

Variable	β (SE)	p-value
Assessments		
Assessment 2	-0.70 (0.35)	0.045
Assessment 3	-1.09 (0.35)	0.003
Assessment 4	-1.31 (0.37)	<0.001
Age	0.005 (0.04)	0.150
BMI	0.06 (0.07)	0.394
Stage 2	-0.28 (0.60)	0.648
Stage 3	5.00 (1.84)	0.011
Stage 4	6.03 (1.94)	0.004
Smoking	-0.13 (1.01)	0.903
Psychiatric history	2.29 (1.06)	0.039
Period since cancer diagnosis	-0.14 (0.07)	0.060
Adjusted for age, BMI, cancer stage, smoking status, previous psychiatric history, and period since cancer diagnosis.		

Results

Of 54 enrolled patients, 38 completed two or more assessments and were included in the analysis. Most had stage II or lower disease (n=36) and no prior psychiatric history (n=33). Mean baseline DT score was 4.5, indicating clinically significant distress. DT scores decreased significantly at assessments 2, 3, and 4 relative to baseline. Prior psychiatric history was associated with attenuated distress reduction.



Conclusions

Users of AICARE demonstrated significant reductions in self-reported distress, suggesting that personalized digital interventions can reduce cancer distress without in-person care. Further research with larger samples and clinical outcome measures is warranted.

PSYCH-106

COMPARISON OF THE EORTC QLQ-EN24, FACT-EN, AND FENSI FOR ASSESSING QUALITY OF LIFE IN ENDOMETRIAL CANCER: A SYSTEMATIC REVIEW

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Introduction

Endometrial cancer is a prevalent gynecological malignancy with rising incidence and substantial symptom burden. As treatments evolve, understanding patient-reported quality of life (QoL) is critical. This review examines the characteristics, psychometric properties, and domain coverage of three key endometrial-cancer-specific patient-reported outcome measures (PROMs) to guide clinical and research applications.

Methods

This systematic review followed PRISMA guidelines. Scopus, PUB-MED/MEDLINE, Embase, Web of Science, and EBSCO were searched from database inception to October 31, 2025 for studies evaluating the EORTC QLQ-EN24, FACT-En, and/or FEnSI in endometrial cancer populations. Eligible peer-reviewed English-language studies assessed psychometric properties, validity, responsiveness, or clinical applicability of these instruments. Included papers were evaluated on questionnaire structure, measurement validity, responsiveness, and clinical or research utility. Two reviewers screened studies using Covidence, with conflicts resolved by consensus or third-reviewer adjudication.

Results

The EORTC QLQ-EN24, FACT-En, and FEnSI differ in structure, scope, and focus. QLQ-EN24 provides detailed assessment of disease- and treatment-related symptoms and has undergone extensive multinational validation. The FACT-En, also extensively validated, offers broader evaluations of physical, emotional, social, and functional well-being, supporting longitudinal and survivorship investigations. FEnSI, developed using patient-centered, equity-focused approaches, emphasizes symptoms and function, including cognitive dysfunction and neurotoxicity. All instruments demonstrate strong reliability and validity; however, evidence for responsiveness and longitudinal performance remains limited, particularly for the FEnSI. Across instruments, sexual and vaginal health items yielded lower completion rates, reflecting cultural and contextual challenges.

Conclusions

This review highlights differences in scope, strengths, and psychometric properties of different PROMs used in endometrial cancer. While all tools demonstrate clinical research utility, gaps remain in cross-cultural validation and longitudinal responsiveness. Future research should prioritize validation across diverse populations to strengthen reliability of QoL measures. Instrument selection should align with clinical objectives, with the QLQ-EN24 suited for detailed symptom assessment, FACT-En for broader QoL evaluation, and FEnSI for patient-centered measurements.

SUPPO-002**WOMEN'S EXPERIENCES AND DECISION-MAKING PROCESS OF BREASTFEEDING FOLLOWING OR DURING CANCER: AN INTEGRATIVE SYSTEMATIC REVIEW**

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Introduction

Cancers diagnosed in young and reproductively aged women are increasing globally. The impact of cancer is known to affect women's pregnancy and breastfeeding outcomes and experiences. Universally, international recommendations promote exclusive breastfeeding for infants, yet there is an absence of evidence to inform and support breastfeeding with women following or during a diagnosis of cancer. The objective of this integrative systematic review is to examine women's breastfeeding experiences and decision-making following or during cancer treatment.

Methods

This integrative systematic review followed the PRISMA 2020 Preferred Reporting Items for Systematic Reviews and Meta-Analysis, using the Joanna Briggs Institute (JBI) methodology. All data was qualified for the purpose of thematic analysis to critically analyse and deduce robust findings. A feminist research perspective was employed to enable an ethical approach that valued women's situated knowledge in their breastfeeding experience and decision-making to critically analyse access and equity in their care.

Results

2095 records were identified; 50 full-text records were reviewed, and 15 studies were included. Many women experienced inadequate breastfeeding information and support. There were 55 individual findings which generated three themes; (1) Emotional aspects, (2) Adaptive care and (3) Professional involvement. Women's care requirements were unique to their cancer characteristics and treatment schedules. Women affected by cancer require comprehensive breastfeeding information and support to meet their individualised needs and informed feeding decisions. Care by midwives, lactation services, nurses and medical specialists as well as health services broadly, are required to promote and support lactation.

Conclusions

There is an urgent need to consider lactation services within models of supportive care, educational resources for healthcare professionals, and increase the accessibility of donor human milk for women affected by cancer. Considering the increasing incidence of early onset cancers, evidence-based lactation information and support is required to improve maternal experiences and outcomes in this cohort.

SUPPO-005**TIME FROM DIAGNOSIS TO TREATMENT: ARE RURAL PATIENTS WITH CANCER RECEIVING OPTIMAL CARE IN AUSTRALIA?**

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Introduction

Optimising the timely initiation of cancer treatment is important for reducing mortality, particularly among priority populations affected

by inequities in cancer care, including people living in rural areas. This study examined the prevalence and characteristics of rural cancer patients in Queensland, Australia, who experienced a delay in starting treatment based on the Optimal Care Pathways (OCPs).

Methods

This cross-sectional analysis used baseline data from a longitudinal study of adults in Queensland who travelled largely from regional and remote areas to metropolitan centres to receive cancer care (N=640). Dates of diagnosis and treatment were reported by participants, with delays in treatment defined as a diagnosis-to-treatment interval that exceeded OCP recommendations for the respective cancer type and treatment modality.

Results

The median time from diagnosis to treatment was 4.4 weeks (interquartile range: 2.1-8.9 weeks). Of the 494 participants whose data were assessable against OCPs, 199 (40%) experienced a treatment delay. Delay was not associated with age, sex, geographic remoteness, comorbidities, or treatment modality. Participants without private health insurance had higher odds of delay compared to those with insurance (adjusted odds ratio [aOR]=1.68, 95% confidence interval [CI]=1.02-2.78), and participants with breast (aOR=0.32, 95% CI=0.14-0.74) or skin (aOR=0.23, 95% CI=0.09-0.61) cancers had lower odds of delay than those with other cancer types.

Conclusions

Two in five rural cancer patients did not commence treatment within recommended timeframes. Therefore, adherence to OCP recommendations was low (60%) compared to the generally accepted quality target of 70 to 85%. Low adherence to these recommendations highlights the urgent need to strengthen system-wide support and accountability measures, particularly for those facing disparities in access to cancer care related to health insurance status and cancer type.

SUPPO-006**DEVELOPMENT OF A NAVIGATION STRATEGY OF BREAST AND CERVICAL CANCER IN HOMELESS WOMEN IN NITERÓI/RIO DE JANEIRO/BRAZIL**

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Introduction

In 2022, breast and cervical cancer navigation was implemented in the public health network in the municipality of Niterói, located in the state of Rio de Janeiro, Brazil. This implementation was an institutional effort aimed at reducing barriers to health services and seeking equity in access to prevention, diagnosis and cancer treatment. This process revealed the need for an specific perspective on homeless women, considering that cancer is marked by social inequities. Therefore, managers should implement particular strategies to ensure equitable access to actions that guarantee prevention, early diagnosis and treatment of breast and cervical cancers.

Methods

This qualitative research is composed of multimethods that include documents and information systems analysis, focus groups with professionals who take care for homeless women, interviews with managers of Primary Health Care and professionals involved in navigating oncology patients

Results

Initial results revealed that controlling breast and cervical cancers among homeless individuals is a complex challenge, given the limited awareness of the disease, prejudice, and the daily struggle for survival that may overshadow the pursuit of healthcare. In response,

key elements emerged for specific cancer navigation: intensification of active outreach and care beyond traditional settings, despite territorial mobility; access through open scheduling, timely appointments, and reduced administrative barriers for diagnostic confirmation; individualized follow-up with adapted communication, monitoring of absences, and re-engagement strategies; assurance of privacy and sensitive approaches to experiences of sexual and gender-based violence and intersectorial coordination for social support, shelter, and transportation.

Conclusions

Oncology navigation emerges as a proposal for supporting homeless women. The researchers expect that the results of this study present an appropriate strategy for effective control of breast and cervical cancer in such a vulnerable population.

SUPPO-007

BARRIERS AND FACILITATORS TO PATIENT-CENTRED PROSTATE CANCER CARE FOR BLACK MEN: A SYSTEMATIC REVIEW

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Introduction

Despite advances in the diagnosis and treatment of prostate cancer (CaP), inequities in care persist for Black communities. Patient-centred care (PCC) is a cornerstone of high-quality CaP care; however, limited attention has been paid to understanding Black patients' needs. This study synthesizes published evidence on the barriers and facilitators shaping PCC for Black men living with CaP from diagnosis to end-of-life care.

Methods

A mixed-method systematic review was undertaken involving a comprehensive search of Medline, Embase, Cochrane, and PsycINFO from database inception to 1/1/2024, yielding 9,317 unique articles. Eligible studies included English-language publications reporting the care experiences of Black men and their caregivers across the CaP care continuum. Double screening, quality appraisal, and data extraction were performed by seven reviewers independently using standardized procedures. Data were analyzed using a convergent-integrated thematic synthesis approach.

Results

A total of 40 studies were included. Analysis revealed six barriers and four facilitators shaping CaP PCC for Black men. Barriers included: (i) communication and information-exchange gaps that undermine PCC; (ii) systemic racism and pervasive mistrust of the healthcare system; (iii) socioeconomic challenges constraining care options; (iv) a culture of silence driven by fear, fatalism, and masculinity norms; (v) difficulties navigating a racialized healthcare system; and (vi) intersecting gaps in knowledge, health literacy, and comorbidity management. Facilitators comprised: (i) multilayered support systems that underpin coping and recovery; (ii) trusted healthcare providers who anchor engagement across the care continuum; (iii) insurance coverage enabling equitable and timely services; and (iv) holistic, culturally informed care that empowers Black men.

Conclusions

This study highlights persistent structural, informational, and relational barriers that impede PCC for Black men with CaP, while also identifying key facilitators that can strengthen engagement and improve

outcomes. Addressing these gaps requires culturally informed communication and anti-racist healthcare environments. Additionally, healthcare policies must promote insurance coverage, care continuity, and trust.

SUPPO-008

AVAILABILITY OF THROMBOPROPHYLAXIS IN AMBULATORY CANCER CARE: A GLOBAL SURVEY OF INSTITUTIONAL GUIDELINES AND STANDARD PRACTICES

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Introduction

Cancer-associated thrombosis (CAT) is a leading cause of morbidity and mortality. As cancer therapies increasingly shift to ambulatory care – where most venous thromboembolism (VTE) events occur and patients are at substantial risk – consistent access to evidence-based thromboprophylaxis is essential. Implementation of CAT prevention for outpatients remains less standardised than in-hospital practice.

Methods

A global, cross-sectional survey of health services, distributed to oncology pharmacists, was conducted during Q2 2025. Institution-level data on access to supportive care infrastructure for CAT prevention including guideline availability, VTE risk assessment practices, preferred antithrombotics, and barriers to implementation were collected and analysed descriptively. Denominators applied reflect eligible responses to each question.

Results

Responses were received from 96 health services across multiple regions (Asia 27.1%, North America 27.1%, Oceania 20.8%, Europe 14.6%, Other 10.4%). CAT prevention guidelines were available in 38.6% of ambulatory settings, compared with 56.8% of hospitalised settings. Ambulatory care practices were inconsistent: VTE risk assessment recommended for selected patients in 30.4% of centres (versus 56.0% hospitalised) and not performed in 39.1% of services. System-level supports for assessing VTE risk were reported less often by health services for ambulatory (25.3%) than hospitalised (62.2%) patients. Preferred antithrombotics differed by care setting, with direct-acting oral anticoagulants cited as guideline-recommended agents more often in ambulatory than hospitalised care (68.8% vs 33.3%), and heparins used less frequently (59.4% vs 85.0%). Quality reporting for ambulatory CAT was uncommon, with ≤15% of services routinely monitoring risk assessment, prophylaxis use, or VTE rates. Barriers to thromboprophylaxis included limited pharmacist involvement (absent in 19.5%

of ambulatory settings), system-level interventions, and variable anticoagulant availability.

Conclusions

This multinational survey demonstrates clearly insufficient access to thromboprophylaxis guidelines, decision support, clinical pharmacists, and monitoring systems in ambulatory cancer care. Addressing these gaps is critical to improve equity, reduce variation, and prevent avoidable thrombosis among patients with cancer.

SUPPO-009

UNDERSTANDING PERSPECTIVES ON PARTICIPATING IN CANCER RESEARCH FOR ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES: A YARNING STUDY

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Introduction

Systemic barriers impact cancer research participation by Aboriginal and Torres Strait Islander people (respectfully referred to as First Nations people) in Australia. Resources exist for non-First Nations people to explain cancer research participation, using a process of information delivery and values-based decision making. Culturally responsive resources, employing principles of health literacy, do not exist for First Nations people, contributing to underrepresentation in research. This study sought to understand the experiences of First Nations people with cancer, their caregivers and health professionals/cancer researchers who provide support to First Nations people making a decision about cancer research participation, with the view to co-design culturally safe resources.

Methods

An Indigenist, strengths-based approach was utilised. Qualitative Yarning methodology was used with patients with a cancer diagnosis and family (n = 15), and cancer researchers/health professionals (n=14) to explore experiences and perspectives of cancer research participation, and provide feedback on resources available for the general population.

Results

Fifteen patients and caregivers, and fourteen health professional/cancer researchers participated in a Yarn. Of the patients (n=9) and caregivers (n = 6), 14/15 identified as Aboriginal and/or Torres Strait Islander. Of the health professionals (n = 10) and cancer researchers (n = 4), 5/14 identified as Aboriginal and/or Torres Strait Islander. Yarning revealed the following themes about experiences of First Nations people that impacted cancer research participation: First Nations workforce, communication and care approach of researchers, and emotions and beliefs related to cancer and cancer research. Available resources were deemed lengthy, complex, and lacking visual representations.

Conclusions

Aboriginal and Torres Strait Islander people with a cancer diagnosis, their caregivers and cancer researchers/health professionals shared many factors that continue to impact on cancer research participation. The interplay between workforce, research approach, and addressing historical beliefs of cancer and research may support improved cancer research participation for Aboriginal and Torres Strait Islander peoples.

SUPPO-011

A MULTIDIMENSIONAL SUPPORTIVE CARE MODEL FOR BREAST CANCER IN A RESOURCE-CONSTRAINED SETTING: INSTITUTIONAL EXPERIENCE FROM INDIA

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Introduction

For over 25 years, Prashanti Cancer Care Mission (PCCM), through its dedicated breast health vertical, Orchids Breast Health Clinic, has delivered a comprehensive, coordinated, and affordable breast cancer care in India. Established as a single surgeon–specialty center, PCCM offers integrated oncologic care encompassing surgery, systemic therapies, radiation, and long-term follow-up. Complementing clinical treatment, PCCM embeds individualized supportive care from diagnosis through survivorship, including nutrition, psycho-oncology, genetic, yoga counseling. Central to this model is the Pink Ribbon Support Group, one of the oldest and largest breast cancer support groups in India. Over the years, PCCM has supported more than 10,000 breast cancer patients, with additional outreach and counseling provided to over 30,000 women through large-scale screening and counseling initiatives. A dedicated biobank and translational research program, among the earliest established within a single-surgeon breast unit, further enables integration of clinical care and research.

Methods

PCCM implemented a coordinated and individualized supportive care framework integrating oncologic treatment with supportive care. All patients and caregivers had free access to counseling services, with interventions personalized to individual and family needs. Between 2022 and 2025, of approximately 4,000 clinical encounters, 2,200 structured supportive care encounters were delivered.

Results

At least one supportive care service was accessed by 80% of patients between 2022–2025. Psycho-oncology accounted for ~70% of counseling encounters, nutritional counseling for ~36%, and genetic counseling for ~20%, with a dedicated risk assessment clinic initiated in 2024. Engagement with the Pink Ribbon Support Group was observed in ~48% of patients, with sustained participation among younger patients and long-term survivors.

Conclusions

Our experience demonstrates that coordinated, individualized, and comprehensive breast cancer care can be sustainably delivered in a resource-constrained setting. Such models may enhance patient-reported outcomes, continuity of care, and equity in access, offering a scalable framework for strengthening breast cancer care delivery

SUPPO-012

NAVIGATING CHALLENGES AND BUILDING UNDERSTANDING FOR RESOURCE-STRATIFICATION OF SUPPORTIVE CARE GUIDELINES

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Introduction

Resource-stratification of guidelines is a pragmatic approach for defining context-appropriate cancer care in resource-constrained settings, particularly low- and middle-income countries (LMICs). A Multinational Association of Supportive Care in Cancer (MASCC) healthcare professional survey identified implementation of supportive care guidelines as a major contributor to health disparities. Aligned with the MASCC Supportive Care 2030 Movement, resource-stratification of guidelines prioritizes resources to establish sustainable recommendations.

Methods

Resource-stratification intends to optimise treatment and supportive care delivery, considering existing constraints as a basis for policies guiding health system improvements. MASCC has published antiemetic resource-stratified guidelines, and developed and piloted a policy development process. We explore five critical challenges broadly relating to resource-stratified guidelines: misunderstanding of purpose and/or misapplication, gaps in evidence base, access to care, representation of people from LMICs, and resource-prioritization driven by quality-of-life (QoL) outcomes.

Results

To overcome resource-stratified guidelines being viewed as endorsing inferior care or supporting cost-saving measures, stakeholders must be clear the intent is to optimise care within existing constraints, support advocacy for improved resources, and guide system improvements. As most supportive care research originates from high-income countries, and does not explore low-cost alternative therapies, research using diverse methodologies from various contexts can be used. Limited access to medicines and trained staff creates ethical and clinical dilemmas in the development of resource-stratified guidelines, necessitating exploration of alternative interventions, concurrent to advocacy for improved access. Poor connectivity and competing clinical and service demands hinder participation of people in LMICs in topic selection, development, and implementation of resource-stratified guidelines, which can be overcome through pragmatic, collaborative, and context-specific strategies. Unlike anti-cancer therapy guidelines that focus on survival, supportive care guidelines prioritise QoL and require distinct outcome measures for resource-stratification.

Conclusions

Navigating challenges and building understanding can enable MASCC resource-stratified guidelines to play a critical role in advancing equity in supportive care oncology.

SUPPO-013

PATIENT CENTERED DOSING INITIATIVE: AGE AND MANAGEMENT OF TREATMENT TOXICITY IN METASTATIC BREAST CANCER

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Introduction

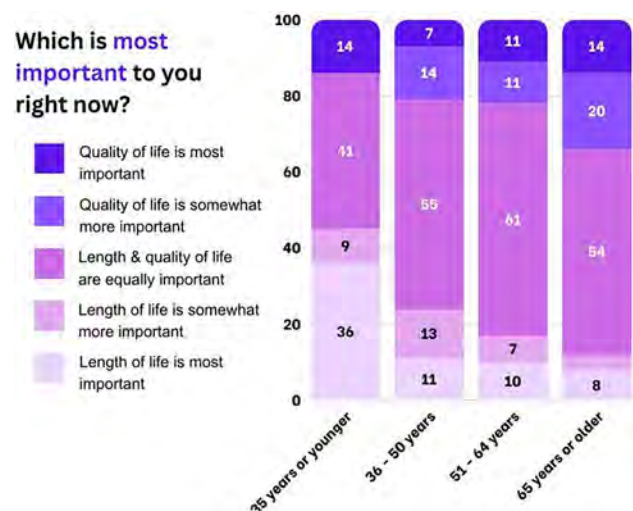
Balancing quality and quantity of life is a challenge for those living with MBC, in part because most treatments come with side effects (SE) that decrease quality of life. This study aimed to characterize SE management in people living with MBC through a patient-led survey.

Methods

The Patient Centered Dosing Initiative developed and disseminated a cross-sectional survey, in both English and Spanish, to people with MBC in the United States through multiple channels. The survey was open April 14 – December 31, 2025. Descriptive statistics were used to summarize participant responses. Age-related differences in toxicity management were evaluated using chi-squared tests.

Results

506 responses were available for analysis. The average age was 54.9. Over half (56.6%) valued length and quality of life equally; though numbers were small, there was a significant difference ($p=0.0007$) across age groups, with more of those under 35 preferring length over quality of life. Most respondents (79%) experienced a “bad” SE, with 49% of those seeking urgent medical attention. Medication (66%) and/or any dose modification (71%) were common strategies to reduce SEs and did not significantly differ by age; however, missed treatments due to SEs did ($p=0.0143$). Financial barriers to supportive care were not experienced by 54% of those receiving such care. Most respondents (62%) reported they had not seen a supportive care specialist.



Conclusions

SE experiences were largely similar regardless of age; however, consistent with the literature, goals of care differed. Medication and modifying treatment doses were common SE mitigation tools. A critical gap is indicated by the low proportion of people referred to supportive care specialists, with patients reporting financial barriers to this care. This study highlights the need for real-world research of supportive care interventions in MBC, dose optimization, and SE mitigation. A limitation is the non-random sample relying on self-report.

SUPPO-016

WHEN DISTANCE BECOMES A BARRIER: EXPERIENCES OF REGIONAL VICTORIANS WITH CANCER AND THE ROLE OF PATIENT TRANSPORT ASSISTANCE SCHEMES

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Introduction

Globally, people affected by cancer face direct and indirect costs associated with diagnosis and care. Costs are often higher for regional populations, who report greater indirect costs associated with travel and time off work. When cost becomes a barrier to access, people miss out on receiving optimal care.

The Victorian Patient Transport Assistance Scheme (VPTAS) provides essential financial support for Victorians required to travel for medical treatment. Despite this, there have been no substantial changes to VPTAS since 2015, and it lags other Australian patient transport assistance schemes.

Publicly available data about VPTAS is limited. We sought to understand how VPTAS is used by regional Victorians with cancer and their out-of-pocket costs.

Methods

Online survey, shared via paid Facebook marketing and directly with Cancer Council's health professional network, targeting people affected by cancer in regional Victoria.

Results

A total of 415 people were included in final analysis. Approximately three quarters (74%, n=308) had a diagnosis of cancer; the rest (26%, n=107) cared for someone with cancer. Over half (54%, n=232) travelled more than 100km (one-way) to access medical treatment. Main reason(s) for travel was limited availability of specialist, diagnostic or supportive care services near home. Almost all (91%, n=376) experienced out-of-pocket (OOP) travel costs. Of these respondents, 48% (n=182) reported forgoing other activities or were unable to access treatment due to cost. Just over a third (36%, n=151) accessed VPTAS for support. Their experiences highlighted delays (42%, n=64 waited over 3-months) and gaps in access to support (42%, n=64 reported it covered $\leq 30\%$ of total costs).

Conclusions

Our survey confirms the financial burden faced by regional Victorians affected by cancer, and highlights gaps in available financial support. Results have been used to advocate for changes to VPTAS and may be useful for other regions grappling with patient OOP.

SUPPO-017

BARRIERS TO SUPPORTIVE CARE ACCESS AMONG AUSTRALIAN CANCER CARERS: DOES ACCESS DIFFER FOR THOSE FROM PRIORITY POPULATIONS?

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Introduction

Cancer carers play a critical role in supporting people with cancer, yet many experience unmet supportive care needs. This study examined barriers to accessing supportive care among Australian cancer carers, with a focus on identifying differences for those from priority groups.

Methods

A cross-sectional online survey (June 2024–January 2025) was completed by Australian adults (aged 18+) who had cared for someone with cancer in the past five years. Priority groups were carers from Lesbian Gay Bisexual Transsexual Queer, Intersex Asexual plus (LGBTQIA+) communities; Cultural and Linguistically Diverse (CALD) communities and Regional/rural residents. Use of support services was captured via an open ended item and coded into eight categories. Barriers to accessing supportive care were assessed using multiple response options (11 available). Logistic regression models examined differences in reporting of barriers by priority group membership, adjusting

for participant and care characteristics. Adjusted Odds Ratios (aOR) are reported.

Results

A total of 1,536 carers participated. Most were female (79.6%), employed (54.4%), and held a bachelor's degree or higher (48.8%); with 29.0% residing in rural/remote areas, 25.5% from CALD communities, and 8.8% identified as LGBTQIA+. Most respondents experienced barriers to service access (64.3%), commonly: lack of time and energy (34.9%), long wait periods (29.7%), services not available locally (27.8%), or when needed (27.5%). Carers from CALD communities had significantly higher odds of reporting that services were not culturally appropriate aOR=10.03 95% CI [4.63 - 21.73], or appropriate for gender aOR=3.4 95%CI [2.4; 4.4] or sexual identity aOR=2.3 95%CI [1.0; 3.5]. Carers from rural/remote areas had significantly higher odds of reporting services were not available locally aOR=1.4 95%CI [1.2-1.7]. No significant differences were present for LGBTQIA+ carers.

Conclusions

Results highlight the urgent need for more accessible, timely, inclusive and culturally appropriate support services, particularly for carers in rural/remote and CALD communities who face disproportionately higher barriers.

SUPPO-018

ADVANCING OPTIMAL CARE PATHWAYS TO ACHIEVE WORLD-CLASS CANCER OUTCOMES

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Introduction

Optimal Care Pathways (OCPs) are central to the Australian Cancer Plan's vision of world-class cancer outcomes and experiences. Embedding OCPs into routine cancer care to drive measurable improvements—including in supportive care—is reliant on improving their relevance, accessibility, visibility, and accountability.

Methods

OCPs provide nationally endorsed, evidence-based, best practice cancer care guidance across Australia. They aim to reduce unwarranted variations in care and improve timeliness and coordination across all steps of the cancer continuum. Supportive care is embedded as a core principle essential for delivering high quality, patient-centred cancer care.

Although recognised as valuable resources, OCP implementation is varied across jurisdictional and local health services. To address this, a multi-phase reform approach, guided by the National Optimal Care Pathways Framework, is underway. Key activities included:

- Digitisation to enable tailored access relevant to individual circumstances.
- Scoping national quality indicators to measure optimal care, including supportive care.
- Increasing priority population OCPs to address intersectionality and improve outcomes.
- Updating content including the common template to ensure consistency across principles and steps.
- Improving tools to support earlier diagnosis in primary care.
- Implementing a comprehensive communications strategy to enhance awareness and confidence.

Results

With support from the cancer sector, the OCP reform agenda is well underway. Work continues to develop a core set of national indicators to benchmark optimal cancer care, including supportive care.

Digitising OCPs will improve functionality and accessibility, ensuring supportive care elements such as validated screening tools are accessible for patients and their health care providers.

Conclusions

OCPs are a critical tool in achieving health equity in cancer control. The ongoing reform approach will ensure OCPs are effective in supporting integrated, coordinated, data-driven, high-quality health systems to consistently deliver optimal cancer care, including supportive care.

SUPPO-020
UNMET SUPPORTIVE CARE NEEDS OF COLORECTAL CANCER SURVIVORS IN VIETNAM

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Introduction

Colorectal cancer (CRC) is a common cancer worldwide, with a rising number of survivors, and Vietnam is no exception. Understanding the unmet supportive care needs of CRC survivors in Vietnam is essential, as most existing research from Western contexts may not be generalizable to the country's unique healthcare and cultural environment. This study aimed to identify the unmet supportive care needs of CRC survivors in Vietnam and to examine the factors associated with these needs.

Methods

A cross-sectional study was conducted among adult CRC survivors who had completed primary treatment and were attending follow-up visits at the Vietnam National Cancer Hospital from April to July 2025. Exclusion criteria included stage IV disease, CRC recurrence/metastasis, concurrent cancers, cognitive impairment, or mental illness. The questionnaire comprised a personal information form and the Cancer Survivors' Unmet Needs measure. Descriptive analyses and multiple linear regression were used to analyze the data, with significant level of $p < 0.05$.

Results

Among 354 CRC survivors enrolled in the study, 70.8% reported at least one unmet need. The mean prevalence score of unmet needs was 6.66 out of 35 (SD = 6.34), and the mean intensity score of unmet needs was 0.26 out of 3 (SD = 0.29). Participants reported the most frequent unmet needs in the existential survivorship domain and the greatest severity in the quality-of-life domain. Factors related to a higher unmet need included lower education, having national health insurance, receiving adjuvant therapy, and a shorter duration since treatment completion.

Conclusions

CRC survivors face a broad spectrum of unmet needs that differ in prevalence and intensity, highlighting the necessity of regular assessment to guide supportive care, especially in resource-limited settings such as Vietnam. Future research should employ longitudinal and qualitative approaches to track changes in unmet needs over time and capture survivors' experiences, thereby informing more effective strategies.

SUPPO-021
PERSPECTIVES OF CANADIAN HEALTHCARE PROFESSIONALS WORKING WITH ADOLESCENT AND YOUNG ADULT (AYA) PATIENTS IN DESIGNING A REGIONAL AYA PROGRAM

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Introduction

When adolescents and young adults (aged 15 to 39, AYA) are diagnosed with cancer, their quality of life changes drastically. This study explored the experiences and perspectives of healthcare professionals (HCP) when working with AYA cancer patients to inform development of a regional supportive care program for AYA with cancer.

Methods

Qualitative semi-structured interviews were conducted with HCPs who work with AYA cancer patients in the Champlain region of Ontario, Canada between November 2024 and February 2025. An experienced interviewer (AS and SC) conducted the interviews, which were recorded, transcribed verbatim and analysed thematically. Thematic analysis focused on key domains of planned regional program development: mental health, sexual health/fertility, financial impacts, and palliative care

Results

Fourteen participants were interviewed with a mode of 30–39-year-olds age, and 0-9 years of clinical experience; 12 identified as women. Professions included: 5 physicians, 5 nurses, 2 radiation therapists, 1 pharmacist and 1 social worker. Key themes identified included:

- 1) **HCP unpreparedness for difficult discussions:** (i) Need for more training; (ii) Navigating taboo topics; (iii) Lack of awareness of resources; (iv) Discomfort raising challenging discussions.
- 2) **Improving communication:** (i) Communication between HCP teams; (ii) More empathy in conversations with patients; (iii) Need for accessible communication strategies; (iv) Power of open-ended questions
- 3) **Complex navigation needs for AYA:** (i) Lack of patient advocacy and navigation; (ii) Need for HCP role clarity, (iii) Unique support needs for AYA.

Table 1: Thematic Analysis		
Theme	Codes (frequency)	Sample Quotes
HCP unpreparedness for discussions	Need for more training (76)	HCP12: I think my discomfort is more, I feel
	Lack of awareness of resources (33)	awkward because I don't really know how to
	Discomfort for "taboo" topics (50)	help them [with sexual health symptom
	Discomfort raising challenging discussions (49)	alleviation] because I don't know what's available
Improving communication		HCP01: I let the patient kind of take the reins on the conversation. If they bring up anything that has to do with fertility or sexuality, then to me it's... OK for me to broach the subject... otherwise... I do ask them if there is anything else that you are... wondering or concerned about
	Communication between team (25)	HCP14: When I'm working with someone younger... I find I have to be very careful to not make assumptions about what people are going through or how things are going to happen.
	Need for more empathy in conversation (17)	HCP02: Is there a way to...have a more coordinated transition or a period of time where the pediatric... team can sort of come and see them in their adult center a little bit to help sort of make that feel better
	Need for accessible communication strategies (18)	
Complex navigation needs for AYA	Power of open-ended questions (18)	
	Lack of patient advocacy and navigation (22)	HCP13: One of my patient's said you guys are shitty at supporting young people that have cancer. Nobody is talking about the things that I wanna talk about. And I sit in the waiting room and nobody looks like me. So I don't know what resources... Again, I keep coming back to something that is more targeted
	Need for role clarity (36)	HCP11: But if there could be a liaison between the patient and the inpatient nurses and the team to really advocate for the young adult with cancer. Because oftentimes I find that if they're not interested in their care, they'll talk to the parents or whoever their caregivers are. and we want to make sure that they're involved with their care as well
	Unique support needs for AYA (57)	

Conclusions

This cohort of motivated HCPs highlighted challenges in providing care to the AYA populations, impacting the patient-HCP relationship due to challenges in communication, limited resources, and role strain.

SUPPO-023

BARRIERS AND FACILITATORS TO ACCESSING SYMPTOM SUPPORT SERVICES BY PATIENTS FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS (CLEAR-ACCESS)

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Introduction

Patients from culturally and linguistically diverse (CALD) backgrounds experience inequities in cancer outcomes, partly due to barriers accessing timely care for treatment-related side-effects. Symptom support services - such as Symptom and Urgent Review Clinics and access to Clinical Nurse Consultant-led care provide early intervention to reduce emergency department presentations, however, CALD patients are underrepresented among service users. This study explored barriers and facilitators influencing access to symptom support services for CALD patients receiving systemic anti-cancer therapy

Methods

A qualitative study was conducted across two cancer centres in Victoria, Australia, utilising focus groups and semi-structured interviews with patients, caregivers and community representatives from Vietnamese, Mandarin, and Greek-speaking backgrounds and healthcare professionals (HCPs). Data were collected in participants' preferred language. Transcripts were analysed using inductive reflexive thematic analysis, with themes mapped to Levesque et al.'s access to healthcare framework.

Results

Thirty-five participants were included: patients (n=20), caregivers (n=4) community representatives (n=7), and HCPs (n=4). Among patients, caregivers and community representatives, 26% (10/35) identified as Chinese, 14% (5/35) as Greek, and 46% (16/35) as Vietnamese. Access to and engagement with symptom support services were influenced by: (1) awareness of available services; (2) availability and acceptance by patients of family to facilitate access; (3) availability of accessible information; and (4) confidence in communication with HCPs. Patients and caregivers frequently relied on family members to interpret information and initiate contact. Trust and shared language with general practitioners supported symptom discussion, often positioning primary care as a preferred access point.

Conclusions

CALD patients described intersecting challenges to accessing symptom support services. Access was shaped by awareness of services, their accessibility and acceptability, and patients' confidence engaging with healthcare providers. These findings directly inform ADVANCE-ACCESS, a multi-institutional co-design program across four Australian health services focused on improving access to symptom support services for CALD cancer patients.

SUPPO-024

ENHANCING INPATIENT ACCESS TO SUPPORTIVE CARE-CAN DIGITALISATION BRIDGE THE GAP?

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Introduction

Comprehensive supportive care is crucial for provision of optimal cancer care. Inpatient supportive care screening tool (SCST) rates at Monash Health are 34%, well below the Victorian Cancer Plan target of 80%. Inpatients are screened less compared to ambulatory patients undergoing chemotherapy (70%) or radiotherapy (68%). Failure to identify and mobilise patient needs early, restricts access to optimal cancer care, experience and outcomes. By digitalising the current paper based validated NCCN Distress Thermometer (DT), this aims to improve inpatient SCST rates and increase nursing staff knowledge and confidence in supportive care provision.

Methods

The paper based NCCN DT has been built into a digital PowerForm in the EMR. Automatic referrals will also be sent to social work (via set criteria). Baseline audits of SCST rates and staff surveys have been undertaken in preparation for staff education and training prior to implementation in early 2026.

Results

Baseline data confirms suboptimal supportive care screening rates of 20% on the two oncology wards. Baseline staff feedback (35 % response rate) have indicated that: knowledge of the benefits of SCST for patients is high but a number of barriers exist including: workload, patient acuity, language barriers and confidence in using the tool plus facilitating sensitive conversations.

Implementation is set for February 2026 and by providing a digital form and nurse education scheduled, we expect a significant increase in SCST completion plus nurse knowledge and confidence in managing supportive care. Results to analysed and provided at MASCC/ISOO meeting.

Conclusions

This digital solution is expected to improve supportive care screening, provide personalised and timely access to supports and services, and ultimately improve patient outcomes and experience. Findings will inform the feasibility of expanding this tool across the organisation, ensuring reach to all cancer inpatients.

SUPPO-025

IMPLEMENTATION OF A CO-DESIGNED SUPPORTIVE CARE INTERVENTION FOR PEOPLE DIAGNOSED WITH PANCREATIC AND BILIARY CANCER

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Introduction

Each year in Australia, around 5,400 people are diagnosed with pancreatic or biliary cancer. Prognosis is poor, with 5-year survival rates of 13% (pancreatic cancer) and 20% (biliary cancer), and high unmet

needs, including informational. Although guidelines recommend supportive care and navigation, adoption into practice appears suboptimal. Our recent scoping review of Australian websites and resources for people with pancreaticobiliary cancer concluded that coalescing resources could reduce information-seeking burden and unmet need. This study reports the implementation of a co-designed supportive care navigation intervention for people diagnosed with pancreaticobiliary cancer and their caregivers at Flinders Medical Centre (FMC), South Australia.

Methods

The intervention includes (1) an online resource hub consolidating Australian pancreaticobiliary cancer resources (pbc.cancersa.org.au), and (2) a navigation tool to facilitate systematic needs assessment and linkage to services. No additional funding or staffing is required. Patients diagnosed in the FMC surgical unit are offered the unit nurse-delivered intervention each consultation. Needs are screened (Distress Thermometer and Checklist), prioritised, and referrals facilitated using a service directory. Patients/caregivers record discussions, and their GP receives a copy.

As part of the hybrid implementation-effectiveness trial (ACTRN12624001067561), patients/caregivers complete an interview (enrolment) and surveys (SCNS-SF34) at enrolment, 3, 6, and 12 months. Data will be compared to historical data (2024/2025; $n=10$ patients, $n=7$ caregivers). Primary outcomes: unmet needs and distress; secondary: survival. Interviews analysed using descriptive content analysis. Plan-Do-Study-Act cycles at 1, 3, and 6 months will assess implementation. RE-AIM outcomes include reach (% patients engaged), adoption (fidelity, facilitators/barriers), and implementation (individual: satisfaction, acceptability; organisational: assessments/referrals, and time) metrics.

Results

The intervention commenced late-December 2025 (expected $n=65$ patients/caregivers). To date, one person diagnosed with pancreatic cancer has enrolled.

Conclusions

Findings will inform scalable models for integrating supportive care navigation into pancreaticobiliary cancer care pathways.

SUPPO-026

LONGITUDINAL TRAJECTORIES OF RADIODERMATITIS SEVERITY IN PATIENTS WITH HEAD AND NECK CANCER RECEIVING PHOTOBIO-MODULATION DURING RADIOTHERAPY

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Introduction

Radiodermatitis is a toxicity that evolves during and after radiotherapy (RT). Despite its significance, few studies provide detailed trajectories of skin toxicity, especially in patients treated with photobiomodulation (PBM). Thus, we sought to characterize the longitudinal progression of radiodermatitis and evaluate factors associated with worsening or improvement during PBM-supported RT.

Methods

This is a prospective observational cohort study of patients with head and neck cancer (HNC) undergoing RT who received PBM as standard

care. Radiodermatitis grade (CTCAE) was evaluated at baseline (start of RT), assessed daily until the end of treatment, and summarized weekly. Trajectories were analyzed using repeated-measures mixed-effects ordinal logistic regression with polynomial contrasts, adjusting for clinical factors. Sphericity violations were corrected, significance was set at $p<0.05$, and effect sizes were reported.

Results

A total of 181 patients were recruited ($M=62$ years, IQR 53-71; 56% male); 84% received IMRT and 65% were treated with adjuvant intent. Radiodermatitis severity evolved during treatment, with most patients presenting Grade 1 at baseline (84%) and 16% with Grade ≥ 2 . Weekly assessments showed gradual improvement, with the proportion of Grade 0 increasing from 0% at baseline to 32% by Week 4. Severe toxicity remained rare ($<3\%$ at all timepoints). Higher initial radiodermatitis grades and longer time to complete resolution were associated with higher average toxicity, while clinical factors (age, sex, RT dose, fractionation, comorbidities) were not predictive. Weekly improvement was observed across the cohort during PBM-supported RT.

Conclusions

Radiodermatitis follows a predictable weekly trajectory, with peak severity around weeks 3-4 and subsequent improvement. Higher baseline severity and longer time to complete resolution were associated with higher average toxicity. Weekly monitoring of skin toxicity is essential, and PBM-supported care may help mitigate severity over time. These findings support the integration of PBM into routine supportive care.

SUPPO-028

CANCER PREHABILITATION CAN BE INCLUSIVE FOR INDIVIDUALS FROM DIVERSE COMMUNITIES BY PRIORITISING CULTURAL RELEVANCE AND INVOLVING FRIENDS AND FAMILY.

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Introduction

Prehabilitation prepares individuals for cancer treatment by optimising physical, nutritional, and psychological health through needs-based interventions. Although widely accepted as beneficial, uptake varies and can be dependent on inequalities in access to or acceptance of prehabilitation. The Inclusive Prehabilitation (I-Prehab) study addresses this through a programme of work to co-produce online education for cancer workers to support inclusive prehabilitation. The third work package aimed to co-produce I-Prehab education to facilitate inclusive prehabilitation for cancer treatment, with a focus on engagement of people from culturally diverse and/or deprived communities.

Methods

Communities across Wales (UK) were involved in co-production workshops. Areas of high deprivation and/or ethnic minority populations were specifically engaged. A study public involvement group helped with this stage of recruitment and took part in facilitating the co-production workshops. Eight co-production activities were conducted, comprising 7 in-person workshops ($n=60$), one online workshop ($n=18$), and 4 individual interviews, (Total $n=82$). The workshops involved a discussion of qualitative findings from earlier ethnographic case study research and a numerical voting exercise using a nominal group technique. Quantitative and qualitative data were integrated to record priorities for delivering inclusive prehabilitation.

Results

The top three priorities for inclusive prehabilitation in the voting exercise were: Inclusive communication; Inclusive prehabilitation delivery; Allocation of keyworker. Thematic analysis of the qualitative data supported the voting data with the generation of four main

themes: Communication inclusivity, Person-centredness, Involving Friends and Family and Lifestyle Monitoring. Communication inclusivity was the dominant theme and sub-themes included; optimal timing for prehabilitation discussion, delivered through a preferred format (online, telephone, or in-person).

Conclusions

To enhance access, acceptance, and adherence to cancer prehabilitation inclusive education should include a person-centred approach, including a key contact, and flexible communication methods delivered at the right time of the cancer diagnosis and treatment pathway.

SUPPO-030

MULTIMODAL SENSORY STIMULATION COMBINED WITH MINDFULNESS-BASED STRESS REDUCTION FOR CHEMOTHERAPY-INDUCED ANTICIPATORY NAUSEA AND VOMITING

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Introduction

To evaluate the efficacy of multimodal sensory stimulation (MSS) combined with mindfulness-based stress reduction (MBSR) in managing anticipatory nausea and vomiting (ANV) in cancer patients undergoing chemotherapy.

Methods

This randomized controlled trial recruited 120 patients who developed chemotherapy-induced nausea and vomiting (ANV) after receiving chemotherapy in a tertiary hospital from June 2023 to June 2024. The subjects were randomly assigned to either the intervention group (MSS+MBSR, n=60) or the control group (standard antiemetic treatment, n=60). The intervention plan includes an 8-week MSS therapy (olfactory, auditory, and tactile stimulation) combined with structured MBSR treatment. The main evaluation indicators include the severity of ANV assessed through visual analog scoring and the Moro Nausea and Vomiting Scale, while secondary indicators include anxiety levels, quality of life, and treatment compliance. All assessments were conducted at baseline, 4 weeks, 8 weeks, and 3-month follow-up.

Results

The intervention group demonstrated significantly greater reduction in ANV severity compared to controls ($p < 0.001$). At 8 weeks, mean VAS scores decreased by (4.2 ± 1.3) versus (1.8 ± 1.1) in control group. Anxiety levels improved substantially ($p < 0.01$), and quality of life scores increased significantly. Treatment compliance remained higher in intervention group throughout follow-up period.

Conclusions

Multimodal sensory stimulation combined with mindfulness-based stress reduction effectively reduces chemotherapy-induced anticipatory nausea and vomiting while improving psychological well-being and treatment adherence, representing a promising non-pharmacological intervention strategy.

SUPPO-031

RURAL-URBAN RESIDENCE AND MULTILEVEL SOCIO-ECONOMIC STATUS ARE ASSOCIATED WITH PAIN PHENOTYPES IN BREAST CANCER SURVIVORS

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Introduction

Breast cancer survivors (BCS) frequently experience persistent pain, including neuropathic symptoms, which can compromise quality of life. Rural-urban context, multilevel socioeconomic status (SES), encompassing neighborhood attributes and individual resources, and social characteristics may contribute to pain experiences, yet joint patterns of these factors are not well characterized.

Methods

This is a secondary analysis of a cross-sectional study in cancer survivors (ClinicalTrials.gov Identifier: NCT04611620). We used latent class analysis (LCA) to identify 2–5 classes of rural-urban context, multilevel SES, and social characteristics profiles using six categorical indicators: Rural-Urban Commuting Area (RUCA) residence, census tract-level SES measured by Yost Index quartiles, and individual-levels of household income, education, employment status, and marital status. Neuropathic pain was measured using the PROMIS® Neuropathic Pain Quality-Short Form T-score, and bodily pain using the SF-36 Bodily Pain domain (transformed so higher scores indicate worse pain). We examined associations between latent classes and pain scores using ordinary least squares regression with robust standard errors, adjusting for age, cancer stage, study year, and treatment history (chemotherapy and radiation).

Results

Among N = 304 BCS, the two-class solution (Urban/Higher SES and Town-Rural/Lower SES) yielded the lowest Bayesian Information Criterion. Compared with the Urban/Higher SES class, the Town-Rural/Lower SES class had higher neuropathic pain scores ($\beta = 3.50$; 95% CI, 1.40–5.70) and higher bodily pain scores ($\beta = 9.30$; 95% CI, 3.40–15.0) (Table 1, 2), indicating more severe pain among survivors living in town/rural areas with lower socioeconomic status. Associations remained significant after adjustment for clinical factors, treatment history, and year of consent.

Table 1. Associations between the latent classes and neuropathic pain

Characteristic	Model 1			Model 2			Model 3		
	β	95% CI	p-value	β	95% CI	p-value	β	95% CI	p-value
LCA Class									
Urban/Higher SES	—	—	—	—	—	—	—	—	—
Town-Rural/Lower SES	3.5	1.4, 5.7	0.001	3.3	0.66, 4.8	0.010	2.7	0.62, 4.8	0.011
Age (years)	0.38	-0.02, 0.18	0.10	0.09	-0.01, 0.18	0.093	—	—	—
Cancer Stage									
Stage I	—	—	—	—	—	—	—	—	—
Stage II	-0.36	-2.6, 1.9	0.7	-0.65	-3.0, 1.7	0.6	—	—	—
Stage III	3.3	0.22, 6.3	0.035	3.2	-0.03, 6.4	0.052	—	—	—
Year of Study Consent									
2020	—	—	—	—	—	—	—	—	—
2021	-3.6	-6.0, -1.2	0.003	-3.6	-5.9, -1.1	0.004	—	—	—
Received Chemotherapy									
No	—	—	—	—	—	—	—	—	—
Yes	—	—	—	2.0	-1.4, 5.4	0.2	—	—	—
Received Radiation									
No	—	—	—	—	—	—	—	—	—
Yes	—	—	—	-1.1	-3.4, 1.3	0.4	—	—	—

Abbreviation: CI = Confidence Interval

Table 2. Associations between the latent classes and bodily pain

Characteristic	Model 1			Model 2			Model 3		
	β	95% CI	p-value	β	95% CI	p-value	β	95% CI	p-value
LCA Class									
Urban/Higher SES	—	—	—	—	—	—	—	—	—
Town-Rural/Lower SES	9.3	3.4, 15	0.002	8.6	2.6, 15	0.005	8.5	2.5, 15	0.006
Age (years)	0.06	-0.22, 0.34	0.7	0.07	-0.22, 0.36	0.6	—	—	—
Cancer Stage									
Stage I	—	—	—	—	—	—	—	—	—
Stage II	-11	-16, -3.7	0.003	-11	-19, -3.8	0.003	—	—	—
Stage III	-2.4	-10, 5.7	0.6	-2.4	-11, 6.2	0.6	—	—	—
Year of Study Consent									
2020	—	—	—	—	—	—	—	—	—
2021	-4.3	-11, 2.2	0.2	-4.1	-11, 2.6	0.2	—	—	—
Received Chemotherapy									
No	—	—	—	—	—	—	—	—	—
Yes	—	—	—	3.7	-8.2, 15	0.5	—	—	—
Received Radiation									
No	—	—	—	—	—	—	—	—	—
Yes	—	—	—	-2.3	-9.1, 4.5	0.5	—	—	—

Abbreviation: CI = Confidence Interval

Conclusions

Joint rural–urban context and multilevel SES are associated with both neuropathic and bodily pain types in BCS. These findings support residential area and multilevel SES-informed approaches to survivorship pain assessment and equitable supportive care delivery.

SUPPO-032

THE HEALTHCARE UTILISATION DATASET (HUD) – USING EMR-EXTRACTED SUPPORT SERVICE UTILISATION DATA TO INFORM INEQUITIES IN PRIORITY POPULATIONS

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Introduction

Routinely collected electronic medical record (EMR) data, such as referral and appointment records, have potential to inform service improvement and learning health systems, yet without structured translation, these data remain poorly suited to identifying gaps and inequities in supportive care. The study's aim was to describe an implementation informed method for translating EMR service-use data into measurable healthcare utilisation indicators, enabling assessment of real-world care processes and context-specific implementation strategies.

Methods

A structured process translated multiple linked EMR data fields (such as referral and attendance activities) into clinically meaningful utilisation constructs across the cancer care pathway, enabling identification of supportive service-use gaps. Clinicians, health-services researchers, business intelligence, and data custodians iteratively standardised definitions and operationalised key constructs. The Healthcare Utilisation Dataset (HUD) provides a foundation for identifying and measuring service-use and delivery inequities.

Results

The structured translation process was applied to a retrospective cohort at Peter MacCallum Cancer Centre between 1 January 2023 and 30 June 2024, consolidating 7,877 patient records. 105 EMR data fields were translated into 135 variables across six supportive care services and 12 tumour streams, forming clinically meaningful utilisation constructs as indicators of service provision and use. Referral activity integrated referral orders, status, and scheduling outcomes, while attendance consolidated appointment bookings, completions, misses, and cancellations (Figure 2). Patient demographics and clinical characteristics were standardised for equity-focused analyses, including culturally and linguistically diverse (CALD) status (consolidated interpreter need, primary language, and country-of-birth) and tumour stream (combined ICD-10 codes and clinician free-text). Data were derived with discipline codes to capture referral and attendance patterns across CALD groups and tumour streams and highlight opportunities for further investigation (Figure 2–3).

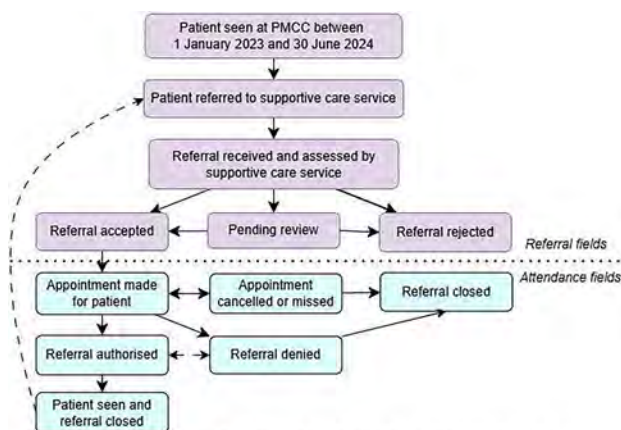


Figure 1: Simplified decision tree of possible referral pathways to supportive care services for Peter MacCallum Cancer Centre (PMCC) patients

EMR-extracted variable	Variable definition	Derived variable & definition
REFD_TO_PHYSIO	Yes or NA, referred to PT	PHYSIO_ACCEPTED Yes or No, at least one referral to physiotherapy not denied
PHYSIO_RFL_STATUS	PT referral status (Authorised/ cancelled/ closed/ denied/ pending review)	
PHYSIO_RFL_DENY_RSN	Reason for denial if PT referral denied	
PHYSIO_REF_PROV_TYPE	Provider of PT referral	PHYSIO_ATTENDED_ANY True or False, patient attended ≥1 appointment after PT referral
PHYSIO_ENCOUNTER_COMPLETED_COUNT	Number of PT encounters attended	
PHYSIO_ENCOUNTER_DNA_COUNT	Number of PT encounters scheduled but not attended	
PHYSIO_ENCOUNTER_CANCEL_COUNT	Number of PT encounters scheduled but cancelled	

Figure 2: Physiotherapy (PT) example of EMR-extracted service use variables and subsequent derived variables

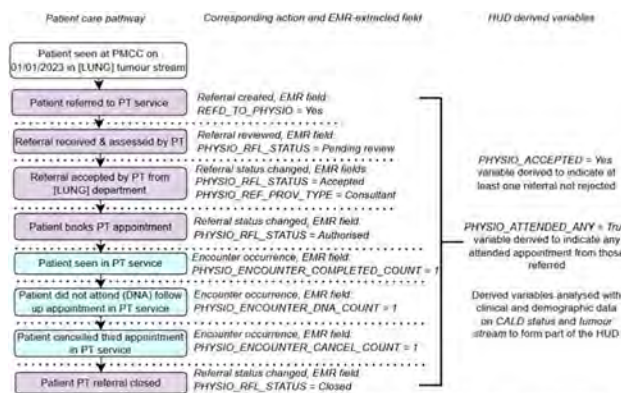


Figure 3: Physiotherapy (PT) example patient care pathway and corresponding EMR-extracted variables and fields derived to form part of the Healthcare Utilisation Dataset (HUD)

Conclusions

This informed and replicable approach translates linked EMR fields into utilisation constructs aligned with clinical workflows, thus enabling referral and attendance tracking to support learning health systems and guide targeted quality improvement.

SUPPO-033**AN EVALUATION OF CONSUMER SATISFACTION WITH SURVIVORSHIP SUPPORT FOR GYNAECOLOGICAL CANCER PATIENTS IN WESTERN AUSTRALIA**

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Introduction

In July 2024, the Survivorship Clinic was established at King Edward Memorial Hospital in Western Australia to support women following treatment for gynaecological cancers. This statewide multidisciplinary service provides access to a nurse consultant, general practitioner, gynae-oncologist, physiotherapist, dietician and psychologist. Increasing survivor numbers highlight the need for comprehensive, multidisciplinary survivorship care focused on patients' ongoing and complex needs. This study aimed to evaluate the Survivorship Clinic and patient satisfaction with care since its inception.

Methods

A two-phased observational descriptive study was conducted. In Phase one, demographic and diagnostic data of all patients booked to the clinic between July 2024 and May 2025 were audited. Phase two comprised a cross-sectional patient experience survey collecting quantitative and qualitative data. Quantitative data underwent descriptive statistical analysis. Qualitative data underwent content analysis.

Results

In the 11 months since inception, 101 gynaecological cancer survivors were booked to the clinic, with 96 (95.0%) attending at least one appointment. Cervical cancer was the most common cancer type (n=57/101, 56.4%). Most lived in a metropolitan area (n=71/101, 70.3%) and were born in Australia (n=58/101, 57.4%). Five survivors (5.0%) identified as Aboriginal and most preferred health information provided in English (n=94/96, 97.9%).

Fifty-three survivors completed the satisfaction survey. All agreed that they were satisfied with the service provided and 52 respondents (98.1%) agreed that their needs were met by the Survivorship Clinic staff. Qualitative data showed that survey respondents valued the integrated multidisciplinary nature of the Clinic and clear accessible information provided, highlighting the positive impact of care on their sense of wellbeing. Recommendations for improvement related to clinic time, parking and transport, more information regarding follow up and support for carers.

Conclusions

Early evaluation indicates that the Gynaecological Cancer Survivorship Clinic is highly valued. Findings will inform ongoing service refinement, with relevance for similar survivorship services nationally and internationally.

SUPPO-034**IMPLEMENTING TARGETED THROMBOPROPHYLAXIS AS SUPPORTIVE CARE: MAPPING IMPLEMENTATION PREFERENCES ACROSS A CANCER CARE PATHWAY**

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Introduction

Cancer-associated thromboembolism (TE) causes substantial morbidity and mortality, yet uptake of guideline-recommended thromboprophylaxis in high-risk ambulatory patients remains limited by workflow complexity and uncertainty in patient selection. The Australian Ph-III TARGET-TP trial demonstrated biomarker-directed thromboprophylaxis improved risk prediction and reduced TE and mortality. This study mapped implementation preferences and identified barriers and enablers to inform co-designed strategies for routine care.

Methods

This qualitative study used semi-structured focus groups with patients/carers (n=14) and healthcare professionals (HCP, n=19); three groups each. Process maps guided discussion of care delivery including preferred/alternative approaches. Preferences were specified using the AACTT framework (Action, Actor, Context, Target, Time) and compared between consumers and HCPs. Analysis used deductive coding to the AACTT and Theoretical Domains Framework (TDF), mapping barriers and enablers to TDF domains.

Results

Six actions (blood test ordering, risk-assessment, documentation, prescribing, supply, and education; Figure 1) were discussed with 33 participants (Table 1). HCPs preferred oncologist-led risk-assessment embedded within tumour-specific electronic order sets with active prompts, supported by allied health stewardship to oversee appropriateness, documentation, and continuity, positioning junior doctors as implementers when plans were pre-documented. Patients and carers expressed varied preferences regarding consent and communication, ranging from integrating risk testing with routine blood tests and notification only if action was required, to preferring upfront discussion emphasising clarity of purpose and a clear management plan. TDF mapping showed HCP barriers concentrated in early actions (ordering, review, prescribing), driven by Memory, Attention and Decision Processes, Environmental Context and Resources, and Social/Professional Role and Identity. Patient barriers were fewer and clustered around education and consent, dominated by Knowledge, Beliefs about Consequences, and Emotion. Across groups, treatment modality (injectable vs oral) also influenced preferences.

Figure 1.

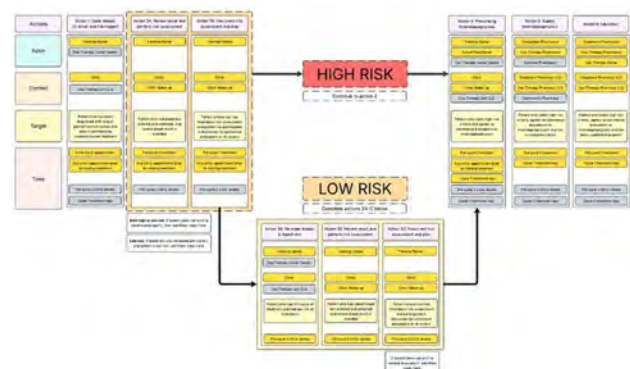


Table 1. Characteristics of consumers and health care professionals participating in the TARGET-TP implementation evaluation

Characteristic	Consumers (n = 14)	Health care professionals (n = 19)
Sex		
Female	7 (50%)	10 (53%)
Male	7 (50%)	9 (47%)
Age, years		
Median (range)	71 (51–82)	30 (31–42)
Role / profession		
Patient	9 (64%)	—
Carer	5 (30%)	—
Pharmacist	—	6 (32%)
Medical oncologist	—	6 (32%)
Nurse	—	6 (32%)
Digital health	—	1 (5%)
Cancer type		
Lung	7 (50%)	—
Gastrointestinal	6 (43%)	—
Other	1 (7%)	—
Prior experience/knowledge of blood clots		
None / low	9 (64%)	—
Moderate / high	5 (36%)	—
Prior experience/knowledge of TARGET-TP		
None / low	10 (71%)	11 (58%)
Moderate	2 (14%)	3 (16%)
High / very high	2 (14%)	5 (26%)
Language spoken at home		
English only	13 (93%)	17 (89%)
Other language(s)	1 (7%)	2 (11%)

Conclusions

Application of AACTT and TDF enabled role-specific, workflow-sensitive implementation strategies for TARGET-TP, supporting translation into routine practice and reducing missed opportunities for thromboprophylaxis.

SUPPO-036

IMPACTS OF AN EMBEDDED CENTRELINK FINANCIAL ASSISTANCE CLINIC WITHIN AN ONCOLOGY SOCIAL WORK SERVICE

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Introduction

At Peter MacCallum Cancer Centre, through an innovative initiative in collaboration with Services Australia, an in-person Centrelink (Australian governmental financial assistance) clinic operates once weekly supporting patients and carers with psychosocial barriers in navigating Centrelink's service system and provides secondary consultations for social workers. Currently, there are minimal Centrelink clinics on-site at health services in Australia, and none at cancer-specific health services other than at Peter Mac. A project evaluation is being undertaken of Peter Mac's Centrelink Clinic to determine:

- Utilisation and outcomes of the clinic from April 2024 through April 2026
- Demographic and clinical characteristics of service users
- Key psychosocial barriers to accessing Centrelink benefits

Methods

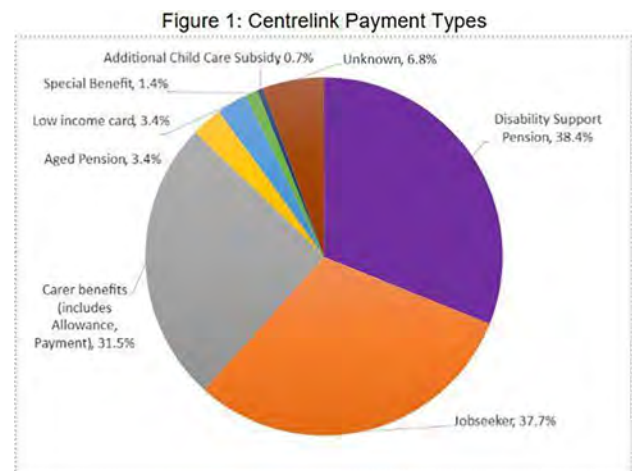
This project evaluation utilises a mixed-methods approach analysing data from:

- Administrative sources (Electronic Medical Record)

- Surveys and Focus Groups with Patients/Carers, Peter Mac Staff, Centrelink Liaison Officer

Results

Approximately 1,040 patients and carers will have accessed the service by end of April 2026. Preliminary findings indicate the major populations served include patients with limited prognosis, CALD backgrounds, and cognitive/functional changes. Common barriers to access include complex medical presentation, family violence, and language/cultural reasons. Since implementation of the service, application outcome wait times and self-reported psychosocial distress of both carers and patients have reduced. Based on 30 individual survey and 2 focus groups of 6 participants (with 1 more planned), staff report therapeutic rapport and confidence in systems navigation and care provision have increased. Figures 1 and 2 demonstrate further context of efficacy of service, and payment types most accessed by cancer patient and carer population.



Conclusions

This evaluation contributes to emerging models of embedded psychosocial and financial support in healthcare and may inform future expansion, refinement, and/or research on psychosocial interventions within oncology settings.

SUPPO-037

SOCIOECONOMIC DETERMINANTS OF TREATMENT OUTCOMES IN POST-SURGICAL CANCER PATIENTS: A MULTI-CENTER OBSERVATIONAL RETROSPECTIVE STUDY FROM INDIA

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Introduction

Socioeconomic status (SES) plays a critical role in access to cancer care and postoperative outcomes, particularly in countries with wide disparities such as India. Patients undergoing curative-intent surgery require timely adjuvant therapy, consistent follow-up, and adequate supportive care. This study assesses how SES factors influence treatment adherence and short-term clinical outcomes in a large, multicenter cohort of post-surgical cancer patients.

Methods

A retrospective observational study was conducted across multiple cancer hospitals in India, including 500 adult patients who underwent curative-intent cancer surgery between December 2019 and November 2025. SES indicators included monthly income, educational status, occupation, insurance coverage, and distance from the treatment facility. Primary outcomes were adherence to planned adjuvant therapy, treatment delays, postoperative complications, and 1-year disease-free survival (DFS). Secondary outcomes included follow-up compliance and documented socioeconomic barriers. Associations were analyzed using multivariate logistic regression and Cox proportional hazards modelling.

Results

Among the 500 patients across diverse cancer types, lower SES categories showed significantly higher rates of adjuvant treatment delay, incomplete therapy, and loss to follow-up ($p < 0.05$). Patients living more than 50 km from the treating center were twice as likely to miss scheduled visits or discontinue therapy. Limited or absent insurance coverage strongly predicted financial toxicity and treatment interruptions. Higher educational attainment was associated with better treatment understanding and improved adherence. One-year DFS was reduced in the low-income cohort, predominantly due to compromised continuity of care rather than tumor-related factors.

Conclusions

SES disparities substantially affect treatment completion and early survival outcomes in Indian cancer patients following curative-intent surgery. Financial constraints, travel burden, and inadequate insurance remain major barriers. Interventions such as patient navigation programs, financial counselling, improved insurance access, and decentralized cancer services are essential to address these inequities and support MASCC's goal of reducing global disparities in supportive oncology care.

SUPPO-038

ASSESSMENT OF USABILITY AND ACCEPTABILITY OF CANCER REHABILITATION IN DECISION SUPPORT (CARDS) ALGORITHM

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Introduction

The purposes of this study were to develop a decision support tool, the Cancer Rehabilitation in Decision Support (CARDS) algorithm, for appropriate provision of cancer rehabilitation, and assess its usability and acceptability among stakeholders for implementing CARDS.

Methods

An online modified-Delphi study was conducted. A total of 100 stakeholders (healthcare professionals, researchers, cancer survivors, and members of patient support groups) with experience in cancer rehabilitation were invited. Participants used CARDS to determine the treatment level to which they should refer for cancer rehabilitation with simulated cases. Usability was assessed using the chi-squared test to compare the correct response rate for the referral decision with and without CARDS. Acceptability was assessed using the Acceptability of Intervention Measure (AIM), a 5-point scale, and judged based on both the median score and the agreement rate. Opinions on the suitable locations, methods, and media for implementing CARDS were also collected.

Results

In the first survey, responses were obtained from 86 participants, and in the second survey, from 82 participants. The correct response rate for three simulated cases was high, with no significant differences observed due to a ceiling effect. However, in one case with a relatively low correct response rate without CARDS, the use of CARDS significantly improved decision accuracy ($p < .05$). Regarding acceptability, the median for each AIM item was 4.0, with an interquartile range of 0.5–1.0, and the mean agreement rate was 70.0%, meeting the pre-defined consensus criteria. Consensus was also reached on preferred settings, methods, and media for implementing CARDS.

Conclusions

CARDS is a clinical decision support tool developed by expert consensus that has demonstrated meaningful usability and acceptability. It is expected to contribute to the appropriate delivery of cancer rehabilitation through future research on the implementation of CARDS

SUPPO-039

CO-DESIGNING A SEXUALITY IN CANCER CLINIC WITH CONSUMERS AND PRACTITIONERS: A QUALITATIVE STUDY OF LIVED EXPERIENCES

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Introduction

Despite 40–100% of people with cancer reporting sexuality concerns, implementation of best-practice guidelines in sexual health care as a component of comprehensive cancer care has been limited. The objective was to co-design a sexuality in cancer clinic with consumers and practitioners, informed by their lived experiences.

Methods

Using modified Experience Based Co Design Methodology (EBCD), three workshops were conducted with participants purposively and conveniently sampled: 1) consumers, 2) practitioners, and 3) both. Workshops were facilitated using a semi-structured guide, recorded and transcribed. Following introductions, trigger films were played (Fig. 1), and participants' impressions were shared. Guided by the AACT (Action, Actor, Context, Target) framework, questions regarding implementation were discussed. Thematic analysis was undertaken whereby workshop 1) and 2) data were inductively coded, codebook created, and themes/subthemes identified. Workshop 3) data were deductively coded using the codebook, and new themes/subtheme meanings were added.



Fig 1: Trigger films played

Results

Twenty-four consumers (n=13) and practitioners (n=11) participated. Five themes emerged: 1) Resources, 2) Health professional communication 3) Sexual side effects of treatment 4) Service delivery and 5) Facilitators of disclosure. *Health professional communication* was critical: *sexuality discussion initiation* e.g. using conversation prompts, *timing and scale of conversation and practitioner knowledge and safety*. These are about clinicians leading conversations on sexual changes at the right time, and needing practical skills to provide safe, useful guidance. Consumers underscored *lack of access to resources* – feeling lost and unsure – and *group resources* e.g. peer support because it is less lonely to discuss sexual changes collectively. *Multidisciplinary team care* was emphasised. This subtheme is about sexuality support coming from a whole team, not just one doctor.

Conclusions

The clinic will integrate training focused on knowledge and communication to help practitioners lead conversations and provide relevant resources to consumers. A stepped approach will be trialled towards implementing a multidisciplinary care model.

SUPPO-040

THERAPEUTIC BENEFIT (TB), PSYCHOLOGICAL WELL-BEING, AND SURVIVAL OF ADVANCED CANCER PATIENTS (ACPS) IN PHASE I TRIALS AND SPOUSAL CAREGIVERS (SCS)

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Introduction

ACP participating in phase I clinical trials have high hopes for TB leading to inadequate understanding of informed consent and prognosis. However, the impact of TB on ACP and SC psychological well-being and survival is unknown.

Methods

ACP enrolling in phase I trials were assessed at baseline (T1) and one month (T2) using quantitative symptom measures: depression (CES-D), state anxiety (STAI-S), quality of life/qol (FACIT-Pal), and global health (SF-36). Structured interviews evaluated Phase I trials understanding (purpose, risks/benefits, alternatives).

Results

To date, 158 participants (79 Phase I ACP and 79 SC) have been separately interviewed at T1 and T2. For the total population: median age 62y (28–79); 50% male; 100% married; 89% Ca; 69%>HS educ; 59% GI dx; ACP median survival 8.2 month (.51–18.8); 53% income<\$65,000 yr. At T1, only 40% of ACP recalled correct phase I trial purpose as “dosage”, 55% hoped for TB; 65% reported no risk involved; 60% reported trial prolongs life. For SC at T1, 75% hope for TB; 70% believed trial extends ACP life; 88% worried re ACP death; and 65% reported alternative options (“hospice”) were offered. For both ACP and SC, rates remained consistent for both ACP and SC. At T2, ACP hoping for TB had elevated STAI-S (33±10 v. 27±8, p=0.03) and CES-D scores (12±11 v. 10±9, p=0.04). SC with TB hopes had higher STAI-S anxiety (39±14 v. 33±11, p=0.03) at T2. Regression analyses revealed ACP hoping for TB had worsening FACIT-Pal QOL over time. Also, SC reporting ACP had poor prognosis at T2 was negatively associated with SF-36 scores. Regarding survival, ACP with high TB had shorter survival compared to ACP without (4.5 v. 6.8 months, p=0.02).

Conclusions

Phase I ACP and SC report significant TB from trial participation negatively impacting their psychological well-being and survival. Supportive couple-based, dyadic psychological interventions for ACP-SC are needed.

SUPPO-041

MAPPING SUPPORTIVE CARE NEEDS AMONG WOMEN WITH BREAST CANCER: A FIRST STEP TOWARDS PLANNING OF HOLISTIC CANCER CARE IN RESOURCE LIMITED SETTINGS

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Introduction

While breast cancer (BC) survival is improving globally, the resulting physical and psychosocial burdens have made the assessment of supportive care needs (SCN) a priority. We measured SCN among women with BC and assessed the associated factors in an upper middle-income setting.

Methods

Data from 723 women recruited across seven tertiary hospitals in Malaysia were analysed. SCN were assessed using the validated Needs Assessment Tool for BC, encompassing information/services, hospital appointments, emotional/psychological, personal care/health, and social/intimate relationships domains. Associations with sociodemographic and clinical factors were assessed using generalised linear models.

Results

Median age was 54 years. High SCN were most prevalent in information/services (28.1%, 95%CI: 24.8–31.4), hospital appointments (29.5%, 95%CI: 26.1–32.8), and emotional/psychological (16.2%, 95%CI: 13.5–18.9) domains. Overall, high SCN items included dietary information (45.9%), shorter waiting times (45.0%), self-care guidance (41.4%), treatment cost information (40.4%), prompt test results (39.6%), and clean hospital facilities (39.6%). Women with advanced BC (ABC) reported significantly higher needs than those with early-stage disease, particularly for hospital appointments (36.1% vs. 18.6%), information/services (35.6% vs. 15.7%), emotional/psychological (20.3% vs 9.5%) domains. While ABC, employment status, and care in academic hospitals were significantly associated with higher needs across multiple domains (β range 0.17–0.52) in multivariable analyses, women with ABC appeared most vulnerable.

Table 1

Table 1: Socio-demographic characteristics of 723 respondents with breast cancer

Sociodemographic characteristics	Frequency (%)
Age (years)	≤ 39
	73 (10.1%)
	40–49
	191 (26.4%)
	50–64
Ethnicity	334 (46.2%)
	≥ 65
	125 (17.3%)
	Malay
	419 (58.0%)
Education level	Chinese
	204 (28.2%)
	Indian
	80 (11.1%)
	Others
Employment status ^a	20 (2.8%)
	None or primary education
	93 (12.9%)
	Secondary education
	344 (47.6%)
Household income ^b	Tertiary education
	286 (39.6%)
	Employed
	235 (32.5%)
	Retired
Marital status ^c	118 (16.3%)
	Housewife
	270 (37.3%)
	Unemployed
	100 (13.8%)
Ownership of private health insurance	Low (B40)
	497 (68.7%)
	Middle (M40)
	146 (20.2%)
	High (T20)
Primary hospital for follow up	80 (11.1%)
	Married
	517 (71.5%)
	Without partner
	206 (28.5%)
Primary hospital for follow up	Yes
	202 (27.9%)
	No
	521 (72.1%)
	Academic hospital
Primary hospital for follow up	150 (20.7%)
	MOH-owned hospital
	487 (67.4%)
	Private hospital
	86 (11.9%)

Footnote:

^a Employed category includes respondents who are employed and self-employed.

^b Based on Malaysian Department of Statistics Household Income and Basic Amenities survey of 2019. B40: Bottom 40%, M40: Middle 40%, T20: Top 20%. 1 USD=4.00 Malaysian Ringgit.

^c Excluding those who are not married/divorced/separated.

Table 2

Table 2: Clinical profile of 723 respondents with breast cancer

Clinical profile	Frequency (%)
TNM stage at initial diagnosis	Stage I
	45 (6.2%)
	Stage II
	170 (23.5%)
	Stage IIIa
	59 (8.2%)
	Stage IIIb
Time since diagnosis	160 (22.1%)
	Stage IIIc
	59 (8.2%)
	Stage IV
	230 (31.8%)
	< 3 months
	200 (27.7%)
Modified Charlson Comorbidity Index	3 to < 6 months
	241 (33.3%)
	6 to 12 months
	201 (27.8%)
Surgery	≥ 12 months
	81 (11.2%)
	0
	247 (34.1%)
Radiotherapy	1–2
	318 (44.0%)
	3 and above
	158 (21.9%)
Chemotherapy	Mastectomy
	388 (53.7%)
	Breast conserving surgery
	103 (14.2%)
HER2 therapy	Others ^a
	20 (2.8%)
	No
	212 (29.3%)
CDK4/6 inhibitor	Yes
	483 (66.8%)
	No
	240 (33.2%)
Other targeted therapy	Yes
	623 (86.2%)
	No
	100 (13.8%)
Hormone therapy	Yes
	282 (39.0%)
	No
	441 (61.0%)
Immunotherapy	Yes
	74 (10.2%)
	No
	649 (89.8%)
Immunotherapy	Yes
	25 (3.5%)
	No
	698 (96.5%)
Immunotherapy	Yes
	437 (60.4%)
	No
	286 (39.6%)
Immunotherapy	Yes
	37 (5.1%)
	No
	686 (94.9%)

Footnote:

^a Others: Unspecified surgery type.

Figure 1

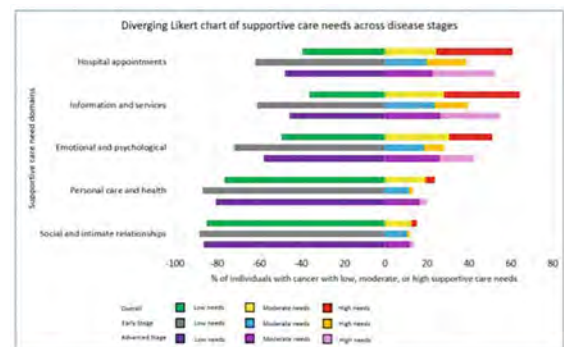


Figure 1: Distribution of need among people living with and beyond breast cancer across various domains (n=723).

Conclusions

Substantial unmet SCN characterize the BC experience in Malaysia, particularly for women with ABC who face compounded informational,

logistical and emotional challenges. Routine SCN assessment, culturally sensitive communication, patient navigation, digital tools and NGO partnerships may strengthen holistic BC care.

SUPPO-042

BARRIERS TO PHYSICAL AND OCCUPATIONAL THERAPY ACCESS FOR PEDIATRIC CANCER PATIENTS

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Introduction

Physical and occupational therapy during cancer treatment is vital not only to quality of life but also to functional patient outcomes and return to normalcy following treatment. This study examines the barriers to access for PT and OT for pediatric patients in a quaternary care cancer hospital.

Methods

We interviewed 60 staff members: 20 administrators, 20 medical providers, and 20 therapists including both occupational and physical therapists. Interviewees were asked about system-level barriers that may prevent pediatric patients from obtaining the therapy they required. Interviews were transcribed and coded using the MaxQDA software for qualitative data analysis. Their responses were systematically organized and coded into categories to identify common barriers. Once the most common barriers were identified, the number of participants in each group that raised concern for that barrier were tabulated.

Results

The most common barrier to access to OT/PT across all three participant groups was inadequate space for pediatric rehab. Administrators noted the major barriers to be staffing (9/20), dedicated space for pediatric patients during rehab sessions (6/20), lack of provider awareness (5/20), and problems with the referral system (5/20). Medical providers identified insurance denials (8/20), challenges with the referral system (7/20), and inadequate rehab space (3/20) as primary barriers. The therapists reported insufficient rehab space (8/20), lack of equipment (5/20), short staffing (5/20), and limited medical provider education (5/20) to be the biggest obstacles.

Table 1. Number of participants who reported on each barrier to OT/PT access for pediatric cancer patients, by role.

	Administrator	Medical Staff	Therapist
Staffing	9	2	5
Insurance	2	8	1
Space	6	3	8
Equipment	0	0	5
Provider awareness	5	0	5
Referral system	5	7	0
Therapist training	0	2	1
Family support	3	4	2
Socioeconomic	0	1	0
Parent education	0	1	2
Patient availability	0	1	1

Conclusions

Multiple barriers to OT/PT access were identified in this study. The most common, by group, were deficiencies in staffing (administrators), limitations in insurance coverage and the referral system (medical providers), and insufficient space and equipment for rehab sessions (therapists). To improve access to OT/PT for pediatric oncology patients within our institution, multiple system-level changes are needed including improved staffing, a streamlined referral process, promotion of insurance coverage, and expansion of space and equipment.

SUPPO-043

QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG GYNECOLOGIC CANCER SURVIVORS WITH LOWER LIMB LYMPHEDEMA AFTER SURGERY

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Introduction

Lower limb lymphedema is a chronic and often overlooked complication following gynecologic cancer surgery, characterized by persistent swelling, sensory disturbances, and functional limitations, which may significantly affect patients' quality of life. However, empirical evidence remains limited, particularly among Asian populations. This study aimed to examine the quality of life and associated factors among gynecologic cancer survivors with lower limb lymphedema after surgery.

Methods

A cross-sectional correlational study was conducted using purposive sampling in the gynecologic ward of a medical center in central Taiwan. Eligible participants were gynecologic cancer survivors aged 18 years or older who had undergone surgery at least three months prior to enrollment. Data were collected using the International Society of Lymphology (ISL) staging system, the Gynecologic Cancer Lymphedema Questionnaire (GCLQ), and the Functional Assessment of Cancer Therapy-General (FACT-G), and were analyzed using descriptive and correlational analyses.

Results

Among 115 gynecologic cancer survivors, the mean age was 60.3 ± 10.9 years. Lower limb lymphedema developed within approximately one year after surgery in 65.2% of participants, and 51.3% had bilateral involvement. According to the ISL staging system, 41.7% were classified as stage I and 39.1% as stage II. The most frequently reported symptoms were swelling (88.7%), tightness (86.1%). The mean total FACT-G score was 53.9 ± 15.5 , with functional well-being being the most impaired domain (10.6 ± 6.0). Lymphedema severity was significantly and negatively correlated with physical, emotional, and functional well-being.

Table 1. Characteristics of Patients with Gynecologic Cancer (N = 115)

Variables	Mean (SD) (%)	Variables	Mean (SD) (%)	Variables	Mean (SD) (%)
Demographic		Disease		Lower limb lymphedema	
Age	60.3 (10.9)	Ovarian cancer	55(91.3%)	Location of cancer (cm)	2.3 ± 2.3
City	76(66.1%)	Endometrial cancer	4(29.4%)	< 1 cm	46(40.0%)
Body Mass Index (BMI)	23.3 (3.7)	Cervical cancer	2(17.0%)	1-2 cm	28(25.2%)
<24	8(6.9%)	Vulvar cancer	2(17.0%)	>2 cm	39(34.8%)
≥24	32(43.2%)	Cancer stage		ISL stage	
Education		Stage I	47(80.0%)	Stage 0	1(0.8%)
<High school	40(34.8%)	Stage II	4(29.4%)	Stage 1	46(40.0%)
≥High school	75(65.2%)	Stage III	4(10.0%)	Stage 2	45(39.1%)
Employment		Stage IV	1(5.0%)	Stage 3	1(0.8%)
Yes	54(47.0%)	Lymph node dissection		ISL	
No	61(53.0%)	Debulking surgery	45(75.4%)	None	75(65.2%)
Marital status		Stump intact	4(13.3%)	Unilateral	59(51.3%)
Married	8(68.8%)	Radical hysterectomy	1(3.3%)	Bilateral	55(48.7%)
Single	22(18.3%)	Reason for admission		Cross management strategies	
Religion		Treatment	3(10.0%)	None	2(1.7%)
Yes	8(15.4%)	Conservative	3(10.0%)	1 type	4(3.5%)
No	48(24.6%)	Performance status		2 types	45(40.0%)
Monthly income		ECOG-0	1(0.9%)	3 types	49(43.5%)
< NT\$40,000	75(65.2%)	ECOG-1	4(13.3%)	>3 types	4(3.5%)
≥ NT\$40,000	40(34.8%)	ECOG-2	4(13.3%)		
Return to work		ECOG-3	1(3.3%)		
Yes	17(14.8%)	ECOG-4	1(3.3%)		
No	98(85.2%)				

Figure 1. Distribution of Cross Management Strategies for Lower Limb Lymphedema (N = 115)



Table 3. Correlations Between Lower Limb Lymphedema and Quality of Life

Variables	Physical	Social/Family	Emotional	Functional
Lymphedema	-0.328**	-0.111	-0.378**	-0.407**
Physical		-0.13	0.536**	0.466**
Social/Family			0.139	0.305**
Emotional				0.426**

Conclusions

Lower limb lymphedema among gynecologic cancer survivors was associated with a significant reduction in quality of life, particularly in the physical and functional domains. These findings highlight the critical role of oncology nurses in the early identification, systematic assessment, and ongoing management of lower limb lymphedema. Healthcare professionals may consider developing integrated supportive care models for lymphedema management to improve overall quality of life.

SUPPO-044
EVALUATING SUPPORTIVE CARE DELIVERY IN VICTORIA: INSIGHTS FROM A CANCER SELF ASSESSMENT SURVEY

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Introduction

The cancer services improvement network in Victoria, Australia, comprises nine Integrated Cancer Services (ICS), each representing partnerships of health services delivering cancer care. Collectively, these partnerships form the Victorian Integrated Cancer Service (VICS), a statewide network of more than 120 health services. VICS is a key mechanism for implementing the Victorian Cancer Plan, including consistent adoption of Australia’s Optimal Cancer Care Pathways. In 2024, VICS undertook a statewide self-assessment survey to evaluate current supportive care screening practices across health services delivering cancer treatment across multiple modalities and settings.

Methods

The VICS Supportive Care Working Group developed a self-assessment tool informed by published expert consensus quality indicators for cancer supportive care. The tool comprised 53 questions designed to identify current supportive care screening practices, the presence of screening documentation, barriers and facilitators to implementation, and opportunities for service improvement. Data collection was conducted using REDCap, with the tool administered as a semi-structured interview to promote reflective discussion and local context.

Results

Seven of the nine ICSs participated in conducting interviews with local health services. In total, 45 health services were surveyed, and 86 interviews were fully completed, with several involving multiple participants. Most participants were Specialist Nurses or Cancer Care Coordinators (46%), followed by Nurse Unit Managers (24%). Survey findings identified priority areas for improvement, including the need to standardise supportive care screening practices, strengthen referral documentation and processes, improve the use of screening data to identify patients at high risk of unmet needs, and enhance communication and training, particularly in cultural competency.

Conclusions

The VICS supportive care self-assessment survey provided ICSs with valuable insights into local supportive care screening practices and variability. The process strengthened engagement with key stakeholders and informed targeted quality improvement initiatives, supporting the delivery of consistent, high-quality supportive care for people diagnosed with cancer across Victoria.

SUPPO-045
INEQUITIES IN NUTRITION SERVICES ACROSS AUSTRALIAN CANCER CARE: FINDINGS FROM A NATIONAL SURVEY

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Introduction

This study aimed to describe the nutrition and dietetics services available in Australian cancer care and to identify inequities in service availability.

Methods

A national cross-sectional survey was distributed to managers or team leaders of nutrition and dietetics or allied health services within acute health services providing cancer treatment in Australia. A 30-item survey on dietetic services for people with cancer was purpose-built by a team of Australian cancer nutrition clinical and research experts and included questions on service availability by tumour group, treatment stage and modality. The survey was distributed via email to 176 dietetics managers or team leaders between October 2024 and February 2025.

Results

Sixty-seven health services participated (38% response rate) and most were public (67%) and metropolitan-based (58%). Dietetic services were predominantly referral-based (48-81%) across all tumour groups, treatment stages and modalities. Less than half (47%) of health services provided routine dietetic care for high-malnutrition risk tumour groups. Private health services did not provide routine dietetic care for high-malnutrition risk tumour groups receiving systemic treatments or radiotherapy. The proportion of health services providing routine dietetic care to high-malnutrition tumour groups did not differ between regional and metropolitan locations ($p>0.05$), with the exception of after treatment, where a higher proportion of regional services provided routine dietetic care compared with metropolitan services (41% vs. 4%, $p=0.006$). Fifty-eight percent of health services reported no pathway for referral or no community-based dietetic services available after treatment.

Conclusions

This national survey has demonstrated inequitable access to dietetic care for patients at high risk of malnutrition treated within the private sector. Patients at high risk of malnutrition treated in regional locations had equal or better access to dietetic care. Policy change at a national level is recommended to support service and workforce planning to address these inequities.

SUPPO-046
FORMULARY ACCESS TO KEY CANCER SUPPORTIVE CARE MEDICATIONS IN U.S. MEDICARE: COVERAGE, UTILIZATION MANAGEMENT, AND STANDARDIZED MONTHLY COST TRENDS

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Introduction

Timely access to cancer supportive care medications (antiemetics, analgesics) is essential for treatment tolerance and quality of life. In US Medicare Part D, formulary inclusion may still impose cost sharing and utilization management (UM; prior authorization [PA],

quantity limits [QL]). We quantified coverage, UM intensity, standardized monthly costs, and trends to identify access barriers across plan types and drug classes.

Methods

Using Medicare-Part-D formularies from 2019Q1–2025Q1, we performed a descriptive trend study evaluating 23 common supportive care drugs/dose forms spanning antiemetics, opioid and opioid-adjacent analgesics, and common adjuvant symptom agents (e.g., duloxetine, pregabalin), based on NCCN guidelines. Outcomes included quarterly plan-level coverage, QL, and PA. We summarized plan-reported average monthly cost, standardized to clinically plausible 30-day use via formulation-specific monthly units

Results

Across 3,738 Medicare-Part-D/MAPD plans, supportive oncology drugs were widely covered, yet utilization management remained pervasive. In antiemetics, ondansetron 4 mg (tablet/ODT) had 100% coverage but high prior authorization (73.32%), and granisetron 1 mg had PA 89.62% despite low monthly cost (~\$16).

Opioid access stratified into three patterns: (1) short-acting generics were predominantly quantity-limit (QL) restricted with minimal PA (oxycodone 5 mg and hydromorphone 2 mg: ~95% QL; 0.90% PA; ~\$28–\$29/month); (2) long-acting regimens were more often PA-gated (fentanyl transdermal PA 49.25%, ~\$108/month; methadone 5 mg PA 44.06%, ~\$19/month); and (3) novel/brand opioids concentrated high costs and formulary exclusion (tapentadol IR 0.70% coverage, ~\$1,494/month; tapentadol ER 1.02%, ~\$761/month; abuse-deterrent ER oxycodone 4–19% coverage, ~\$333–\$409/month).

Longitudinally, tapentadol ER coverage shrank sharply (51.73% in 2019Q1 to 1.02% in 2025Q1), whereas buprenorphine transdermal coverage expanded (47.72%→70.89%) with declining costs (~\$228→\$128/month) but rising PA (10.96%→29.76%).

Conclusions

In US Medicare plans, supportive-oncology access is shaped more by utilization management (UM) than by formulary inclusion: prior authorization concentrates in time-sensitive antiemetics and long-acting opioids, whereas novel analgesics face high costs and frequent exclusion, supporting supportive-oncology-specific access metrics and targeted policy interventions.

SUPPO-047

WHAT ARE THE BEST METHODS FOR RECRUITING A LARGE, DIVERSE SAMPLE OF CANCER SURVIVORS TO A REGISTRY-BASED QUALITATIVE STUDY?

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Introduction

Effective cancer care requires a comprehensive understanding of supportive care needs and experiences. Previous research has mostly used homogenous samples and scale items that do not fully capture these needs and the experiences contributing to them.

Additionally, perceived participant burden can prevent people from engaging in such research. This study investigated effective methods for recruiting a large, diverse sample of survivors to a qualitative study of supportive care needs and experiences via a cancer registry.

Methods

From July–October 2025, co-designed invitations and qualitative questionnaires were mailed via the Queensland Cancer Registry to a random sample of 2,702 adults diagnosed with cancer in the previous 12 months, stratified by cancer type, months post-diagnosis, and geographical remoteness. Invitations were randomised across four arms to test consent processes (explicit signed vs implicit via questionnaire return) and questionnaire type (semi-structured vs open-response). Reminders were mailed to non-responders one-month post-initial invitation. Response rates were compared across study arms and questionnaire completion method (online, paper, phone) and the characteristics of participants and non-responders were compared using chi-square tests ($p < 0.05$).

Results

Overall, 422 (16%) invitees participated in the study. Sample composition was diverse across age, sex, remoteness, ethnicity, cancer type, and months post-diagnosis, although people living in remote areas, Aboriginal and Torres Strait Islanders, and those with less common cancers were less likely to participate (Table 1). Participation was significantly lower in the explicit consent and open-response arm ($\chi^2(3) = 14.30$, $p = .003$) and questionnaire completion method differed significantly across arms (Table 2). Participants aged >65 years were more likely to complete the questionnaire via phone (94%) and paper (75%) compared to younger age groups (Table 3).

Table 1: Characteristics of invitation recipients, study participants, and non-responders

	Invitation recipients	Study participants	Non-responders
Total N	2702	422 (16%)	2280 (84%)
Sex			
Female	1080 (40%)	157 (37%)	923 (40%)
Male	1622 (60%)	265 (63%)	1357 (60%)
Age (years)			
18–39	284 (10%)	25 (6%)*	259 (11%)
40–69	1560 (58%)	232 (55%)	1328 (58%)
≥70	858 (32%)	165 (39%)*	691 (31%)
Remoteness			
Major city	1123 (42%)	181 (43%)	942 (41%)
Inner regional	748 (28%)	131 (31%)	617 (27%)
Outer regional	597 (22%)	87 (21%)	510 (22%)
Remote / very remote	234 (9%)	23 (5%)*	211 (9%)
Born in Australia			
Yes	2126 (79%)	322 (76%)	1804 (79%)
No	576 (21%)	100 (24%)	476 (21%)
Aboriginal and Torres Strait Islander status			
Yes	358 (13%)	27 (6%)*	331 (15%)
No	2275 (84%)	386 (91%)	1889 (83%)
Not stated	69 (3%)	9 (2%)	60 (3%)
Cancer type			
Prostate	696 (26%)	144 (34%)*	552 (24%)
Breast	329 (12%)	40 (9%)	289 (13%)
Melanoma	272 (10%)	46 (11%)	226 (10%)
Colorectal	190 (7%)	28 (7%)	162 (7%)
Lung	137 (5%)	28 (7%)	109 (5%)
Other*	1078 (40%)	136 (32%)*	942 (41%)
Months post-diagnosis*			
<3	167 (6%)	25 (6%)	142 (6%)
3–<6	1022 (38%)	163 (39%)	859 (38%)
6–<9	756 (28%)	108 (26%)	648 (28%)
9–<12	757 (28%)	126 (30%)	631 (28%)

* Includes haematological, gynaecological, bone and soft tissue, neurological, endocrine, head and neck, hepatobiliary, upper GI, kidney, testis, and other invasive cancers. * Recorded at the point of stratification and selection for study invitation.

*** $p < .001$; ** $p < .01$; * $p < .05$ (based on standardised residuals from the chi-square test comparing response rates).

Table 2: Response rates and questionnaire completion method by study arm

	Arm 1 Explicit consent + open-response	Arm 2 Explicit consent + semi-structured	Arm 3 Implicit consent + open-response	Arm 4 Implicit consent + semi-structured
Invited N	673	678	666	685
Consented	76 (11%)*	116 (17%)	105 (16%)	125 (18%)
Questionnaire completion method*				
Online	44 (58%)	50 (43%)*	92 (88%)*	114 (91%)
Paper	27 (35%)*	62 (54%)*	1 (1%)*	1 (1%)*
Phone	5 (7%)	4 (3%)	12 (11%)	10 (8%)

*Based on participants only.

*** p < .001; ** p < .01; * p < .05 (based on standardised residuals from the chi-square test).

Table 3: Chosen methods of questionnaire completion by participant characteristics

	Online	Paper	Phone
Total N (%)**	285 (70%)	91 (22%)	31 (8%)
Sex			
Female	113 (74%)	31 (20%)	9 (6%)
Male	172 (68%)	60 (24%)	22 (9%)
Age			
18-39	21 (84%)	3 (12%)	1 (4%)
40-69	167 (79%)	38 (18%)	6 (3%)*
≥70	97 (57%)*	50 (29%)	24 (14%)*
Remoteness			
Major city	129 (74%)	36 (21%)	9 (5%)
Inner regional	78 (64%)	30 (24%)	14 (11%)
Outer regional	60 (71%)	19 (22%)	6 (7%)
Remote / very remote	17 (68%)	6 (24%)	2 (1%)
Born in Australia			
Yes	216 (69%)	68 (22%)	27 (9%)
No	68 (72%)	23 (24%)	4 (4%)
Aboriginal and Torres Strait Islander status			
Yes	18 (69%)	7 (27%)	1 (4%)
No	259 (70%)	83 (22%)	30 (8%)
Not stated	8 (89%)	1 (11%)	0
Cancer type			
Urological	113 (69%)	36 (22%)	15 (9%)
Breast	30 (67%)	12 (27%)	3 (7%)
Melanoma	27 (69%)	9 (23%)	3 (8%)
Colorectal	22 (79%)	6 (21%)	0
Lung	21 (78%)	3 (11%)	3 (11%)
Other*	72 (69%)	25 (24%)	7 (7%)
Months post-diagnosis			
<3	2 (67%)	1 (33%)	0
3-6	94 (69%)	29 (21%)	14 (10%)
6-9	85 (75%)	26 (23%)	2 (2%)
9-12	104 (68%)	35 (23%)	15 (10%)

*Missing 15 participants who did not provide demographic data. *Includes haematological, gynaecological, bone and soft tissue, neurological, endocrine, head and neck, hepatobiliary, upper GI, and other invasive cancers.

*** p < .001; ** p < .01; * p < .05 (based on standardised residuals from the chi-square test).

Conclusions

Cancer registries can be leveraged to capture diverse survivor voices for equitable service planning. Implicit consent and/or semi-structured questionnaires may support study participation. Multimodal options for questionnaire completion are required to reach all age groups.

SUPPO-048

PROMOTING EQUITABLE ACCESS TO SUPPORTIVE CANCER CARE – DEVELOPMENT OF AN OPTIMAL CARE PATHWAY FOR PEOPLE LIVING IN RURAL AND REMOTE AREAS WITH CANCER

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Introduction

Optimal Care Pathways (OCPs) are nationally endorsed frameworks that outline principles and best-practice for safe and quality cancer care. OCPs are established for multiple cancer types and are in development for priority population groups to deliver equitable supportive care. The Equitable Cancer Outcomes across Rural and Remote Australia (ECORRA) research group led the development of the OCP for people living in rural and remote areas.

Methods

The OCP development aligned with the OCP toolkit methodology and the National OCP Framework. A national OCP working group was appointed, chaired by a Medical Oncologist and Nurse Practitioner practicing in rural Australia. A new OCP was developed and tailored through academic literature reviews, iterative drafting with the working group and a national public consultation to ensure it appropriately serves the supportive care needs of people from rural and remote areas.

Results

Over eight months, the OCP was developed with input from over 30 members of the working group, citing over 280 references. The supportive care principle was tailored to the rural and remote context by 1) addressing access and availability of supportive care services; 2) assistance coordinating multiple appointments and tests to minimise travel burden for patients and carers; 3) support navigating complex referral pathways; 4) connection to local peer support services where available and 5) financial support for rural-specific costs such as travel and accommodation. Importance was placed on the need for supportive care to be an ongoing component of the cancer care pathway, beyond active clinical treatment.

Conclusions

This OCP sets a standard to drive equitable cancer care for people from rural and remote areas, including best practice supportive care. This guide tailors the supportive care principle, and embeds supportive care considerations at all stages, driving better cancer outcomes.

SUPPO-049

IMPACT OF FOOD INSECURITY, PSYCHOLOGICAL DISTRESS, ALCOHOL USE, AND SMOKING ON EMERGENCY ROOM UTILIZATION IN PATIENTS WITH CANCER

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Introduction

Food insecurity (FI) affects many patients with cancer and contributes to psychological distress that can increase health-risk behaviors, including alcohol consumption and smoking. However, the evidence on how these factors impact emergency room (ER) utilization is limited. The purpose of this study was to determine the extent to which FI, psychological distress, and health-risk behaviors (alcohol use and smoking) are associated with ER utilization in patients with cancer.

Methods

A cross-sectional secondary analysis was conducted using the 2022 Medical Expenditure Panel Survey (MEPS) among adults (18 years or older) with cancer (N=1462). Logistic regression with adjusted odds ratios (aOR) covarying for age and applying survey design factors was used to determine: (a) sociodemographic characteristics associated with FI; (b) the relationship among FI, psychological distress, and health-risk behaviors; and (c) the independent association of FI,

psychological distress, and health-risk behaviors with any ER utilization in 2022.

Results

Of the 1462 individuals, 99 (6.8%) were classified as food insecure. The final parsimonious multivariable regression indicated significantly greater odds of experiencing FI among adults with cancer with the following sociodemographic characteristics: single, less formal education, an annual income <\$30,000, and Supplemental Nutrition Assistance Program (SNAP) recipient. FI was significantly associated with psychological distress (aOR=5.16, $p<0.0001$) and smoking (aOR=5.03, $p<0.0001$). The final parsimonious multivariable regression indicated the odds of having an ER visit were significantly higher among those who reported FI (aOR=1.91, $p=0.0370$) and psychological distress (aOR=2.50, $p<0.0001$). An ER visit was inversely related to regular alcohol use (aOR=0.57, $p=0.0325$) and age under 65 (aOR=0.47, $p<0.0001$). Smoking was not related to having an ER visit ($p>0.05$).

Conclusions

The findings indicate that FI is associated with psychological distress, and both FI and psychological distress can considerably affect ER utilization. Future interventions targeting FI and psychological distress, including routine screenings and referrals within cancer care, are needed.

SUPPO-051

SUPPORTIVE CARE ACCESS AFTER NEEDS IDENTIFICATION: A CONVERGENT MIXED-METHODS STUDY OF REFERRAL LINKAGE AND SERVICE UTILIZATION

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Introduction

Routine screening in cancer care can identify patients with supportive care needs, yet access to corresponding services remains inconsistent. We examined how identified needs translate into service use and explored mechanisms shaping whether services are offered, accepted, and used.

Methods

We employed a convergent mixed-methods design. Quantitative analysis involved a historical cohort of breast and gynecological cancer patients screened using the Distress Thermometer and Problem List, with linked referral and visit data for mapped services (Sep2019-Jun2022). We summarized the prevalence of needs, referral within three months, and service use among those referred. Multivariable logistic regression assessed factors associated with rehabilitation referral among patients with reported rehabilitation need. Semi-structured interviews with 10 cancer patients (≥ 1 -year survivorship across diagnoses) were thematically analyzed. Findings were integrated at interpretation using joint displays.

Results

Among analyzed cohort (N=2325), fatigue (32.1%), anxiety (27.8%), neuropathy (23.7%), and sleep problems (23.3%) were commonly identified. Referral rates for service-mapped needs ranged from 4.5-21.6%, with service attendance rates of 72.7-100% (Table 1). Rehabilitation referral among patients reporting need (n=1441) was less likely in patients who survived >1 year (aOR=0.63, 95%CI=0.47-0.85), and more likely in those who underwent surgery (aOR=2.9, 95%CI=1.6-5.5) or reporting practical problems (aOR=1.8, 95%CI=1.3-2.4). Qualitative findings explained the upstream access gap: patients often lacked awareness of available services and relied on clinician initiation

for service offer. Acceptance was shaped by perceived benefit and relevance weighed against time, effort, and emotional energy required to engage. While most attended once referred, navigation and administrative burdens such as scheduling and financial eligibility shaped whether services were ultimately accessed (Figure 1)

Table 1. Referral and service utilization patterns (N=2325)

Supportive care need	Associated supportive care services	Patients with reported need, n (%)	Patients with reported need referred to appropriate supportive care service, n (%)	Attended service among those who accepted referred, n (%)
Abnormal swelling in legs or arms	Rehabilitation, physiotherapy, occupational therapy	139 (6.0%)	30/139 (21.6%)	29/30 (96.7%)
Appetite	Dietetics	229 (9.8%)	11/229 (4.8%)	8/11 (72.7%)
Feeling tired	Rehabilitation, physiotherapy, occupational therapy	746 (32.1%)	94/746 (12.6%)	83/94 (88.3%)
Memory/ Concentration	Rehabilitation, physiotherapy, occupational therapy	271 (11.7%)	37/271 (13.7%)	32/37 (86.5%)
Mouth/ Swallowing problems	Speech therapy	109 (4.7%)	9/109 (8.3%)	7/9 (77.8%)
Moving around	Rehabilitation, physiotherapy, occupational therapy	178 (7.7%)	30/178 (16.9%)	25/30 (83.3%)
Pain	Rehabilitation, physiotherapy, occupational therapy, or palliative medicine	515 (22.2%)	78/515 (15.1%)	71/78 (91%)
Problems in urination	Rehabilitation, physiotherapy, occupational therapy	54 (2.3%)	7/54 (13%)	6/7 (85.7%)
Sleep problems	Rehabilitation	541 (23.3%)	74/541 (13.7%)	64/74 (86.5%)
Speech/ Hearing problem	Speech therapy	66 (2.8%)	3/66 (4.5%)	3/3 (100%)
Tingling/ numbness in feet/ hands	Rehabilitation	551 (23.7%)	76/551 (13.8%)	68/76 (89.5%)
Bathing / Dressing / Toileting	Rehabilitation, physiotherapy, occupational therapy, or palliative medicine	88 (3.8%)	18/88 (20.5%)	15/18 (83.3%)
Family/ relationship/ emotional problem(s)	Psychosocial	877 (37.7%)	172/877 (19.6%)	134/172 (77.9%)

Figure 1. Joint display of quantitative and qualitative findings.



Conclusions

Although screening identifies substantial supportive care burden, access gaps stem largely from inconsistent service offering and the complexity of patient acceptance. Strengthening systematic referral triggers and supporting patients in navigating trade-offs, especially for long-term cancer survivors, can improve access and engagement.

SUPPO-052**‘WE DON’T TREAT PEOPLE LIKE THAT’: CANCER CARE AND GENDER NORMS. A QUALITATIVE STUDY WITH TRANS AND GENDER DIVERSE PEOPLE.****Lucille Kerr***Deakin University***Introduction**

Socio-institutional functions erase trans and gender diverse people within cancer care. This includes the concept of ‘normal’, which is extensively used within biomedicine, extending to gender (e.g. that it is binary, defined by sex-at-birth). Gender bias is deeply embedded within healthcare systems and reinforced by patient-provider interactions. Emerging evidence establishes the wide-ranging harm this causes for trans and gender diverse people with cancer. This study aimed to explore the experiences of trans and gender diverse Australians with a cancer-related diagnosis in order to inform ongoing compassionate care for this underserved group.

Methods

Twelve in-depth interviews were conducted with trans and gender diverse people who had a cancer-related diagnosis. This paper revisits specific findings from previous thematic analysis.

Results

Gender norms are pervasive within cancer care, with participants expressing many instances in which healthcare providers act as arbiters for gendered stereotypes and assumptions, negate trans and gender diverse lived experiences and are dismissive of their needs. Alienation and invisibility in social/support networks and within systems were strong themes.

Conclusions

Trans and gender diverse people represent a challenge to gender norms, which may be perceived as an attack on medical authority, resulting in patient-provider interactions coloured by conflict and the enforcement of gender norms. It is important for cancer care providers and researchers to disassemble gendered assumptions and conceptualise ‘normal’ at an individual-level. Gender affirming experiences are characterised by connectedness, recognition and empathy.

SUPPO-054**INEQUITIES IN SUPPORTIVE CARE ACCESS AMONG OLDER BREAST CANCER PATIENTS LIVING ALONE IN URBAN JAPAN: A RETROSPECTIVE CASE SERIES****Yasuko Kikuchi¹**, Sachiko Taka², Noriko Nogami², Goro Kutomi¹, Mitsue Saito¹¹*Juntendo University Hospital, Breast Oncology Department, Tokyo*, ²*Juntendo University Hospital Department of Nursing, Tokyo***Introduction**

Ensuring equitable access to supportive cancer care is a growing challenge in aging societies. In Japan, despite universal health insurance coverage, older adults living alone may face barriers to supportive care related to social isolation, limited informal caregiving, and psychosocial vulnerability. This study examined inequities in supportive care access among breast cancer patients living alone in an urban setting.

Methods

We retrospectively reviewed 20 female breast cancer patients living alone treated at the Breast Center of Juntendo University Hospital. Data included age, treatment phase, availability of a key support person, employment status, treatment decision-making, psychiatric history, and comorbidities. Thirteen patients were receiving perioperative treatment, and seven were treated for recurrent or metastatic disease. Ten patients were aged 60 years or older, including eight aged 65 years or older.

Results

All patients were medically eligible for standard cancer treatment; however, access to supportive care was uneven. Treatment decisions, symptom monitoring, and timing of healthcare visits relied entirely on patient self-management. Among patients aged 60 years or older, five identified adult children as key sources of support, but two lived overseas or far away, limiting practical assistance.

All patients aged 65 years or younger were employed, and two patients aged 65 years or older remained employed. Some patients experienced employment disruptions related to cancer treatment, such as job loss or transition to part-time work, leading to financial strain and barriers to care continuity. Fifteen patients had comorbid conditions. Six patients had pre-existing psychiatric disorders, and four developed psychiatric symptoms during cancer treatment requiring concurrent psychiatric or psychosomatic care.

Conclusions

Older breast cancer patients living alone experience inequities in access to supportive care even within a universal healthcare system. Supportive care strategies that expand social support and community-based resources beyond family caregivers are needed to promote equity in aging societies.

SUPPO-055**EVALUATING THE FEASIBILITY OF A FALLS PREVENTION PROGRAM FOR OLDER PEOPLE WITH HEMATOLOGICAL CANCER****Bora Kim¹**, Traci Cook², Patricia Lynch³, Yibai Li¹, Louise Acret¹, Diana Yun², Alisha Ganesh², Young In Kim², Kate White¹¹*Susan Wakil School of Nursing and Midwifery, The University of Sydney, NSW*, ²*Cancer Services & Palliative Care, Sydney Local Health District, NSW*, ³*Health Promotion Unit, Population Health, Sydney Local Health District, NSW***Introduction**

The Stepping On program is an evidence-based, group-based, eight-week in-person intervention that supports community-dwelling older adults to reduce falls risk through education and structured exercise. This project evaluated the feasibility of delivering the program to older adults with hematological cancer.

Methods

This mixed-methods study utilised a pre-post design with semi-structured interviews. Adults aged ≥65 years with hematological cancer were recruited from a tertiary hospital in Sydney, Australia. Quantitative surveys assessed perceived content usefulness, appropriateness of program delivery, and confidence in skill application. Physical function outcomes, including leg strength and balance, were compared before and after the intervention. Qualitative interviews examined participant experiences and recommendations for program refinement, and were analysed using thematic analysis.

Results

Forty-five participants completed the program (mean age 78 years; range 65–93). Most had myeloma, lymphoma, or leukemia (59%), and 51% were receiving primary treatment. Overall, 85% rated the program as excellent. The mean attendance rate across sessions was 79%. Physical metrics improved: Sit-to-Stand test (−3 seconds, $p < 0.001$), Timed Up and Go test (−2 seconds, $p < 0.001$), and Tandem Stand test (+6 seconds, $p = 0.007$). Twenty-five participants completed post-program interviews. Three preliminary themes emerged: (1) enhanced understanding of falls-prevention strategies leading to tangible behaviour changes; (2) socialisation as an important and valued component of the program; and (3) the appropriateness of the program’s delivery method.

Conclusions

The program demonstrated the feasibility of delivering the Stepping On program to individuals with hematological cancer. High attendance rates

and interview feedback indicated that the time commitment and in-person format were acceptable and not burdensome. Given the increased risk of falls in this patient group due to frailty associated with hematological cancer and its treatment, this study demonstrates the potential value and feasibility of offering the Stepping On program to this population during and after treatment.

SUPPO-056

CLINICIAN PERSPECTIVES ON CURRENT PRACTICE, GAPS, AND OPPORTUNITIES IN SUPPORTIVE CARE FOR OLDER ADULTS WITH HEMATOLOGICAL CANCER

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Introduction

Older adults with hematological cancer often experience complex supportive care needs due to multimorbidity, frailty, and treatment-related toxicities. This study aimed to explore cancer care clinicians' perspectives on current supportive care practices for older people with hematological cancer, and to identify gaps and opportunities for service improvement.

Methods

A qualitative descriptive study was conducted at a tertiary hospital in Sydney, Australia. Semi-structured interviews were undertaken with clinicians involved in the care of older adults with hematological cancer, including hematologists, nurses, and allied health professionals. Interviews explored current approaches to supportive care, challenges in care delivery, and perceived opportunities to enhance coordinated and patient-centred care. Interviews were analysed using thematic analysis.

Results

Fifteen clinicians participated in the interviews. Three preliminary themes emerged: (1) increased vulnerability among subsets of patients; (2) the need for enhanced case-management support to address complex care needs; and (3) workload and time constraints limiting the delivery of comprehensive supportive care.

Clinicians expressed a strong commitment to providing holistic care for this patient group but described constraints within busy clinical workflows. Key gaps included limited mechanisms for early frailty-prevention interventions and for assisting patients in navigating community services and programs, challenges related to travel burden, and heightened vulnerability among patients with limited family support and those with limited English proficiency. Clinicians identified opportunities to enhance care through re-examination of clinical workflows, targeted strategies to address high-risk groups, and improved access to existing services to prevent avoidable frailty and complications and optimise quality of life for older people with hematological cancer.

Conclusions

Workload pressures and competing clinical demands were major barriers to delivering optimal supportive care for older adults with hematological cancer. Nonetheless, opportunities to enhance care remained, including redesigning clinical workflows, implementing risk-stratified care models, and better utilising existing services.

SUPPO-057

EFFECTIVE STRATEGIES TO IMPLEMENT SCREENING TOOLS FOR CLINICAL CONDITIONS REQUIRING SUPPORTIVE CARE IN PEOPLE WITH CANCER: A SYSTEMATIC REVIEW

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Introduction

Screening for clinical conditions and symptoms requiring supportive care is the pathway to access timely evidence-based care, yet there are well established barriers to regular and equitable screening. This systematic review aimed to explore the implementation strategies used to implement screening tool for clinical conditions and symptoms affecting people with cancer and evaluate which strategies are associated with achieving implementation outcomes.

Methods

A search was conducted in Medline Complete, Scopus, CINAHL Complete, PsycINFO, and Embase using four concepts: screening, implementation, cancer and hospital settings. Implementation strategies were identified using the Expert Recommendations for Implementing Change (ERIC) compilation. Proctor's framework was utilised for implementation outcomes (acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, penetration, sustainability). Thematic analysis categorised studies into groups based on similar use of the ERIC implementation strategies and were assessed against implementation outcomes.

Results

Overall, 19,312 records were screened resulting in 41 unique studies reported in 55 publications. Screening tools were most commonly implemented for distress (n=20, 50%) and malnutrition (n=6, 15%) and predominantly patient completed (n=23, 56%). Almost all studies (90%) used training and education strategies, yet when used alone or in combination with monitoring and adaptation throughout implementation, these strategies demonstrated limited potential for integration into clinical care. Implementation was most effective when broad strategies were utilised, encompassing integration into hospital systems, addressing pre-identified barriers alongside monitoring and adapting screening processes and workflows in response to feedback throughout the implementation period. Findings from this review have generated recommendations to guide future implementation (Figure 1).

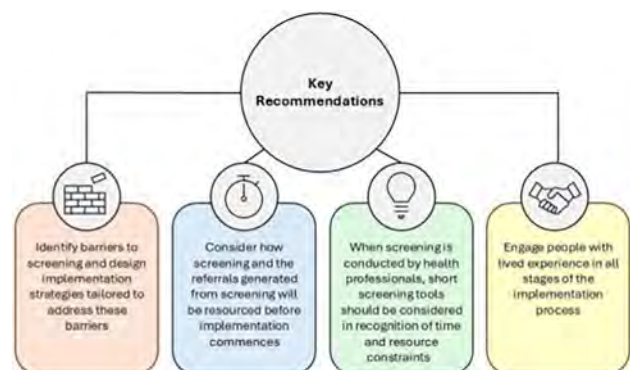


Figure 1: Key recommendations for future implementation efforts for implementation of screening tools for clinical conditions and symptoms common in people with cancer

Conclusions

The implementation of screening into routine care within health services remains a significant challenge in the context of complex and busy health care environments. Future implementation efforts should consider how screening and subsequent referrals will be resourced, design implementation strategies tailored to pre-identified barriers and engage people with lived experience throughout implementation.

SUPPO-058

PROFOUND-PROSTATE: CHANGES IN FUNCTIONAL ABILITY AND HELP-SEEKING BEHAVIOURS AMONG PROSTATE CANCER PATIENTS FROM RESOURCE-CHALLENGED AREAS IN SCOTLAND

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Introduction

People from remote and/or deprived areas are less likely to survive prostate cancer. One reason is disproportionate change in functional ability and an unequal response to it. PROFOUND-Prostate will investigate how people with prostate cancer from deprived and/or remote areas of Scotland perceive, experience, prioritise and contextualise changes in their functional ability, and what triggers (how and when) them to make decisions to seek help (or not) in relation to these changes.

Methods

This is a prospective, multiple methods project. The exploratory, repeated-measures quantitative part will involve self-reporting of functional ability and help-seeking, informed by ecological momentary assessment. The explanatory qualitative part will involve consecutive 'reflective' interviews that will follow an adapted 'story completion' approach. Participants (n=48 in total) will self-report on their functional ability by completing a weekly questionnaire for up to 24 weeks. At four timepoints (baseline, 8, 16 and 24 weeks), we will aggregate the participant's individual responses from the repeated questionnaires to create a graph. The graph will visually show the participant if/how their health status changed over the previous 8 weeks. At each timepoint, a conversational interview will support participants to reflect on any health changes as shown on the graph at that timepoint, and any health-seeking behaviours and actions related to these changes.

Results

PROFOUND-Prostate has been developed with support from Prostate Scotland registered charity. Throughout the project (2025-2027), we will work with patient representatives and members of the public from resource-challenged communities in Scotland to ensure maximum inclusivity and opportunity for involvement.

Conclusions

PROFOUND-Prostate will highlight how the tested model can be incorporated within a community context to achieve better outcomes and to reduce health inequalities for this at-risk population

by motivating/activating patients to develop, enhance or sustain self-monitoring, self-management and help-seeking behaviours to support their own health and wellbeing.

SUPPO-062

BREAST CANCER SCREENING INTENTION AND BEHAVIOR AMONG WOMEN WITH CHRONIC MENTAL ILLNESS: A HEALTH BELIEF MODEL-BASED STUDY

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Introduction

Breast cancer is the most prevalent cancer among women in Taiwan. Mammography reduces breast cancer mortality by 20–30% among women aged 50–69 years. Women with chronic mental illness may have an elevated breast cancer risk due to long-term antipsychotic use and often face barriers to screening related to cognitive impairment and psychiatric symptoms. Understanding factors influencing screening intention and behavior in this population is essential. Objective: This study examined breast cancer screening intention and behavior among women with chronic mental illness using the Health Belief Model (HBM).

Methods

A cross-sectional study was conducted between January and December 2024 in a psychiatric specialty hospital in Taiwan. A total of 160 female patients from chronic psychiatric wards who met national breast cancer screening criteria were recruited. Data were collected via interviewer-administered questionnaires, including demographics, mammography uptake during 2022–2023, psychiatric illness severity (CGI-S), breast cancer knowledge, HBM constructs, and screening intention.

Results

Patients with mild to moderate illness severity reported significantly higher screening intention than those with severe illness (51.7% vs. 35%, $p < .05$). However, no significant difference was found in actual mammography uptake between moderate and severe illness groups (91.7% vs. 86%, $p = .28$). Overall breast cancer knowledge was low (mean = 12.7/20). Higher health motivation and perceived benefits were significantly associated with greater screening intention. Greater breast cancer knowledge predicted higher intention, whereas perceived severity showed a negative association. Each one-point increase in perceived barriers reduced the odds of screening intention by 0.9-fold.

Conclusions

Psychiatric illness severity influenced screening intention but not actual screening behavior, possibly due to institutional screening promotion policies. Interventions should focus on enhancing breast cancer knowledge, strengthening health motivation and perceived benefits, and reducing perceived barriers to improve screening intention among women with chronic mental illness.

SUPPO-063

WHAT PEOPLE WITH CANCER AND CARERS VALUE MOST: INSIGHTS FOR TRANSFORMING CANCER INFORMATION AND SUPPORT SYSTEMS IN AUSTRALIA

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Introduction

Reliable information and compassionate support are vital for people affected by cancer and their carers. The Australian Cancer Council Victoria's nurse-led telephone service (131120) offers guidance, navigation, and emotional care. However, little is known about which aspects of cancer information and support service delivery are most important to users. This study aimed to measure the preferences of people with cancer and their carers for features of 131120.

Methods

An online discrete choice experiment was conducted with people with cancer and their carers, who had used the 131120 service. Participants chose between two hypothetical service options, with each iteration varying across seven features: follow-up call frequency, operating hours, additional technology, operator type, operator consistency, call length, and service fee (Figure 1). As an indication of perceived value rather than actual cost, a willingness-to-pay value was calculated, representing the highest amount in Australian dollars, participants would pay to gain a service feature.

Figure 1: Example of hypothetical 131120 service options

Feature	Service 1	Service 2
Follow-up call	None	Yes in 1 week
Operating hours	Mon-Fri 9-5pm + Sat/Sun 9-12pm	Mon-Fri 7-5pm
Additional technology	None	Video calls
Operator type	Person with cancer experience	Cancer nurse
Operator consistency	DIFFERENT person EVERY call	SAME person EVERY call
Call length	Up to 30 minutes	Unlimited
Service fee	\$0	\$50
Service you prefer	X	✓

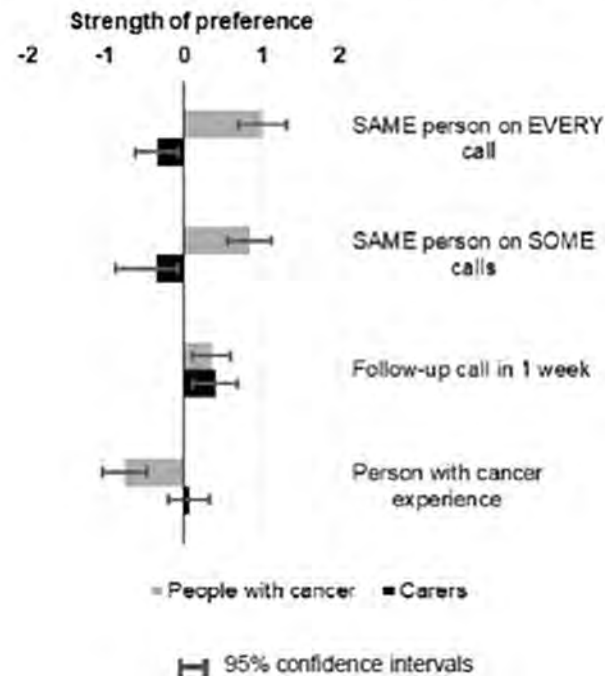
Results

Of seven features, people with cancer (n=205) most preferred 'operator consistency,' wanting to speak with the same person on every call, and least preferred 'operator type,' disliking talking to someone with cancer experience compared to a cancer nurse. Carers (n=106) most valued a 'follow-up call' within one week of the initial 131120 call, which patients also wanted (Figure 2). Carers least preferred feature was 'operator consistency.'

Whilst Cancer Council services are free, people with cancer were willing to pay up to AU\$21.71 per call (95% CI: -\$28.93 to \$72.35)

for operator consistency, while carers would pay up to AU\$20.21 (95% CI: -\$0.18 to \$40.61) for a 1-week follow-up call.

Figure 2: Strength of preferences for 131120 features



Conclusions

Results indicate that people with cancer and their carers prioritise different features in cancer support services. Understanding these varied preferences can inform decisions to tailor services and enhance access, ensuring they meet the genuine needs of those seeking cancer-related knowledge and support.

SUPPO-064

CODESIGN OF A MULTIDISCIPLINARY PREHABILITATION TOOLKIT FOR MAJOR CANCER SURGERY: THE PREP-4-CANCER SURGERY TOOLKIT

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Introduction

Growing evidence supports prehabilitation as preparation for major cancer surgery. However, limited evidence-based information is publicly available to support services to develop new cancer prehabilitation programs. This project aimed to code-sign an online, evidence-based multidisciplinary cancer surgery prehabilitation toolkit (focused on major gastrointestinal and gynaecological cancer surgery), and evaluate its usefulness and acceptability.

Methods

A series of online codesign workshops with consumers, health professionals and identified key stakeholders were conducted to iteratively develop the content, structure and functionality of the toolkit. International experts in cancer prehabilitation were identified and invited to provide feedback on the toolkit. Health professionals from three Victorian health services were then invited to review and evaluate the toolkit via a survey guided by the Theoretical Framework of Acceptability (TFA).

Results

Three online codesign workshops were held with consumers, health professionals and key stakeholders (n=22). Workshop participants iteratively codesigned the toolkit unpinned by existing evidence; with core modules including medical, nursing, exercise, nutrition and psychology; and both patient and clinician-facing resources. Six international experts in cancer prehabilitation (representing medical, exercise, nutrition, psychology disciplines) provided feedback that was incorporated into the final toolkit. Nineteen health professionals from three health services completed the evaluation survey. Seventy-nine percent of respondents reported the toolkit was acceptable, 79% reported improved confidence and ability to prepare patients before major cancer surgery and 94% stated the toolkit would have a positive impact on patient experiences/outcomes (table 1). The toolkit is freely available (figure 1).

Table 1. Acceptability outcomes

CONSTRUCT	N	%
General acceptability and confidence	15/19	79%
Understanding and purpose	14/19	74%
User experience (responded positively to the material)	16/19	84%
Perceived impact (Toolkit could positively impact patient outcomes)	17/18	94%
Perceived impact (increased knowledge in preparing patients for surgery)	17/19	90%
Individual website sections rated as helpful	19/19	100%



Figure 1. The Prep-4-Cancer Surgery toolkit website

Conclusions

The Prep-4-Cancer Surgery toolkit is an acceptable resource that supports improved access to evidence-based information and provides both patient and clinician-facing resources for developing and implementing multidisciplinary prehabilitation into clinical practice. Further evaluation of the toolkit's potential impact on improving physical, nutritional and psychological outcomes is warranted, as is expansion to include culturally and linguistic diverse resources.

SUPPO-065

COMPARING REFERRAL PATTERNS BEFORE AND AFTER THE INTRODUCTION OF PSYCHOLOGY TO A TERTIARY PSYCHO-ONCOLOGY SERVICE

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Introduction

Psychological distress is common among patients in our oncology service, with over 60% reporting emotional concerns and more than half experiencing clinically significant distress. Despite this, only 1.3% of supportive care referrals are directed to our psycho-oncology team highlighting the need for improved integration and visibility of psycho-oncology services. Historically, psycho-oncology support has been provided by psychiatry with limited integration into the oncology department model. The recent addition of a dedicated psychologist within oncology aims to improve service visibility, streamline referrals, and enhance integration. This study explores whether this integration influences referral patterns.

Methods

A retrospective observational study compares referral data from two periods: 3 months prior to the psychologist's integration and 3 months post-integration. Referral numbers, sources, and follow-up will be compared between the two periods. Statistical analysis will assess changes in referral volumes and sources.

Results

Data collection is underway and will be complete by May 2026. We anticipate that embedding a psychologist within oncology will increase referral rates and diversify referral sources, reflecting improved integration and confidence among staff in addressing psychological needs.

Findings will inform strategies for sustainable psycho-oncology integration and may provide a model for other cancer services seeking to enhance mental health care within oncology.

Conclusions

This study will offer insights into the impact of embedding a psychologist within oncology teams on referral patterns to psycho-oncology services. Early observations suggest that improved integration and visibility will lead to higher internal referral rates, potentially enhancing timely psychological care for cancer patients. Ongoing evaluation will determine whether these changes translate to better patient outcomes and sustained engagement with psycho-oncology services as a part of integrated cancer care.

SUPPO-066

INTEGRATING PATIENT REPORTED MEASURES IN A DAY ONCOLOGY UNIT: A REDESIGN APPROACH TO ENHANCING PERSON CENTRED CANCER CARE

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Introduction

The Comprehensive Cancer Care Project at Ramsay Health Shepparton aims to strengthen supportive and survivorship care by embedding routine, standardised supportive care screening within the Day Oncology Unit. Statewide audits and diagnostic findings identified inconsistent identification and documentation of supportive care needs, limited use of validated patient-reported measures, and absence of formalised processes to guide screening, escalation and multidisciplinary referrals. This work aligns with the Victorian Cancer Plan (2024–2028), National Optimal Care Pathways and National Safety and Quality Health Service Standards, delivering a more coordinated, person-centred model of care.

Methods

A rigorous healthcare redesign methodology was applied to identify current gaps and obtain sponsorship for change, incorporating structured diagnostics, workflow mapping, systematic review, and co-design with key stakeholders. Feasible, sustainable solutions were prioritised and refined.

Results

The redesign process enabled multidisciplinary stakeholders to reach agreement on a defined problem list informed by diagnostic findings and current-state workflow mapping. Collaborative solution design supported consensus on priority improvement areas and practical strategies to address gaps in supportive care screening, escalation and referral processes. Engagement across clinical, operational and executive stakeholders demonstrated readiness for change and shared ownership of the redesigned model of care. This structured, collaborative approach strengthened alignment between proposed solutions and local workflows, supporting feasibility and sustainability. Quantitative pilot outcomes, including screening uptake, documentation completeness, adherence to agreed processes and referral activity, will be assessed following completion of pilot phase.

Conclusions

This project demonstrates an innovative application of healthcare redesign methodology, with early executive engagement acting as a key enabler of change to embed patient-reported measures into routine supportive care processes and address previously unmet needs. The pilot is establishing a scalable, evidence-informed model that supports early identification of distress, timely referrals and improved coordination. Findings will guide refinement, sustainability planning and long-term integration within the health service.

SUPPO-068

HIDDEN COSTS, VISIBLE IMPACT: THE FINANCIAL AND EMOTIONAL TOLL OF CANCER CARE IN AUSTRALIA

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Introduction

Financial toxicity is a critical determinant of cancer outcomes. Australia's universal health system aims to provide essential healthcare, without financial hardship, to all Australians, however people affected by cancer continue to be substantially out-of-pocket (OOP). This study explored the differences of costs reported by magnitude and lived experiences of these costs to inform patient-centred policy and supportive care responses.

Methods

A national cross-sectional online survey of Australian adults with cancer captured quantitative and qualitative data on OOP costs. Quantitative data were analysed using generalised linear and two-part regression models to compare costs by healthcare system type (public, private, mixed). Open-ended responses were analysed using descriptive qualitative content analysis to identify recurring patterns in financial, emotional, and social impacts.

Results

Of the 171 participants with quantitative data, 98.8% incurred OOP costs in the preceding three months. Median costs were highest for people accessing services in the private health system (\$1,255 [IQR \$400–\$3,920]) and lowest for people accessing public services (\$515 [IQR \$200–\$1,700]). Private users were significantly more likely to incur specialist (OR = 5.88, 95% CI 2.56–14.29) and hospitalisation costs (OR = 33.3, 95% CI 5.56–100.0).

Content analysis revealed widespread financial strain, emotional distress, and disrupted care. Participants described delaying scans and cancelling appointments due to cost. Employment disruption was common: 38.2% identified income loss (up to \$200,000) as their greatest cost. Survivorship expenses such as compression garments and adaptive equipment created ongoing stress and anxiety. Many reported guilt over the financial and psychological burden placed on partners and/or children throughout treatment and recovery.

Conclusions

Financial costs, including OOP costs, are near-universal and extend beyond treatment into survivorship and caregiving. Financial toxicity drives treatment modification, income disruption, and persistent distress. Policy reforms must strengthen financial protection, carer support and cost transparency so that clinical need, not financial capacity, determines access to optimal care.

SUPPO-070

SUPPORTIVE CARE NEEDS OF YOUNGER BREAST AND GYNAECOLOGICAL CANCER PATIENTS WITH INDUCED MENOPAUSE: INSIGHTS FROM PATIENTS AND HEALTHCARE PROFESSIONALS

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Introduction

Treatment-induced menopause is an important, yet under-recognised aspect of cancer survivorship for many younger women, impacting

physical, psychological, emotional and social wellbeing. However, menopause-related supportive care needs within cancer settings remain poorly understood. This multi-group qualitative study explored patient and healthcare professional (HCP) perspectives regarding current menopause support and future priorities within Australian cancer care.

Methods

Semi-structured interviews were completed with: i) 30 cancer patients (25 breast, 5 gynaecological) who experienced induced menopausal symptoms prior to age 45, and ii) 27 HCPs involved in treatment and/or support of this cancer population. Patients were recruited via social media or hospital sites, and HCPs through purposive sampling and snowballing. Interviews were conducted via telephone or videoconferencing, and analysed using framework analysis.

Results

Patient participants ranged in age from 28–52 years and averaged 3 years post cancer diagnosis. HCPs practiced across public and private settings, had a mean of 22 years professional experience (range: 2–49 years) and included nurses (n=11), clinical psychologists (n=9), social workers (n=2), oncologists (n=2), breast surgeon (n=1), counsellor (n=1), endocrinologist (n=1). Four themes were identified: 1) *Entering Menopause Unprepared*- reflecting the perceived lack of preparation and unmet informational needs; 2) *Gaps and Barriers in Current Care*-including gaps in current menopause-related supports, particularly psychosocial care; 3) *Sources of Support and Self-management*- describing existing professional and self-directed menopause-focused supports; and 4) *Reimagining Menopause Support in Cancer Care*- capturing recommendations for improved menopause-related supportive care, including improved patient and partner resources, clinician education, and clearer care pathways.

Conclusions

Current supportive care for menopause-related challenges remains limited, particularly in addressing psychosocial needs of younger patients and their partners. Findings demonstrate the need for better preparation, clear and accessible information, targeted psychosocial support, and specialised training and clinical guidance to better equip health professionals in addressing these unique and complex survivorship challenges.

SUPPO-071

ENHANCED RECOVERY AFTER SURGERY (ERAS) IN SURGICAL ONCOLOGY: A PRISMA SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

Enhanced Recovery After Surgery (ERAS) protocols are multimodal perioperative care pathways designed to reduce surgical stress and accelerate recovery. While ERAS is established in many surgical fields, its efficacy in cancer surgery across diverse specialties: gastrointestinal, hepatopancreatobiliary, gynecologic, thoracic, and urologic oncology, remains under active investigation. We performed a systematic review and meta-analysis to assess the impact of ERAS on postoperative outcomes in oncology patients.

Methods

Following PRISMA guidelines, we included English-language, open-access studies (RCTs, cohort, case-control, cross-sectional) of any cancer-related surgery. Key outcomes were postoperative complication rates, hospital length of stay (LOS), 30-day readmissions, and patient quality of life (EORTC QLQ-C30). Random-effects meta-analyses were conducted when ≥ 3 studies reported an outcome.

Results

Eighty studies (n>15,000) met inclusion. ERAS significantly improved outcomes. Pooled analysis of 74 RCTs (n=9,076) showed shorter

LOS (mean difference -1.88 days, 95% CI -2.81 to -0.95) and lower complication risk (RR 0.71, 95% CI 0.59–0.87). Subgroup analyses confirmed LOS reduction in gastric cancer gastrectomy (-1.12 days), pancreatic resection (-2.49 days), lung cancer surgery (-2.70 days), and gynecologic oncology (-1.6 days). Complication rates were consistently lower (pooled ORs 0.48–0.73). Thirty-day readmissions were similar or slightly reduced (e.g., gynecologic OR 0.80, 95% CI 0.64–0.99). Quality-of-life data were limited; one lung cancer meta-analysis reported a 10-point improvement in EORTC QLQ-C30 scores (95% CI 9.59–11.02).

Conclusions

ERAS protocols in surgical oncology significantly reduce LOS and complications without increasing readmissions and may improve post-operative quality of life. These results support broad implementation of ERAS as standard care in oncology surgery. Future research should focus on standardizing ERAS elements, enhancing protocol adherence, and further evaluating patient-reported outcomes.

SUPPO-072

INCLUSION IN CANCER PREHABILITATION: QUALITATIVE RESEARCH TO EXPLORE ACCESS, ACCEPTANCE AND ADHERENCE TO CANCER PREHABILITATION

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Introduction

Prehabilitation for patients awaiting cancer treatment comprises education and/or interventions for physical activity, nutrition, and emotional well-being, delivered by a multidisciplinary team. Prehabilitation is associated with faster recovery times and improved oncological outcomes. Practical action to improve inclusion in prehabilitation is needed to reduce inequities in cancer care and outcomes. This study explored prehabilitation practices within cancer services to understand how, when, and why people engage (or otherwise) with prehabilitation.

Methods

NHS services delivering prehabilitation for adults with upper gastrointestinal, colorectal, lung, prostate, or breast cancer in Wales, UK, were included in this case study of cancer prehabilitation. Qualitative data were collected from observations of prehabilitation consultations (20 per site, 6 services/sites) and semi-structured interviews, using a sampling frame for a socioeconomically diverse sample. Seven focus groups with cancer care workers took place, one at each NHS site. Thematic framework analysis of qualitative data was conducted using an adapted version of the World Health Organisation adherence framework.

Results

We observed prehabilitation consultations with 120 patients, 45 (37.5%) from Index of Multiple Deprivation quintiles 1 or 2 (most socioeconomically deprived). Interviews were conducted with 40 cancer care workers and 36 patients. The following themes were identified to describe modifiable determinants of access to, acceptance of, and adherence to cancer prehabilitation: emotional and physical capacity, alignment of patient, family and health professional expectations, reciprocity and social connection, the prehabilitation pathway, mode of prehabilitation delivery, and individualisation and holistic approach.

Conclusions

Person-centred care and communication, alongside social support, are central to providing inclusive cancer prehabilitation. For access, acceptance, and adherence to prehabilitation to be inclusive, individuals need to understand how prehabilitation can be done to help them through their

cancer treatment and recovery. To achieve this, prehabilitation education and services need to be person-centred, flexible, and include social support.

SUPPO-075

THE COST OF CANCER: A POPULATION-BASED COST ANALYSIS OF CHILDHOOD, ADOLESCENT AND YOUNG ADULT CANCERS IN QUEENSLAND, AUSTRALIA.

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Introduction

Childhood, adolescent, and young adult (AYA) cancers represent a distinct group of malignancies that impose significant economic burdens on healthcare systems and families. This study quantified healthcare costs for children and AYAs in Queensland, Australia, from a payer perspective, and examined cost variations across the cancer care continuum.

Methods

We conducted a retrospective, population-based cost analysis using linked administrative data for individuals aged 0-39 years diagnosed with cancer between 1997 and 2015 in Queensland. Direct and out-of-pocket costs were estimated across three care phases: initial (first 12 months), continuing care (post-initial to 5 years), and end-of-life (last 12 months of life). Costs were calculated on a per person-year and standardised to 2024 Australian dollars (AUD).

Results

The cohort included 25,038 individuals: 9.2% aged 0-14 years, 15.4% aged 15-24 years, and 75.3% aged 25-39 years. Mean health system costs per person-year were highest in the end-of-life phase (AU\$118,948), followed by initial (AU\$55,869) and continuing care (AU\$22,464). Mean costs were substantially higher for children compared to AYA, particularly during the initial phase (AU\$186,594 vs. AU\$40,198). Among children, costs were highest for those with malignant bone tumours (AU\$303,771; SD AU\$207,326) and leukaemia (AU\$245,986; SD AU\$220,079). Among AYA, haematologic malignancies generated the highest costs across all care phases. Inpatient care was the primary cost driver across the continuum.

Conclusions

Healthcare costs vary markedly across age groups and cancer types. Health system costs are consistently highest for children particularly in the initial phase due to intensive inpatient care and high-cost malignancies such as leukaemia and bone tumours. These findings highlight the need for tailored resource planning and supportive care strategies to address the distinct burden across paediatric and AYA cancer populations.

SUPPO-076

IS TRANSLATION ENOUGH? PROMS PARTICIPATION AMONG CULTURALLY AND LINGUISTICALLY DIVERSE ONCOLOGY PATIENTS

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Introduction

Patient-reported outcome measures (PROMs) support patient-centred care and inform clinical decision-making. However, patients from

culturally and linguistically diverse (CALD) backgrounds consistently demonstrate lower PROMs participation compared with English-speaking patients. Language translation is commonly used to improve access, yet its impact on PROMs uptake remains unclear.

Methods

A six-month observational study was conducted in a large Victorian public oncology service. A total of 687 oncology patients (21.3% CALD) were invited to complete electronic PROMs prior to scheduled outpatient appointments (1,751 invitations). PROMs included the EQ-5D-5L, Edmonton Symptom Assessment System-Revised, and Supportive Care Needs Survey-Short Form. Questionnaires were translated into the ten most frequently used non-English languages based on hospital interpreter service data. Demographic characteristics and PROMs completion rates were compared between CALD and non-CALD patients using t-tests and chi-squared analyses.

Results

Compared with non-CALD patients, CALD patients were older (mean age 68.5 vs 63.8 years), more likely to be male (35.6% vs 24.0%), partnered (70.5% vs 56.2%), and not in paid employment (89.0% vs 73.6%), all $p < 0.05$. Thirty-five non-English first languages were recorded, most commonly Mandarin, Greek, and Vietnamese. Despite the availability of translated questionnaires, PROMs completion was significantly lower among CALD patients than non-CALD patients (38.7% vs 49.0%, $p < 0.001$). CALD patients were less likely to report that PROMs were easy to complete (Figure 1, $p = 0.002$) or took an acceptable amount of time (Figure 2, $p = 0.051$), and more likely to require carer assistance (50.0% vs 6.7%, $p < 0.001$). CALD patients used translated PROMs more than their carers (50% vs 11%, $p < 0.001$). Overall, uptake of translated PROMs by CALD patients and their carers was 25%

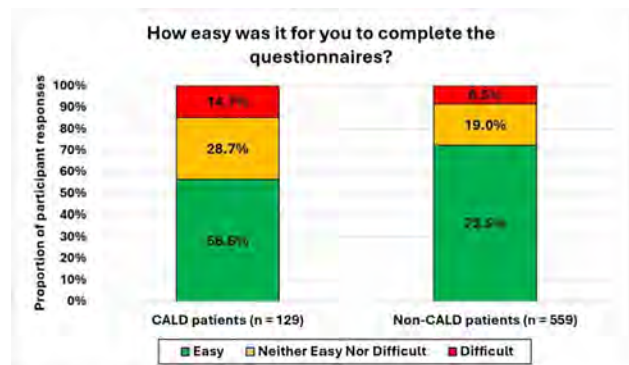


Figure 1. PROMs participants' ease of completion feedback survey responses (n=688).

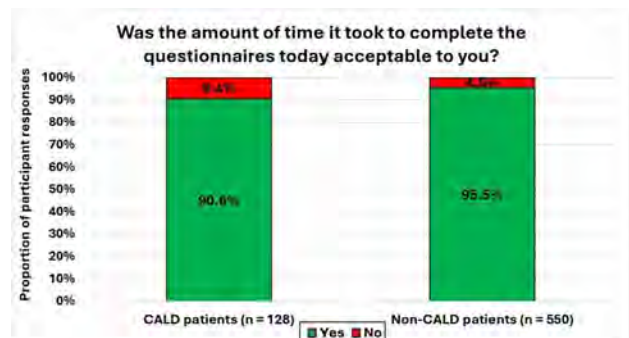


Figure 2. PROMs participants' time acceptability feedback survey result (n=678).

Conclusions

Language translation alone does not sufficiently improve PROMs participation among CALD oncology patients. Targeted, multifaceted strategies addressing broader structural, digital, and support-related barriers are needed to ensure equitable and inclusive PROMs implementation.

SUPPO-077

PERSPECTIVE OF INDONESIAN NUTRITIONISTS AND DIETITIANS MANAGING PATIENTS WITH CANCER: A SURVEY ON NUTRITION CARE PRACTICES, BARRIERS AND FACILITATORS

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Introduction

Nutrition care plays a pivotal role in supporting oncology care and improving outcomes, yet little is known about ongoing practices or the extent to which the Nutrition Care Process framework is implemented in Indonesia. This study investigated the delivery of oncology nutrition care and identified the barriers and facilitators experienced by nutritionists and dietitians in Indonesia.

Methods

A survey was designed to describe current nutrition care practices, explore perceived barriers and facilitators guided by Theoretical Domains Framework (TDF) and the Capability–Opportunity–Motivation Behaviour (COM-B) model and assess behavioural determinants influencing evidence-based oncology nutrition care. The survey was disseminated online to members of the Indonesian Dietitian Association.

Results

A total of 268 respondents completed the survey (91% female; 67.5% nutritionists; median age 34 years, interquartile range 28–41). Participants expressed strong confidence and motivation, driven by professional identity and personal fulfilment. However, awareness of international evidence-based oncology-specific nutrition guidelines was low (ranging from 11.2–44.8%), with most available only in English. Most respondents reported conducting individual components of nutrition assessment (anthropometry 91.8%, biochemical data 88.4%, physical examination 71.3%, dietary intake 95.1%), yet only 55.6% used a validated tool of malnutrition assessment. The most common facilitators to providing nutrition care were access to basic nutrition training (64.2%) and peer support (79.9%), whereas the top barriers included limited oncology-specific nutrition training (75.7%) and insufficient availability of guidelines in Indonesian (42.9%).

Conclusions

The disparity in capability and opportunity hinders the delivery of evidence-based oncology nutrition care in Indonesia, regardless of their high motivation. Addressing this disparity requires culturally adapted national oncology nutrition guidelines, wider adoption of validated malnutrition assessment tools, and expanding access to cost-effective oncology-specific nutrition training. Strengthening these areas is essential for advancing evidence-based practice and improving outcomes for patients with cancer in Indonesia.

SUPPO-078

SUPPORTIVE CARE NEEDS IN IMMUNOTHERAPY FOR HEAD AND NECK CANCER: A QUALITATIVE STUDY OF STAFF PERSPECTIVES

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Introduction

The engagement of allied health in the care of patients receiving immunotherapy for head and neck cancer (HNC) is yet to be formally established. This study explores the perspectives of the multidisciplinary team to examine current allied health services and the supportive care needs of HNC patients undergoing immunotherapy. Understanding how clinicians perceive the supportive care needs of head and neck cancer patients undergoing immunotherapy is essential for identifying gaps in current services and guiding model-of-care development.

Methods

Semi-structured interviews were completed with staff (n = 19) at two tertiary cancer services. Cancer care clinicians (allied health, nursing and medical oncologists) and team leaders/ service managers were interviewed to provide an understanding of current supportive care services and identified gaps, barriers and enablers to providing enhanced care. All interviews underwent thematic analysis.

Results

Most cancer care clinicians interviewed did not feel that current service models are meeting the needs of patients receiving immunotherapy, and expressed concern that resources are already strained. Five themes emerged: immunotherapy-specific patient factors; immunotherapy-specific service issues; current supportive care gaps; education and awareness; and future supportive care considerations.

Conclusions

Increased understanding of the role of allied health to inform high value and high-quality care pathways is needed to enable early identification and management of immunotherapy toxicities. Feedback from staff reflects that existing allied health models do not adequately meet the needs of this population, pointing to the necessity for an innovative, tailored model of care. As immunotherapy use in HNC increases, the rising volume and complexity of patients will outpace current service capacity unless new, sustainable models of care are established.

SUPPO-079

GLOBAL DISPARITY IN ACCESS TO ACUTE ONCOLOGY SERVICES: REAL-WORLD CONSEQUENCES AND TANGIBLE ACTIONS IN TACKLING THEM

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Introduction

Acute oncology services (AOS) integrate oncology expertise into acute care, linking emergency departments, oncology and medical teams to provide coordinated management of cancer-related emergencies. In

high-income countries (HICs), AOS has been demonstrated to improve outcomes via prompt diagnostics and reduced hospital stays for acutely ill patients. However, their role and potential impact in low- and middle-income countries (LMICs) remains poorly defined, despite the disproportionate burden of cancer-related morbidity and mortality in these regions. This study evaluates AOS in LMICs as a potentially cost-effective strategy to reduce global cancer care disparities.

Methods

We are conducting a global cross-sectional survey targeting clinical oncologists in LMICs using a structured questionnaire. Key domains include access to AOS, quality of acute care, workforce capacity and infrastructure. Findings will inform a Delphi study engaging experts from both LMICs and HICs to define essential AOS components and guide implementation in resource-limited settings. Subsequent projects will include pilot implementation studies, evaluation of outcomes for key oncological emergencies (e.g. neutropenic fever, cord compression, SVC syndrome), and development of international partnerships to translate consensus into scalable, sustainable AOS models of care.

Results

This is a trial in progress and data collection is underway. As of September 2025, responses have been received from 90 oncologists across more than 20 countries and 6 continents. We anticipate collecting over 250 responses to enable sufficient power for robust analysis. Findings will identify common barriers to AOS delivery and highlight opportunities for targeted intervention to strengthen acute cancer care in LMICs.

Conclusions

Preliminary insights suggest that AOS remain underdeveloped in many LMIC settings, despite their potential to significantly improve patient outcomes. The results of this study will provide critical evidence to inform future policy, guiding the development of scalable and context-specific AOS. Ultimately, this work will help to support global efforts to reduce inequalities in global cancer care.

SUPPO-083

CONSUMER LEADERSHIP IN HEALTH: WHAT WE KNOW AND WHAT'S MISSING

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Introduction

Leadership by consumers, or patient advocates, is increasingly recognized as critical to improving health system quality, safety, and equity. Yet evidence of enactment and evaluation remains fragmented. This scoping review maps what is known about consumer leadership across healthcare contexts and synthesizes enablers, barriers and impacts to support health organizations to implement and enhance integration of patient experience.

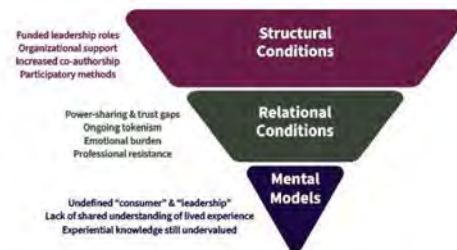
Methods

Guided by JBI scoping review methodology and using a consumer-led framework, we conducted a scoping review with consumers leading key decisions throughout. The team brought together lived experience expertise and experienced researchers, which enabled consumers to meaningfully inform the review while ensuring robust review methods.

Included papers were identified through database and grey literature searches. Studies were screened against inclusion criteria and data extracted. Data were synthesized using descriptive mapping and qualitative thematic analysis, coding barriers/enablers across four domains and impacts by system levels.

Results

180 sources met inclusion criteria. Consumer leadership was most frequently reported in healthcare services with evidence also spanning research, health professional education, advocacy and policy. Impacts were predominantly described narratively at individual, relational and organizational levels, with limited formal evaluation. Overall, structural supports appear to have increased, but less progress is evident in relational conditions and the perceived value of lived experience (Figure 1).



1).

Figure 1. Visual representation of findings, adapted from Kania et al. 2018

Conclusions

Consumer leadership opportunities have expanded structurally but remain constrained by cultural and relational conditions, perpetuating risks of tokenistic involvement rather than meaningful influence. The consumer-led approach taken in this review strengthens the relevance and credibility of the synthesis by foregrounding influence, legitimacy, and the relational conditions required for consumer leadership to be effective. These findings extend current evidence by highlighting the clear gap of growing structural support for consumer leadership without equivalent relational and cultural development which limits potential for transformational change.

SUPPO-085

NATIONAL PATHWAYS TO ACCESS TIMELY PAIN MANAGEMENT AND EARLY PALLIATIVE CARE FOR PEOPLE WITH PANCREATIC CANCER

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Introduction

People with pancreatic cancer face high symptom burden, psychosocial distress and poor prognostic outcomes. While pain management and palliative care should be a core element of care, many people access them late, or not at all. As part of Cancer Australia's Pancreatic Cancer Roadmap, this project aimed to develop evidence-based, community-informed, web-based pathways to early palliative care and timely pain management for people with pancreatic cancer. This included associated clinical guidance and implementation plans, a clinician education module and patient information about interventional pain management.

Methods

A mixed method, iterative approach where rapid literature summaries and expert review via working groups (n=44, including patients, clinicians, community members) was utilised to develop pathways incorporating a pain assessment tool, clinical guidance and educational materials (Figure 1). The pathways were then presented for review to multiple stakeholders, including consumers, Aboriginal and Torres Strait Islander community members, cultural experts, specialist and primary health care professionals (n=40) across all states and territories of Australia. Stakeholders identified barriers and enablers to implementation and recommended strategies to embed the pathways into practice.



Figure 1: Development of national pathways for access to pain management and early palliative care for people with pancreatic cancer, including associated guidance and education materials.

Results

Two pathways are presented (via QR code in Figure 2 or <https://www.pancre.org.au/pancreatic-cancer-roadmap-projects/pancreatic-cancer-pathways>); a pathway for pain management for people with resectable disease and an integrated pathway for pain management and palliative care for unresectable disease. Tailored pain assessment and clinical guidance, plus accredited clinician education and patient information materials specific to interventional pain management, were developed to support clinical application.



<https://www.pancre.org.au/pancreatic-cancer-roadmap-projects/pancreatic-cancer-pathways>

Figure 2: access to national pathways to pain management and early palliative care for people with pancreatic cancer, and associated clinical guidance and patient information.

Conclusions

The pathways provide an agreed and consistent approach to care, whereby interventional pain management and palliative care are delivered early in the course of the illness and concurrent with cancer treatment. Consultation with clinical and community sectors ensures the

pathways, pain assessment, and associated materials have relevance and potential to guide service and policy development across all care settings.

SUPPO-087

DEVELOPING AND IMPLEMENTING AN EVIDENCE-BASED FINANCIAL NAVIGATION PROGRAM FOR CANCER PATIENTS IN LOW- AND MIDDLE-INCOME COUNTRIES

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Universiti Malaya

Introduction

Financial toxicity remains a major barrier to treatment adherence and survival in low- and middle-income countries (LMICs), where high out-of-pocket expenses, income loss, and non-medical costs place devastating pressure on patients and families. Yet existing financing strategies continue to overlook critical patient-level barriers. Although financial navigation is recognised by the World Health Organisation (WHO) as an essential supportive care intervention, it remains largely absent in LMICs, creating a major and urgent opportunity to transform global cancer care.

Methods

We developed a novel, context-specific financial navigation program using a four-phase implementation science framework. Phase 1 comprised a comprehensive needs assessment through literature review, in-depth stakeholder interviews, and a modified Delphi process to identify priorities and contextual gaps. Phase 2 focused on co-designing services with clearly defined objectives, stakeholder roles, and standard operating procedures. Phase 3 involved pilot implementation with iterative refinement using Plan–Do–Check–Act cycles. Phase 4 centred on evaluation and scale-up guided by the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework.

Results

Findings from Phases 1 and 2 revealed fragmented financial support systems, poor awareness of assistance schemes, complex reimbursement pathways, and limited financial counselling capacity. In response, we established an integrated financial navigation model comprising five coordinated services: (1) medical bill navigation; (2) facilitation of insurance and government scheme access; (3) linkage to social welfare programmes; (4) financial literacy and debt management support; and (5) pharmaceutical cost assistance. Phase 3 pilot implementation is underway with ongoing iterative refinement, and Phase 4 evaluation and scale-up planning have been initiated under the RE-AIM framework. Together, these phases constitute an implementation-ready, patient-centred, and scalable supportive care model aligned with LMIC health system realities.

Conclusions

This framework offers a scalable, implementation-ready approach to addressing financial toxicity, strengthening supportive cancer care, and advancing the integration of comprehensive patient navigation in resource-limited settings.

SUPPO-088

GERIATRIC ASSESSMENT IN ONCOLOGY: REAL-WORLD AUDIT OF TREATMENT INTENT, SUPPORTIVE CARE AND OUTCOMES IN OLDER ADULTS WITH CANCER

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Introduction

Geriatric assessment (GA) is crucial for tailoring oncology care in patients aged 65 and above, uncovering risks (functional decline, comorbidities, cognition, emotional health, nutrition, polypharmacy, social support) linked to worse outcomes. It is recommended best practice per American Society of Clinical Oncology GA Global Guideline. Electronic Rapid Fitness Assessment (eRFA) plus cognitive and timed-up-and-go assessments, embed multi-domain GA into workflows. Patient electronic health records (EHR) were audited to explore and downstream care.

Methods

Retrospective EHR audit (2021–2024) of consecutive eRFA assessments ($n=298$) at a regional cancer centre Victoria, Australia. Exploratory analysis of GA impairments, treatment intent, supportive care, hospitalisations/ED and crude associations was performed. Descriptive statistics and relative risk (RR) are reported.

Results

Mean age 79.8(6.3); 58.6% male. Top cancers: lung (15.4%), colorectal (11.1%), prostate (8.1%), pancreatic (4.7%), melanoma (4.7%). Stage IV 22.8%. Impairments were common: ADL 73.5%, iADL 70.1%, Karnofsky Performance Status (KPS) 68.8%, falls 38.6%, polypharmacy 51.7%, distress 55.4%. Supportive/palliative linkage was high (73.8%). Hospitalisation 48.3%; ED 24.5%. GA aligned with some care decisions: KPS impairment with palliative intent ($RR=1.35$); polypharmacy with hospitalisation ($RR=1.35$); TUG ≥ 20 s with falls ($RR=1.87$). Referral fields (psych-onc, OT/PT, pharmacy) showed documentation gaps, limiting observed alignment.

Conclusions

Beyond confirming the high burden of geriatric vulnerabilities, this audit mapped post-assessment care trajectories, revealing alignment gaps, where GA outcomes such as polypharmacy do not consistently lead to targeted interventions like medication review, despite being highly prevalent. Strengthening supportive care pathways and clinical prompts could help ensure GA-driven interventions are acted upon, improving patient-centred care.

SUPPO-089

EQUITABLE CANCER OUTCOMES ACROSS RURAL AND REMOTE AUSTRALIA: A CROSS-SECTIONAL SURVEY ON TIME TO CANCER DIAGNOSIS AND TREATMENT, AND EXPERIENCES

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Introduction

Disparities in cancer care between rural and metropolitan residents are recognised internationally. People from rural areas often experience longer delays to cancer diagnosis and treatment, which have been associated with poorer outcomes for some cancers. However, the reasons behind rural-urban inequities are complex. This study aims to identify predictors of time to cancer diagnosis and treatment in rural and urban settings. This presentation outlines recruitment progress and demonstrates strengths of utilising cancer registries for recruiting people with cancer.

Methods

Statewide, cross-sectional survey of adults (≥ 18 years) living in Victoria, Australia, diagnosed between February 2024 and January 2025, with melanoma, colorectal, oesophageal, head and neck, lung, or prostate cancer (cancers with known rural-metropolitan survival disparities) identified through the Victorian Cancer Registry (VCR). The target sample size is 1100 (550 rural; 550 metropolitan).

Recruitment commenced in March 2025 and is anticipated to conclude by March 2026. Eligible patients are mailed a survey capturing cancer diagnosis and treatment experiences, supportive care needs, and socio-demographic information. This will be linked with registry data including demographics, cancer type, diagnosis dates and pathology. Data analysis will identify predictors of time to diagnosis and treatment.

Results

As of December 2025, 2,836 surveys have been mailed and 770 consents received (27% consent rate; 49.6% rural; 50.4% metropolitan). Consent rates were higher for rural (28%) than metropolitan participants (23%), and varied by cancer type (e.g., highest for prostate; 31%). Recruitment is on track to achieve the sample size within the expected timeframe.

Conclusions

This study will generate new evidence to inform better support systems for people living in rural areas with cancer. Understanding factors contributing to the timeliness of diagnosis and treatment and overall experience, is critical to improving cancer outcomes. Cancer registries provide effective population-based, targeted recruitment of people with diverse tumour types living in rural and metropolitan areas.

SUPPO-090

THE AUSTRALIAN LANDSCAPE OF NEEDS-ANALYSIS ASSESSMENT TO PROMOTE EQUITABLE EXERCISE AND DIET REFERRALS IN ONCOLOGY PRACTICE: THE NEEDS STUDY

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Introduction

Exercise and diet are critical components of supportive cancer care, yet referrals to these allied health specialists are infrequent. Needs-analysis assessments, to prioritise people most at risk of poor treatment outcomes, may help improve referral rates and appropriateness. However, current needs-analysis practices for diet and exercise referrals in Australian oncology settings are unknown, as are provider recommendations for improvement.

Methods

Health and medical professionals involved in cancer care (>500 hours of experience) were recruited via convenience and snowball sampling. Participants completed a survey about their service's current needs-analysis practices for exercise and diet referrals and provided recommendations for improvement. Quantitative data were descriptively summarised; qualitative responses were thematically analysed.

Results

Participants (n=100) included medical (26%), nursing (26%) and allied health (48%) professionals from public and private services across all Australian states (80% metropolitan, 20% regional-rural). Overall, 57% of professionals reported that their service used a needs-analysis assessment, most commonly for nutrition screening (29%). Common tools included the Malnutrition Screening Tool (MST), Body Mass Index (BMI), and 24-hour food recall for diet; and BMI, 6-minute walk test, and Supportive Care Needs Survey for exercise. Diet-based assessments led to referrals 38% of the time, whereas exercise-based assessments led to referral 16% of the time. A majority (62%) of respondents expressed a desire for improved evidence-based needs-analysis tools. Priorities included the need for pre-treatment screening, cancer- and treatment-specific tools, and a brief standardised tool integrating both diet and exercise. Other provider-informed recommendations for implementation and improvement will be discussed.

Conclusions

Although exercise and diet are critical to cancer care, formalised needs-analysis and referral rates remain low, with assessments often prioritising diet alone. Exercise-related assessment and referral follow-through are particularly lacking. Clinicians desire concise, standardised tools, which further research can develop to enhance referral consistency, equitable access, and patient outcomes.

SUPPO-092

ON-THE-GO: PERCEPTION OF CANCER CARE IN THE COMMUNITY

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Introduction

The National University Cancer Institute, Singapore (NCIS) established an innovative care model to expand cancer treatment into the community. NCIS On-The-Go (NOTG) is a network of clinics providing 17 low-risk treatment and nursing services. NOTG users previously reported high satisfaction rates, but 55% of patients decline this service. We sought to understand patients' motivators and barriers towards using NOTG, to increase uptake in future.

Methods

21 CA patients and 4 caregivers were recruited. Semi-structured in-depth interviews were conducted from Mar-Oct 2024. Thematic analysis was employed, utilizing an abductive approach to interpret emerging insights.

Results

Among 25 respondents, 76% were aware of NOTG and all could identify a site close to their home, yet 32% mistakenly believed it was run by non-NCIS staff. Key themes that motivated the adoption of NOTG included i) the convenience of having NOTG near home, ii) reduced travelling and waiting times, and iii) trust in quality of care. However, 27% of previous users declined to continue, citing safety concerns regarding the absence of on-site physicians, perceived staff qualifications and a smaller physical environment in the community. Interestingly, NOTG became an opt-out service (rather than opt-in) for patients receiving low risk treatments from Jul 2024, and uptake increased by 38% thereafter suggesting that patients are amenable if there is institutional endorsement and "nudging". By 2025, NOTG workload increased by 178% compared to 2021, successfully decanting 16% of suitable workload. This optimized hospital resources by saving 379 chemotherapy chair days in 2024 alone.

Table 1. Demographics of Study Participants

Demographics of CA patients	No. (%)
Cancer type	
- Breast	13 (62)
- Gastrointestinal	4 (19)
- Lung	2 (10)
- Other	2 (10)
Clinical stage	
- Early (stage 1-3)	9 (43)
- Advanced (stage 4)	12 (57)
Phase of life	
- Employed	11 (52)
- Requiring caregiver	3 (14)
Phase of treatment	
- Active treatment	10 (48)
- Maintenance treatment	11 (52)
Satisfaction with NOTG	
- Previously used NOTG	18 (86)
- Willing to continue using NOTG	15 (73)
- Decline use of NOTG	6 (27)
Mode of patients learning about NOTG	
- From healthcare worker (doctor / nurse)	16 (76)
- Through outreach materials (poster / online)	4 (19)
Patients with central venous line requiring regular flushing	7 (33)
Patients aware of following treatments available at NOTG	
- Blood tests	16 (76)
- Central venous line flushing	6 (29)
- Wound dressing	2 (10)
- Low-risk treatments (e.g. subcutaneous hormonal treatments, bone modifying agents)	11 (52)

Conclusions

NOTG is well-received but awareness of its services can be improved. Addressing patients' concerns and managing expectations through counselling by healthcare professionals, complemented by testimonials from peer advocates can potentially increase adoption, but institutional support is critical. Future NOTG sites could be co-designed with patients and caregivers to further bridge the trust gap in decentralized oncology models.

SUPPO-094

REDUCING APPOINTMENT NON-ATTENDANCE IN CANCER CARE USING THE EQUITY PROCESS FRAMEWORK: PRELIMINARY FINDINGS FROM THE REFRAME STUDY

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Introduction

Appointment non-attendance has significant and detrimental impacts on cancer outcomes, contributing to the widening of disparities between populations. Literature demonstrates that patients who fail to attend scheduled appointments often experience negative outcomes such as disease progression, higher symptom burden, failure to complete planned treatment, and reduced access to comprehensive supportive care. This study pilot tested the Equity Process Framework as a structured, strengths-based guide to address the issue of non-attendance and operationalise health equity in cancer outpatient services.

Methods

Data were collected to examine the previous two years' appointment non-attendance data in cancer care services at a large, tertiary level facility in metropolitan Queensland. A total sample of 500 individual cases were recorded (inclusive of 150 non-attenders and 350 attenders). A retrospective cohort study was conducted using routinely collected data in the electronic medical records. Dependent variables included number of missed appointments and appointment type. Independent variables included a range of socio-demographic, clinical and service utilisation variables. Descriptive statistics were generated to summarise the characteristics of populations with appointment non-attendance in the aggregate sample. Bivariate analyses were then conducted to assess associations between sociodemographic variables and non-attendance rates. Finally, hierarchical cluster analysis was performed using SPSS to identify distinct patterns within the data.

Results

A range of socio-demographic, clinical and service utilisation measures were associated with appointment non-attendance. These included socio-economic status, Aboriginal and Torres Strait Islander status and travel distance to hospital. Population outcomes included reduced treatment completion and reduced supportive care provision. Preliminary findings suggest the utility of Equity Process Framework in identifying priority populations.

Conclusions

The Equity Process Framework may provide health services with a solutions-focused tool to inform cancer equity research, policies and service improvements. Ongoing pilot research is being undertaken to evaluate the effectiveness of this framework in clinical settings.

SUPPO-095

EXPLORING VARIATIONS IN THE SYMPTOM EXPERIENCE BY SEX AND AGE: A LONGITUDINAL OBSERVATIONAL COHORT STUDY OF AN AUSTRALIAN CANCER TREATMENT UNIT

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Introduction

Cancer and its treatments can substantially impact patients' quality of life (QoL), with symptom experiences varying widely between individuals. Increasing attention is being given to the complex interplay of factors influencing symptom presentation during treatment, including demographic, psychosocial, biological, and genetic characteristics. In Australia, cancer incidence among younger people is rising, and evidence suggests that both age and sex may shape symptom experiences.

Methods

A prospective, observational cohort study was conducted using data from a single cancer treatment center in Queensland, Australia. Data were collected via a series of monthly surveys monitoring patient symptoms, levels of distress, and quality of life during the first four

months of chemotherapy administration. Symptom experience was measured using the National Cancer Institute Patient Reported Outcome Common Terminology Criteria for Adverse Event (PRO-CTCAE), Quality of life (QOL) was assessed using the Assessment of Quality of Life (AQoL-4D) and distress was measured using the Distress Thermometer (DT).

Results

Of the 252 participants who completed the baseline survey 88 were males and 164 were females. Of the 252 participants 18 (7.1%) were young (18 - 39), 96 (38.1%) were middle-aged (40 - 60), and 138 (54.8%) were older adults (61+). Across all time points females reported higher distress ($p < .001$), lower QOL ($p < .001$), higher levels of sadness ($p = .002$), and higher daily interference from fatigue and dizziness ($p = .006$) than males. Younger participants (18-39 years) reported the highest levels of sadness ($p = .006$), highest levels of distress ($p = .009$), highest anxiety severity ($p < .001$), highest depression symptoms ($p = .011$), and highest likelihood to report pain ($p = .003$).

Conclusions

Age and sex were associated with significant differences in symptom burden, distress, and QOL. Younger patients and females experienced disproportionately higher psychological distress and symptom burden, highlighting the need for deeper understanding of these groups to inform more responsive and tailored care.

SUPPO-097

ENABLING EQUITABLE CANCER CARE: AUSTRALIAN CANCER CARE PROFESSIONALS' PERSPECTIVES ON REASONABLE ADJUSTMENTS FOR PEOPLE WITH INTELLECTUAL DISABILITY

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Introduction

People with intellectual disability have the right to the same range, quality, and standard of cancer care as others, yet inequities persist across the cancer continuum. Reasonable adjustments are changes to usual approaches or processes that improve accessibility and are essential to reducing these inequities. However, limited evidence exists on the use of reasonable adjustments in cancer care. This study explored cancer care professionals' perspectives on reasonable adjustments for people with intellectual disability.

Methods

Semi-structured interviews were conducted with fifteen Australian healthcare professionals across varied cancer care roles and settings. Data were analysed using thematic analysis, guided by the COM-B Model for Behaviour Change, which conceptualises behaviour as a function of capability, opportunity, and motivation. These components served as the overarching analytical framework, under which data were deductively coded. Concurrent inductive coding enabled the construction of sub-themes within each COM-B component.

Results

Participants were unfamiliar with the term reasonable adjustments and reported minimal formal training related to supporting people with intellectual disability. Nevertheless, all participants described implementing some reasonable adjustments in practice. Participants' "capability" to provide reasonable adjustments was influenced by their experience, confidence and understanding of intellectual disability. Their "opportunity" was shaped by health service systems, staffing, time pressures, limited accessible resources and poor coordination between the health and disability sectors. Finally, their "motivation" was driven by a commitment to person-centred care, although reliance on support

networks sometimes reduced the direct involvement of the person with intellectual disability.

Conclusions

This study revealed insights into how healthcare professionals perceive and implement reasonable adjustments in cancer care. System-wide improvements are needed to strengthen workforce capability, expand accessible health information, and improve coordination between health and disability systems. Improvements in these areas will support the reduction of cancer inequities for people with intellectual disability.

SUPPO-098
PATIENT DECISION-MAKING IN HAEMATOLOGY AND IMPLICATIONS FOR SUPPORTIVE CARE TRIALS: A QUALITATIVE STUDY

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Introduction

Clinical trial participation is essential to generate high-quality evidence to inform care. Participation in clinical trials is low, but studies have shown rates of uptake is high when a clinical trial is offered. Participation in trials of supportive care interventions may be more challenging with regards to recruitment, as clinicians and patients may prioritise trials of disease-directed treatments. Patients with blood cancers have unique clinical features and relationships with their treating teams which influence the dynamic for discussions of treatment options. This study explores barriers and enablers to trial participation, including supportive care interventions, for patients with haematological malignancy, their families, and clinicians caring for them.

Methods

Descriptive qualitative study conducted at Monash Health which serves a large ethnically and socio-economically diverse population in metropolitan Melbourne, Australia. Ethics approval was obtained. Semi-structured interviews were conducted by telephone, videochat or face to face using a researcher-developed interview guide. Interviews were conducted to data saturation, and recorded, transcribed and analysed using reflexive thematic analysis.

Results

Eighteen patients (with 4 caregivers) and 7 clinicians (4 haematologists, 2 clinical trial coordinators, 1 clinical nurse consultant) participated; patient demographics are shown in Table 1. Key themes were trust, information, logistics and decision urgency with 12 subthemes detailed in Figure 1, with selected quotes summarised in Table 2.

Table 1: Patient demographics							
Characteristic		Total cohort (N=18)		Characteristic		Total cohort (N=18)	
Female		7	38.9%	Disease duration:			
Haematological malignancy:				<3 years		2	11.1%
CLL		2	11.1%	3 to 5 years		6	33.3%
Myeloma		5	27.8%	6 to 10 years		5	27.8%
MDS/AML		5	27.8%	>10 years		5	27.8%
Other lymphoma		5	27.8%	Education level completed:			
CML		1	11.1%	Early school (up to age 15)		5	27.8%
Country of birth:				High school (age 16-18)		6	33.3%
Australia		9	50.0%	TAFE or diploma		3	16.7%
Outside of Australia		9	50.0%	University		4	22.2%

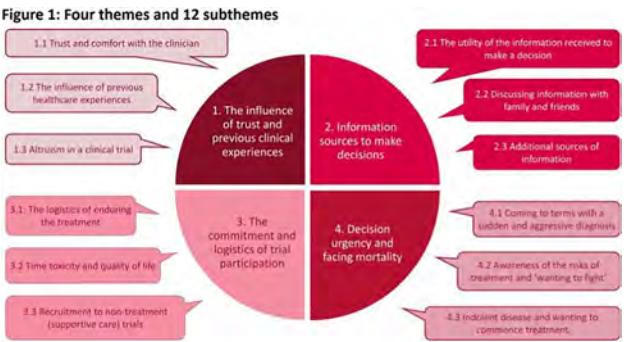


Table 2: Select quotes from participants			
Theme 1: The influence of trust and previous experiences	Theme 2: Information sources to make decisions	Theme 3: The commitment and logistics of trial participation	Theme 4: Decision urgency and facing mortality
Quotations			
"I've had great doctors and they've supported me and I supported them because I never argued" (Patient 4)	"If they're lower educational background, ... a little bit more difficulty in understanding what is asked of them." (Clinician 3)	"The appointments don't make any difference to me because I'm retired, so I have the time no matter what time they ask me to come." (Patient 11)	"It's like if you go out to dinner and it's steak and steak and steak and no choice. You don't have a choice." (Patient 6)
"Just the whole system, I really felt so well looked after over the whole journey." (Patient 14)	"... the kids said, 'Whatever you do, Dad, it's your choice' but I think they would have prayed a lot." (Patient 10)	"And I said to the family, 'It's going to be too much, the appointment and a weekend and this and that'" (Patient 12)	"I know there are risks, there are huge risks involved. If I do nothing, that's really not an option for me." (Patient 4)
"I'm happy to participate. Even if it didn't do anything for me, they might find something else for other people." (Patient 17)	"... high socioeconomic patients... they have access to the internet and Google and different views, and I think they're more open to all of this." (Clinician 2)	"If ... they're already happy with their current treatment, changing that treatment to something else... it can be harder to convince people to come onto [supportive care] trials." (Clinician 3)	"... for the doctors, it's wait and see, but for patients, it's wait and worry." (Patient 16)

Conclusions

Previous health care experiences, altruism and the level of trust in the treating clinician were important for patient decision-making about trial participation. Altruism was an important factor and patients were willing to enrol in clinical trials that may not directly benefit themselves - including supportive care studies. Clinicians reported having difficulty enrolling patients to supportive care trials and didn't identify altruism to be a key influencing factor. Tailoring information according to the specific condition, education level, cultural values and patients' needs will likely improve the patient experience.

SUPPO-100
BRINGING THE PATIENT PERSPECTIVE TO THE FORE-
FRONT: DEVELOPMENT AND VALIDATION OF A PATIENT
-REPORTED EXPERIENCE MEASURE (PREM) FOR ONCOL-
OGY CARE

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Introduction

Quality health-care delivery in oncology requires integrating the patient perspective, as individuals often navigate complex and prolonged treatment pathways. Patient- Reported Experience Measures (PREMs) allow systematic assessment of non- clinical care aspects such as communication, coordination, and shared decision- making. This study aimed to develop and validate an indigenous PREM questionnaire tailored to cancer patients receiving care in an Indian tertiary hospital.

Methods

The study followed a multi-phase approach. Phase 1A focused on developing an item pool by synthesizing validated questions from

existing PREMs and oncology-specific instruments to ensure comprehensive domain coverage. Phase 1B established content validity through qualitative interviews with 30 purposively sampled patients representing diverse diagnoses and treatment phases. Semi-structured interviews were conducted privately to elicit patient-identified priorities in care.

In Phase 2, a six-member expert panel—three oncologists and three oncology nurses—conducted a modified Delphi process. Each item was rated as “not important,” “somewhat important,” or “very important.” Consensus discussions led to the retention of 37 items from an initial pool of 51, covering communication, access, coordination, emotional support, trust, privacy, shared decision-making, and overall assessment.

The pilot study sample size was calculated at four patients per item, yielding 148; thus, 150 inpatients and outpatients were recruited. Participants completed the 37-item PREM and the validated EORTC tool. Feedback on clarity, length, and relevance was collected, with all participants affirming the importance of included questions. Validity was examined using Spearman’s correlations between scale scores and the overall experience rating.

Results

Most items showed meaningful correlations with the overall experience score (>0.3), supporting construct validity. Scale-level correlations indicated that the instrument accurately captured core dimensions of patient experience.

Conclusions

The developed questionnaire is a culturally relevant, reliable PREM for Indian oncology settings. Its strong validity supports its use for routine quality monitoring and enhancing patient-centered cancer care.

SUPPO-101

MEASURING THE IMPACT OF COMMUNITY SUPPORT GROUPS IN CANCER PATIENTS AND THEIR FAMILIES IN A MULTI-CULTURAL SETTING: A COST-BENEFITS APPROACH

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Introduction

Cancer survivors from culturally and linguistically diverse (CALD) backgrounds experience poorer health outcomes. Community organisations play an important role in improving outcomes for this demographic, by offering holistic psychological, health and practical support. Sister Cancer Support Group (SCSG) based in NSW Australia, is one such organisation providing culturally sensitive supportive care to women affected by cancer. This study uses a cost-benefit analysis (CBA) to evaluate the impact of SCSG.

Methods

A mixed methods study design was conducted including a preliminary literature review through OVID MEDLINE and development of a logic model aligning with SCSG’s ‘ESSENCE’ values. Data collection was obtained through interviews and SCSG annual reports. Sensitivity analysis of the data was conducted using basic counting principles and a 5% discount rate to rebase all costs to the current financial year 2025/2026.

Results

Annual organisational costs comprised \$11,180 in capital costs, \$13,600 in recurrent costs, and \$265 per event, with minimal regulatory costs (\$300 annually). Seventeen participants were interviewed, predominantly female (94.1%) with high linguistic diversity (nine home languages). Most consumers (87.5%) engaged with SCSG for at least one year, dedicating 2 to 4 hours per event and all expressed minimal travel burden. All volunteers had contributed for at least 2 years, with

77.7% devoting up to 10 hours monthly. All consumers recommended SCSG, reporting improvements in health literacy, physical, mental and spiritual wellbeing, and community connection.

Conclusions

SCSG represents a low-cost, community-based intervention that delivers multidimensional benefits for cancer patients from CALD backgrounds. The findings demonstrate positive impacts across health literacy, psychosocial wellbeing, physical health, and community connection, supported by sustained consumer and volunteer engagement. These results highlight the value of culturally tailored community organisations in addressing inequities in cancer care and support sustainable funding of similar models to enhance health outcomes for multicultural communities.

SUPPO-102

FROM EPROM-ASSISTED IDENTIFICATION TO SUPPORT: IMPLEMENTING THE CANCER PATIENT REFERRAL IDENTIFICATION AND SUPPORT PROGRAM (CRISP) FOR PARENTS

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Introduction

Parents with cancer face unique psychosocial challenges, and their children are at increased risk of emotional distress. Despite this, hospitals often lack systematic processes to identify and refer these families for psychosocial support. This study evaluated the iterative implementation of CRISP, a screening and referral program designed to connect parents with community-based cancer support services.

Methods

CRISP was implemented in a hospital Radiation Oncology department between June 2023 and October 2024. An electronic patient-reported outcome measure (ePROM) supported Patient Care Radiation Therapists (PCRTs) in the identification of parents of children aged 0–25 years. The program included information provision, referral offers, and documentation in the Oncology Information System. Previous formative research on CRISP showed only 48% of parents were approached by PCRTs. In this implementation project, two Plan-Do-Study-Act (PDSA) cycles were conducted, aiming to improve to $\geq 75\%$ PCRT approach and referral documentation rates. Outcomes were assessed using the RE-AIM framework.

Results

Across two PDSA cycles, 205 parents with cancer were identified, most with a breast cancer diagnosis (59.5%) and children aged 12–25 years (63.4%). Cycle 1 identified 93 parents, 64.5% had documented PCRT approach and referral outcomes; and Cycle 2 identified 112 parents, 80.4% with PCRT approach and referral outcomes documented ($\chi^2 = 6.49$, $p = 0.01$). Amongst all parents identified by the program, ePROMs directly assisted in 33%. Referral, acceptance and decline rates were recorded.

Conclusions

Iterative refinement of CRISP significantly enhanced program reach and implementation, resulting in greater parent access to information and referrals to community-based psychosocial support. PCRT-led conversations were pivotal for parent identification, with ePROMs complementing identification. Additionally, ePROMs provided inspiration and guiding data for the PDSA cycles contributing to CRISP’s long-term sustainability in routine care. These findings underscore the

importance of embedding systematic, technology-assisted screening, and a structured referral pathway into routine cancer care.

SUPPO-103

FROM ASSESSMENT TO ACTION: INTEGRATING PSYCHOSOCIAL ASSESSMENT AND SUPPORT FOR PARENTS INTO ROUTINE ONCOLOGY CARE IN ADULT AND PEDIATRIC SETTINGS.

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Introduction

Parenting during cancer, whether the parent or child is diagnosed, creates significant psychosocial burden. Parents report elevated distress and unmet support needs that negatively impact quality of life. These challenges are often overlooked in cancer care. We evaluated three interventions integrated into routine practice to address gaps in support for parents in the context of cancer.

Methods

Three distinct interventions were iteratively developed and implemented across hospital settings. These aimed to identify parents, assess distress and needs, and provide or refer to psychosocial support. Approaches varied across interventions but all included patient-reported outcomes assessment and mechanisms for referral to hospital or community services. Parents were recruited from pediatric and adult cancer services. Evaluation focused on implementation outcomes (e.g., feasibility, acceptability), effects on distress, needs, self-efficacy, referral patterns, and costs.

Results

Across four studies of three interventions, 331 parents (57 of children with cancer; 274 with cancer themselves) and 26 healthcare staff participated. Interventions showed high feasibility and acceptability across diverse contexts. Outcomes included statistically significant improvements in parental distress, support needs, and self-efficacy, enhancing quality of life (all $p \leq 0.01$). Implementation reach improved, with 80% of parents offered tailored information and referral; 14% accepted referral to community services. Mean cost for one intervention was AU\$196 per parent.

Conclusions

Systematic identification of parents, assessment of distress and needs, and referral to community services are feasible and acceptable in cancer care. These interventions improved parent wellbeing and strengthened hospital-community pathways, ensuring timely support. Integration into routine care demonstrates potential for scalable, sustainable models addressing the often-overlooked needs of parents affected by cancer.

SUPPO-104

CO-DESIGNING A PATIENT NAVIGATION PROGRAM FOR CHINESE- AND VIETNAMESE-SPEAKING PEOPLE AFFECTED BY CANCER IN AUSTRALIA: THE PEARL STUDY

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Introduction

Australia is a multicultural country, with one in five Australians speaking a language other than English at home. Culturally and Linguistically Diverse (CALD) populations in Australia face significant disparities in cancer survivorship outcomes. Complex barriers accessing supportive care lead to poorer quality of life and high unmet needs.

The “PEARL” study aims to evaluate the implementation and effectiveness of a patient navigation program for Chinese- and Vietnamese-speaking cancer survivors. The proposed program involves a hub-and-spoke model in which patient navigators support a network of trained peer navigators, delivered by trusted community organisations with strong links to multicultural communities. We present insights the co-design phase of this study which will inform a subsequent hybrid Type II effectiveness-implementation randomised controlled trial

Methods

We are conducting interactive workshops and interviews with up to 80 Chinese- and Vietnamese-speaking survivors and caregivers, and up to 50 healthcare professionals (GPs, practice nurses, oncologists, cancer nurses, allied health professionals) and community organisation representatives across five sites in three Australian states. To date, 38 people affected by cancer and 33 healthcare professionals/community organisation representatives have been recruited. Interviews and workshops will be completed by February 2026. Data are being analysed using inductive thematic analysis

Results

This research will describe the unique post-treatment experiences and unmet needs of Chinese- and Vietnamese-speaking individuals affected by cancer in Australia, alongside provider perspectives on system-level barriers to accessing care. We will highlight common challenges, identify essential culturally appropriate program components, and understand implementation barriers and strategies.

Conclusions

Prioritising lived experience and provider expertise ensures the PEARL program is optimised for real-world implementation. This work addresses disparities in supportive care for underserved communities by delivering a scalable, evidence-based solution to address barriers to supportive care for CALD people affected by cancer.

SUPPO-107

BRIDGING EVIDENCE TO PRACTICE: A SYSTEMATIC REVIEW OF REAL-WORLD NUTRITION AND EXERCISE INTERVENTIONS FOR BREAST CANCER SURVIVORS

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Introduction

Controlled trials demonstrate the efficacy of combined nutrition and exercise interventions for breast cancer survivors. Despite this, implementation in routine care remains limited, and evidence of effectiveness in real-world settings is lacking. This consumer-led systematic review aimed to synthesise evidence from real-world interventions to examine reach, effectiveness (quality of life; QoL), adoption, implementation, and maintenance using the RE-AIM framework.

Methods

Following PRISMA guidelines, five databases were searched for studies (2000–2025) evaluating combined nutrition and exercise interventions (PROSPERO: CRD42025633128). Studies of any design were eligible if they reported outcomes for ≥ 1 RE-AIM domain, in a cohort (solely or majority) of breast cancer survivors, and examined an intervention implemented in real-world conditions. Data were narratively synthesised.

Results

From 3,035 citations screened, 43 papers (36 studies) were included. Programs were predominantly delivered: via hospital outpatient (61%); in-person (81%); at least partially in group format (83%); by multidisciplinary teams (86%); either during treatment or early post-treatment (61%); and for an average of 17 weeks (range: 2 weeks to 12 months). Sample sizes ranged from 21–786 (median: 73). Most studies included mixed cancer cohorts, predominantly recruiting those with early-stage disease. QoL outcomes were reported in 67% of studies; 79% of these demonstrated a statistically significant improvement in ≥ 1 QoL score (overall or domain/subscale), with mostly sustained benefits at follow-up in the five studies reporting long-term QoL outcomes. Few studies provided details on factors related to organisational sustainment (e.g., cost). Half of the programs were reportedly ongoing at publication, though sustainability was often dependent on external funding.

Conclusions

Real-world nutrition and exercise interventions for breast cancer survivors are feasible and associated with possible QoL benefits. However, organisational sustainment remains limited, underscoring the need for funding models and implementation strategies to scale-up interventions and support long-term sustainability for all breast cancer survivors.

SUPPO-109

INSIGHTS FROM THE FIRST CBT-I INTERVENTION FOR VIETNAMESE-SPEAKING PEOPLE WITH CANCER

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Alexandra Hospital, Head and Neck Radiation Oncology, Brisbane, Queensland, ⁸Moffitt Cancer Center, Tampa, Florida, ⁹Peter MacCallum Cancer Centre, Consumer Representative, Melbourne, Victoria, ¹⁰The University of Melbourne, Melbourne School of Population and Global Health, Melbourne, Victoria; Peter MacCallum Cancer Centre, Psychosocial Oncology Program, Melbourne, Victoria

Introduction

Sleep difficulties are common after a cancer diagnosis. Cognitive Behavioural Therapy for Insomnia (CBT-I) is the gold standard treatment, but has not been tailored for people from Vietnamese backgrounds. This project aimed to evaluate the feasibility, acceptability, and potential efficacy of the first manualised CBT-I intervention for Vietnamese-speaking people with cancer.

Methods

Vietnamese-speaking people treated for cancer at a Melbourne hospital were invited via a personalised letter and phone call. Interested participants completed eligibility screening ($\geq$ mild PROMIS Sleep Disturbance; low risk of restless legs syndrome and obstructive sleep apnoea). Eligible participants were offered a 6-week CBT-I intervention with a Vietnamese-speaking clinical psychologist via telehealth. Re-screening and evaluation measures were completed post-intervention. Feasibility was assessed by recruitment and retention rates (attendance at ≥ 3 CBT-I sessions), acceptability by reported satisfaction on the Client Satisfaction Questionnaire (CSQ), and potential efficacy by self-reported changes to sleep.

Results

97 people were invited to participate (see Figure 1 for participant flow). Participants were often difficult to contact via phone and uptake was low, with 17/97 completing screening. 8/17 were eligible. 3/8 were lost to follow up, with 1 person providing feedback that consent processes were too complex. These outcomes suggest there are barriers to engaging Vietnamese-speaking cohorts in research. 5/8 commenced the CBT-I intervention and all completed ≥ 3 sessions (see Table 1 for demographics). Participants were highly satisfied with the intervention on the CSQ ($M = 28.6/32$) and showed a reduction in PROMIS Sleep Disturbance scores from $M_{pre} = 62.48$ (moderate) to $M_{post} = 50.68$ (normal).

Figure 1.

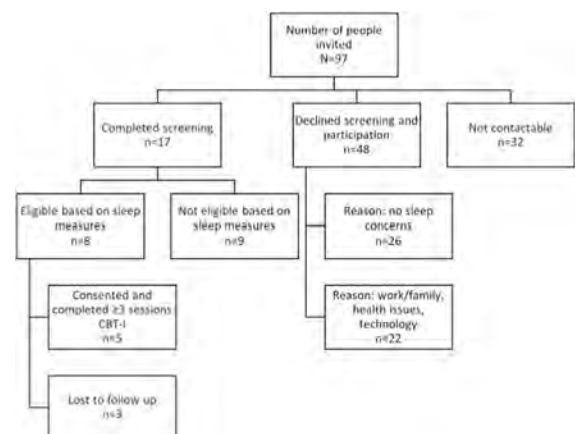


Table 1. Participant Demographics

Participant characteristics	
n	5
Age (years)	
Mean	59.4
Range	55-73
Sex	
Female	3
Male	2
Type of cancer	
Colorectal	1
Gynaecological	1
Haematological	2
Lung	1
Treatments*	
Surgery	2
Radiotherapy	0
Chemotherapy	4
Immunotherapy	2

*Some participants completed multiple types of treatment

Conclusions

Despite the small number of participants, intervention adherence was excellent and participants were satisfied. This suggests that if barriers to recruitment are reduced, Vietnamese-speaking survivors could benefit from an adapted CBT-I intervention. Further research is needed to explore and address possible cultural factors in research engagement.

SUPPO-110

PREHABILITATION FOR PEOPLE WITH BREAST CANCER IN AOTEAROA NEW ZEALAND

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Introduction

Prehabilitation, the phase before surgery or treatment, can improve current health and overall functioning to better withstand upcoming cancer treatments and outcomes. We aim to co-design prehabilitation interventions for people with cancer, with a pre-specified focus on wāhine Māori Indigenous population of Aotearoa New Zealand.

Methods

Needs and wants during the prehabilitation period were explored in focus groups for whānau with breast cancer and semi-structured interviews with healthcare providers. Data were analysed thematically in NVivo following Braun and Clarke's six-step framework.

Results

Forty-two people with breast cancer (of those 28 Māori), and 33 health-care providers participated. The most frequently identified needs were related to kori tinana le exercise and taioranga nutritional advice, followed by taha whānau, taha wairua psychosocial care and taha hinen-garo spiritual guidance. Māori patients noted that current rehabilitation services are mostly European orientated, not offered, and did not align or integrate with te Ao Māori. Key personal themes acting as both barriers and facilitators included motivation, social support, feeling overwhelmed and cultural safety. Logistical barriers and facilitator themes included timing and mode of delivery, scheduling with planning of sessions and financial constraints.

Conclusions

This study provides a ground up understanding of the prehabilitation needs, ensuring that subsequent co-design mahi is anchored in patient and whānau experience and focused on improving health outcomes for wāhine Māori. The overarching aim is that this research program will increase health equity, with prehabilitation care provided for all tāngata people with breast cancer in Aotearoa.

SUPPO-111

DEVELOPMENT OF AN ONCOLOGY NURSE AI AGENT (DIGI-COACH) TO REDUCE CANCER DISTRESS DURING RADIOTHERAPY: A PARTICIPATORY ACTION RESEARCH

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Introduction

Timely access to supportive cancer care significantly improves the overall experiences related to survivorship.

Methods

The study was conducted in two phases. The first phase was the development of a GPT-powered self-care advice chatbot link with a multidisciplinary team. The second phase was the co-construction of the main components for an app-based intervention, 'Digi-Coach,' with the Lived Experienced Advisory Panel to provide virtual supportive nursing consultation during radiotherapy. Outcomes were measured with an author-developed questionnaire including both Likert scale items and open-ended questions. Data were analyzed using the descriptive statistics and content analysis.

Results

A total of 22 patients with cancer were recruited from the community to participate in the Lived Experienced Advisory Panel. The majority of participants were female (54.5%), with a diagnosis of head and neck or esophageal cancer (36.4%). They underwent various treatment modalities, including immunotherapy, chemotherapy, radiotherapy, and surgery. One participant assessed the intervention as entirely unfeasible, while three others expressed that it was not useful, believing it could not match the effectiveness of real individuals and was unable to provide any practical services. All participants expressed their willingness to recommend it to other patients. The content analysis revealed that the majority of participants regarded it as an effective resource for gaining knowledge about the disease and self-care practices. Participants emphasized Digi-Coach as an effective virtual companion for engaging in conversation during times of loneliness or when experiencing low moods. The participants suggested further modifications to the intervention, emphasizing a more personalized tone in conversations and incorporating additional interactive features such as pictographic educational materials and voice messages. The final design of the Digi-Coach incorporates self-assessment of distress, virtual nursing consultation, and an infographic learning hub.

Conclusions

The needs for patients receiving cancer treatment at ambulatory settings and their caregivers are multi-dimensional, multi-faceted, and span across different temporal-spatial settings. A comprehensive, integrated understanding of these needs is crucial for tailoring care delivery, enhancing its quality and patient satisfaction, and ultimately advancing the goal of universally accessible, patient-centered cancer care.

SUPPO-113

THE FEASIBILITY OF EDUCATION FOR CANCER CARE WORKERS TO FACILITATE INCLUSIVE PREHABILITATION ('I-PREHAB')

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Introduction

Prehabilitation (Prehab) improves cancer treatment outcomes by supporting physical activity, nutrition, and emotional resilience. However, access and adherence to cancer prehab remains inequitable, particularly for people from minority ethnic backgrounds and socioeconomically disadvantaged communities. To address this, we co-produced online Inclusive Prehabilitation ('I-Prehab') education to help cancer care workers facilitate access and adherence to prehabilitation for all people with cancer. This study tested the feasibility of delivering and evaluating I-Prehab amongst cancer care workers.

Methods

I-Prehab was launched at four sites in the United Kingdom through a mixture of in-person, online and hybrid roadshows. The primary feasibility outcomes were recruitment to and completion of I-Prehab education. Questionnaires pre- and post-education assessed knowledge of six aspects of inclusive prehabilitation practice using bespoke questions (six-point Likert scale: strongly agree to strongly disagree), and confidence in healthcare-related communication using the Self-Efficacy 12 measure (maximum score = 120).

Results

A total of 126 cancer care workers accessed the I-Prehab roadshows and 97 completed the pre-education questionnaire (83% female). 80/97 (82%) completed all six I-Prehab modules and the post-education questionnaire. Participants who completed I-Prehab were representative of those who started. Self-reported knowledge of inclusive prehabilitation practices increased in all six areas assessed; pre-education, 51-60% reported they strongly or moderately agreed that they had knowledge in each area, rising to 96-99% post-education. Self-Efficacy-12 scores improved from median Pre: 89 (IQR 82-98); Post 106 (IQR 94.5-113.0) ($p < 0.001$) indicating an improvement in confidence in healthcare-related communication.

Conclusions

Addressing inequities in cancer prehabilitation requires targeted strategies that promote inclusivity. The results indicate recruitment to and completion of I-Prehab education and its evaluation were feasible. Knowledge of inclusive prehabilitation practices and confidence in healthcare-related communication improved. I-Prehab education offers a novel way to equip cancer care workers with the knowledge and skills needed to deliver equitable, person-centred prehabilitation.

SUPPO-114

ANCESTRY REPRESENTATION AND EQUITY IN PAEDIATRIC PHARMACOGENOMIC TESTING: A RETROSPECTIVE ANALYSIS OF THE MARVEL-PIC PROGRAM

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Introduction

Pharmacogenomic (PGx) testing is increasingly used to optimise supportive care in paediatric oncology by reducing adverse drug reactions and improving treatment tolerability. However, the evidence base underpinning PGx-guided recommendations is largely derived from adult populations of European ancestry, raising concerns about equity, generalisability, and access for culturally and linguistically diverse (CALD) children. Identifying ancestry groups with limited uptake of PGx programs, is essential to addressing disparities in individualised supportive care.

Methods

This ongoing retrospective, multi-site study includes over 600 paediatric oncology patients considered for PGx testing through the MARVEL-PIC program across four Australian children's hospitals between January 2023 and January 2026. Patients were categorised as: (1) enrolled with complete participation, (2) enrolled with incomplete participation, (3) declined participation, or (4) deemed ineligible. Self-reported ancestry and ancestry recorded in medical records, including language indicators where available, are extracted and analysed. Ancestry distributions are compared across participation categories and against Australian population and paediatric cancer estimates.

Results

Preliminary analyses indicate disparities between ancestry representation in PGx utilisation and population-based estimates. Lower uptake of PGx testing relative to ancestry distribution of paediatric oncology patients, suggests inequities in access and communication, rather than differences in disease prevalence alone. Further analyses will identify which ancestry groups experience the largest gaps across PGx access and utilisation.

Conclusions

This study will provide foundational evidence to identify ancestry groups most affected by inequities in PGx-informed supportive care. Findings will directly guide a subsequent implementation project focused on bridging identified gaps through tailored consent processes, culturally responsive engagement strategies, and improved approaches to communicating PGx information and results. Addressing these disparities is essential to ensuring equitable delivery of precision supportive care for all children with cancer.

SUPPO-116

FOOD INSECURITY AND CHEMOTHERAPY DOSE INTENSITY AMONG WOMEN BEING TREATED FOR BREAST CANCER IN THE UNITED STATES

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Introduction

An estimated 13.7% of the United States population reported food insecurity (FI) during 2024. Financial toxicity of cancer care may exacerbate existing food access and dietary quality concerns. This pilot study aimed to evaluate associations between FI and chemotherapy relative dose intensity (RDI) among women with breast cancer.

Methods

This prospective, observational study enrolled adult women who were diagnosed with invasive breast cancer and scheduled to receive cytotoxic chemotherapy at a single institution in Washington, DC between September 2024 and December 2025. FI was defined as a positive answer to either of the Hunger Vital Sign screening questions administered at a pre-chemotherapy visit. Demographics, insurance type, planned and actual chemotherapy cycle dates, dosing, and referrals for social work,

registered dietitians, and financial assistance were abstracted from electronic medical records. RDI was calculated as the ratio of chemotherapy dose received during the actual treatment duration to the planned dose during the planned duration. Fisher's Exact test was used to evaluate associations between food security status and RDI $\geq 85\%$ (yes/no).

Results

Of 33 women in the final analysis, 10 were identified as having FI. Women with FI had lower odds of receiving RDI $\geq 85\%$ compared to women who were food secure for each of five chemotherapy drugs {overall OR: 0.37 (95%CI: 0.06-2.20)}, although all confidence intervals included 1. Most women with FI (90%) received social work counselling and 60% received financial assistance, thus we were unable to evaluate associations between receiving assistance and RDI $\geq 85\%$ compared to women who did not receive assistance.

Conclusions

This small study did not find statistically significant differences in receipt of $\geq 85\%$ scheduled dose for individual chemotherapy drugs by food security status among women being treated for breast cancer. Larger, prospective studies are needed to further investigate observed trends food security, chemotherapy receipt, and supportive interventions.

SUPPO-117

ENVIRONMENTAL SCANNING BEFORE INNOVATION: A FRAMEWORK FOR EVIDENCE-INFORMED, EQUITY-FOCUSED SUPPORTIVE CANCER CARE DEVELOPMENT

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Introduction

Cancer care inequities persist not because effective supportive care solutions are lacking, but because systemic barriers prevent the identification, adoption/adaptation, and implementation of existing evidence-based initiatives. Academic and policy systems often privilege innovation over adoption/adaptation, contributing to research waste and delayed access to supportive care interventions. We propose an Environmental Scanning Framework that positions systematic assessment of existing initiatives as a prerequisite to de novo development.

Methods

An interdisciplinary collaborative process involving researchers, clinicians, health service leaders, and policy stakeholders developed the Environmental Scanning Framework through integration of established implementation science principles with literature synthesis. The framework comprises three phases: (1) Identify existing initiatives across peer-reviewed literature, grey literature, health service reports, and practice-based innovations; (2) Prioritise using structured evaluation criteria such as the Hexagon Tool and APEASE criteria to determine transferability and contextual fit; and (3) Adopt, Adapt and Implement through evidence-informed refinement using established tools such as ADAPT guidance and FRAME documentation.

Results

The framework provides systematic guidance for determining when adoption, adaptation, or innovation is most appropriate for addressing supportive care gaps. An illustrative application to rural and remote cancer care demonstrates operationalisation, identifying transferable initiatives including patient navigation programs, virtual multidisciplinary team meetings, and shared-care arrangements. The framework enables evidence-informed pathway selection: de novo development proceeds only when scanning confirms genuine gaps, contextual barriers preclude adaptation, costs favour new development, or existing initiatives lack acceptability, safety, or effectiveness evidence.

Conclusions

Embedding environmental scanning as a prerequisite to developing supportive cancer care initiatives could reduce duplication, enhance cost-effectiveness, and accelerate equitable implementation. The framework offers healthcare leaders, researchers, policy makers a practical mechanism to shift from innovation by default toward innovation by need. Advocacy for policy and practice reform, including funding structures valuing adoption/adaptation and data infrastructure to catalogue effective initiatives, is critical to ensuring communities benefit from existing evidence.

SUPPO-118

IMPROVING EQUITABLE ACCESS TO SUPPORTIVE CARE FOR VICTORIANS AFFECTED BY CANCER

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Introduction

Supportive care is essential for optimal cancer care, yet significant gaps remain in its delivery for Victorians. Regional and rural communities, as well as people experiencing socioeconomic disadvantage, face additional barriers to accessing timely support. These inequities contribute to heightened distress, financial toxicity, and poorer health outcomes. Cancer Council Victoria delivers a range of supportive care programs, including financial counselling and peer support, but access to these services is not evenly distributed. This project aims to improve equitable access to those services through a multi-faceted approach.

Methods

Financial wellbeing capacity building

To improve financial literacy support within cancer care, a new training module for health professionals is in development, enabling clinicians to better identify financial concerns and provide accurate, timely information for people experiencing financial vulnerability at diagnosis. Complementing this, new consumer-friendly financial wellbeing resources are in development to address key knowledge gaps identified in a recent survey of people affected by cancer. Additionally, feedback mechanisms have been introduced to ensure referring health professionals are notified of referral outcomes, enhancing continuity of care and improving provider awareness of patient needs.

Diversification of peer support programs

To better support Victorians who speak a language other than English or live in regional or rural areas, recruitment efforts have focused on diversifying the volunteer pool of our peer support program, Cancer Connect. The program has also been expanded to support people living with advanced or metastatic cancer. The transition from in-person to online, self-paced volunteer training has further increased accessibility for regionally based volunteers.

Results

Project activities are progressing, with detailed outcomes to be presented at the conference.

Conclusions

Strengthening financial wellbeing support, expanding peer programs, and increasing volunteer diversity will help reduce barriers for regional, financially disadvantaged, and culturally diverse communities. Full outcomes will be shared at the conference.

SUPPO-119

COMORBIDITY-RELATED OUTCOMES AND HEALTHCARE EXPENDITURES AMONG ADULTS WITH CANCER

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Introduction

Comorbidities are prevalent among adults with cancer and require substantial medical attention. However, evidence is limited on how cancer affects healthcare utilization and expenditures for non-cancer comorbidities. This study compares healthcare expenditures and health outcomes between patients with comorbidities who have cancer and those without.

Methods

This longitudinal analysis used the Medical Expenditure Panel Survey (Household Component) 2008–2014 cohort. Participants with one or more of 19 chronic conditions (ICD-9 coded; Figure 1) relevant to primary care were classified by self-reported cancer history. Outcomes from the second year of each panel (2009–2015) included comorbidity-specific healthcare utilization, expenditures (total and out-of-pocket), functional status, HRQoL, and health utility (Table 1). Cost differences conditional on positive expenditures were analyzed using generalized linear models (gamma regression with log-link), adjusting for covariates.

Results

A weighted total of 24,057,137 adults with ≥ 1 comorbidity (age 58.3 ± 15.8 years; 59% female) were included, of whom 10% ($n=2,393,300$) reported a history of cancer. Compared with non-cancer patients, cancer patients received more comorbidity-specific home-health visits (OR=2.01; 95% CI=1.13–3.57) but had lower total comorbidity-specific expenditures (OR=0.81; 95% CI=0.71–0.92). Cancer patients incurred lower comorbidity-specific hospitalization costs and out-of-pocket expenditures for emergency department visits ($p<0.05$). Specifically, they had lower total costs for arthritis and stomach problems, and lower out-of-pocket costs for thyroid problems and osteoporosis (Figure 1). Among patients with ≥ 2 conditions, cancer patients had lower out-of-pocket costs for emergency department visits (OR=0.42; 95% CI=0.26–0.68). Regarding health outcomes, cancer patients with depression reported greater functional limitations, lower HRQoL and health utility than non-cancer patients with depression (Table 1). Similar trends were observed for cancer patients with musculoskeletal disorders and urinary problems.

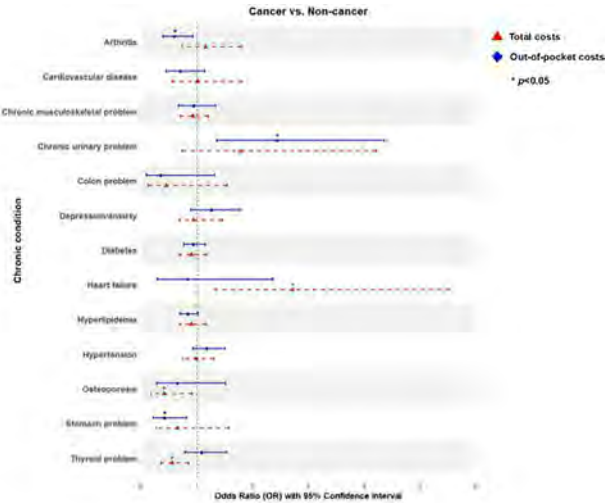


Figure 1. Comparison of comorbidity-specific total costs and out-of-pocket costs between cancer and non-cancer patients across various chronic conditions, adjusting for clinical, socioeconomic, and lifestyle covariates. Chronic lung problem was not presented due to imprecise estimates. Chronic liver disease, dementia, obesity, stroke/transient ischemic attack, and chronic kidney disease were not presented due to the proportion of patients with positive expenditures being less than 1%.

Table 1 Comparison of health outcomes between cancer and non-cancer patients with concomitant depression

Outcomes	Cancer patients (n=2,393,300)	Non-cancer patients (n=21,663,837)	P
SF-12 Physical component scores, mean (SE)	39.46 (1.09)	42.47 (0.42)	0.035
SF-12 Mental component scores, mean (SE)	38.45 (1.03)	40.05 (0.37)	0.49
SF-6D health utility, mean (SE)	0.66 (0.01)	0.65 (0.005)	0.001
Instrumental activities of daily living limitations, % (95% CI)	33.5 (31.1, 35.9)	17.1 (15.0, 19.2)	0.010
Activities of daily living limitations, % (95% CI)	9.7 (8.0, 13.5)	9.5 (7.9, 11.0)	0.88
Limitations in physical functioning, % (95% CI)	44.8 (38.6, 51.0)	47.8 (44.9, 50.8)	0.35
Cognitive limitations, % (95% CI)	45.0 (37.8, 52.2)	36.2 (33.4, 39.1)	0.029
Social/recreational limitations, % (95% CI)	25.7 (20.2, 31.1)	28.2 (25.7, 30.8)	0.37
Work/home/school limitations, % (95% CI)	59.3 (52.6, 66.0)	50.6 (47.8, 53.3)	0.016

Multivariable linear regression models were used for continuous outcomes and multivariable logistic regression models for binary outcomes, adjusting for clinical, socioeconomic, and lifestyle covariates.

Conclusions

Cancer patients with comorbidities experienced greater functional limitations yet lower comorbidity-related healthcare expenditures than non-cancer patients, suggesting potential disparities. Primary care resources should be prioritized for cancer patients with concomitant depression, musculoskeletal disorders, and urinary problems.

SUPPO-120

RECOVERY STAGE-SPECIFIC COMPREHENSIVE MULTI-COMPONENT INTERVENTION AFTER ESOPHAGECTOMY

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Introduction

Patients underwent esophagectomy experience significant nutritional challenges that vary by postoperative recovery stage. However, current interventions often fail to address these complex needs effectively. This study evaluated the feasibility and effects of a tailored nutritional intervention incorporating protein care foods and structured meal planning according to recovery stage.

Methods

This single-arm intervention study was conducted between April and December 2025 at Samsung Medical Center and enrolled 30 patients who underwent esophagectomy. Participants were classified into three recovery stages: within 1 month (Stage 1), 2–3 months (Stage 2), and 5–6 months (Stage 3). The intervention included individualized nutritional targets, stage-specific high-protein care foods (six meals/day) and meal plans, daily monitoring of body weight, dietary intake, and guideline adherence using food diaries and photographs, wearable-based physical activity monitoring, and weekly telephone counseling. The program was delivered for 4 weeks in Stages 1 and 2 and for 1 week in Stage 3. Nutritional status, fatigue, quality of life (EORTC QLQ-C30), and adherence, satisfactions were assessed before and after the intervention.

Results

Thirty patients (28 male) completed the program and the mean age was 62.9. In Stage 1, although body weight decreased (−7.0%), nutritional biomarkers including prealbumin and prognostic nutritional index improved, accompanied by reduced fatigue and a 13.4-point increase in global health status. In Stage 2, weight loss was minimal, muscle mass increased, PG-SGA-SF scores decreased, and global health status score improved by 9.7 points. Adherence to nutritional guidelines increased by over 15% in both stages. Patients in Stage 3 reported persistent gastrointestinal symptoms but showed modest improvements in nutritional indicators. Overall adherence and patient satisfaction were high.

Conclusions

This stage-specific nutritional intervention was feasible and associated with favorable changes in nutritional status, fatigue, and quality of life after esophageal cancer surgery, supporting further evaluation in larger intervention study.

SURVI-003**MAPPING CANCER SURVIVORSHIP EDUCATION: A REVIEW OF CURRICULA AND LEARNING OUTCOMES**

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Introduction

An educated workforce is essential to improve and advance cancer survivorship care, yet the core learning components of cancer survivorship education are poorly described. The MASCC Survivorship Study Group (SG) sought to complete a review of existing cancer survivorship specific curricula to identify learning outcomes and inform future curricula.

Methods

Published cancer educational frameworks and educational offerings with cancer survivorship content were identified from Thamm and colleagues (2024) Scoping Review, published literature, internet search and through the MASCC Survivorship SG. Data extraction included cancer survivorship-specific and general learning outcomes/competencies, and the presence, domain and assessment of capabilities in practice.

Results

We identified 22 frameworks and 1 postgraduate curriculum, published 2009 to 2024 and from the USA (n=6), UK (n=6), Australia (n=4), Ireland (n=2), Canada (n=1), Europe (n=1), Hong Kong (n=1), New Zealand (n=1) and South Africa (n=1). Twelve were generic cancer nursing frameworks, 3 referred to nursing and allied health professionals, 4 to children and young people, 3 were disease specific (lung, prostate, and breast cancer). The terms learning outcomes, competencies and capabilities were used interchangeably and were described from foundational to advanced levels of practice. Survivorship-specific learning outcomes were 1. Psychosocial care, 2. Long-term and late effects, 3. Surveillance/follow-up, 4. Co-ordination of care, and 5. Health Promotion. Competencies and capabilities in practice included 1. Holistic patient-centred assessment, 2. Management of key survivorship conditions, and 3. Health promotion including self-management and health-behaviour change. General learning outcomes embedded across frameworks were broadly related to research, professional practice, leadership, patient-centred care and the fundamentals of cancer care.

Conclusions

This review identifies common themes across existing frameworks and curricula. Findings from this review will inform the design of comprehensive training programs that equip healthcare professionals with the competencies required to deliver high-quality survivorship care.

SURVI-006**BEYOND SURVIVAL, BEYOND TABOO: ONCO-MENOPAUSE CARE IN MOROCCO — A MOASCC NATIONAL SURVEY**

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Introduction

For many women surviving cancer, menopause symptoms are not a side note—they are daily, life-shaping challenges. Hot flashes, sleep disturbance, sexual pain, and genitourinary syndrome remain under-recognized and undertreated, especially after breast cancer. While survivorship is improving, onco-menopause care still sits at the intersection of clinical uncertainty, cultural taboo, and limited resources. Questions persist around when—and whether—to use vaginal estrogens or menopausal hormone therapy (MHT), particularly in low- and middle-income settings.

Methods

To map how Moroccan clinicians currently approach onco-menopause and to pinpoint practical gaps that hinder equitable, evidence-based care, the Moroccan Association of Supportive Care in Cancer (MoASCC), an affiliate of MASCC, conducted a prospective national cross-sectional survey using an anonymous, web-based questionnaire distributed to professionals engaged in cancer and survivorship care (medical/radiation oncologists, gynecologists, general practitioners, urologists). Domains included provider demographics, clinical exposure to survivors, prior menopause training, and attitudes toward non-hormonal options, vaginal estrogens, and systemic MHT. Case vignettes probed real-world decisions for vulvovaginal atrophy and vasomotor symptoms by hormone receptor status and disease stage, with emphasis on breast cancer.

Results

This first national snapshot of onco-menopause practice in Morocco will:

- Reveal where practice converges—and where it diverges.
- Surface safety perceptions and decision thresholds around vaginal estrogens and MHT.
- Identify training needs and system barriers across specialties.
- Inform pragmatic, context-adapted guidance aligned with MASCC priorities and the Supportive Care 2030 vision.

Conclusions

Moving beyond survival means treating what patients live with every day. By illuminating current practice and its gaps, this study lays the groundwork for safer, culturally responsive, and scalable onco-menopause care in Morocco. Ready access to symptom relief should not be a privilege—it should be standard supportive care.

SURVI-009**CHARACTERIZING SYMPTOM SEVERITY AND PATTERNS OF CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY IN BLACK BREAST CANCER SURVIVORS**

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Introduction

Breast cancer survivors are living longer due to advancements in cancer treatment, heightening the need for more research on their ongoing care needs, particularly for Black breast cancer patients who experience significant differences in treatment outcomes. Breast cancer survivors experience unique uncertainties regarding long-term treatment-related side effects and their impact on quality of life (QOL). Chemotherapy-induced peripheral neuropathy (CIPN) is a common side effect that significantly impacts QOL, yet limited research exists on CIPN among Black breast cancer survivors. Research shows that over 30% of breast

cancer survivors treated with chemotherapy experience some degree of CIPN in their first-year post treatment. This current study examines CIPN's characteristics and severity in Black breast cancer survivors at 1-year post-chemotherapy.

Methods

This cross-sectional survey study examines the occurrence, symptom presentation, and severity of CIPN in $N = 125$ early-stage (I–III) Black breast cancer survivors 12 months after completing taxane-based chemotherapy. CIPN symptoms are assessed using the validated EORTC QLQ–CIPN20. Participants are recruited from two Atlanta institutions: a large urban academic medical center (NCI-designated Cancer Center) and a large urban public hospital. Descriptive statistics will summarize demographic and clinical variables, and correlations will assess relationships between CIPN severity and patient characteristics. We hypothesize that distinct survivor subgroups will emerge based on symptom patterns and severity levels based on EORTC QLQ–CIPN20 responses.

Results

Participant enrollment is ongoing, with over 40 subjects enrolled, and data collection is in progress. Early differences in CIPN symptom burden and presentation have emerged in this preliminary sample of survivors with unique demographic and care characteristics linked to symptom presentations. Results will be available and presented at the MASCC conference.

Conclusions

As one of the first multi-site studies examining symptoms among Black breast cancer survivors this work will help improve treatment outcomes to promote inclusivity and reduce care gaps among breast cancer survivors.

SURVI-010

EXPANDING ACCESS TO SUPPORTIVE CARE IN BREAST CANCER: OUTCOMES FROM THE PINK RIBBON SUPPORT GROUP, A SINGLE-CENTRE COMMUNITY-DRIVEN INITIATIVE

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Introduction

The Pink Ribbon Support Group, established 17 years ago by Prashanti Cancer Care Mission in 2009, addresses critical gaps in psychosocial support and information for breast cancer patients. It provides a compassionate, inclusive community with a focus on emotional support, knowledge sharing, and sustained engagement. The group helps connect newly diagnosed patients with local support group volunteers who help address the patient's needs in a personalized way. Through regular monthly webinars, educational sessions, and community-based programs, the group has evolved into an accessible supportive-care platform for over 3000 members of which 500 members are part of an active whatsapp community. This abstract presents the methodology and preliminary findings of a survey evaluating its impact

Methods

Structured 25-question survey was administered to all 500 members of the Pink Ribbon Support Group, yielding 350 responses (70% response rate). Survey captured demographic data, participation patterns, perceived knowledge gains, and overall satisfaction.

Results

Among 350 respondents, 286 (81.7%) were breast cancer patients, 31 (8.9%) caregivers, and 33 (9.4%) others. Of the patients, 61.2% were below 60 years of age, with a median age at diagnosis of 50 years. A total of 185 (64.7%) were breast cancer survivors, while 101 (35.3%) were undergoing active treatment. Over 80% (153/185) of survivors

reported that the support group was beneficial throughout their cancer journey. Nearly half (47.82%) reported significantly improved knowledge regarding breast cancer and its treatments, attributed to regular interactions, webinars, and peer discussions.

Conclusions

This survey highlights the Pink Ribbon Support Group as an effective model for bridging gaps in supportive care for breast cancer patients in India. By combining peer support, digital platforms, and structured monthly educational programs, the group enhances access to emotional support and reliable information. These findings offer valuable insights to enable the development of equitable, patient-centered supportive care strategies.

SURVI-012

EVALUATION OF COST-EFFECTIVENESS OF COMMUNITY-BASED SURVIVORSHIP CARE FOR COLORECTAL CANCER (CRC) BEYOND 5 YEARS POST-DIAGNOSIS

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Introduction

Although the annual risk of CRC recurrence beyond five years post-diagnosis is low (<1.5%), long-term survivorship care continues to place demands on specialist services and patients. Optimising care delivery while maintaining safety and patient experience is a key survivorship priority. The National University Cancer Institute, Singapore (NCIS) implemented a structured programme to transition CRC survivors beyond five years from diagnosis to community-based primary care. We evaluated the safety, healthcare utilisation, costs, and patient satisfaction of this survivorship care model.

Methods

Between July 2018 and April 2025, CRC survivors >5 years from diagnosis with no evidence of recurrence were prospectively enrolled for transition and followed for recurrence. Healthcare utilisation and costs (specialist consultations, carcinoembryonic antigen [CEA] tests, CT scans, and colonoscopies) were analysed. Patient satisfaction was assessed via telephone-administered surveys.

Results

As of April 2025, 718 patients were eligible for transition. Median age was 72 years, 56% were female, and disease stages were stage I 13.4%, II 33.1%, III 46.1%, and IV 4.2%. Median time since diagnosis was 6 years (range 5–32). Overall, 66.0% ($n = 474$) were transitioned to primary care (Group A), while 34.0% ($n = 244$) continued specialist follow-up (Group B); 75.8% of Group B were not offered transition and 24.2% declined. Group A had significantly fewer specialist consultations, CEA tests, and CT scans (all $p < 0.001$), and fewer colonoscopies ($p = 0.015$). Mean costs were lower for consultations (\$436 vs \$1165), CEA (\$10.0 vs \$30.6), and CT scans (\$134 vs \$340), with an overall cost reduction of \$1022 per patient (95% CI \$674–\$1370; $p < 0.001$). Recurrence rates were low and comparable (Group A 0.8% vs Group B 2.5%; $p = 0.10$). Patient satisfaction ($n = 255$) was high (80%), with reported reductions in travel time, waiting time, and transport costs.

Conclusions

Community-based follow-up for long-term CRC survivors is safe, acceptable, and cost-effective, supporting sustainable survivorship care delivery.

SURVL-013**EXPLORING ARTIFICIAL INTELLIGENCE: EVALUATING THE EFFECTIVENESS OF CHATGPT-4O IN ADDRESSING QUERIES ABOUT ARM LYMPHEDEMA IN BREAST CANCER SURVIVORS**

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Introduction

Artificial intelligence (AI) chatbots, such as ChatGPT-4o, allow interactive, accessible platforms for patient education. This study evaluated the correctness and completeness of ChatGPT-generated responses to questions on the prevention and management of breast cancer-related arm lymphedema (BCRAL).

Methods

Fifteen patient-centred questions were developed based on the Multinational Association of Supportive Care in Cancer (MASCC) consensus of clinical practice guidance for the prevention of breast cancer-related arm lymphoedema (BCRAL), and an international consensus of multidisciplinary preventive intervention for BCRAL. Corresponding ChatGPT-4o responses were generated using a new, unbiased account, with each question entered into a separate chat. Three experts independently rated responses for correctness (1–6 scale) and completeness (1–3 scale), and provided written feedback. Quantitative and qualitative data were analyzed to identify patterns and limitations.

Results

ChatGPT-4o achieved a mean correctness score of 5.24 ± 0.636 and a mean completeness score of 2.59 ± 0.488 . Highest-rated responses addressed symptoms of BCRAL, the role of compression sleeves, arm movement, suggested exercises, and recommended diet. Lower-scoring topics included guidance on common risk factors, preventative care at home, early recommended treatment, and prophylactic compression sleeves. Reviewers also noted concerns about responses that cited limited evidence, such as avoiding bloodwork for the care at home topic, as well as mixing evidence for prophylactic use with use for early symptoms. When comparing

with the MASCC guidelines, topics of symptoms of BCRAL, common risk factors, early treatment, movement, and diet recommendations were strongly aligned.

Table 1: Summary of Expert Feedback and Consensus Alignment for ChatGPT-4o Responses

Question	Topic	Key Strengths and Issues Highlighted
1	Symptoms	Completely correct and complete. Aligned and in-depth.
2	Common Risk Factors	Lacked strong evidence for some provided examples. Other examples were correct, complete, and aligned with the consensus.
3	Post-surveillance Program Screening	Covered current evidence of surveillance programs. Lacked mentions of a risk-stratification approach.
4	Diagnostic screening methods	Accurate overall, but unclear diagnostic thresholds for each method.
5	Care at home	Lacked proper clinical evidence. Misleading placement of some recommendations.
6	Early recommended treatment	Accurate and safe recommendations. Concern over omission of re-assessment/close monitoring by healthcare providers.
7	Compression sleeve usage	Covered current recommendations and aligned.
8	Axillary treatment alternatives	Alternatives were clear, but omitted clinical trials and did not directly mention arm lymphedema.
9	Prophylactic compression sleeves	Misleading conflation of prophylactic use with compression for early symptoms. Lack of evidence for recommendations.
10	Starting prophylactic compression sleeves	Lack of strong clinical evidence. Prioritized editorial commentary over actual methodology.
11	Axillary reverse mapping	Accurate and complete. Aligned with best practices.
12	Prophylactic lymphatic reconstruction	Mostly clear and clinically appropriate information. Suggestions to mention long-term follow-ups, as well as to specify that the procedure is experimental.
13	Arm movement	Complete and accurate. Could be strengthened by mentioning future high-intensity training after full recovery.
14	Exercises	Nearly complete and correct. Minor suggestions to recommend gradual and progressive heavy lifting.
15	Diet recommendations	Aligned with best practices. Clear and accurate recommendations.

Table 2: Mean scores for correctness and completeness of responses to the 15 questions about breast cancer-related arm lymphedema for ChatGPT-4o

Question	ChatGPT-4o		
	Mean	SD	Median (IQR)
Correctness			
1	6	0	6 (0)
2	4.333333333	0.5773502692	4 (0.5)
3	5.333333333	1.154700538	6 (1)
4	5	1	5 (1)
5	3.666666667	0.5773502692	4 (0.5)
6	4.666666667	0.5773502692	5 (0.5)
7	6	0	6 (0)
8	5	1	5 (1)
9	5.333333333	1.154700538	6 (1)
10	4.333333333	2.081665999	5 (2)
11	6	0	6 (0)
12	5	1.414213562	5 (1)
13	6	0	6 (0)
14	6	0	6 (0)
15	6	0	6 (0)
Overall Performance (n=15)	5.244444444	0.6338220964	5.4 (0.5667)
Completeness			
1	3	0	3 (0)
2	2.666666667	0.5773502692	3 (0.5)
3	2.666666667	0.5773502692	3 (0.5)
4	2.666666667	0.5773502692	3 (0.5)
5	2.666666667	0.5773502692	3 (0.5)
6	2.666666667	0.5773502692	3 (0.5)
7	3	0	3 (0)
8	1.666666667	0.5773502692	2 (0.5)
9	2.333333333	0.5773502692	2 (0.5)
10	2.333333333	0.5773502692	2 (0.5)
11	3	0	3 (0)
12	2	1.414213562	2 (1)
13	2.666666667	0.5773502692	3 (0.5)
14	2.5	0.7071067812	2.5 (0.5)
15	3	0	3 (0)
Overall Performance (n=15)	2.588888889	0.4878315178	2.7 (0.4)

Conclusions

Although the responses were accurate for a majority of topics, the responses were limited by non-evidence-based responses, as well as providing inadequate examples. While ChatGPT-4o may be able to provide a quick reference for patients’ questions, clinical guidance remains highly important to ensure patient-centred care.

SURVI-014
DEFINING GUT-HEART AXIS INTERACTIONS IN A PRE-CLINICAL MODEL OF CHEMOTHERAPY-INDUCED CARDIOTOXICITY

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Introduction

Cardiovascular disease (CVD) is the leading cause of death in cancer survivors. Although acute cardiotoxicity caused by cancer therapies is known to contribute to CVD risk, more nuanced and modifiable mechanisms remain unknown. An emerging body of evidence positions the gut microbiome as a major influencer of cardiovascular function, and when disrupted, can drive cardiovascular pathology. Given that the gut microbiome is profoundly damaged during cancer therapy, chemotherapy in particular, it is hypothesised that microbiome alterations contribute to CVD risk by accelerating subclinical cardiotoxicity. The objective of this study is to develop a preclinical model to evaluate microbiome-CVD interactions in the context of chemotherapy and use this model to determine if microbiome-targeted therapies can reduce CVD risk after chemotherapy.

Methods

Six-week-old ApoE-deficient C57BL/6J mice (mixed sex) commenced an atherogenic high-cholesterol diet for 6 weeks to induce subclinical CVD. Mice were then randomised to receive either a single intraperitoneal bolus dose of the chemotherapeutic agent, 5-FU (250 mg/kg; N=12), or vehicle control (N=12). Atherosclerotic burden will be assessed by aortic sinus plaque quantification (Oil red O) and plasma total cholesterol levels. Temporal gut microbiome dynamics will be evaluated using 16s rRNA sequencing and metabolomic analyses on serially collected faecal and plasma samples, respectively.

Results

Results are anticipated by May, with this model designed to determine whether a clinically relevant dose of 5-FU accelerates atherosclerotic plaque progression and induces vascular inflammation in a cardio-metabolically susceptible background. Longitudinal sampling will allow assessment of temporal gut microbiome alterations following 5-FU exposure and their potential alignment with emerging vascular pathology.

Conclusions

This study will establish a foundational model for investigation 5-FU-induced cardiotoxicity within a clinically relevant cardiovascular risk context. Outcomes will determine whether 5-FU accelerates atherosclerosis progression and identify temporal windows in which gut microbiome alterations may signal or contribute to cardiotoxic processes, informing future microbiome-targeted intervention studies.

SURVI-015
REVERSING SPICE NON-TOLERANCE- A CULTURALLY RELEVANT AND UNDER-RECOGNIZED ISSUE IN HEAD AND NECK CANCER SURVIVORS

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Introduction

Head and neck cancer (HNC) survivors in India frequently face radiotherapy-related toxicities that disrupt long-term dietary habits. Intolerance to staple spices like chili and pepper is a culturally significant complication that restricts dietary diversity, compromises nutrition, and diminishes quality of life. Despite its profound impact, spice non-tolerance remains under-recognized and poorly studied in survivorship care.

Methods

This is an ongoing Phase II single-arm study at CMC Vellore enrolled disease-free adults ≥3 months post-radiotherapy. Phase 1 assessed baseline prevalence using the Spice Tolerance Monitoring (STM) scale with anthropometric and dietary assessment. Phase 2a involved intervention with structured dietary rehabilitation protocol with individualized nutritional counseling and a graduated spice-reintroduction schedule. In Phase 2b, patients were monitored until target tolerance was achieved. Primary outcomes included changes in spice tolerance scores and the time required for recovery.

Results

Fifty survivors were evaluated using descriptive analysis. The baseline prevalence of post-radiotherapy spice non-tolerance was 84.0% (n=42/50). The cohort was 80% male (mean BMI 21.7 ± 1.9 kg/m²) with oral cavity cancer (72%) being the most common primary site. Significant nutrition impact symptoms included burning sensation (66.0%), xerostomia (60.0%), and taste alterations (46.0%); notably, 54.2% had improved 24-hour dietary recalls with transition from restricted soft diet to a spice-integrated normal diet. In the Post-interventional group, phase 2b (n=20), objective spice tolerance (STM) scores improved significantly from 3.2 ± 1.1 at baseline to 8.8 ± 1.1 post-intervention (p < 0.001). Subjective xerostomia (XI) scores also showed a marked reduction from 30.4 ± 3.4 to 20.0 ± 6.4, indicating improved oral comfort. The mean time required to regain acceptable spice tolerance was 7 ± 3.5 months.

Conclusions

Spice non-tolerance is a prevalent, clinically relevant issue for Indian HNC survivors. Early results demonstrate that structured dietary rehabilitation significantly improves objective oral tolerance highlighting the necessity of integrating tailored interventions into survivorship protocols

SURVI-016

ONLINE PRECISION EDUCATION WITH MINDFULNESS AND QIGONG FOR YOUNG COLORECTAL CANCER SURVIVORS: A PILOT RCT STUDY

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Introduction

Young-onset colorectal cancer (yCRC) survivors experience symptom distress and psychosocial challenges. They commonly juggle work and family roles, report reduced quality of life and increasing depressive symptoms, and continue to have unmet self-care information needs for up to five years after treatment. We developed an intervention that integrates precision nursing education with mindfulness and qigong and examined its feasibility and preliminary effects.

Methods

In this pilot mixed-methods RCT, yCRC survivors (20–50 years), within 5 years of completing active treatment, without metastasis, and able to use online meeting tools were randomized to an 8-week intervention (weekly tailored digital education, facilitated discussions, mindfulness training, qigong, daily 10-min home practice) or online nursing education materials for self-study in control group. Outcome measures include the EORTC QLQ-C30, EORTC QLQ-CR29, Beck Depression Inventory-II, Meaning in Life Questionnaire, and the Five-Facet Mindfulness Questionnaire–Taiwan version. Assessments will be conducted pre, post, and at 3, 6, and 9 months post-intervention. Data will be analyzed using generalized estimating equations.

Results

Over six months, 30 survivors consented; 15 initiated the intervention (participation rate: 50%), and 10 completed post-intervention assessments (follow-up rate: 66.7%). Baseline mean BDI-II was 4.4, with two participants meeting criteria for mild depression. For pre–post analyses (n=10; intervention=5, control=5), bowel symptom scores decreased in the intervention group (12.0 to 8.8) but slightly increased in controls. In generalized estimating equation models, only the mindfulness facet “nonreactivity” showed a significant group-by-time effect ($\beta=0.22$, $p=0.04$). Interviewees reported improved self-care knowledge (particularly diet), valued peer sharing in online groups, and applied mindfulness to support emotional regulation and sleep; key barriers were scheduling constraints and difficulty maintaining daily practice.

Conclusions

This online precision education program integrated with mindfulness and qigong appears feasible for yCRC survivors and shows preliminary signals of bowel symptom improvement and enhanced nonreactivity. Larger, adequately powered trials with longer follow-up are warranted.

SURVI-017

BRIDGING THE GAP IN SURVIVORSHIP: A NETWORK META-ANALYSIS OF DIGITAL, PSYCHOSOCIAL, AND SOMATIC SEXUAL REHABILITATION FOR GYNECOLOGIC CANCER

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Introduction

Sexual dysfunction remains a pervasive unmet need in gynecologic cancer survivorship. Integrating the biopsychosocial framework, we categorized interventions by their primary therapeutic focus: somatic-based (biological), psychosocial (psychological/relational), and digital (cross-domain access/education). While traditional face-to-face care is the gold standard, accessibility barriers persist. Emerging digital technologies offer scalability, yet their comparative efficacy is unclear. This study aimed to establish a hierarchy of efficacy among these modalities to guide precision nursing assessment.

Methods

We conducted a network meta-analysis (NMA) of RCTs identified via PubMed evaluating non-pharmacological sexual rehabilitation following PRISMA-NMA guidelines. Interventions were categorized into four mutually exclusive nodes: (1) Somatic-Based (biological focus), (2) Face-to-Face Psychosocial (psychological/relational focus), (3) Digital (tech-enabled cross-domain support), and (4) Control. Primary outcome was sexual function (FSFI); secondary outcomes included distress and intimacy. SUCRA values estimated efficacy rankings.

Results

Nine RCTs (N=1173) were included. For sexual function, Somatic-Based Interventions ranked highest (SUCRA=75.6%; SMD=0.48, 95% CI -0.46 to 1.42), confirming physiological benefits despite trial scarcity. Digital Interventions demonstrated robust efficacy (SUCRA=74.1%; SMD=0.31, 95% CI -0.01 to 0.63), outperforming Face-to-Face Psychosocial care (SMD=0.09) in functional domains. Secondary analyses revealed distinct benefits: Psychosocial Interventions significantly enhanced intimacy (SMD=0.56, 95% CI 0.26–0.87), while Digital Interventions were most effective in reducing sexual distress (SMD=0.15) and improving relationship satisfaction.

Conclusions

This NMA provides the first hierarchy grounded in the biopsychosocial framework to guide nurse-led survivorship care. While digital interventions offer a scalable standard for distress, the analysis reveals a critical evidence gap in somatic trials, highlighting the need to prioritize biological recovery. To improve care quality, nursing professionals must implement precision assessment strategies—distinguishing biological, psychological, and relational needs—to coordinate individualized support.

SURVI-019

A MIXED-METHODS STUDY TO EXPLORE THE UNMET SUPPORTIVE CARE NEEDS OF CHINESE COLORECTAL CANCER SURVIVORS

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Introduction

While quantitative studies have identified unmet supportive care needs among colorectal cancer (CRC) survivors, none integrate qualitative data for an in-depth understanding in Chinese contexts. This study aimed to assess the prevalence and predictors of unmet needs; explore lived survivorship challenges and preferred supportive care delivery modes among Chinese CRC survivors.

Methods

A mixed-methods study was conducted among adult Chinese CRC survivors (Table 1; N=216 surveys, 27 semi-structured interviews). Needs were assessed using the validated Chinese Supportive Care Needs Survey Short Form (SCNS-SF34), covering 5 domains: physical daily living (PDL), psychological (PSY), sexuality (SEX), patient care and support (PCS), and health system and information (HSI) needs. Standardized summated scores (0 to 100) were calculated for each domain, with a higher score indicating

more unmet needs. Linear regression identified unmet need predictors. Interview data were systematically analyzed using thematic analysis.

Table 1. Demographic and clinical characteristics of participants

Characteristics	
Age (years), mean (SD) [range]	66 (10) [32-91]
Gender, n (%)	
Female	91 (42%)
Male	125 (58%)
Educational attainment, n (%)	
Primary education or below	71 (33%)
Secondary education	103 (48%)
Tertiary education	42 (19%)
Employment status, n (%)	
Employed or self-employed	42 (19%)
Housewife	11 (5.1%)
Retired	155 (71.8%)
Unemployed	8 (3.7%)
Monthly household income, n (%)	
<HKD\$2,000	110 (51%)
HKD\$2,000 – HKD\$5,000	3 (1.4%)
HKD\$5,000 – HKD\$10,000	15 (6.9%)
HKD\$10,000 – HKD\$25,000	28 (13%)
HKD\$25,000 – HKD\$50,000	35 (16%)
>HKD\$50,000	25 (12%)
Staging, n (%)	
I	6 (2.8%)
II	35 (16%)
III	49 (23%)
IV	126 (58%)
Treatment statuses, n (%)	
Received surgery	
No	39 (18%)
Yes	177 (82%)
Chemotherapy	
Did not receive	41 (19%)
Receiving	100 (46%)
Completed	75 (35%)
Radiotherapy	
Did not receive	160 (74%)
Receiving	5 (2.3%)
Completed	51 (24%)
Targeted therapy	
Did not receive	124 (57%)
Receiving	56 (26%)
Completed	36 (17%)
Immunotherapy	
Did not receive	213 (99%)
Receiving	1 (0.5%)
Completed	2 (0.9%)
Years since diagnosis, mean (SD)	2.2 (2.1)
Colostomy, n (%)	
Without	143 (66%)
With (at present)	42 (19%)
With (used to)	31 (14%)

Results

The mean standardized SCNS scores were 20.48 (HSI), 17.16 (PSY), 14.03 (PCS), 6.41 (PDL), and 1.81 (SEX). Female gender and advanced cancer staging (III-IV) predicted elevated HSI, PSY, and PCS needs. Receiving chemotherapy was associated with greater HSI and PCS needs. Key themes included physical challenges and adaptations (such as colostomy leakage, treatment-related side effects, and trial-and-error strategies), psychological distress and resilience (such as depression, emotional suppression to avoid family stress, resilience via religious beliefs), and information gaps on diet, symptom management, colostomy resources, and subsidies. Participants valued peer sharing among “people walking the same path” and expressed interest in mobile applications featuring practical dietary guidance, colostomy care and product information, symptom management, and survivor stories.

Conclusions

This study revealed higher unmet HSI, PSY, and PCS needs among female, advanced-stage, and chemotherapy-receiving Chinese CRC survivors. Integrating quantitative/qualitative findings supports the potential of culturally tailored mobile applications to address information gaps, enhance mental well-being, and improve self-management in Chinese CRC survivorship.

SURVI-020

UNDERSTANDING THE RELATIONSHIP BETWEEN HOSPITAL READMISSION POST ALLOGENEIC STEM CELL TRANSPLANTATION AND RETURN TO WORK AS INDICATORS OF MORBIDITY.

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Introduction

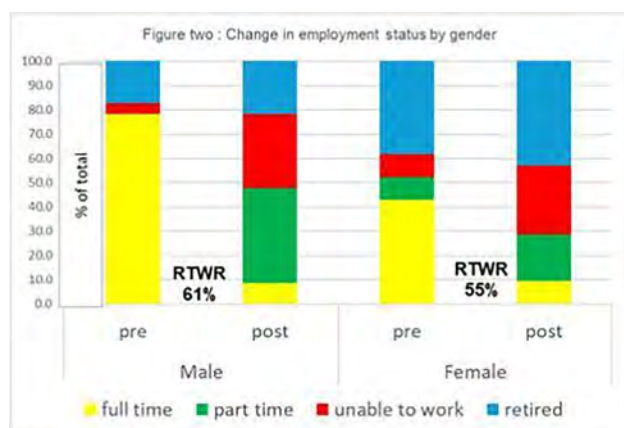
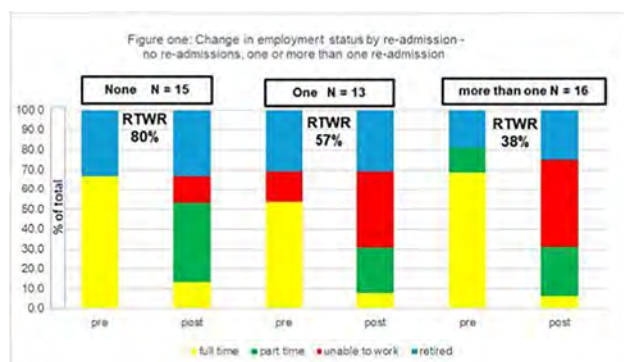
Individuals who return to work (RTW) after allogeneic stem cell transplant (SCT) report good-excellent quality of life. Exploring the factors impacting RTW can identify targeted intervention and support. The aim of this pilot study was to explore RTW rates (RTWR) and the frequency and reasons for hospital readmission post allogeneic SCT.

Methods

Data was collected from Individuals at least 6 months after transplantation attending a Nurse-Led Haematology Supportive Care Clinic Program (NLHSCCP). Individual demographics, employment type (full time, part time, unable to work and retired) before and after transplant, readmission rates (RR) and reason for readmission were analysed. Descriptive statistics were used to determine proportion and characteristics of patients RTW post-SCT.

Results

Between February 2024 and November 2025, 44 patients attended the NLHSCCP. Most participants had acute leukaemia (66%), there were more females (52%) who were older median age 58 yrs (range 23, 72) than males median age 56 yrs (range 21, 74) at transplant. The average length of stay for SCT admission was 31 days. Twenty-nine (65%) participants were readmitted at least once, with 62 readmissions recorded within 18 months post-transplant. Reason for readmission included infection (39%), fever of unclear cause (16%), sepsis (9%) and graft-versus-host disease diagnoses (9%).



Figures one and two display percentage of individuals by employment type before and after transplantation. RTWR declined as the number of re-admissions increased. The RTWR declined from 80% to 57% to 38% for individuals with no readmissions, one and more than one readmission respectively. RTWR was higher in males 61% compared to females 55%.

Conclusions
This preliminary data identifies a possible relationship between RTW and re-admission post-SCT. Gender and RR were identified as potential independent variables highlighting opportunities for targeted lifestyle and behaviour support interventions to improve RTW outcomes.

SURVI-021 **REDUCING LOW-VALUE FOLLOW-UP: AN AUDIT OF LONG-TERM CANCER SURVIVORS AT RISK OF LOW VALUE CARE IN RADIATION ONCOLOGY OUTPATIENT CLINICS**

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Introduction

Follow-up care is recommended for most cancer survivors, partly to assess for long-term and late effects and monitor for possible recurrence. Prolonged follow-up may deviate from best

practice guidelines, provide little or no clinical benefit, represent low-value care and contribute to unsustainable healthcare practice. This audit aimed to use electronic health record (EHR) data to identify the prevalence of low-value follow-up and to assess opportunities for discharge or alternative care pathways.

Methods

We conducted an audit of long-term cancer survivors (LTCS) attending radiation oncology follow-up clinics at a single tertiary cancer institution over a 12-month period. LTCS were defined as patients in active follow-up who were ≥ 5 years post curative-intent treatment for breast and head and neck cancers, and ≥ 7 years post curative-intent treatment for prostate cancer, with ≥ 1 outpatient attendance between January and December 2024. Patients with metastatic disease, those on active treatment, and those receiving palliative care were excluded. A list of eligible patients was generated from the EHR. Patients who met the inclusion criteria and had no clinical indication for consultant follow-up were considered for discharge to primary care or transfer to nurse led follow-up.

Results

A total of 85 patients met the initial inclusion criteria (49 prostate, 18 breast, and 18 head and neck cancer patients). Among these, 32% had clinical or biochemical recurrence, 19% had already been discharged, 12% were undergoing clinical trial follow-up, 24% had other clinically valid reasons for ongoing follow-up, and 1% were deceased. The remaining 13% (n=11) were identified as potentially suitable for discharge or transfer to alternative survivorship care pathways.

Conclusions

This audit demonstrated that apparent low-value follow-up and discharge opportunities among LTCS was less prevalent than anticipated, largely due to limitations of EHR data accurately defining survivor status. Improved data capture within the EHR will support monitoring deviations from guideline-recommended follow-up.

SURVI-022

BONE HEALTH MANAGEMENT IN CANCER CARE: A SYSTEMATIC REVIEW OF CLINICAL PRACTICE GUIDELINES

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Introduction

Bone loss is a well-recognised adverse effect of many anticancer treatments and represents a substantial long-term health concern for cancer survivors, including increased risk of osteoporosis and fracture. This systematic review sought to critically appraise clinical guidelines for bone health management in cancer and synthesise recommendations.

Methods

A comprehensive search of five electronic databases (PubMed, EMBASE, CINAHL, Scopus and Overton) and grey literature search via google was undertaken to identify clinical guidelines addressing bone health in cancer. Data extraction was independently conducted by two authors. Guideline quality was assessed using the Appraisal of Guidelines for Research and Evaluation II (AGREE II) instrument. Recommendations were grouped into three domains: pharmacological

management, screening practices, and lifestyle interventions, and examined across different cancer types.

Results

Sixty-three guidelines were included. Lifestyle recommendations were reported in approximately two-thirds of guidelines, most frequently relating to calcium and vitamin D supplementation. Screening guidance appeared in 76% of guidelines, primarily recommending bone mineral density assessment using dual-energy X-ray absorptiometry (DXA). Pharmacological strategies were included in 89% of guidelines, with bisphosphonates and denosumab most often advised. Just over half of the guidelines (54%) addressed all three management domains. AGREE II appraisal classified 40 guidelines as moderate quality and 23 as high quality. The mean AGREE II domain score was 85.3%, indicating an overall high standard of methodological quality.

Conclusions

Variability was observed in the quality and scope of existing guidelines, with many failing to provide integrated multidisciplinary approaches to bone health management. Future guidelines should explicitly address the needs of patients exposed to multiple risk factors and include strategies to manage the combined effects of cancer treatment-related bone loss and age-related skeletal decline in cancer.

SURVI-023

THE EFFECTS OF COLORECTAL CANCER TREATMENT ON GUT MICROBIOTA: A PILOT FEASIBILITY STUDY

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Introduction

Evidence suggests that colorectal cancer (CRC) treatments can disrupt the composition and function of the gut microbiome (dysbiosis), which may contribute to adverse effects (AEs). The gut microbiome may therefore play an integral role in AE development. Understanding treatment-related dysbiosis may help AE prevention, improve supportive care, and enhance patient quality of life.

Methods

Our transdisciplinary team aimed to determine the feasibility of collecting microbiota samples from CRC patients from diagnosis to one-year post-treatment, examine longitudinal changes to microbiota, and identify preliminary associations between microbiota changes with treatment completion, AEs, and patient reported outcomes (PROs). CRC patients (stage I-III) were referred by surgical oncologists prior to treatment. PRO data and at-home fecal samples were collected at 4 time-points (pre-treatment, post-treatment, 6 and 12 months). Fecal samples were analyzed using shotgun metagenomic sequencing to assess gut microbiota composition and diversity. Bioinformatics included analyzing alpha and beta diversity and PRO data was described.

Results

Eleven of 14 (78%) referred patients were consented. One (9%) participant withdrew before sample collection; 4 (36%) collected two or fewer samples, and 5 (45%) provided all samples. Age range was 40-80yr, 25% male, 80% colon cancer, treatment type: n=7 surgery alone, n=2 surgery + chemotherapy, n=1 neoadjuvant chemotherapy + radiation. Sequencing revealed a reduction in microbial diversity following treatment in 3/5 patients, with diversity levels not returning to baseline after one year, suggesting a lasting impact of therapy on the

gut microbiome. Participants demonstrated the highest positive gains to quality of life, anxiety, depression, fatigue, and cognitive function six-months post-treatment.

Conclusions

Reliance on surgeon-initiated referrals was a key feasibility challenge due to competing clinical demands, suggesting the need for multi-pronged recruitment approaches in future studies. Although patients showed clinically meaningful improvements in PROs, studies should investigate how and if these changes are correlated to microbiome diversity in a larger sample.

SURVI-024

DEVELOPING A SUSTAINABLE EVALUATION FRAMEWORK FOR A BREAST CANCER SUPPORTIVE CARE SERVICE MODEL

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Introduction

BBreast cancer survivors experience a range of supportive-care needs, many of which are unmet. Optimal survivorship outcomes require care that addresses physical, psychological, emotional, information, and broader wellbeing needs. The Think Pink Foundation is a Melbourne, Australia, volunteer-based charity providing free supportive-care services to breast cancer survivors, their families, and caregivers through the Living Centre. Despite supporting more than 4,500 individuals, the organisation's supportive care model has not previously been evaluated and thus the effectiveness of its services is unclear.

Methods

This study aimed to develop an ongoing and sustainable database and evaluation strategy for the Think Pink Foundation, using a co-design approach. Three focus groups were conducted: two with consumers (n = 18) and one with staff and facilitators (n = 4). Reflexive thematic analysis identified key preferences and considerations for a future database. A proposed database plan was then circulated to participants, who completed measures of acceptability, appropriateness, and feasibility, along with five open-ended questions regarding the plan.

Results

Reflexive thematic analysis from the focus groups resulted in three key themes: (1) preferences for data, (2) uses of data, and (3) key considerations for implementation. The finalised proposed database plan was rated on a 1-5 scale as highly acceptable (M = 4.10, SD = 0.61), appropriate (M = 3.98, SD = 0.72), and feasible (M = 4.08, SD = 0.69) by consumers and staff, with observed scores ranging from 2.25 to 5.00.

Conclusions

Our established Think Pink Foundation database will enable systematic evaluation and optimisation of the organisation's supportive-care services. Implementing this ongoing evaluation process will provide insight into the benefits of delivering diverse supportive-care interventions to breast cancer survivors and inform future community-based survivorship care models.

SURVI-025

LEGAL AND FINANCIAL CHALLENGES FACED BY PEOPLE WITH CANCER IN VICTORIA: INSIGHTS TO INFORM LAW AND POLICY REFORM AND IMPROVED SUPPORT SERVICES

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Introduction

Cancer's impact extends beyond diagnosis and treatment, often creating legal and financial challenges that affect wellbeing and access to care. While research links health conditions to legal and financial problems, current data in the cancer context is limited. This study examined the experiences of people with cancer in the state of Victoria, Australia, to identify unmet needs and inform improvements in law, policy, and support services.

Methods

Victorians who had been diagnosed with cancer as an adult in the last 10 years completed an online survey. The survey examined legal and financial challenges, workplace impacts, and use of support services to manage these issues to identify unmet legal, financial and other support needs.

Results

102 people with a history of cancer in Victoria, Australia completed the survey (53 female, 48 male), with 78% living in metropolitan areas. Most common age groups were 65+, 55–64, and 35–44 years. The most reported cancers were breast, prostate, and melanoma. Most had completed treatment; 5% were living with advanced cancer. Legal issues affected 41%, mainly insurance, workplace, estate planning, medical decision-making, and cancer-related debt. All reported distress, yet 80% did not seek legal help. 30% lost income and 36% faced worsening circumstances. Out-of-pocket costs exceeded expectations for 30%. Cancer costs were managed mostly by using savings, reducing essential and non-essential spending, and having someone in the household work more. Workplace challenges were common, particularly managing the physical and emotional impacts of cancer. Despite these challenges, use of legal, financial, and cancer support services was limited.

Conclusions

People living with cancer experience a range of legal and financial challenges and have unmet support needs to manage these issues and the distress they cause. Legal, policy and existing service delivery require improvements to meet this unmet need to reduce the physical, financial and emotional burden of cancer.

SURVI-026

LIVED EXPERIENCES OF A GOOD DAY IN DIFFICULT-TO-TREAT CANCERS: FINDINGS FROM THE 'GOOD DAY' PROJECT

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Introduction

Personal definitions of a 'good day' can help characterise and enable insight into a person's adjustment to cancer. We examined how people living with difficult-to-treat cancers define, experience, and sustain 'good days', offering insights to advance more person-centred supportive care

Methods

Semi-structured interviews were conducted with adults diagnosed with lung (n=7), liver (n=1), brain (n=6), oesophageal (n=8), pancreatic (n=6), or stomach cancer (n=3) in Europe. Recordings were transcribed and data processed via reflexive thematic analysis to identify cross-cutting patterns. Interviews focused on personal definitions of good day, symptoms, psychosocial coping and more.

Results

Thirty-one people were involved, residing in the UK (n=19), Spain (n=3), Greece (n=3), Netherlands (n=2), Germany (n=1), Poland (n=1), Belgium (n=1), and Ireland (n=1). Most participants reported having good days, or good moments within days, which were shaped by five key factors: (1) effective symptom control, especially for pain,

fatigue, sleep, confusion, or digestion issues; (2) emotional regulation supported by routines, being in nature, purposeful activity, and a sense of control; (3) maintaining social connections, turning bad days around; (4) drawing on personal existential or spiritual resources for meaning; and (5) meaningful engagement with health and social care services/personnel.

Participants emphasized feeling heard, unrushed, and being treated as whole persons, calling for multidisciplinary teams with strong nursing presence, tailored psychological support, and stronger links to patient organisations and community groups.

Conclusions

People living with difficult-to-treat cancers can, and often do, experience good days. Although deeply personal, the idea of enjoying a "good day" commonly reflects a balance of internal and relational factors, including effective symptom control, emotional resilience, strong social connections, and access to person-centred care. Proactively exploring each individual's definition and conditions for a good day can enable insights that allow more meaningful, responsive supportive and palliative care interventions, ultimately enhancing wellbeing and more appropriate outcomes for the individual.

SURVI-027

CANCER SURVIVORSHIP CARE DELIVERY IN GREATER SAN FRANCISCO BAY AREA REGION: A QUALITATIVE STUDY

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Introduction

Advances in cancer care have resulted in an increasing number of breast and colorectal cancer survivors. Cancer survivors continue to experience unmet needs after the completion of curative treatment, emphasizing the need for comprehensive patient-centered care. However, survivorship care and survivorship care planning vary across practice settings. Despite published recommendations on quality survivorship care and the American College of Surgeons Commission on Cancer (COC) and National Cancer Institute (NCI) survivorship care standards, the implementation of high-quality survivorship care remains suboptimal in clinical practice. In this qualitative study, we sought to understand current survivorship care practices and identify key components of survivorship care from the perspective of clinicians in nine San Francisco Bay Area Counties.

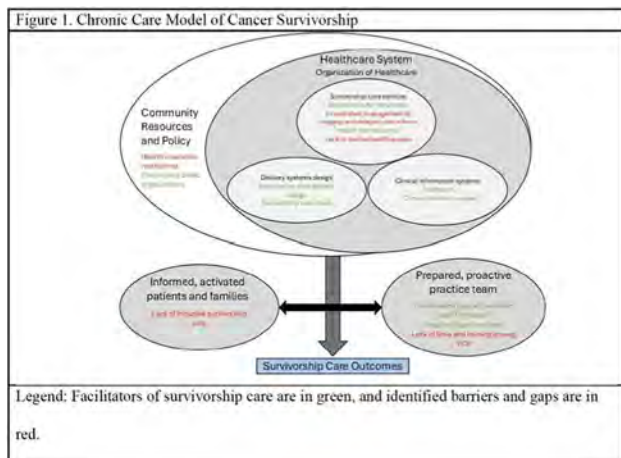
Methods

We conducted semi-structured interviews with oncologists, primary care providers (PCP), and oncology leaders across 24 different healthcare facilities. We recorded and transcribed the interviews and analyzed the transcripts using grounded theory and a constant comparative approach.

Results

We interviewed 48 participants from 24 practices. We found heterogeneity in survivorship care practices, with varying models of care delivery led by PCPs, oncologists, advanced practitioners, and integrated primary care-oncology models. We used the Chronic Care Model to map the themes (Figure 1). We also identified the essential elements of a survivorship care program: patient-centered, multidisciplinary, dedicated survivorship care/services, surveillance

management through electronic medical records, longitudinal care, and patient education/empowerment.



Conclusions

Through qualitative interviews, we identified variability in cancer survivorship care practices across healthcare systems. We also identified the essential elements of a survivorship care program that may inform research and practice in survivorship care.

SURVI-028

COUNTED AT LAST: CONSUMER LEADERSHIP DELIVERS AUSTRALIA'S FIRST NATIONAL METASTATIC BREAST CANCER PREVALENCE ESTIMATE

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Introduction

High-quality metastatic breast cancer (MBC) data is essential for understanding disease burden, addressing inequities, and planning treatment and supportive care. Yet many population-based cancer registries capture incidence and mortality but not stage at diagnosis or recurrence/relapse, leaving people living with MBC “hidden in plain sight”. This prevents systems from quantifying need or investing appropriately. Breast Cancer Network Australia (BCNA) supports Australians impacted by breast cancer, ensuring their voices shape better care, stronger policy and greater understanding.

Methods

Guided by lived experience, BCNA identified the national MBC data gap as a priority and set an ambitious goal: ensure people living with MBC are visible and counted. Following BCNA's 2023 National Roundtable and roadmap report, several states developed and refined linked-data methodologies to identify people living with MBC. Building on this jurisdictional progress, the Australian Institute of Health and Welfare (AIHW), supported by Cancer Australia, the Department of Health, Disability and Ageing, and the Australian Government, estimated the number of people living with MBC in Australia using the available state MBC estimates and linked national health data sets about cancer diagnosis, mortality, medications and healthcare.

Results

The new data model provides a national prevalence estimate for MBC: approximately 20,950 Australians (20,800 women and 150 men) were living with MBC at the end of 2024—more than double the 2020 estimate (10,553).

Conclusions

Australia's estimate is a national first and world-leading example of translating linked-data methods into MBC prevalence measurement at scale. It demonstrates how consumer leadership can catalyse methodological innovation and policy reform—turning invisibility into insight and insight into influence. Sustained national coordination and registry capacity building are now required so visibility drives equitable, person-centred care and informs advanced cancer data reform more broadly. Australia's progress sets a global benchmark and provides a pathway to accurately estimate the impact of other metastatic cancers.

SURVI-029

SUPPORTING INFORMED ONCOFERTILITY TREATMENT DECISIONS: FERTILITY- AND MENOPAUSE-RELATED INFORMATION NEEDS OF YOUNG WOMEN WITH BREAST CANCER

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Introduction

Concerns about chemotherapy-related infertility and premature menopause are the most frequently reported unmet supportive care needs among young breast cancer patients. We explored patient's reproductive concerns, fertility- and menopause-related information needs, and the potential value of individualised risk information to support informed oncofertility decisions.

Methods

A cross-sectional survey was administered to women with breast cancer who were premenopausal at diagnosis and to clinicians across Australia (breast surgeons, medical oncologists, breast care nurses, fertility specialists, and fertility preservation nurses).

Results

A total of 112 patients (mean age:33.6 years; range,21–40; SD:4.3; 51.4%>5 years from diagnosis) and 134 clinicians completed the survey. Most patients reported pre-treatment discussions about fertility (82.8%) and menopause (73.2%); however, 43.6% and 60.6% were dissatisfied with fertility- and menopause-related information, respectively. Most (88.4%) felt pressured to make fertility decisions due to insufficient information, urgency to commence treatment, and emotional distress. The majority (80.9%) reported difficulty accepting the possibility of not having (more) children. One-third would accept an increased absolute cancer recurrence risk (up to 30%) to preserve fertility by compromising chemotherapy. The mean reproductive concerns score (55.2/90; SD:11.9) indicated concerns about fertility potential, personal health, acceptance, and future pregnancy. Multivariate regression analysis showed that younger age (B:−0.6; β:−0.3; p<0.02) and desire for future children (B:5.1; β:0.3; p<0.007) were significantly associated with greater reproductive concern.

Most patients (80.6%) wanted an individualised infertility and menopause risk calculator based on planned treatment, 52.8% reporting it would better meet their information needs. Most clinicians were willing

to use such a tool (83.6%) and believed it would support oncofertility decision-making (88.8%). Patients preferred risk information to be provided before chemotherapy, primarily by medical oncologists (69.7%), followed by fertility specialists (58%) and breast care nurses (51.8%).

Conclusions

Integrating an individualised, treatment-based risk calculator into cancer-treatment discussions may better meet patients' information needs and support informed oncofertility decision-making.

SURVI-030

EXPLORING THE IMPACT OF GENDER AND INCOME ON CONCERNS REPORTED BY CANCER SURVIVORS AGED 85+ YEARS IN CANADA

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Introduction

The number of survivors who are older adults is growing. This project reports concerns, positive experiences and suggestions for improvement in survivorship care from the perspective of cancer survivors aged 85+ years based on gender and income levels.

Methods

A Canada-wide survey was conducted about needs of cancer survivors and experiences with follow-up care following treatment. This secondary analysis is based on the qualitative survey data from survivors aged ≥85 years. The analysis explored their perspectives based on gender and income levels.

Results

In total, 581 individuals aged ≥85 years responded to the survey, of which 399 confirmed gender and answered the annual household income question. Within this oldest group, 201 were male, 198 were female; 134 males (66.7%) and 160 females (80.8%) reported annual household income under \$50K; and 67 males (33.3%) and 38 females (19.2%) reported income \$50K and over. Limited differences were noted between survivors' responses by sex and/or by income levels. Concerns focused on physical challenges and body changes. Positive comments reflected appreciation of care by attentive healthcare professionals and suggestions for improvement addressed the need for more services tailored for older adults, and better attention to communication and providing information. Close to 60% of respondents did not answer one or more of the three open-ended survey questions.

Conclusions

Survivors ≥85 years face physical, emotional and practical challenges following cancer treatment. This study highlights the importance of considering how living alone or with a partner, community connection, and the burden of co-morbidities which compound physical challenges after cancer treatment intersect to create unique situations for this age group. While major differences by gender and income did not emerge in this analysis, further study is required to understand why few respondents in this age group specified their concerns, gain deeper insight into their experiences, and inform targeted innovations and services.

SURVI-034

IMPACT OF ELEVATED FLUID ON BIOIMPEDANCE SPECTROSCOPY SKELETAL MUSCLE INDEX PERFORMANCE IN CANCER PATIENTS COMPARED WITH DXA

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¹ImpediMed, ²

Introduction

Accurate skeletal muscle assessment is essential for identifying sarcopenia in oncology care. Bioimpedance spectroscopy (BIS) offers a convenient alternative to dual-energy X-ray absorptiometry (DXA), but its accuracy may be affected by fluid status abnormalities common in cancer patients. This study evaluated how elevated fluid impacts the diagnostic performance of BIS-derived skeletal muscle mass index (SMMI) compared with DXA appendicular skeletal muscle index (ASMI).

Methods

Data were analysed from two prospective studies conducted at Prisma Health Cancer Institute (2018–2023). Patients undergoing or within six months of cancer treatment received concurrent BIS (SOZO, ImpediMed) and DXA (Lunar iDXA, GE Healthcare) assessments. Elevated fluid status was defined as extracellular fluid percentage of total body water (ECF%TBW) exceeding +2SD above age-matched reference values. BIS SMMI diagnostic performance of detecting muscle mass consistent with sarcopenia against DXA ASMI was evaluated using EWGSOP1 [1] low muscle mass thresholds, with sensitivity, specificity, and Pearson correlations calculated separately for normally hydrated and elevated fluid measurements.

Results

From 100 patients, 178 measurements were analysed (121 normally hydrated; 57 elevated fluid). Cohort demographics are shown in Table 1. In normally hydrated measurements, BIS SMMI demonstrated strong correlation with DXA ASMI ($r=0.84$, $p<0.001$) with sensitivity of 0.90 and specificity of 0.81. In elevated fluid measurements, correlation was moderate ($r=0.66$, $p<0.001$) with sensitivity of 0.71 and specificity of 0.72.

Table 1. Cohort characteristics by hydration status

	Normal (n=121)	Elevated Fluid (n=57)
Sex (M/F)	29/92	17/40
Age (years)	58.9 ± 11.2	62.9 ± 11.1
BMI (kg/m ²)	29.1 ± 5.0	28.7 ± 5.4
DXA ASMI (kg/m ²)	7.2 ± 1.3	6.9 ± 1.0
BIS SMMI (kg/m ²)	7.6 ± 1.5	7.5 ± 1.4

Values are mean ± SD unless otherwise specified

Conclusions

BIS demonstrates robust performance for skeletal muscle assessment in normally hydrated cancer patients. While elevated fluid status modestly reduces diagnostic accuracy, BIS SMMI retains acceptable sensitivity and specificity for sarcopenia screening. These findings support BIS as a practical tool for longitudinal muscle monitoring in oncology, with consideration of hydration status when interpreting results.

SURVI-035

A NURSE- AND PHARMACIST-LED SURVIVORSHIP CLINIC FOR PEOPLE LIVING WITH MULTIPLE MYELOMA: A PILOT FEASIBILITY STUDY

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Introduction

Multiple myeloma (MM) currently remains a cancer treated with non-curative intent; patients experience persistent symptom burden, psychosocial and treatment-related toxicities over multiple-lines of therapy. Improved treatment options have resulted in doubling of median survival(5-10yrs) however follow-up care remains largely disease-focused limited to broader survivorship needs. The Living Better with Myeloma (LBWM) clinic is an innovative, nurse-and-pharmacist-led survivorship model tailored to address long-term care needs in MM. This pilot evaluated feasibility, acceptability, and fidelity of implementation within routine care.

Methods

A mixed-methods pilot feasibility study was conducted at a tertiary cancer centre. Patients with stable MM (maintenance-therapy/surveillance) were offered a pharmacist-led medication review and nurse-led survivorship assessment informed by patient-reported outcome measures (MyPOS, COST-FACIT 2, Brief Fatigue Inventory). Semi-structured interviews with patients and healthcare professionals (HCPs) explored acceptability and feasibility, guided by the Theoretical Framework of Acceptability (TFA) and Theoretical Domains Framework (TDF). Quantitative data were analysed descriptively; qualitative data used deductive framework-based coding.

Results

The LBWM clinic (Figure 1) was feasible to deliver with high completion of pharmacist-and-nurse-led components, including PROM use and delivery of core intervention elements (Table 1). Patient and HCPs (Table 2) were interviewed to evaluate implementation. Assessed using TFA domains, patients reported positive Affective Attitudes and Intervention Coherence, valuing the structured focus on survivorship needs. HCPs reported high Perceived Effectiveness and Ethicality, particularly improved care-coordination and role clarity. Feasibility, examined using TDF domains, was supported by Social/Professional Role and Identity, Knowledge, Social Influence and Environmental Context and Resources. Key barriers related to staffing capacity and competing clinical demands.

Figure 1: Living Better with Myeloma clinic model

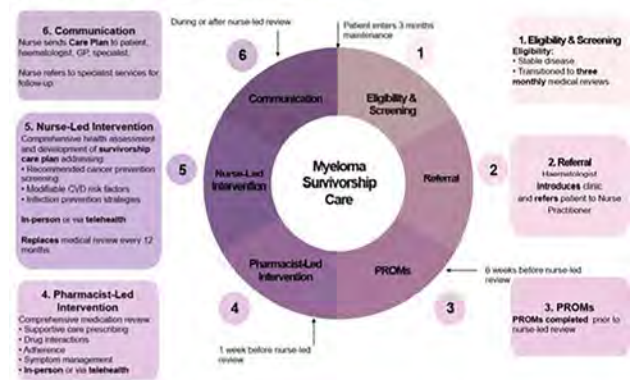


Table 1. Clinical, demographic characteristics, and completion rates of patients who attended the LBWM clinic in the pilot feasibility study

Age at recruitment (years)	
Mean (SD)	61.9 (10.5)
Median (IQR)	63 (55.3, 69.0)
Range	38 - 80
Years since diagnosis (years)	
Mean (SD)	5.9 (3.8)
Median (IQR)	2.5 (2.0, 8.8)
Range	1.4 - 23
Duration on maintenance treatment (months)	
Mean (SD)	20.8 (32.4)
Median (IQR)	12 (8.0, 36.0)
Range	3 - 144
Sex assigned at birth	
Male	14 (53.8)
Female	12 (46.2)
Remoteness (based on ARIA categories)	
Major City	16 (69.2)
Inner Regional	8 (30.8)
ATSI status	
Not Aboriginal or Torres Strait Islander	28 (100)
Maintenance treatment	
Lenalidomide	11 (42.3)
Daratumumab	5 (19.2)
No maintenance treatment	4 (15.4)
Carfilzomib	3 (11.5)
Combination	1 (3.9)
Other	2 (7.7)
Number of lines of treatment	
1	17 (65.4)
2	5 (19.2)
3	1 (3.9)
4	2 (7.7)
5	1 (3.9)
Clinic components completed	
Eligibility checklist	26 (100)
Fidelity checklist	26 (100)
PROMS	25 (96.2)
Pharmacy-led clinic	26 (100)
Nurse-led clinic	26 (100)
Care plan	28 (100)

Table 2. Clinical and demographic characteristics of interviewed patients and healthcare professionals who attended the LBWM clinic in the pilot feasibility study

Patient participants (n = 16)	Healthcare professional participants (n = 15)
Age (years)	
Mean (SD)	45.8 (9.9)
Median (IQR)	43 (39.5, 50.0)
Range	34 - 62
Years since diagnosis (years)	
Mean (SD)	10.8 (8.0)
Median (IQR)	8 (4.5, 16.5)
Range	3 - 27
Duration on maintenance treatment (months)	
Mean (SD)	32.0 (38.5)
Median (IQR)	12 (8.0, 48.0)
Range	3 - 144
Sex assigned at birth (n (%))	
Male	10 (62.5)
Female	6 (37.5)
Remoteness (based on ARIA categories) (n (%))	
Major City	12 (75.0)
Inner Regional	4 (25.0)
ATSI status (n (%))	
Not Aboriginal or Torres Strait Islander	16 (100)
Type of maintenance treatment (n (%))	
Lenalidomide	5 (31.3)
Daratumumab	4 (25.0)
No maintenance treatment	4 (25.0)
Carfilzomib	2 (12.5)
Combination	0 (0.0)
Other	1 (6.3)
Number of lines of treatment (n (%))	
1	9 (56.3)
2	4 (25.0)
3	0 (0.0)
4	2 (12.5)
5	1 (6.3)
Role (n (%))	
Haematologist	8 (53.3)
Nurse Consultant (NC)	3 (20.0)
Nurse Specialist (NS)	1 (6.7)
Nurse Practitioner (NP)	1 (6.7)
Patient navigator	1 (6.7)
Pharmacist	1 (6.7)

Conclusions

This pilot demonstrates a feasible, acceptable, and implementable nurse-and-pharmacist-led survivorship clinic for people living with MM. Findings support further evaluation of effectiveness and scalability, including adaptation to other haematologic and nonhaematologic cancer populations with long-term survivorship needs, and highlight the potential of multidisciplinary models to improve access to supportive care.

SURVI-036

DIET QUALITY AND CANCER-RELATED SYMPTOMS OF OLDER CANCER SURVIVORS IN AUSTRALIA: AN EXPLORATORY STUDY

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Introduction

Older adults aged ≥ 65 years comprise 65% of cancer survivors in Australia, a figure that is projected to increase due to population ageing and advances in cancer detection and treatment. Despite growing evidence linking diet quality to improved outcomes in cancer survivors, studies examining the dietary patterns of older cancer survivors in Australia remain limited. This study aimed to assess diet quality in older cancer survivors and examine associations with sociodemographic characteristics and cancer-related symptoms.

Methods

This cross-sectional study included older cancer survivors aged ≥ 65 years who attended the Sydney Cancer Survivorship Centre Clinic between 2024–25. Dietary intake was assessed using an investigator-initiated food frequency questionnaire and 24-hour diet recall as part of routine clinical care. Diet quality was evaluated using the Healthy Eating Index-2015 (HEI-2015) and the 2018 World Cancer Research Fund/American Institute for Cancer Research (WCRF/AICR) scoring system. Sociodemographic data and 15 cancer-related symptoms were collected as part of routine patient reported outcome measures. Group-comparison and correlation tests were utilized in the statistical analysis to explore potential associations.

Results

Thirty-one participants (mean age 74.7 ± 5.7 years; 16 males; 15 females) presented with varied cancer types (14 colorectal, 7 haematological, 4 breast). Mean diet quality scores were 65.3 ± 12.2 (HEI-2015) and 4.3 ± 1.0 (WCRF/AICR). Older cancer survivors with lower HEI-2015 scores had significantly more comorbidities (median 3 vs. 1; $P=0.009$), a higher prevalence of hyperlipidaemia (62.5% ($n=10$) vs. 26.7% ($n=4$); $P=0.045$) and higher rates of anxiety (31.3% ($n=5$) vs. 0% ($n=0$); $P=0.043$). Those with lower WCRF/AICR scores also had a higher anxiety prevalence (29.4% ($n=5$) vs. 0% ($n=0$); $P=0.048$). Higher HEI-2015 scores correlated with less trouble concentrating ($r=-0.441$; $P=0.024$).

Conclusions

Findings suggest diet quality maybe associated with anxiety and poor concentration. Larger prospective studies are warranted to validate these associations, establish potential causality and determine if dietetic interventions improve outcomes.

SURVI-037

“I DIDN’T THINK YOU WERE THE TYPE OF PERSON WHO GOT ANAL CANCER”. ADDRESSING THE MYTHS AND MISCONCEPTIONS EXPERIENCED BY WOMEN WITH A RARE CANCER.

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Introduction

The incidence of anal cancer continues to rise globally with women disproportionately affected. The physical effects of pelvic radiotherapy coupled with the psychosocial challenges of a rare diagnosis can have permanent, life-altering consequences. Recent qualitative research identified how women felt under-informed about treatment-related changes and ill-prepared to maintain sexual health and intimate relationships. This study aimed to address these gaps by co-designing an information resource tailored to the needs of women with anal cancer, assessing the acceptability and usability of the resource, and exploring the feasibility of implementation in clinical practice.

Methods

Women with lived experience ($n=4$) and cancer care providers ($n=4$) from Australia, New Zealand and USA were recruited to an expert advisory group (EAG). The EAG’s primary role was to co-design the resource intended for women newly diagnosed with anal cancer, which was produced by a professional publishing company. Acceptability and usability of the resource was assessed by intended end users ($n=18$). Feasibility of implementing the resource in clinical practice was explored with specialist cancer nurses ($n=9$).

Results

Overall, participants ($n=27$) agreed that the resource was acceptable, information it contained was useful, relevant and supportive for women with anal cancer, and would be feasible to implement in clinical settings provided site-specific contextual barriers and facilitators were explored and addressed. Further iterations of the resource are planned as part of a national, multicentre, phase II feasibility study funded by the National Health and Medical Research Council (NHMRC) called the Women’s Initiative for Sexual health, Education and Raising awareness of anal cancer (WISER) study.



Femintimate is a set of three vaginal dilators that support progressive dilation. They are discreet and don't have a separate handle.



Image 5: Femintimate vaginal dilator kit

She-ology is a set of vaginal dilators that come in five different sizes and colours. They are designed to be left in for periods of time, but you can use them as you would other dilators.



Image 6: She-ology vaginal dilator kit

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Conclusions

This study designed the first information resource dedicated to addressing the sexual health needs of women with anal cancer. The WISER study will facilitate widescale implementation and evaluation of the resource at multiple sites across Australia.

SURVI-038

EDUCATION LEVEL PREDICTS OCCUPATIONAL UNMET NEEDS IN CANCER RELATED COGNITIVE IMPAIRMENT

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Mental Health, St Vincent's Hospital Melbourne, Fitzroy, VIC, ⁷School of Psychology and Centre for Data Analytics, Bond University, Gold Coast, QLD, ⁸Human Performance Research Centre, INSIGHT Research Institute, Faculty of Health, University of Technology Sydney (UTS), NSW; Caring Futures Institute, College of Nursing and Health Sciences, Flinders University, Adelaide, SA; Cancer and Palliative Care Outcomes Centre, Faculty of Health, Queensland University of Technology (QUT), QLD; Exercise Medicine Research Institute, School of Medical and Health Science, Edith Cowan University, WA; Institute for Health Research, University of Notre Dame Australia, WA

Introduction

Cancer-related cognitive impairment (CRCI) can affect cancer survivors' ability to return to work and sustain occupational functioning. A comprehensive understanding of CRCI-related occupational difficulties and unmet supportive care needs is essential for informing the development of effective interventions. Within occupational contexts, higher educational attainment is often associated with increased cognitive demands and differing role expectations. The aim of this study was to determine whether level of education explained CRCI-related (a) occupational difficulties and (b) occupational unmet supportive care needs, beyond the contributions of perceived cognitive functioning and employment level.

Methods

A cross-sectional design was employed using a subset of an existing self-reported dataset comprising 358 employed cancer survivors. The dataset included demographic and clinical information, as well as responses from the MASCC COG-IMPACT and PROMIS-Cog instruments. Hierarchical multiple linear regression analyses were conducted.

Results

After controlling for perceived cognitive functioning and employment level, highest level of education did not account for a significant amount of unique variance in CRCI-related occupational difficulties (R^2 Change = 0.004, F Change (1, 354) = 3.26, p = .147). However, after accounting for perceived cognitive functioning and employment level, highest level of education did account for a significant amount of unique variance in CRCI-related occupational unmet supportive care needs (R^2 Change = 0.011, F Change (1, 354) = 4.75, p = .030).

Conclusions

The findings are interpreted through theoretical perspectives involving compensatory strategies such as role adjustment and variations in access to occupational support. The results suggest that individuals with higher levels of education may not receive adequate supportive care related to CRCI within workplace settings, particularly in relation to maintaining work performance and meeting occupational expectations. These findings underscore the importance of designing effective interventions within the workplace to support cognitive functioning among cancer survivors.

SURVI-040

BEYOND CANCER SURVEILLANCE: SUPPORTIVE CARE OUTCOMES OF SINGAPORE'S FIRST ADVANCED PRACTICE NURSE-LED GASTROINTESTINAL CANCER SURVIVORSHIP CLINIC

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Introduction

Effective cancer survivorship care requires integration of health promotion, chronic disease management, and coordination with primary

care. While survivorship clinics are well established in Western health systems, Advanced Practice Nurse (APN)–led survivorship care remains uncommon in Asia and has traditionally been physician-led in Singapore. We evaluated the supportive care outcomes and safety of Singapore’s first APN-led gastrointestinal (GI) cancer survivorship clinic embedded within a tertiary oncology service.

Methods

An Advanced Practice Nurse (APN) embedded within a team-based medical oncology gastrointestinal clinic at the National University Cancer Institute, Singapore independently managed selected survivors on post-treatment surveillance. A retrospective review of patients seen between January and June 2025 was conducted using electronic medical records (EPIC). Eligible patients without recurrence were offered teleconsultation. Outcomes included oncologic safety and delivery of supportive care interventions.

Results

A total of 124 gastrointestinal cancer survivors were managed in the APN-led clinic, predominantly colorectal cancer ($n=100$), with additional upper gastrointestinal and hepatopancreatobiliary malignancies; most had stage II–III disease. Primary care was already established for 84 patients, with the APN initiating community primary care referrals for 11 patients. Supportive care interventions included exercise counselling ($n=65$), smoking cessation counselling ($n=3$; one successful quit), and osteoporosis referrals ($n=3$). Among 23 eligible patients, 12 teleconsultations were conducted, and six long-term survivors (>5 years disease-free) were transitioned to community follow-up. No adverse oncologic outcomes occurred, including missed recurrences, emergency department visits, or unplanned admissions. One second malignancy was detected on surveillance imaging.

Conclusions

An APN-led GI cancer survivorship clinic in Singapore is feasible and safe, representing a rare survivorship care model in Asia. This approach delivers comprehensive supportive care, strengthens primary care integration, and enables teleconsultation, offering a sustainable and scalable solution for the growing survivorship needs of Asian healthcare systems.

SURVI-041

PATIENT AND FAMILY VOICES ON CHILDHOOD CANCER SURVIVORSHIP: IDENTIFYING UNMET NEEDS ACROSS THE SURVIVORSHIP CONTINUUM

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Children’s Cancer CoLab

Introduction

Childhood cancer survivorship extends far beyond treatment completion, with families navigating complex challenges including fragmented healthcare systems, financial burdens, disrupted routines and psychological distress. Children’s Cancer CoLab is an independent non-profit transforming childhood cancer research funding and delivery in Australia by bringing together families, clinicians, researchers and charities. This consultation grounds survivorship research investment, service development, and policy efforts in lived experience, ensuring funding translates into meaningful improvement for survivors and families.

Methods

A participatory, qualitative approach engaged 34 individuals: 6 survivors, 15 parents, 9 researchers/clinicians, and 4 charity representatives. Data collection included semi-structured interviews with survivors and families, Patient and Family Advisory Committee meetings, and a facilitated Survivorship and Living Well Roundtable. Insights were thematically analysed and categorised by survivorship stage (acute treatment, end-of-treatment, long-term follow-up,

ongoing survivorship) and theme (medical, psychological, social, educational, financial, family needs).

Results

A total of 207 discrete insights were captured: 58 (28%) from interviews and 149 (72%) from roundtable discussions, comprising 129 (62%) challenges and 78 (38%) opportunities. Insights categorised across survivorship stages: 52 (25%) acute treatment, 33 (16%) end-of-treatment transition, 75 (36%) long-term follow-up and late effects, and 46 (22%) ongoing experiences. Five priority focus areas emerged: (1) Counselling and support needs for the entire family; (2) Financial toxicities with ongoing costs; (3) Educational challenges and social reintegration causing learning gaps and peer isolation; (4) Healthcare fragmentation between paediatric and adult care; and (5) Access barriers and limited primary care workforce expertise, particularly in regional/rural settings.

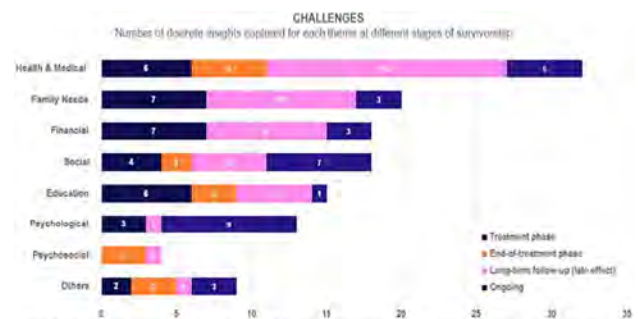


Figure 1. Challenges experienced by childhood and adolescent cancer survivors across different stages of survivorship. This stacked bar chart presents the number of discrete insights for eight themes across four survivorship stages: treatment phase (dark blue), end-of-treatment phase (orange), long-term follow-up/late effect phase (pink), and ongoing (dark purple). Health & Medical challenges represent the largest category (32 total insights), predominantly during long-term follow-up (16 insights). Family Needs and Financial challenges each account for 20 insights, with most challenges experienced in treatment and long-term follow-up phases. Remaining themes collectively capture 59 insights distributed across all survivorship stages, with notable clustering during treatment and long-term follow-up phases.



Figure 2. Opportunities identified by childhood and adolescent cancer survivors across different stages of survivorship. This stacked bar chart presents the number of discrete insights for eight themes across four survivorship stages: treatment phase (dark blue), end-of-treatment phase (orange), long-term follow-up/late effect phase (pink), and ongoing (dark purple). Education opportunities represent the largest category (20 total insights), with substantial representation in long-term follow-up (9 insights) and treatment phases (4 insights). Family Needs opportunities account for 9 insights concentrated in the long-term follow-up phase. Health & Medical opportunities total 17 insights distributed across all stages, with notable concentrations in long-term follow-up (6 insights) and ongoing phases (4 insights). Remaining themes collectively capture 28 insights, with Social opportunities predominantly in the treatment phase (7 insights) and Education opportunities continuing into the ongoing phase (3 insights).

Conclusions

Childhood cancer survivorship requires lifelong, holistic, family-centred approaches recognising the survivor and the whole family unit as central to recovery. Optimal care must integrate medical, psychosocial, educational, and financial support beyond tertiary care with improved coordination to reduce system fragmentation. These findings will guide CoLab’s vision for best practice survivorship care and strategic research prioritisation in Australia.

SURVI-042**EXPLORING SUBJECTIVE AND OBJECTIVE OUTCOME MEASURES FOR THE DETECTION OF GYNAECOLOGICAL CANCER-RELATED LYMPHOEDEMA**

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Introduction

Gynaecological cancer-related lymphoedema (GCRL) is a common and debilitating consequence of cancer treatment, affecting the lower limbs, groin, and abdomen with significant impacts on mobility and quality of life, yet remains under-researched despite evidence suggesting it may be more common than breast cancer-related lymphoedema. Assessment is complicated by the absence of a universally accepted measurement standard. Bioimpedance spectroscopy (BIS) provides an objective method for evaluating extracellular fluid, while patient-reported outcome measures, such as the Gynecologic Cancer Lymphedema Questionnaire (GCLQ), capture symptom burden. This study aimed to explore the relationship between these tools, including the agreement and associations with key factors.

Methods

This study analysed data from 170 women who participated in the Enhancing Treatment Outcomes After Gynaecological Cancer (ACU-MEN) trial. Participants underwent BIS assessment (SFB7, ImpediMed) and completed the 20-item GCLQ. Demographic, diagnosis, and treatment characteristics were recorded. Lymphoedema prevalence was determined by assessing how many participants met established thresholds for BIS and GCLQ scoring, as well as agreement between the two. Relationships between measures, age and body mass index (BMI) were explored using multivariate linear regression.

Results

Lymphoedema prevalence was 51% using BIS and 57% using the GCLQ. Agreement between measures was 0.62, indicating moderate agreement. Multivariate regression demonstrated no significant association between BIS (non-dominant limb) and GCLQ scores (coeff.=5.15, 95% CI=1.66 to 11.97). Age ($p=0.58$) and BMI ($p=0.81$) were also not significantly associated with symptom burden.

Conclusions

Findings highlight the substantial prevalence and impact of GCRL and the limitations of relying on a single measurement method. BIS and the GCLQ capture different but overlapping aspects of lymphoedema, which reinforces the need for comprehensive assessment strategies that integrate objective and subjective outcomes. A combined approach could enhance early detection, guide management, and improve care for women treated for gynaecological cancer.

SURVI-045**A SYSTEMATIC REVIEW OF PEER MENTORING AND COACHING IN CANCER SURVIVORSHIP**

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Introduction

Peer-mentoring and peer-coaching are increasingly used in oncology as supportive care strategies that provide relational, experiential, and motivational benefits alongside standard treatment. By connecting survivors with trained peers who have faced similar cancer experiences, these approaches aim to enhance psychosocial adjustment, health behaviors, and empowerment. However, despite their expanding application, evidence remains dispersed across cancer types, age groups, and intervention formats, highlighting the need for a comprehensive review. This systematic review aimed to synthesize the characteristics, implementation models, and outcomes of peer mentoring and peer coaching interventions for cancer survivors.

Methods

Searches were conducted in Cochrane, Ebscohost, Scopus, Web of Science, and PubMed using the terms ‘Peer-mentoring’ or ‘Peer coaching’ and ‘Cancer Survivors’. Inclusion criteria included studies focused on cancer survivors (not on active cancer treatment), the use of peer-mentoring or peer coaching as an intervention, and publications in English up to December 2025.

Results

Fourteen studies were included, representing randomized controlled trials ($n=5$), qualitative ($n=5$), quasi-experimental ($n=2$), a cohort and single-arm pilot study. More than 1,200 participants across breast, gynecologic, sarcoma, and adolescent/young adult (AYA) populations were represented. Peer mentoring and peer coaching interventions consistently enhanced physical activity, quality of life, emotional well-being, self-efficacy, and self-care behaviors. Qualitative findings highlighted mentoring-specific mechanisms such as normalization, emotional validation, shared identity (“a peer who understands”), reciprocal meaning-making, and mastery building. Structured, longer-duration mentoring models produced stronger psychosocial gains, while technology-supported peer coaching improved accessibility—especially for younger survivors and those with limited geographic access.

Conclusions

Peer-mentoring and peer-coaching constitute adaptable, survivor-centered approaches that meaningfully support behavioral and psychosocial recovery in diverse cancer populations. Future work should refine mentor–mentee matching, strengthen training protocols, and evaluate sustained long-term outcomes using rigorous comparative designs.

SURVI-048**EVALUATION OF A YOUNG ADULT CANCER SURVIVOR-LED “LIVING WITH CANCER” ONLINE EDUCATION PROGRAM: BRAVE (BE RADIANT AND VALUE EVERY DAY)**

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Introduction

Young adult cancer survivors (YAs) experience life-stage-specific challenges during survivorship, yet peer-led interventions tailored to their needs remain limited. This study evaluated a YA-led “Living with Cancer” online education program, examining its feasibility, acceptability, and preliminary effects on quality of life.

Methods

We developed a six-week YA-led online education program, with weekly participant-led sessions addressing psychosocial unmet needs identified through prior literature. Sessions included a brief lecture and structured activities and were conducted online via Zoom weekly for approximately two hours. Participants were YAs aged 20–39 years, recruited from a university-affiliated cancer center in Seoul, Korea, and online communities. Outcomes were assessed using pre–post surveys on quality of life (Quality of Life–Cancer Survivors-Korean version),

loneliness (UCLA Loneliness Scale), program satisfaction, and thematic analysis of semi-structured interviews.

Results

27 YAs (mean age: 32.4; SD: 3.8, female: 85.2%) completed the online peer support program. Quality of life has improved from pre- to post-intervention (mean: 106.2 to 110.2), with the greatest improvement observed in the emotional well-being (26.0 to 27.3). Loneliness scores showed minimal quantitative change (41.4 to 40.9); however, over 70% of participants reported reduced feelings of loneliness in interviews due to peer connections. Program satisfaction was high (96%). All participants emphasized the accessibility, psychological comfort, and sustainability of the online format. Health management and future planning sessions were particularly valued as peer-led exercise guidance and opportunities to reframe future goals. Participants suggested the need for tailored financial information based on employment and living contexts, and additional psychologically supportive activities, including mindfulness-based approaches and involvement of mental health professionals, when addressing sensitive relational and emotional topics.

Conclusions

YA-led, peer-based online interventions appear feasible and acceptable and show potential to support emotional well-being among young adult cancer survivors. Further refinement and larger-scale studies are warranted to optimize content and assess long-term effectiveness.

SURVI-049

ACCESSIBILITY, IMPLEMENTATION, AND BARRIERS TO LYMPHEDEMA THERAPY FOR HEAD AND NECK CANCER SURVIVORS

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Introduction

Secondary lymphedema is a significant underrecognized sequela of head and neck cancer (HNC) and its treatments. Lymphedema may impact external structures (head, face, neck) and internal structures (larynx, pharynx), leading to functional impairments, disability, and reduced quality of life. Although therapist guided lymphedema treatment (TGLT) is effective, timely access is frequently limited by financial constraints, geographic barriers, systemic inefficiencies, and shortages of trained therapists. This study evaluates accessibility, implementation, and barriers to TGLT in HNC survivors.

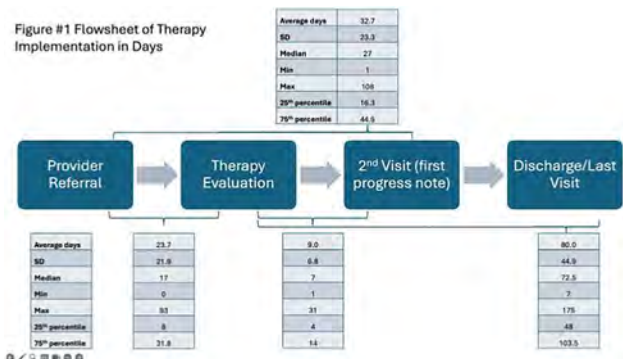
Methods

This prospective cohort study was nested within a multi-site randomized trial comparing usual care to an advanced pneumatic compression device (APCD). Eligible participants (N=117) were HNC survivors with lymphedema and at least one lymphedema-associated symptom rated $\geq 4/10$. Therapy notes and patient data were abstracted to assess referral patterns, therapy timelines, lymphedema treatment characteristics, documented therapeutic goals, and reported barriers. Descriptive statistics were obtained to depict trends in therapy initiation, implementation, and barriers.

Results

Of 117 participants referred for therapy, 77 (66%) were evaluated by a therapist. Of these, 11 failed to return for a second visit (56%). Median time from referral to evaluation was 17 days. Median time from evaluation to last recorded visit was 72.5 days (median 10 visits). Many patients experienced protracted wait times (Figure 1) and treatment breaks. Therapy delivery varied substantially; By last documented visit, recommendations included home manual lymphatic drainage (82%),

compression garments (65%), APCD (33%), and written self-care instructions (26%). 28% achieved all therapy goals. Documentation inconsistencies and gaps in provider communication hindered effective therapy implementation. Barriers included geographic distance, financial constraints, and therapist shortages.



Conclusions

Significant variability, limited care access, and delays in TGLT exist for HNC survivors. Standardized protocols, telemedicine, and adjunctive technologies such as APCDs may improve accessibility, adherence, and outcomes. Future studies should focus on optimizing care models including self-care and reducing disparities in therapy delivery.

SURVI-050

IMPACT OF ADVANCED PNEUMATIC COMPRESSION DEVICES AND USUAL CARE ON PSYCHOSOCIAL OUTCOMES IN HEAD AND NECK CANCER SURVIVORS WITH LYMPHEDEMA

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Introduction

Head and neck cancer (HNC)-associated lymphedema impairs quality of life (QOL) in survivors, affecting body image, self-management efficacy, work productivity, and psychosocial functioning. Data supports therapist guided lymphedema therapy (TGLT) and technologies such as advanced pneumatic compression devices (APCD) reduce swelling. There is a lack of data on psychosocial and QOL outcomes. This randomized clinical trial compared psychosocial outcomes of TGLT and APCD in treatment-naïve HNC survivors with symptomatic lymphedema over 6 months.

Methods

Participants (N=236) with HNC-associated lymphedema were randomized 1:1 to receive either TGLT (117) or APCD (119) for 6 months. Psychosocial outcomes were assessed at baseline, 2, 4, and 6 months using validated instruments: the Work Productivity and Activity Impairment Questionnaire (WPAIQ), Perceived Medical Condition Self-Management Scale (PMC-SMS), Body Image Quality of Life Inventory (BIQLI), and Linear Analog Self-Assessment (LASA) for QOL. Longitudinal mixed-effects models evaluated within- and between-group changes over time.

Results

Both treatment groups experienced improvements in psychosocial outcomes over time. Self-management efficacy improved in both arms. The APCD group demonstrated significantly greater self-efficacy managing lymphedema at 6 months ($p=0.004$). Work and activity impairment

decreased in both groups, with no significant between-group differences. BIQLI scores improved across timepoints in both arms, reflecting enhanced body image-related QOL. LASA scores for overall QOL and emotional, physical, and spiritual well-being also improved similarly in both groups. No significant time-by-treatment interactions were observed, indicating comparable trajectories of psychosocial recovery.

Conclusions

Both TGLT and APCD were associated with meaningful improvement in psychosocial outcomes, including self-management efficacy, body image, and QOL, among HNC survivors with lymphedema. APCD offers ongoing access to a convenient, home-based treatment which may enhance fidelity and self-efficacy through ongoing instrumental support. These findings underscore the value of accessible, patient-centered lymphedema interventions to enhance survivorship care. Future research should explore long-term adherence, cost-effectiveness, and integration of psychosocial support into treatment pathways.

SURVI-051

SUPPORTING SELF-MANAGEMENT OF BREAST-CANCER RELATED LYMPHOEDEMA USING CO-DESIGNED ONLINE PLATFORM

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Introduction

Approximately 1 in 5 women with breast cancer will develop lymphoedema making monitoring and self-management-based risk reduction a priority for all survivors. To overcome access barriers, we have designed an online resource for breast cancer survivors to support self-management of risk for lymphoedema.

Methods

The platform was co-designed through face-to-face and online workshops with breast cancer survivors (n = 19) and healthcare professionals involved in lymphoedema care (n =). Co-design discussions were audio-recorded, transcribed, and analysed thematically to inform platform design. A prototype developed from these findings was reviewed by nurses managing lymphoedema (n = 8) and survivors (n = 23) and then usability tested with survivors (n = 3) and nurses (n = 2).

Results

Participants identified goal setting, self-tracking and motivational reinforcement as essential for sustained engagement. The ability to log health measures and track changes over time was perceived as being motivational. Having the platform backed by a reputable organisation suggested credibility and increased trust in data security. Participants liked the “myth-busting” section and stressed the need for all educational content to be referenced to increase credibility. Participants supported a specialist directory to reduce service seeking burden. Peer support was acknowledged as important, but engaging with existing groups was preferred over building new peer support within the platform. Participants found the layout intuitive and suggested making the platform’s purpose clearer and using empowering terms, such as “self-care” instead of “basic care” which were

incorporated in the final design. Usability testing confirmed that the design with multimodal content delivery supported intuitive use and engagement, establishing readiness for testing in a pre-post intervention study.

Conclusions

Input from survivors and health care providers facilitated refinement of the online platform to ensure easy navigation and self-management support prior to efficacy testing of the intervention.

SURVI-052

SOCIOECONOMIC OUTCOMES OF CHILDHOOD CANCER SURVIVORS IN INDIA: A REPORT FROM A STRUCTURED TERTIARY CARE CHILDHOOD CANCER SURVIVORSHIP PROGRAM IN INDIA

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Introduction

Childhood cancer survival is increasing in India, yet the long-term socioeconomic burden faced by survivors is poorly quantified. We aimed to identify issues related to educational disruption, employment and financial hardship among survivors.

Methods

We conducted a cross-sectional study of survivors enrolled in the Childhood Cancer Survivorship Program at a tertiary cancer center in India (December 2020–March 2025). Eligible survivors were ≤21 years at diagnosis and had completed therapy. Clinical and sociodemographic data were abstracted from records and structured proforma. Logistic regression with forward stepwise modelling was used to identify predictors of educational, financial, and employment challenges.

Results

We included 1,098 survivors. The median age was 16 years at evaluation and 74.7% were male. Among those diagnosed at 5–21 years (n=764), 85% reported educational disruption (median 1.75 years). Independent predictors included relocation for cancer treatment (OR 1.8; 95% CI 1.1–2.7; p=0.01) and job loss within the family (OR 2.1; 95% CI 1.2–3.7; p=0.01). Maternal education ≥high school was strongly protective (OR 0.29; 95% CI 0.14–0.60; p=0.001). Financial data (n=1,048) showed 50.9% incurred treatment costs ≥3,385 USD, and catastrophic health expenditure (CHE) occurred in 91.3% of families with available income data. Younger age at diagnosis (OR 1.03 per year; 95% CI 1.01–1.06; p=0.003) and relocation (OR 1.61; 95% CI 1.22–2.13; p=0.001) independently predicted high expenditure. Cancer-related employment difficulties affected 30.2% of working-age survivors, with older age at diagnosis (OR 1.15; 95% CI 1.09–1.22; p<0.001) and longer time since treatment completion (OR 1.08; 95% CI 1.01–1.15; p=0.02) being independent predictors.

Conclusions

For Indian childhood cancer survivors, cure carries hidden costs of disrupted education, financial strain, and workplace barriers. Addressing school reintegration, financial protection, and targeted vocational support should be integral components of survivorship care in resource-constrained settings.

SURVI-053**IMPACT OF DIABETES SELF-MANAGEMENT TRAJECTORY ON QUALITY OF LIFE IN OPERABLE PANCREATIC CANCER SURVIVORS WITH DIABETES**

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Introduction

Operable pancreatic cancer (OPC) survivors with diabetes often experience worse outcomes than survivors without diabetes. Suboptimal diabetes self-management has been suggested as a key contributor to this disparity. Yet, the diabetes self-management trajectory and its influence on quality of life (QOL) among OPC survivors with diabetes remain unclear. This study examined changes in diabetes self-management across time and assessed its impact on QOL.

Methods

OPC survivors with diabetes were recruited from a pancreatic surgical clinic at a medical center in Taiwan using a longitudinal design. Data were collected at baseline and at 3, 6, 9, and 12 months post-baseline using structured questionnaires. Diabetes self-management (i.e., healthy diet, exercise, blood glucose self-monitoring, taking medication, and foot care) was assessed using the Summary of Diabetes Self-Care Activities. QOL was measured using the EORTC-QLQ-C30. Generalized estimating equations were performed.

Results

Among the 70 participants recruited, total diabetes self-management scores increased significantly at 6 months ($\beta = 3.26$, $p = .005$), 9 months ($\beta = 4.30$, $p = .002$), and 12 months ($\beta = 6.09$, $p < .001$) compared to baseline. More exercise engagement was associated with better overall QOL ($\beta = 2.90$, $p < .001$), whereas more frequent blood glucose self-monitoring was associated with worse overall QOL ($\beta = -1.11$, $p = .012$). Exercise was positively related to physical ($\beta = 3.30$, $p < .001$) and social functioning ($\beta = 1.76$, $p = .008$). Blood glucose self-monitoring was negatively associated with physical functioning ($\beta = -1.33$, $p < .001$).

Conclusions

In OPC survivors with diabetes, increased exercise engagement was associated with better QOL over 12 months. In contrast, more frequent blood glucose self-monitoring was linked to poorer QOL. Healthcare providers should encourage survivors to incorporate exercise into daily routines. Future research should explore how blood glucose self-monitoring influences QOL to inform targeted interventions.

SURVI-054**NETWORK ANALYSIS AND CENTRALITY FOR IDENTIFYING INTERVENTION TARGETS IN BREAST CANCER SURVIVORSHIP**

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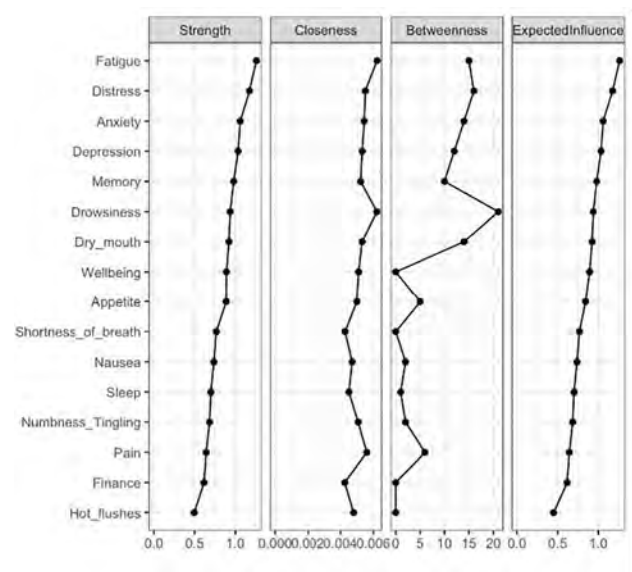
Introduction

Breast cancer survivors frequently experience multiple co-occurring symptoms that cluster together, and identifying optimal intervention targets remains challenging. Traditional approaches identify clusters

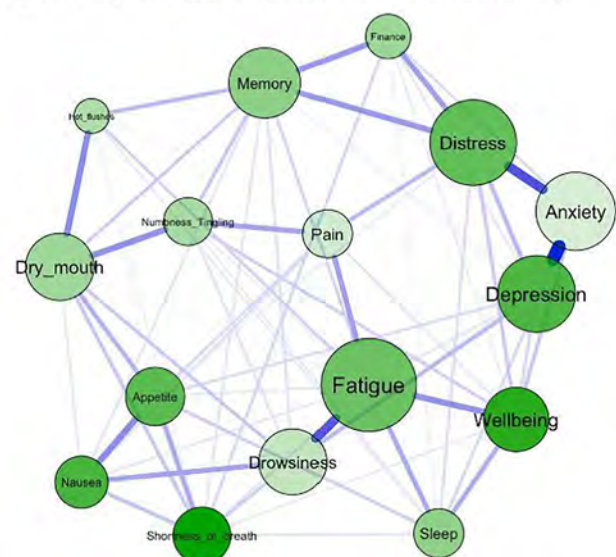
but do not identify how the symptoms interact or serve as optimal intervention targets. Network analysis addresses this gap by mapping symptom interrelationships and identifying central symptoms that may have cascading effects on symptom clusters.

Methods

Edmonton Symptom Assessment Scale (ESAS) was collected from breast cancer survivors at Chris O'Brien Lifehouse, Sydney, Australia. Statistical analysis was performed using R. Missing data were handled using multiple imputation methods. Exploratory Factor Analysis (EFA) identified latent underlying symptom clusters using varimax and promax rotations. Network analysis employed EBICglasso estimation ($\gamma = 0.25$) to derive partial correlation networks. Centrality measures included Expected Influence, Betweenness, Strength, and Closeness. Network stability was assessed using bootnet with 500 bootstrap samples.

Results

Tx_status + Age (Categorical) Network (EI Size & Betweenness Color)



Analysis included 507 breast cancer survivors between 2022–2025 (median age 53 years, 22% active treatment). EFA identified four factors explaining 40–49% variance: Factor 1 (depression, anxiety, finance, distress), Factor 2 (pain, fatigue, sleep, wellbeing, numbness/tingling), Factor 3 (nausea, shortness of breath, appetite), and Factor 4 (memory). Factor 2 explained the highest proportion of variance (25–30%). Centrality analysis revealed fatigue (Expected Influence (EI) = 1.26), distress (EI = 1.17), and anxiety (EI = 1.06) as the most influential symptoms in the network. Fatigue in particular linked physical and emotional symptoms, suggesting it may worsen multiple problems at once. Detailed network relationships are in the process of being interpreted (Figure 1, 2).

Conclusions

Network analysis with centrality metrics identifies fatigue, distress, and anxiety as central intervention targets in breast cancer survivorship. These findings support a holistic approach to symptom management, targeting central symptoms that may have cascading effects on symptom clusters, rather than treating symptoms in isolation.

SURVI-055

CANCER SURVIVORS' EXPERIENCES AND PERSPECTIVES ON A COMMUNITY-BASED MULTIDISCIPLINARY SURVIVORSHIP PROGRAM: A QUALITATIVE STUDY

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Introduction

Recently, we developed and piloted a community-based multidisciplinary cancer survivorship intervention. While a brief survey suggested that the intervention was acceptable, the feedback was brief and provided limited insights into cancer patients' perceptions regarding the usefulness of the survivorship care program in facilitating their transition from the treatment phase to the survivorship phase, as well as the challenges patients face in learning and applying the taught skills. A qualitative study is needed to collect such in-depth information, which will help optimize the design of survivorship care interventions and thereby increase their effectiveness. The aims of this qualitative study were (1) to understand the experience of cancer survivors participating in the cancer survivorship care program and (2) to identify perceptions of barriers and facilitators to learning and applying the taught skills in managing symptom distress and adopting lifestyle modifications.

Methods

Participants were drawn from a pilot survivorship program in Hong Kong. Sixty Cantonese- or Mandarin-speaking Chinese cancer survivors without metastatic disease, who had completed primary and adjuvant treatment within six months, were recruited from public oncology centers. Semi-structured interviews were audio-recorded, transcribed, and analyzed using grounded theory with simultaneous coding.

Results

Difficulty in resuming normal life was a key theme in describing the transition from active treatment to post-treatment care. Several distinct characteristics highlight the struggles faced by these patients: (1) managing the side and late effects of cancer treatment, (2) loss in transition, (3) financial toxicity, and (4) the opportunity to review life values. The program was perceived as enhancing health literacy, promoting self-management, providing emotional support, and ensuring continuity of care. However, adherence to recommended strategies remained challenging.

Conclusions

The findings highlight the role of self-management support, particularly through a stepped-care approach, to build survivors' confidence

and skills in managing treatment-related effects and adopting healthier lifestyles.

SURVI-056

TRAJECTORY OF PATIENTS REPORTED OUTCOMES IN PATIENTS WITH KIDNEY CANCER: FINDINGS FROM A MULTICENTER COHORT STUDY

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Introduction

With continued improvements in kidney cancer survival, understanding longitudinal patient-reported outcomes (PROs) across the disease trajectory has become a research priority. Real-world evidence describing PRO trajectories remains limited.

Methods

A multicenter cohort study was conducted including 599 patients with kidney cancer comprising two cohorts (cohort 1 with localized cancer; cohort 2 with advanced cancer). PROs including EQ-5D-5L, EORTC QLQ-C30 global health/QoL measured quality of life (QoL), FKSI and HADS measured symptoms/side-effects at diagnosis, at 12 and at 24 months. Descriptive statistics were used to summarize patient characteristics and PROs. Within each cohort, longitudinal changes of QoL and symptom/side-effects were examined using linear mixed models with Bonferroni post-hoc adjustment.

Results

Patients were predominantly middle-aged male. In cohort 1, significant improvements over time were observed in QoL and symptom/side-effects (FKSI total score, disease-related emotional symptoms, treatment-related side-effects, and depressive symptoms) ($p < .001$), with post-hoc analyses indicating that improvements occurred between baseline and 12 months and the change maintained at 24 months. Anxiety decreased at 12 months compared to baseline ($p = .012$). In cohort 2, no significant QoL changes were observed. However, emotional symptoms improved and sustained at 12 and 24 months, and treatment-related side-effects worsened at 12 months with recovery at 24 months ($p < .001$). Among patients who received the same regimen for 24 months, treatment-related side effects were more severe in those receiving targeted therapy than in those receiving immunotherapy or combination therapy ($p < .001$), with no significant group-by-time interaction.

Conclusions

Patients with localized cancer experienced improvements in QoL and symptom/side-effects within the first 12 months, which were sustained thereafter. Patients with advanced cancer demonstrated improvements in emotional symptoms and variability in treatment-related side-effects over time, whereas QoL remained stable. Tailored supportive care strategies, informed by the clinical context and cancer trajectory, are needed.

SURVI-058

UNMET CARE NEEDS, STRESSORS, AND IMMUNOTHERAPY DECISION-MAKING AMONG FAMILY CAREGIVERS OF PATIENTS WITH CANCER IN SURVIVORSHIP

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Introduction

Family caregivers increasingly assume complex caregiving and decision-making responsibilities due to advances in cancer treatment and nursing workforce shortages, resulting in heightened stress and unmet care needs. However, these unmet needs among caregivers of patients undergoing immunotherapy remain poorly understood. This study aimed to examine the frequency and severity of unmet care needs among family caregivers of cancer patients undergoing immunotherapy during survivorship, and to identify associated factors across subdomains of informational needs, health-care needs, psychological and emotional needs, and social and work needs.

Methods

In this cross-sectional study, 104 patient-caregiver dyads were included, and 101 dyads completed questionnaires assessing unmet care needs, caregiver and patient stressors, including physical and psychological symptoms, and involvement in shared decision-making. Spearman's rank correlation was used for analysis.

Results

The most frequent and severe unmet needs were in the subdomains of information, work and social support, and health-care services. Patients' education and stressors, including physical and psychological symptoms (e.g., sleep disturbances, pain, dry mouth, anxiety, depression, and uncertainty), were correlated with caregivers' unmet needs. Additionally, caregivers who were younger, more educated, and who experienced greater fatigue, sleep disturbances, anxiety, depression, and uncertainty reported higher unmet needs. Greater caregiver involvement in immunotherapy-related decision-making was also linked to higher unmet needs, particularly in psychological and emotional needs and work and social needs.

Table 1

Patient and Family Caregivers' Background Information (N=101)

Variable	n	%	Mean (SD)	Range
Patient demographic characteristics				
Gender				
Male	77	76.2		
Female	24	23.8		
Age			57.4 (12.6)	23-88
Years of education			11.7 (4.1)	0-21
Marital status				
Unmarried	18	18.8		
Married	85	84.2		
Occupational status				
Unemployed	45	44.6		
Unemployed since sick	30	29.7		
Employed	28	27.7		
Disease characteristics				
Disease				
Head and Neck Cancer	43	42.6		
Lung Cancer	11	10.9		
Liver Cancer	18	17.8		
Other	39	38.7		
Stage				
I	3	3.0		
II	2	2.0		
III	9	9.0		
IV	88	87.0		
Comorbidity				
Yes	80	79.4		
No	41	40.6		
Performance status (ECOG)			1.6 (0.8)	0-4
0	1	1.0		
1	63	61.4		
2	20	19.8		
3	16	15.8		
4	2	2.0		
Treatment				
Immunotherapy only	21	20.8		
Immunotherapy + chemotherapy	26	25.7		
Immunotherapy + targeted therapy	30	29.7		
Immunotherapy + chemotherapy + targeted therapy	25	24.8		
Duration of illness (months)				
< 6	21	20.8		
6-12	18	17.8		
> 12	58	57.4		
Family caregivers' characteristics				
Gender				
Male	17	16.8		

Female	84	83.2		
Age			49.5 (12.8)	23-77
Years of education			13.5 (3.2)	0-21
Marital status				
Unmarried	27	26.7		
Married	74	73.3		
Current occupational status				
Unemployed	33	34.7		
Unemployed or part-time for family caregiving	20	19.8		
Employed	48	48.5		
Financial status (NTD/month)				
No income	36	35.8		
< 30,000	24	23.8		
30,000-60,000	30	29.7		
> 60,000	11	10.9		
Caregiving characteristics				
Relationship to patient				
Spouse	57	56.4		
Child	28	27.7		
Parent	6	5.9		
Other relative	10	10.0		
Average caregiving hours per day			18.8 (8.9)	
Duration of patient care (months)			13.7 (15.4)	

Note: SD = Standard Deviation.

[†] Eastern Cooperative Oncology Group performance status score

Table 2

Frequency and Severity of SCNS-P&C total scores, each dimension, and the top 10 items (N=101)

		Frequency	Severity
SCNS-P&C (theoretical range)		Unmet need (%)	Mean (SD)
Overall unmet care needs (0-100)		96.2	35.3 (20.4)
Information needs		89.1	49.6 (26.1)
Health-care service needs		76.2	44.2 (24.7)
Psychological and emotional needs		59.4	27.5 (23.0)
Work and social needs		89.1	22.4 (19.3)
Top 10 unmet care needs (0-100)			
Domains	Items	Unmet need (%)	Mean (SD)
Information	2. Prognosis	66.3	54.0 (30.6)
Information	5. Patient physical needs	65.3	54.0 (33.1)
Information	6. Decision making	59.4	54.0 (33.1)
Health-care	7. Best medical care patient	55.4	53.5 (33.4)
Health-care	16. Pain control for patient	60.4	52.2 (33.7)
Information	4. Alternative therapies	62.4	52.0 (33.5)
Health-care	10. Discuss concern with doctor	54.4	48.5 (32.6)
Health-care	8. Access local health services	57.4	47.5 (38.5)
Health-care	14. Reduce stress for patient	55.4	46.8 (34.6)
Health-care	12. Case manager coordinated services	50.5	45.8 (32.6)

Note: The SCNS-P&C (Supportive Care Needs Survey - Partners and Caregivers) scale assesses unmet care needs. Frequency refers to the proportion of respondents reporting at least one unmet need within a specific subscale or item. Severity reflects the intensity of unmet needs, with higher scores indicating greater levels of unmet needs across various domains.

Table 3

Correlations of Patients and Family Caregivers' Factors and Unmet Care Needs (N=101)

Variables	Information	Health-care service	Psychological and emotional	Work and social	Overall
Patients' factors					
Age	.13	.05	.02	-.08	.04
Years of education	.18	.19	.28**	.18*	.25*
ECOG ¹	.16	.17	.05	-.05	.11
Sleep disturbance	.19	.21*	.05	.16	.17
Fatigue	.01	.04	-.08	-.04	-.02
Pain	.19	.20*	.08	.13	.17
Poor appetite	.16	.15	.04	.05	.11
Dry mouth	.15	.24*	.16	.18	.21*
Anxiety	.21*	.24*	.11	.13	.23*
Depression	.20**	.20**	.11	.12	.28**
Uncertainty	.26**	.31**	.08	.07	.29*
Family Caregivers' factors					
Age	-.06	-.04	.08	-.22**	-.10
Years of education	.29**	.24*	.32**	.32**	.33**
Pain	.07	.05	.11	-.01	.08
Fatigue	.22*	.21*	.30*	.19	.24*
Sleep disturbance	.21*	.17	.20*	.15	.22*
Anxiety	.26**	.27**	.24*	.15	.28**
Depression					
Depression	.28**	.31**	.28**	.18	.30**
Uncertainty	.27**	.23*	.15	.08	.22*
Effort invested in the SDM process	.16	.07	.24*	.22*	.20*

Note: Correlations assessed using Spearman's rank correlation coefficient analysis.
¹ Eastern Cooperative Oncology Group performance status score

Conclusions

This study highlights that caregivers' age, years of education, fatigue, sleep disturbances, and psychological distress, particularly the time spent understanding immunotherapy-related information, are significantly correlated with their unmet needs. Additionally, patients' years of education and symptom burden also contribute to these needs. Targeted support and interventions are essential to improve outcomes for both caregivers and patients undergoing cancer treatment during survivorship.

SURVI-061

ONCOLOGIST AND GENERAL PRACTITIONER PERSPECTIVES OF TELEHEALTH-DELIVERED COLORECTAL CANCER SURVIVORSHIP CARE

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Introduction

The use of telehealth for the follow up of survivors of colorectal cancer (CRC) provides an opportunity to reduce health resources use and provide flexibility for patients and healthcare providers (HCPs). To determine whether telehealth is acceptable and appropriate for providing CRC follow-up care, we must first understand the perspectives of HCPs who have delivered telehealth-based CRC survivorship care. The aim of this study was to examine the experiences of oncologists and GPs who provided telehealth for CRC survivors within the Shared Care for Colorectal Cancer (SCORE) trial, focusing on implementation outcomes and perceived facilitators and barriers to implementation.

Methods

This was a qualitative descriptive study. Oncologists and GPs participated in individual semi-structured interviews, with interview guides based on defined implementation outcomes (adoption, appropriateness, acceptability, sustainability). Interviews were audio-recorded and transcribed, and data analysed using inductive thematic analysis.

Results

Twenty-three HCPs (13 GPs, 10 oncologists) participated in the study. Seven themes were identified from the data: 1) forced adoption and rapid implementation of telehealth during COVID; 2) patient benefits of convenience and safety; 3) patient factors that determine appropriateness for telehealth; 4) clinical factors that preclude telehealth; 5) HCP preferences and views on quality of care; 6) technical and administrative barriers; and 7) training, technology, administrative support and reimbursement to support future telehealth use. Telehealth was considered acceptable for routine CRC follow-up care, however required judicious use based on patient- and clinical-related factors. Challenges were identified regarding technology and logistical and administrative processes, and the potential for disparities in telehealth access.

Conclusions

This study supports the use of telehealth for the provision of CRC survivorship care, provided that certain patient-related and clinical characteristics are met. Future research may address tools to facilitate decision making for telehealth use, and research that seeks to understand and mitigate disparities in access to telehealth.

SURVI-064

STATUS OF WORK RIGHTS FOR PEOPLE WITH ADVANCED BREAST CANCER: A GLOBAL SNAPSHOT AND FUTURE DIRECTIONS

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Introduction

Law reform is needed across the globe to more comprehensively protect the work rights of people with advanced breast cancer (ABC) and their informal caregivers. Continuing or returning to work is often wished and/or needed for people with ABC yet denied. Due to an increasing number of available treatment options, people may live with ABC for several years, meaning increased potential and desire for workforce participation. This could be to maintain a sense of normalcy and/or to retain health insurance coverage. Despite this, for people with ABC, the right to work often goes unfulfilled with insufficient legal protections often to blame. Commissioned by the ABC Global Alliance and conducted by the McCabe Centre for Law and Cancer, this study explores the status of laws in a range of countries from different regions, income levels and employment environments and identifies necessary reforms.

Methods

This study evaluated national laws in 24 countries applicable to around 43% of the global population, adopting a ‘doctrinal’ legal research methodology focusing on primary sources of law and case law. Where available, secondary sources were also relied upon, as was the technical and practical experience of local contributors including qualified lawyers and cancer organisations.

Results

Across the globe there are gaps in legal protections across a range of areas including flexible work, leave entitlements and benefits and caregiver protections. Insufficient implementation by employers and inadequate monitoring are compounding factors.

Conclusions

While several countries have strong legislative protections in place in key areas, none of the 24 countries studied has introduced sufficient workplace entitlements to comprehensively protect the work rights of people with ABC and their caregivers. Accordingly, improving the legal rights of people with ABC, including the right to continue or return to work remains one of the ten priority goals of the ABC Global Charter for the decade 2025–2035.

SURVI-065

FACTORS INFLUENCING ENGAGEMENT WITH PERSONALISED SURVIVORSHIP RECOMMENDATIONS IN CHILDHOOD CANCER SURVIVORS

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Introduction

Childhood cancer survivors’ adherence to healthcare recommendations remains suboptimal. The relationship between factors influencing recommendation adherence, including the total number of recommendations received, is poorly understood.

Methods

‘Engage’ is a multidisciplinary survivorship intervention, delivered at 2 tertiary paediatric hospitals in Sydney, Australia. Childhood cancer survivors (diagnosed < 18 years, ≥ 5 years post-diagnosis, in remission, and > 2 years from last specialist appointment) completed a remote, guideline-informed health and lifestyle assessment and nurse consultation. Survivors’ clinical history, current health concerns and psychosocial needs were reviewed by a multidisciplinary team, resulting in the provision of personalised survivorship care recommendations across multiple health-care domains, extracted for this analysis. Adherence was assessed at 1-, 6-, and 12-months post-intervention. We used hierarchical linear regression with linear and quadratic-terms and a binomial generalized linear model to assess clinical (e.g. treatment) and demographic (e.g. age) to explore factors associated with recommendation adherence.

Results

105 survivors reported adherence data (mean age at diagnosis: 7.4 years; mean time since diagnosis: 18 years; 31.4% High Grade Brain Tumour). Survivors received a mean of 6.9 recommendations (range: 2–14) and adhered to a mean of 3.4 (range: 0–11; mean adherence rate = 53.3%). Adherence increased linearly with recommendation burden ($\Delta R^2=.194$, $\beta=.457$, $p<.001$). There was no evidence of a ‘tipping point’ ($\Delta R^2=.004$, $p=.509$). Survivors treated with multimodal therapy had lower odds of adhering to individual recommendations compared with those receiving surgery alone ($OR\approx 0.57$, $95\%CI=0.36-0.89$, $p=.014$). Female sex was associated with higher adherence probability ($OR\approx 1.42$, $95\%CI=1.04-1.94$, $p=.028$), whilst survivors without private health insurance demonstrated lower adherence odds ($OR\approx 0.68$, $95\%CI=0.50-0.94$, $p=.019$).

Conclusions

Adherence to survivorship care recommendations appears to be influenced more by clinical complexity (i.e. receipt of multimodal therapy), and individual characteristics (female sex, insurance) than by recommendation volume, underscoring the need for tailored strategies to optimise survivorship care engagement.

SURVI-067

FINANCIAL TOXICITY IN REGIONAL AND RURAL CANCER SURVIVORS IN AUSTRALIA: CO-DESIGN OF A HOLISTIC SUPPORT PROGRAM AND IMPLEMENTATION STRATEGY (FINHOPE)

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Introduction

Over 1.1 million Australians live with a history of cancer. Financial Toxicity (FT) - the economic burden from direct and indirect cancer-related costs – negatively impacts treatment adherence, quality of life, and well-being. Despite subsidised services, financial barriers persist, particularly for regional and rural populations, identified as a priority in the Australian Cancer Plan. Addressing FT is critical for improving equitable access and health outcomes. This study aimed to co-design a holistic support program and implementation strategy for regional and rural cancer survivors experiencing FT in Australia.

Methods

Using The British Design Council’s Double Diamond Framework, nine workshops engaged cancer survivors, family members, clinicians, and community support providers across three phases:

(a) defining barriers and facilitators to accessing FT support, (b) designing a prototype support program, and (c) developing an implementation strategy for integration into community-based cancer support organisations. Analyses were guided by the *Consolidated Framework for Implementation Research (CFIR)* (Figure 1) and *Expert Recommendations for Implementing Change (ERIC)*. Barriers and enablers were mapped to CFIR constructs in the ‘define’ phase, participant preferences were synthesised through content analysis in the ‘design’ phase; ERIC will inform strategy refinement in the final ‘develop’ phase.

Figure 1: Consolidated Framework for Implementation Research (CFIR) domains, adapted from Damschroder et al. 2022



Results

The ‘define’ phase (n=9 participants) identified a comprehensive list of priority barriers and enablers, across 17 constructs in 5 domains, such as clear communication and accessible services (Tables 1-2). The ‘design’ phase (n=16) generated program solutions, such as service navigation, online support and financial counselling. The ‘develop’ phase to finalise an implementation strategy tailored for community cancer support services is underway.

Table 1: Key barriers to accessing financial literacy support

CFIR Domain	Construct	Barriers
Individuals involved	Knowledge	Lack financial literacy and lack of digital skills or access, requiring frequent system changes, not knowing how to access superannuation; limited awareness of, and uncertainty about, available support services and points of contact
	Motivation	Brain fog, exhaustion, and fatigue, leading to lack of energy for seeking help; feeling uncertainty compared to others; fear of losing pensions; belief that support will not help
	Opportunity	Overwhelm from illness, fatigue, competing life demands; being physically unwell without family support; time constraints; isolation when new to community; reliance on carers; self-employed challenges; need for self-advocacy
	Need	Lack of insurance (e.g., income protection); need to continue working during treatment; financial resources depleting over time
Organisations delivering the program	Structural Characteristics (Work Infrastructure)	Shortage of financial counsellors/social workers; staff turnover; limited daytime, service capacity constraints
	Structural Characteristics (IT Infrastructure)	Outdated IT systems hindering efficient support
	Communications	Lack of clear information from hospitals; inefficient pre-visit advice on insurance; financial concerns not routinely prioritised in cancer care/medical focus dominates; staff delivering programs often unaware of processes
	Relative Priority	Limited funding to start or sustain financial support programs
The wider environment	Access to Knowledge & Information	Increasing waiting practices (bulk billing or private)
	Culture - Beliefs & Attitudes	Strict eligibility rules (Centrelink, PBS, NDIS); requirement for GPs records, income thresholds excluding patients; extensive paperwork; delay in assessment; public vs private urgency; digital, limited financial literacy skills; a lack, or loss, of knowledge between cancer types; older GPs ineligible for NDIS, denied based on household income
	Local Conditions	Lack of local services in rural/remote areas; transport barriers; natural disasters (e.g., floods); systemic service gaps; regional variability in support
	Local Attitudes	Confidentiality concerns in small towns; stigma and gossip; overreliance on or inaccurate advice from social media groups
Program implementation processes	Partnerships & Connections	Late connection to services (weeks after referral); poor service coordination; transient GP workforce; divide between public/private systems; fragmented navigation across programs
	Financing	Reliance on philanthropy with inconsistent processes; limited program funding
	Design	Balance on phone/video rather than preferred face-to-face; burdensome requirements for Authority to Act forms (significants)
	Implementation Strategy	Engaging

* PBS: Patient Free/No-Scheme; NDIS: National Disability Insurance Scheme

Table 2: Key enablers to accessing financial literacy support

CFIR Domain	Construct	Facilitators / Enablers
Individuals involved	Knowledge	Multi-engagement options (phone/face-to-face); flexible services with callbacks; tailored/stepped approaches; adaptable to individual needs
	Motivation	Clear/multiple resources; user-friendly information; service hubs; referral directories; coordinators to assist paperwork; structured supports across journey; consistent support persons; treatment timelines; online peer groups; inclusion of GPs/nurses; ongoing touchpoints
	Opportunity	Accessible location (close travel cost support)
	Need	Streamlined processes; usability; reduced burden in managing time
Organisations delivering the program	Partnerships & Connections	Financial information available at GP visit
	Local Conditions	Community engagement officers; local Centrelink offices; referral pathways; GP/nurse referrals; welfare teams; cancer care coordinators
	Local Attitudes	Regional services more accessible; easier in small towns; supportive environments
	Relative Priority	Clear/NDIS-informed; community groups; supportive town culture; travel support schemes seen as collective responsibility
The wider environment	Access to Knowledge & Information	Case managers in super; automatic Centrelink outreach; dedicated Centrelink staff
	Culture - Beliefs & Attitudes	Streamlined paperwork (e.g., DSP forms)
	Local Conditions	Financial discussions integrated into medical appointments
	Local Attitudes	Early and ongoing financial discussions with cancer teams; GPs, nurses; continuity of information flow
Program implementation processes	Partnerships & Connections	Whole-person approach (beyond medical needs); transparency on treatment costs; empathy-driven delivery; consideration of life impacts; caring community culture
	Financing	Well-trained staff delivering support programs
	Design	Support with paperwork; financial counselling services; tech skills; empathy within networks; flexibility understanding challenges; knowing “tricks of the trade”
	Implementation Strategy	Peer connections; philanthropic partnerships; talking to other patients; proactive offers of help; word of mouth; neighbourhood centres/peer groups; community awareness; integration into routine staff appointments

Conclusions

This structured co-design approach delivers a scalable, consumer-informed solution to reduce FT for regional and rural cancer survivors. By addressing a critical equity gap, these outputs advance national priorities for improved consumer experience and survivorship outcomes across diverse cancer care settings.

SURVL-068

TMAC STUDY: TRANSCRANIAL MAGNETIC STIMULATION FOR CHEMOTHERAPY-INDUCED PAIN IN BOWEL CANCER PATIENTS – PRELIMINARY RESULTS

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Introduction

Chemotherapy-induced peripheral neuropathy (CIPN) is a prevalent and debilitating complication characterised by persistent pain and dysaesthesia, significantly impacting survivors’ quality of life. Despite its impact, effective treatments for CIPN-associated sensory disturbances remain limited. Transcranial magnetic stimulation (TMS), a non-invasive brain modulation technique, shows emerging promise for neuropathic pain management. This study aims to determine the analgesic and sensory-modulating potential of TMS in chronic CIPN.

Methods

This is an investigator-led phase II RCT conducted in an academic setting, enrolling bowel cancer survivors previously treated with oxaliplatin-containing chemotherapy. Participants are randomised (1:1) to receive TMS or sham stimulation over four weekly sessions. Pain (primary outcome) and dysaesthesia are assessed immediately before and after each session using the Visual Analogue Scale. Participants are followed up at 8 weeks and 6 months following treatment completion to evaluate long-term effectiveness.

Results

24 participants (60% of target) have completed all treatment sessions, of whom 23 completed the 8-week follow-up and 13 reached the 6-month timepoint. Preliminary data show a 59% reduction in pain at 8-week follow-up in the TMS group compared with 12% increase in the sham group, with TMS effects maintained at 6 months. Dysaesthesia improved in both groups at both follow-ups (28% TMS vs 18% sham at 8 weeks; 19% TMS vs 26% at 6 months). Hospital Anxiety and Depression Scale scores decreased from baseline at 8 weeks (26% TMS vs 17% sham) and showed further reduction at 6 months (35% TMS vs 29% sham).

Conclusions

Recruitment is projected to reach 90% by June, with additional outcome data available for presentation. Preliminary findings suggest potential psychological benefits and reinforce the value of placebo control. TMS may offer a viable non-pharmacological intervention for relieving CIPN-associated sensory disturbances and supporting psychological wellbeing, with the potential for clinical integration into long-term survivorship care.

SURVI-070

“WHO TAKES RESPONSIBILITY FOR MY WELLBEING?”: WOMEN’S EXPERIENCES OF NAVIGATING THE AUSTRALIAN HEALTH SYSTEM AFTER A BREAST CANCER DIAGNOSIS

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Introduction

Post-treatment survivorship for women after a breast cancer diagnosis has focused on medical surveillance, rather than psychological support and adaptation. Understanding the experiences of navigating life after a breast cancer diagnosis is essential to improve access to support. This qualitative study aimed to understand the lived experiences of navigating breast cancer-related care within the Australian healthcare system for women with a breast cancer diagnosis.

Methods

Thirty women at least two years post-breast cancer diagnosis (60% were 5+ years post-diagnosis; 30% had experienced recurrence, and 13% had a stage 4 diagnosis) were recruited from consumer organisations and participated in semi-structured, in-depth interviews via videocall. Interviews were analysed using reflexive thematic analysis.

Results

Women experienced a persistent sense of *Uncertainty* that extended across Personal, Interpersonal, and System levels. At the Personal Level, themes of *Identity* and *Autonomy* reflected women’s health literacy, self-efficacy, and help-seeking as essential to their engagement with care. At the Interpersonal Level, *Patient–Provider Relationships* were central to interpersonal management, including mediating between personal needs and system constraints. At the System Level, the *Organisation of Care*, including fragmentation, access, and continuity, was pivotal in either amplifying or alleviating uncertainty. The interpersonal domain served as the key interface through which women’s agency interacted with system structures.

Conclusions

Women’s lives remain closely intertwined with the health system years after a breast cancer diagnosis, as they navigate shifting personal, relational, and systemic dynamics. The long-lasting uncertainty following a breast cancer diagnosis requires person-centred models of ongoing survivorship care across Personal, Interpersonal, and System Levels to strengthen patient-provider communication and coordination of care, whilst supporting women’s autonomy in the management of their health.

SURVI-071

PERSISTENT FINANCIAL TOXICITY AND HEALTH-RELATED QUALITY OF LIFE AMONG CANCER SURVIVORS IN THE UNITED KINGDOM

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Introduction

Financial toxicity (FT) is increasingly recognised as a long-term consequence of cancer survivorship that may persist beyond active

treatment. However, evidence on how FT severity affects health-related quality of life (HRQoL) among cancer survivors in the United Kingdom (UK) remains limited. This study examined the association between FT severity and HRQoL among UK cancer survivors.

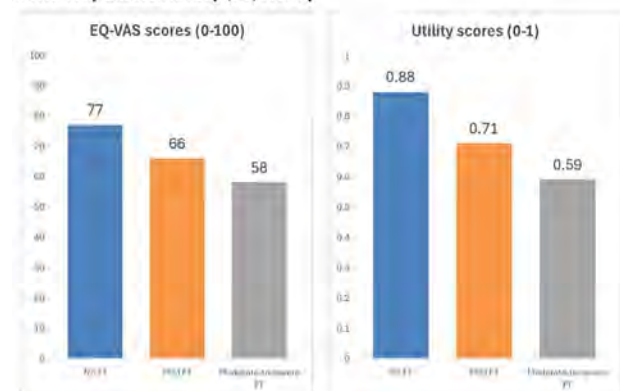
Methods

A cross-sectional online survey among 376 UK adult cancer survivors was conducted. Participants were recruited through the research platform Prolific to ensure a consistent sampling approach. FT was measured using the Comprehensive Score for Financial Toxicity (COST), and HRQoL was assessed using the EQ-5D-5L. Tobit regression models were used to examine the association between FT severity and health utility scores. Models were adjusted for age, sex, cancer stage at diagnosis, and personal annual income.

Results

Overall, 26% of cancer survivors experienced mild FT and 8% experienced moderate-to-severe FT. Mean health utility scores declined with increasing FT severity, from 0.88 among survivors with no FT to 0.71 among those with mild FT and 0.59 among those with moderate-to-severe FT. In adjusted Tobit models, mild and moderate-to-severe FT were independently associated with lower health utility scores ($\beta = -0.20$, 95% CI: -0.26 to -0.14; $\beta = -0.28$, 95% CI: -0.39 to -0.18, respectively). Higher personal income was positively associated with HRQoL, while stage IV cancer was associated with poorer HRQoL. Age and sex were not significantly associated with HRQoL.

Figure 1. Health-related quality of life (EQ-VAS and utility scores) among UK cancer survivors by financial toxicity (FT) severity



Conclusions

Financial toxicity is common among cancer survivors in the UK and is strongly associated with poorer quality of life, independent of clinical and sociodemographic factors. These findings highlight FT as a persistent survivorship issue rather than a purely economic concern. Integrating routine financial screening and targeted supportive care interventions into survivorship services may help mitigate long-term quality-of-life impairments among cancer survivors.

SURVI-072

EFFECTIVENESS OF SUPPORTIVE CARE INTERVENTIONS ON RETURN-TO-WORK OUTCOMES IN BREAST CANCER SURVIVORS: A SYSTEMATIC REVIEW

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Introduction

Return to work (RTW) is a critical indicator of functional recovery among working-age breast cancer survivors. Despite increasing

attention to supportive care interventions, clinicians face uncertainty regarding which approaches most consistently improve RTW-related outcomes.

Methods

A systematic review was conducted across PubMed, Embase, CINAHL, PsycINFO, and Cochrane Library. Interventions were classified using the EU-OSHA framework (physical, psycho-educational, vocational, multidisciplinary). Given substantial heterogeneity, direction-of-effect analysis identified outcome trends. Certainty of evidence was assessed using GRADE.

Results

Twenty studies (10 RCTs, 4 cohort, 6 pilot/feasibility; N=3,247) were included. Integrated multidisciplinary interventions demonstrated the most consistent positive effects. Direction-of-effect synthesis showed positive trends in RTW rate (7/9 studies, 78%) and work ability (4/5 studies, 80%). Physical exercise during chemotherapy showed significant benefits: high-intensity interval training achieved 91% RTW versus 69% usual care (p=0.02) and reduced long-term sick leave from 31.0% to 5.9% (p=0.006). Early integrated rehabilitation reduced sick leave by 50 days (p=0.002). Generic psychosocial support showed no benefit or increased costs. Adjuvant chemotherapy was the strongest predictor for prolonged sick leave (OR=17.3, p<0.001), identifying a high-need subgroup. Overall certainty of evidence was low to very low (GRADE).

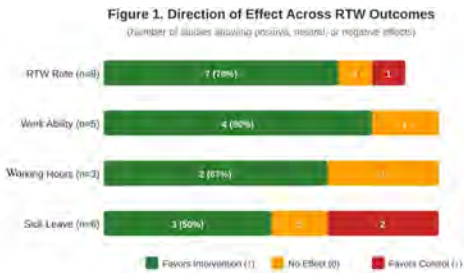


Figure 1. Direction of Effect Across RTW Outcomes. Horizontal bars show the proportion of studies demonstrating positive (green), neutral (yellow), or negative (red) effects for each outcome. RTW rate showed the most consistent positive trend (78% of studies).

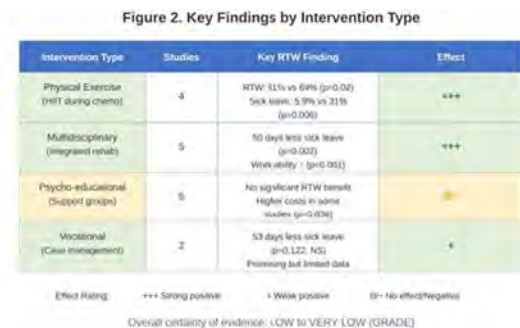


Figure 2. Key Findings by Intervention Type. Physical exercise (particularly HIIT during chemotherapy) and integrated multidisciplinary interventions showed the strongest positive effects on RTW outcomes. Generic psychosocial support groups showed no benefit or increased costs.

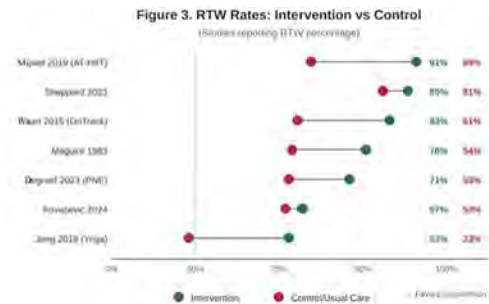


Figure 3. RTW Rates: Intervention vs Control. Forest-plot style comparison of RTW percentages across studies reporting this outcome. Green circles indicate intervention groups; red circles indicate control/usual care groups. All studies except one showed higher RTW rates in intervention groups.

Conclusions

Low-certainty evidence favors mechanism-based, multidisciplinary interventions over generic approaches for sustainable RTW. Oncology nurses can operationalize these findings through early risk stratification of chemotherapy patients, coordination of multidisciplinary care, and vocational navigation for working-age breast cancer survivors.

SURVI-077
PREVALENCE AND IMPACT OF LYMPHATIC PAIN AMONG WOMEN WITH BREAST CANCER-RELATED LYMPHOEDEMA

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Introduction

Breast cancer-related lymphoedema (BCRL) is associated with many symptoms, including pain, swelling, tightness and heaviness. Recent evidence suggests lymphatic pain, conceptualised as the coexistence of swelling and pain, is a common and distressing symptom following breast cancer treatment. However, lymphatic pain has not been widely reported in the literature. This secondary analysis of a prospective observational study validating the Breast Cancer and Lymphoedema Symptom Index (BCLE-SEI) in three Indian languages examined the prevalence of lymphatic pain and its association with physical and psychosocial distress in individuals with or at risk of BCRL.

Methods

Women aged ≥18 years with or at risk of BCRL completed the BCLE-SEI. Participants were grouped by symptom profile: lymphatic pain, pain without swelling, swelling without pain, or no symptoms. Distress scores were derived from the BCLE-SEI impact subscale. Descriptive statistics summarised characteristics and symptom prevalence. One-way ANOVA with post-hoc tests compared distress scores across groups.

Results

Among 350 participants (mean age 49.6 ± 11.8 years), 45% reported lymphatic pain, 32% pain only, 7% swelling only, and 16% no symptoms. Groups were similar in baseline characteristics except for inter-arm impedance ratio (p<0.001). Physical and psychosocial distress differed significantly across groups (p<0.001; physical effect size=0.013, 95% CI=0.0001–0.019; psychosocial effect size=0.031, 95% CI=0.011–0.053). Post-hoc analysis showed individuals with lymphatic pain or pain reported significantly higher distress than those with swelling or no symptoms.

Conclusions

Pain and lymphatic pain are prevalent and strongly linked to distress in individuals with or at risk of BCRL. These findings highlight the need to recognise and address pain after breast cancer treatment. Routine

patient-reported pain assessment should be integrated into clinical practice to guide timely interventions.

SURVI-078

BREAST CANCER-RELATED SWELLING AND INTERFERENCE WITH DAILY FUNCTIONING IN THE WOMEN'S HEALTH INITIATIVE LIFE AND LONGEVITY AFTER CANCER (LILAC) STUDY

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Introduction

Individuals with lymphedema experience impaired physical functioning, decreased quality of life, and difficulties performing daily activities. The Women's Health Initiative (WHI) Life and Longevity after Cancer (LILAC) cohort provides a unique opportunity to study lymphedema within a large group of older breast cancer survivors. We aimed to quantify the relationship between 1) swelling and the ability to perform activities of daily living and 2) swelling and physical functioning.

Methods

We included 3,353 participants from the WHI LILAC study. Cancer diagnosis was adjudicated by medical record review and survey assessed self-reported swelling, physical functioning (PF), and activities of daily living (ADLs). Multivariable median and logistic regression were used to assess differences between swelling groups for PF and ADL outcomes, respectively.

Results

Participants were 79±5.7 years old, mostly white (91%), and college graduates (53.5%). Most women had localized cancer (77.1%) and received radiation (69.9%). There were 659 women (20%) who reported ever having any swelling after their breast cancer diagnosis. Average PF scores (No swelling: 66.0 vs. Swelling: 66.9) and ADLs (No swelling: 5.71 vs. Swelling: 5.78) did not significantly differ between groups ($p>0.05$). Swelling was associated with lower (worse) PF mainly in those <5 years from diagnosis (median difference ± SE: -7.96±2.35) after adjusting for age, race, BMI, years since diagnosis, number of lymph nodes examined, baseline physical activity, chemotherapy, radiation, hormone therapy, and cancer stage. Differences by swelling status were negligible in those more than 5 years from diagnosis. Swelling was not associated with ADL scores in multiple models.

Conclusions

Overall, 20% of breast cancer survivors in this cohort reported swelling. There was no statistically significant association between swelling and ADLs. Shorter time since diagnosis was related to worse PF. Future studies should further investigate lingering symptoms of lymphedema among long-term breast cancer survivors with adjudicated lymphedema diagnoses.

SURVI-080

OPTIMIZING TRANSITIONS TO ADULT CARE FOR AYA CANCER SURVIVORS

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Introduction

Pediatric cancer survivorship care is aimed at education, surveillance, and prevention of late effects. As pediatric cancer survivors age, their

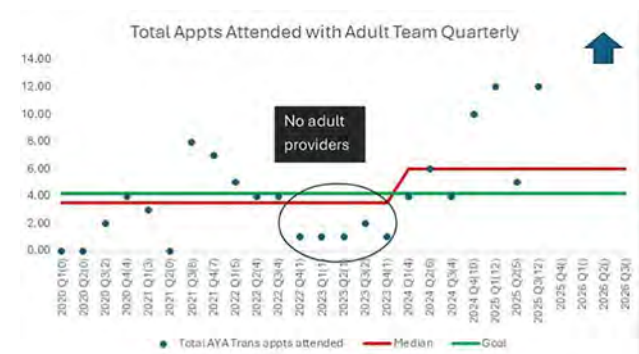
survivorship needs change, and they are often transitioned to adult healthcare services. This transition has been linked to adverse health outcomes, such as disease complications and care disengagement. Many adolescent and adult childhood cancer survivors discontinue survivorship follow-up care after they leave pediatric care. Conversely, when health care transitions are conducted effectively, patients report improvement in adherence to care and quality-of-life while experiencing a reduction in barriers to care and healthcare utilization.

Methods

A multidisciplinary team inclusive of pediatric and adult providers from an academic cancer center engaged in a quality improvement (QI) project. The Model for Improvement with rapid cycle PDSA for the QI Methodology and Got Transition framework tools were used for this work. An aim statement and key driver diagram were developed. The goal was to successfully implement all Six Core Elements of Got Transition for pediatric cancer survivors. A transition policy was developed and distributed, patient transition readiness was assessed and tracked, a medical summary was completed and shared with adult survivorship team, patients were then transferred and surveyed to ensure satisfaction. Run charts were utilized to monitor tested change ideas.

Results

Implementation of the Got Transition Core Elements led to increased adult survivors attending appointments with the adult survivorship team with a median improvement of 3.5 to 6 appointments exceeding goal of 4.2 appointments. (See Figure) One hundred percent of surveyed adult survivors attending adult clinics reported that the transition process was understandable; concerns about the transition process were addressed, and they were very satisfied with the adult survivorship visit.



Conclusions

Implementation of the Got Transition Core Elements improved adherence to survivorship care across the age continuum. Patient satisfaction with the transition process was universally high.

SURVI-082

SUPPORTIVE CARE NEEDS FOR PEOPLE WITH CANCER AND CAREGIVERS IN SOUTH AUSTRALIA

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Introduction

This study aimed to identify supportive care needs of South Australians with cancer and their caregivers, and how needs vary across different demographics and cancer characteristics.

Methods

267 adults (192 with cancer, 75 caregivers) impacted by cancer within the past five years. Recruitment occurred through supportive care

services, hospitals, and social media (April 2023–August 2024). Participants completed a survey collecting demographic and cancer-related information, and assessing needs across six domains: psychological, informational, practical and financial, service access, physical and daily living, and social. Participants could describe additional self-identified needs. Anxiety and depression symptoms were also assessed.

Results

The top unmet needs for people with cancer included understanding government entitlements (31%), household tasks (28%), reduced ability to engage in usual activities (25%), fatigue (24%), and fear about the future (24%). For caregivers, unmet needs were understanding entitlements (29%), fear about the future (29%), carer burden (25%), distress (24%), and preparing for grief and loss (24%). Younger age ($\beta=0.19$, 95%CI -0.33–0.05, $p=.007$), being unpartnered ($\beta=0.17$, 95%CI 0.06–0.29, $p=.004$), and living in disadvantaged areas ($\beta=0.18$, 95%CI 0.05–0.32, $p=.008$) were associated with reporting more unmet needs. Qualitative responses highlighted pervasive unmet needs among people with cancer and caregivers, driven largely by information gaps, emotional strain, and practical barriers. Participants described difficulties navigating services, lack of tailored support, emotional exhaustion, and financial hardship, with caregivers often deprioritising their own wellbeing to meet the needs of others.

Conclusions

Unmet supportive care needs are prevalent among South Australians impacted by cancer. These findings highlight the importance of improving access to tailored information, emotional support, and practical assistance to address complex and interrelated needs. Integrating caregiver wellbeing into care planning is essential for holistic cancer care.

SURVI-083

FINANCIAL STRAIN OF PEOPLE IMPACTED BY A CANCER DIAGNOSIS

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Introduction

Cancer places substantial financial burden on people with cancer (PWC) and their caregivers, a pressure likely intensified by the current cost-of-living crisis. This study examines the prevalence and experiences of cancer-related financial strain among South Australians, reporting survey results from a mixed-method study.

Methods

An online panel recruited 312 South Australians affected by cancer in the past five years ($n=105$ PWC; $n=207$ caregivers). Participants reported current and pre-diagnosis financial circumstances retrospectively, including cost-related sacrifices, awareness of treatment expenses, and use of support resources.

Results

A third of PWC (34%) reported marked financial strain post-diagnosis, increasing from 26% pre-diagnosis. Almost half of PWC (46%) reported feeling unprepared for the financial burden of cancer, and 38% indicated limited-to-no discussions of direct costs with healthcare providers pre-treatment. Forty percent received increased financial support from others post-diagnosis; notably, 15% reported not receiving any financial help, despite requiring it. For PWC, financial strain was most commonly reported to substantially impact physical (51%) and mental wellbeing (46%) domains. Among PWC experiencing greater financial strain, reduced spending on leisure activities (58%), food (44%), and transport (42%) was most often reported. Early discussions with healthcare providers emerged as the most identified way to reduce financial strain (53% PWC, 35% caregivers), followed by pre-treatment access to financial planners/counsellors (38% PWC, 27% caregivers).

Conclusions

Financial strain is a common and significant consequence of cancer for patients and caregivers, affecting wellbeing and practical daily living. Early cost discussions with healthcare providers and financial planning support may help mitigate this burden.

SURVI-084

FINANCIAL AND WORK IMPACTS OF PROSTATE CANCER IN A REGIONAL AREA

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Introduction

This study sought to interview men with prostate cancer from a wholly regional area, Tasmania, about their experiences of employment and finances after diagnosis.

Methods

Men were recruited from the Prostate Cancer Outcomes Registry – Tasmania, a clinical quality registry with high coverage of the Tasmanian prostate cancer population. A random sample of 149 men from the registry were invited to participate. Thematic analysis was used to analyse interview data.

Results

Data from 31 interviews were analysed. Most men ($n=22$) worked for a large employer, and seven were self-employed. Four themes emerged: Disclosure choice and support; Financial impact and information; Employment and return to work decisions; Symptoms and mental health. Return to work outcomes varied. Most men ($n=18$) experienced no change and two reported temporary adjustments. Most men reported a small or no financial impact. Men who did experience a financial impact had more precarious contracts. Income insurance was rarely used, even by men who had it. Several men travelled interstate for robotic prostatectomy, which imposed time costs even if financial assistance was accessed.

Men also experienced mental health impacts from their diagnosis and treatment. Some men felt they returned to work too soon and a slower return would have been better for their mental health. The sexual function impact of prostate cancer and its treatment and how it impacted men's mental health was brought up unprompted in interviews. Relatively few men talked to a health care professional about work. Disclosure to managers and/or co-workers was common, though not something done by all men. Nearly all men who did disclose their diagnosis reported a supportive workplace.

Conclusions

Men generally returned to work, but discussion of work with health professionals was infrequent. Better mental health support for men is urgently needed, both in and out of the workplace.

SURVI-085

CO-DEVELOPMENT AND EVALUATION OF A WEB-BASED INTERPROFESSIONAL SEXUAL FUNCTION INTIMACY CONCERNS AFTER CANCER EDUCATIONAL PROGRAM (SEXFICC)

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Introduction

Sexual health (SH) concerns are recognised sequelae of cancer and cancer treatment, negatively impacting intimate relationships and quality of life (QoL). 40–100% of people affected by cancer report concerns. Well-documented long-term challenges remain largely unaddressed despite healthcare providers (HCPs) acknowledging this important QoL issue. HCPs report lack of relevant knowledge, comfort and confidence, and misconception of limited interventions and referral pathways. Consequently, coordinated systematic approaches for assessment and management of SH concerns are lacking. The SexFICC project aimed to address these gaps by co-designing an educational course with people affected by cancer and HCPs, assessing its usability and acceptability to HCPs, and evaluating its impact on HCP's comfort, confidence, knowledge and behaviour change in addressing SH concerns.

Methods

Iterative co-design with people affected by cancer and HCPs (n=45) was used to co-develop and user test SexFICC. Co-design employed workshops, consultation and online feedback. User testing involved participants engaging with SexFICC and: accessing content, completing quizzes and reflections, and practising conversations with AI generated patients. Pre/post surveys will evaluate the final SexFICC program (launch July 2026).

Results

SexFICC includes an educational course and evidence-based resources for cancer HCPs, with the VCCC Alliance Centre for Cancer Education Hub hosting and supporting its sustainability. Four self-directed modules address foundational knowledge for SH, effects of cancer and cancer treatment on SH, preparing for and having conversations about SH, and strategies for addressing them. Learning activities, reflections and AI interactions are included. The course is applicable across tumour groups and includes content addressing concerns specific to priority populations identified in the 2023 Australian Cancer Plan. User testing confirmed content, design, visual and audio quality, functionality, and learner acceptability.

Conclusions

SexFICC is the first web-based interprofessional educational program co-designed with people affected by cancer and HCPs, upskilling the cancer workforce to support comprehensive sexual healthcare.

SURVI-086

PLAN AND DEVELOP A DEDICATED LYMPHOEDEMA SELF-MANAGEMENT INTERVENTION FOR PATIENTS WHO HAVE COMPLETED TREATMENT FOR HEAD AND NECK CANCER

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Introduction

Head and neck lymphoedema (HNL) is an unintended and chronic consequence of head and neck cancer (HNC). This debilitating condition

can affect up to 90% of HNC patients in the post-treatment phase. Despite the high prevalence of HNL, it remains under-recognised and under-treated. This study aimed to plan and develop an evidence-based and theory-driven dedicated HNL self-management intervention, to promote health-related quality of life for patients with HNC.

Methods

Intervention development was guided by the Person-Based Approach. A systematic review was initially conducted with 12 included studies, followed by qualitative interviews with patients (n=14), family members (n=7) and healthcare professionals (n=39). This empirical data informed guiding principles, providing a blueprint for intervention development. Additionally, iterative input was sought from an advisory group (n=16) with international representation, leading to an intervention prototype which was user-tested using think aloud interviews (n=13) for usability and acceptability.

Results

The study's empirical data highlighted the need for a dedicated patient-centred intervention on HNL, providing information on causality, chronicity and self-management strategies. Intervention delivery was required at different time points, with essential facts provided at diagnosis and more detailed information post-treatment. Having relevant, accessible and evidence-based information on HNL could minimise anxiety and distress, as patients often associated their post-treatment symptoms with cancer recurrence.

Patients and healthcare professionals identified the important role of family members in the management of HNL; however, family members reported a lack of necessary knowledge to promote patient-led HNL self-management. An intervention prototype (information sheet and animated video) was developed and user-tested with evidence of acceptability and usability to address the dearth of HNL self-management interventions.

Conclusions

This novel evidence-based and theory-driven dedicated HNL self-management intervention provides self-management strategies that can be integrated into patients everyday routines, supported by family and promoted by healthcare professionals. This intervention requires further efficacy evaluation, which is planned.

SURVI-087

HEALTHCARE PROFESSIONALS' PERSPECTIVE ON MANAGING MENOPAUSE IN WOMEN WHO HAVE EXPERIENCED CANCER: A QUALITATIVE STUDY

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Introduction

Menopausal symptoms frequently occur after cancer treatment, impacting survivors' quality of life. Healthcare professionals (HCPs) play a crucial role in symptom management and support. Understanding HCPs' perspectives is essential for improving care experiences for both patients and providers.

Methods

We conducted a qualitative study using online one-on-one interviews with HCPs from diverse specialties. Participants were recruited through various professional organisations. Interview transcripts were analysed thematically using Nvivo V. 12, following Braun and Clark's principles.

Results

Twenty HCPs (17 females, 3 males) aged 37–68 participated, including six primary care physicians (half specialising in post-cancer menopause). Clinical experience ranged from 1–35 years, with 3–35 years managing menopause in cancer survivors. Six themes were identified: (1) Perception of more severe menopause symptoms in cancer survivors, (2) Provision of comprehensive care, (3) Practice of shared decision-making (4) Views on symptom management approaches, (5) Perceived effectiveness of management strategies and (6) Limitations in care provision.

Conclusions

HCPs demonstrated a clear understanding of menopausal symptoms' impact on cancer survivors. They reported providing patient-centred care, employing various management strategies, and engaging in shared decision-making. However, extra confidence in prescribing menopausal hormone therapy were identified as area for improvement in clinical practice. These findings underscore the importance of targeted training and support for HCPs managing menopausal symptoms in cancer survivors, potentially leading to enhanced patient outcomes and HCP satisfaction.

SURVI-088

FERTILITY OPTIONS FOR CHILDREN, ADOLESCENT AND YOUNG CANCER SURVIVORS: PROTOCOL FOR TESTING OF A DECISION AID ON UNMET FERTILITY INFORMATION NEEDS

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Introduction

Survival rates of children, adolescents, and young adults (CAYA) with cancer exceed 80%. However, gonadotoxic treatment may impair future fertility. Fertility preservation is possible but cannot guarantee future biological parenthood. Lack of fertility information is an unmet need at diagnosis and survivorship. Fertility preservation Decision aids (FPDA) support informed, value-based fertility decisions; however, evidence on their effectiveness in survivorship is limited. This protocol aims to describe a randomized controlled trial evaluating the effect of

an FPDA on unmet fertility information needs among CAYA survivors diagnosed before age 25 (aged 16 and older) and their parents.

Methods

FPDA development was informed through co-design with consumers and clinicians, and updated with web developers. The FPDA will be evaluated in a parallel-group, double-blind, randomised controlled trial. 358 cancer survivors and parents will be recruited through social media and randomised 1:1 to the control or intervention arm. The Control Group will receive high-quality information. The Intervention Group will receive both high-quality information and the FPDA. This study is funded by the Medical Research Future Fund (MRFF000308) and registered (NCT0689481).

Results

Recruitment started in December 2025. At baseline, participants will complete surveys capturing sociodemographics; PROMIS stress, anxiety and depression scores; cancer impact and information needs; trust in oncologists; satisfaction with fertility information; health literacy; and decision-making preferences. Eight-weeks and six-months post-intervention, follow-up surveys will assess unmet fertility information needs, decisional conflict, fertility knowledge, preparation for decision-making, and feasibility and acceptability of the DA.

Conclusions

This study is the first to evaluate the impact of a FPDA on unmet fertility information needs in CAYA survivors and parents. Grounded in extensive previous co-design of a FPDA work, the trial will provide high-quality evidence on the tool's impact and inform strategies for broader clinical and digital implementation.

SURVI-089

THE FINANCIAL IMPACT OF METASTATIC BREAST CANCER: INSIGHTS FROM A QUALITATIVE STUDY IN THE AUSTRALIAN CONTEXT

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Introduction

Individuals with metastatic breast cancer (MBC) are living longer due to treatment advances, however, experience unique challenges associated with ongoing therapy, disease progression, and prognostic uncertainty. In contrast to early-stage breast cancer treated with curative intent, where financial pressures typically diminish as treatment concludes – and focus shifts to recovery and living beyond cancer – the financial burden in MBC is ongoing. This study aimed to address this research gap by exploring the financial impact experienced by Australian women with MBC.

Methods

A national sample of women with MBC, recruited through community organisations and clinicians, took part in multiple semi-structured interviews conducted via phone or face-to-face over a 12-month period. Interviews were transcribed and analysed using a constructivist approach to thematic analysis.

Results

Thirty-eight women (aged 36–74, living with MBC for 1–23 years) were interviewed. Three themes were identified [Figure 1]: (1) complexities and costs associated with healthcare and treatment; (2) workforce participation as protective against financial strain; and (3) systemic barriers to timely and affordable access to cancer drugs and financial support services. Although all participants reported ongoing financial impacts associated with living with MBC, these were not uniformly experienced. Women who were poorly connected to holistic supportive care including peer support,

those who were not supported by their employers to continue working with flexible arrangements, and those who struggled to navigate government schemes in a timely manner were at greater risk of experiencing financial toxicity.



Conclusions

Metastatic breast cancer can invoke considerable downward force on the financial security of those diagnosed. Policy makers, employers, health service providers and clinicians must explore mechanisms to provide specialised support that is attuned to the realities of lifelong cancer treatment that accounts for the multidimensional complexities of MBC and financial toxicity.

SURVL-090

FINANCIAL TOXICITY IN ADVANCED AND METASTATIC CANCER: A QUALITATIVE SCOPING REVIEW OF PATIENT, CAREGIVER, AND CLINICIAN PERSPECTIVES

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Introduction

Advances in cancer treatment have extended survival for individuals diagnosed with advanced/metastatic cancer, however, living longer can result in substantial and ongoing costs. Financial toxicity within the advanced/metastatic cancer population is an emerging field of research; however, the qualitative evidence capturing lived experiences, as well as the perspectives of healthcare professionals, is not well understood. This review aimed to map qualitative studies exploring financial toxicity among adults with advanced/metastatic cancers, their caregivers and perspectives of healthcare professionals.

Methods

Using Arksey and O'Malley's scoping review framework, we searched Medline, Embase, PsychINFO and Scopus (August 15, 2025) [Table 1]. Eligible studies reported qualitative data on financial toxicity in advanced/metastatic adult patients. Three reviewers independently screened studies in Covidence. Conflicts were resolved through consensus, with a fourth reviewer consulted as necessary. One author extracted and synthesised the qualitative data.

Table 1. Key search terms

Metastatic Cancer	Financial Toxicity
Stage adj IV – Stage 4 – Late stage Advanced – Terminal Neoplasm – Cancer – Carcinoma	Economic – Financial Toxicity – Stress – Distress Hardship – Burden Out of Pocket – Expenses

Results

Of 2608 studies screened, 47 met the inclusion criteria with the majority from the United States. Most used semi-structured interviews and focused specifically on patient perspectives within a mixed cancer population. Twelve themes were identified: employment disruption; behavioural changes to mitigate financial toxicity; pre-existing financial strain; burden of indirect non-medical costs; access to financial support services; cost of cancer-related treatment; end-of-life, palliative care or future planning; effects of societal attitudes and self-image; financial barriers to treatment; administrative burden; costs for ongoing quality of life; COVID-19-related exacerbation.

Conclusions

This review highlights the multifaceted nature of financial toxicity in advanced/metastatic cancer, encompassing structural, psychosocial and behavioural dimensions. Financial toxicity profoundly affects quality of life and care decisions, prompting adaptive strategies among patients and families. Participants described adaptive strategies to manage financial strain. Future research requires longitudinal studies to assess the impact of financial toxicity over time, especially in the context of behavioural changes that people with advanced/metastatic cancer engage in.

SURVL-092

SOCIOECONOMIC AND PHYSICAL PREDICTORS OF FUNCTIONAL QUALITY OF LIFE DURING SURVIVORSHIP IN WOMEN UNDERGOING GYNECOLOGIC CANCER TREATMENT

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Introduction

Gynecologic cancer survivors undergoing treatment often experience multiple symptoms that adversely affect functional quality of life. This study examined factors associated with functional quality of life in this population.

Methods

This cross-sectional study recruited gynecologic cancer patients in northern Taiwan. Socioeconomic and physical factors, as well as functional aspects of quality of life, were assessed using questionnaires, including the EORTC QLQ-C30, the Godin Leisure-Time Exercise Questionnaire, and a self-developed instrument. Multiple linear regression analyses were conducted.

Results

Among the 125 patients surveyed, those who received treatments other than chemotherapy (excluding surgery) demonstrated significantly better quality of life ($\beta = 0.303$, $p = .002$), physical functioning ($\beta = 0.193$, $p = .028$), and role functioning ($\beta = 0.235$, $p = .016$). Regarding socioeconomic factors, being employed was associated with better physical functioning ($\beta = 0.193$, $p = 0.005$) and role functioning ($\beta = 0.171$, $p = 0.031$), but poorer cognitive functioning ($\beta =$

−0.188, $p = 0.035$). Financial difficulties were negatively associated with emotional ($\beta = -0.198$, $p = 0.015$) and social functioning ($\beta = -0.255$, $p = 0.002$). Social resources use was also associated with poorer social functioning ($\beta = -0.183$, $p = 0.027$). For physical factors, symptoms such as fatigue, nausea and vomiting, dyspnea, insomnia, loss of appetite, and constipation showed varying degrees of negative associations across multiple domains of functional quality of life ($\beta = -0.347 \sim -0.164$, $p < 0.05$). Physical activity level was negatively associated with emotional and cognitive functioning ($\beta = -0.162$, $p = 0.049$; $\beta = -0.185$, $p = 0.036$).

Table 1 Demographic characteristics (N = 125)

Variable	Number (%)	Mean (SD)	Range
Age		51.45 (10.17)	31–80
Years of education		14.18 (3.40)	0–20
Junior high school or below	13 (10.4)		
Senior high school	25 (20.0)		
College	70 (56.0)		
Graduate school	17 (13.6)		
FIGO stage			
Early stage (I–II)	45 (36.0)		
Advanced stage (III–IV)	80 (64.0)		
Clinical diagnosis			
Ovarian cancer	65 (52.0)		
Endometrial cancer	36 (28.8)		
Others (ovarian with endometrial cancer, cervical cancer, fallopian tube cancer, leiomyosarcoma, thalidomycin sarcoma)	4 (3.2)		
Received Treatment			
Chemotherapy	39 (31.2)		
Surgery	36 (28.8)		
Others (target therapy, radiation therapy, immunotherapy, chemotherapy combined radiation therapy)	50 (40.0)		
Intimate relationship			
No	46 (36.8)		
Yes	79 (63.2)		
Employment status			
No	96 (76.8)		
Yes	29 (23.2)		
Physical activity ^a			
No	59 (47.2)		
Yes	66 (52.8)		
Sufficient physical activity ^b			
No	83 (66.4)		
Yes	42 (33.6)		
Use social resource			
No	43 (34.4)		
Yes	82 (65.6)		

Note: a, b refers to Physical activity was assessed using the Godin–Shephard Leisure-Time Physical Activity Questionnaire (GLTEQ).

Table 2 Correlations of variables pertaining to quality of life (N = 125)

	QoL						Physical						Role					
	Univariate		Multivariate		Univariate		Multivariate		Univariate		Multivariate		Univariate		Multivariate		Univariate	
	β	p	β	p	β	p	β	p	β	p	β	p	β	p	β	p	β	p
Demographic characteristics																		
Age	0.243	0.101			-0.125	0.165			0.201	0.025	0.132	0.177						
Stage (Early vs Advanced)	-0.007	0.938			0.013	0.887			0.027	0.796								
Clinical diagnosis																		
Endometrial vs Ovarian	-0.119 ^a	0.141			-0.117	0.210			-0.004	0.967								
Others vs Ovarian	-0.111	0.224			-0.080	0.485			-0.040	0.874								
Treatment																		
Surgery vs Chemotherapy	0.187	0.175	0.139	0.143	0.109	0.281	0.112	0.194	0.050	0.628	0.086	0.313						
Others vs Chemotherapy	0.436	<0.001	0.303	0.002	0.381	<0.001	0.193	0.028	0.354	0.001	0.235	0.016						
Intimate relationship (Yes vs No)	0.020	0.773			-0.035	0.540			0.017	0.821								
Socioeconomic factors																		
Years of education	-0.080	0.174			0.040	0.618			-0.174	0.012	-0.088	0.323						
Employment (Yes vs No)	-0.187	0.027	0.124	0.104	0.288	0.003	0.193	0.005	0.182	0.042	0.171	0.031						
Financial difficulties	-0.189	0.040	-0.048	0.548	-0.050	0.740			-0.167	0.061	-0.019	0.799						
Social resource (Yes vs No)	-0.041	0.812			-0.126	0.182			-0.087	0.332								
Physical factors																		
Fatigue	-0.487	<0.001	-0.203	0.110	-0.135	0.081	-0.222	0.051	-0.140	<0.001	-0.236	0.040						
Nausea and vomiting	-0.174	0.003	-0.194	0.035	-0.125	0.001	0.018	0.741	-0.132	<0.001	-0.084	0.147						
Pain	-0.400	<0.001	-0.019	0.594	-0.453	<0.001	-0.111	0.388	-0.434	<0.001	-0.051	0.610						
Dryness	-0.293	<0.001	-0.132	0.069	-0.382	<0.001	-0.231	0.002	-0.119	<0.001	-0.135	0.051						
Insomnia	-0.272	0.002	-0.061	0.306	-0.250	0.010	0.090	0.267	-0.279	0.002	0.005	0.918						
Loss of appetite	-0.419	<0.001	-0.106	0.285	-0.541	<0.001	-0.319	0.001	-0.444	<0.001	-0.134	0.207						
Constipation	-0.018	0.962	-0.212	0.001	-0.164	0.024	-0.297	<0.001	-0.113	0.016								
Diarrhea	-0.155	0.085	0.068	0.434	-0.222	0.013	0.108	0.154	-0.223	0.012	0.053	0.519						
Early menopause	-0.083	0.345			-0.053	0.555			-0.138	0.122								
Changes in sexual activity	-0.026	0.773			-0.046	0.607			-0.179	0.040	-0.042	0.598						
Physical activity	0.107	0.800			0.167	0.451			-0.117	0.129								
Sufficient physical activity (Yes vs No)	0.033	0.714			0.116	0.196			-0.090	0.317								

Table 2 Correlations of variables pertaining to quality of life (continued)

	Emotional				Cognitive				Social			
	Univariate	β	p		Univariate	β	p		Univariate	β	p	
Demographic characteristics												
Age	0.271	0.092	0.192	0.244	0.172	0.054	-0.027	0.778	0.105	0.245		
Stage (Early vs Advanced)	0.027	0.764			0.001	0.952			-0.149	0.100		
Clinical diagnosis												
Endometrial vs Ovarian	0.042	0.682			0.378	0.415			-0.166	0.070	-0.163	0.058
Others vs Ovarian	0.011	0.903			0.332	0.740			-0.002	0.984	0.051	0.518
Treatment												
Surgery vs Chemotherapy	-0.135	0.210			-0.001	0.951			0.004	0.998		
Others vs Chemotherapy	0.010	0.926			-0.047	0.667			0.159	0.141		
Intimate relationship (Yes vs No)	0.013	0.883			-0.127	0.157			-0.027	0.766		
Socioeconomic factors												
Years of education	-0.168	0.130			-0.143	0.113			-0.053	0.561		
Employment (Yes vs No)	-0.055	0.543			-0.153	0.089	-0.188	0.035	0.132	0.144		
Financial difficulties	-0.368	0.001	-0.198	0.015	-0.246	0.005	0.065	0.199	-0.376	<0.001	-0.255	0.002
Social resource (Yes vs No)	0.159	0.076	0.024	0.780	-0.123	0.173			-0.153	0.083	-0.183	0.027
Physical factors												
Fatigue	-0.467	<0.001	-0.347	0.004	-0.253	<0.001	-0.135	0.283	-0.403	<0.001	-0.018	0.899
Nausea and vomiting	-0.019	0.829			0.326	0.294			-0.226	0.011	-0.068	0.468
Pain	-0.287	0.001	0.083	0.428	-0.181	0.044	0.080	0.402	-0.367	<0.001	-0.068	0.514
Dryness	-0.118	0.136			-0.041	0.653			-0.340	0.005	-0.180	0.039
Insomnia	-0.391	<0.001	-0.139	0.132	-0.361	<0.001	-0.241	0.017	-0.292	<0.001	-0.080	0.404
Loss of appetite	-0.195	0.030	0.044	0.638	-0.180	0.045	-0.095	0.348	-0.356	<0.001	-0.131	0.201
Constipation	-0.195	0.030	-0.021	0.791	-0.114	0.206			-0.100	0.034	-0.047	0.567
Diarrhea	-0.174	0.032	-0.015	0.859	-0.041	0.653			-0.282	0.001	-0.088	0.311
Early menopause	-0.300	<0.001	-0.119	0.213	-0.203	0.013	-0.032	0.751	-0.118	0.192		
Changes in sexual activity	-0.234	0.009	-0.059	0.524	-0.174	0.053	-0.095	0.356	-0.206	0.021	-0.140	0.058
Physical activity	-0.290	0.003	-0.162	0.049	-0.214	0.016	-0.185	0.036	-0.118	0.189		
Sufficient physical activity (Yes vs No)	-0.143	0.111			-0.128	0.154			-0.064	0.902		

Conclusions

Employment status, financial difficulties, social resource use, symptom severity, and physical activity level were associated with functional quality of life among gynecologic cancer survivors during treatment. Addressing these factors and paying particular attention to patients receiving chemotherapy may improve quality of life in survivorship care.

SURVI-095**RISK OF INCIDENT MENTAL DISORDERS FOLLOWING CANCER: RESULTS FROM A NATIONWIDE POPULATION-BASED COHORT STUDY IN DENMARK**

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Introduction

Cancer and mental disorders may influence one another, yet research on the risk of developing a new-onset mental disorder following a cancer diagnosis, other than depression, remains limited. We estimated the incidence of mental disorders in cancer patients and compared it to that of cancer-free individuals.

Methods

In a nationwide register-based study, patients were followed from incident cancer diagnosis (01/1995 – 12/2015) until end of follow-up 2023, excluding those with a history of mental disorders. Patients were matched with cancer-free individuals on age, sex, socioeconomic position and physical comorbidities. We estimated incidence rates (IR) of mental disorders per 1,000 person-years, identified through psychiatric diagnoses with inpatient/outpatient hospital admissions and prescriptions of psychotropic medication. Hazard ratios (HR) for mental disorders were estimated in comparison to cancer-free individuals.

Results

This study included 289,391 cancer patients and 1,031,069 population-matched cancer-free comparisons. Among cancer patients, 116,118 developed any incident mental disorder (IR 59.9 [95%-CI: 59.5-60.2]), with a HR of 2.3 [2.3-2.3] and varying rates across tumor types. In the first year after cancer, the IR (16.0 [165.4-168.6]) and HR (12.3 [11.9-12.7]) were highest and decreased rapidly thereafter, yet the HR remained elevated exceeding ten years. One in two cancer patients developed any incident mental disorder within 25 years following cancer diagnosis. Highest IRs and HRs were observed for anxiety, unipolar depression and substance use disorders. Our results were confirmed by several sensitivity analyses, with stricter outcome criteria for psychotropic medication, exclusion of additional burden through physical comorbidities, and inclusion of individuals with preexisting mental disorders.

Conclusions

Cancer patients exhibit at least a two-fold increased risk of developing new-onset mental disorders, being highest within the first year after cancer diagnosis. The incidence and risk elevation vary based on sex, cancer type and type of mental disorder, underscoring the need for tailored psychiatric/psychotherapeutic interventions in supportive cancer care.

SURVI-096**A CARDIO-ONCOLOGY DISEASE MANAGEMENT PLAN IMPROVES NEUROCOGNITIVE OUTCOMES IN LONG-TERM CANCER SURVIVORS WITH SUBCLINICAL HEART FAILURE**

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Introduction

Sub-clinical heart failure (SBHF), cancer survivorship and aging are all associated with poorer neurocognitive outcomes. Although cardioprotective strategies can improve self-reported neurocognitive function in oncology patients during anti-cancer treatments, it is unclear if interventions improve clinical neurocognitive outcomes in older, long-term cancer survivors with SBHF. Therefore, we investigated if a cardio-oncology disease management plan (CODMP) improves neurocognitive outcomes in long-term cancer survivors with SBHF.

Methods

Cancer survivors ≥ 40 years old with SBHF receiving chemotherapy ≥ 5 years ago ($n = 60$; Table 1) were randomised to a multidisciplinary CODMP or usual care (UC). The CODMP included personalised optimisation of pharmacotherapy via neurohormonal blockade (angiotensin converting enzyme inhibitors or receptor blockers and beta-blockers) and a supervised group exercise training program analogous to cardiac rehabilitation. Neurocognitive function was measured with a Montreal Cognitive Assessment (MoCA) at baseline and six months. A MoCA score < 26 indicated mild-cognitive impairment (MCI). Group mean change [95% CI] in MoCA scores adjusted for baseline score are reported.

Table 1. Descriptive characteristics of long-term cancer survivors enrolled into a cardio oncology disease management plan (CODMP) or usual care.

	CODMP (n = 28)	Usual Care (n = 32)
Age (years)	64.2 (13.6)	65.5 (9.8)
Sex (% of females)	79%	72%
Body Mass Index (kg · m ²)	30.0 (7.6)	30.5 (6.3)
Type of Cancer		
Bowel	0	1
Breast	19	19
Leukaemia	2	2
Lymphoma	7	10
Year Since Cancer Diagnosis	14.7 (5.4)	15.7 (6.0)
MoCA Score (au)	26.8 (2.4)	27.3 (1.7)
MCI (%)	21%	13%

Abbreviations: CODMP; cardio oncology disease management plan, MCI; mild cognitive impairment, MoCA; Montreal Cognitive Assessment.

Results

Fifty-seven participants completed the six-month follow up (CODMP: $n = 26$; UC: $n = 31$). The CODMP significantly increased total MoCA score from baseline to six months (CODMP: 1.5 au [1.0, 2.1]; UC: 0.2 au [-0.3, 0.7]; $P \leq 0.001$; Figure 1). The CODMP also improved visuospatial execution ($P = 0.018$) and language ($P = 0.003$) task scores. Of those who were identified with MCI at baseline, 33% of CODMP participants (2/6) and 100% of UC participants (4/4) demonstrated MCI at six months. One UC participant who demonstrated 'normal cognition' at baseline displayed MCI at six months.

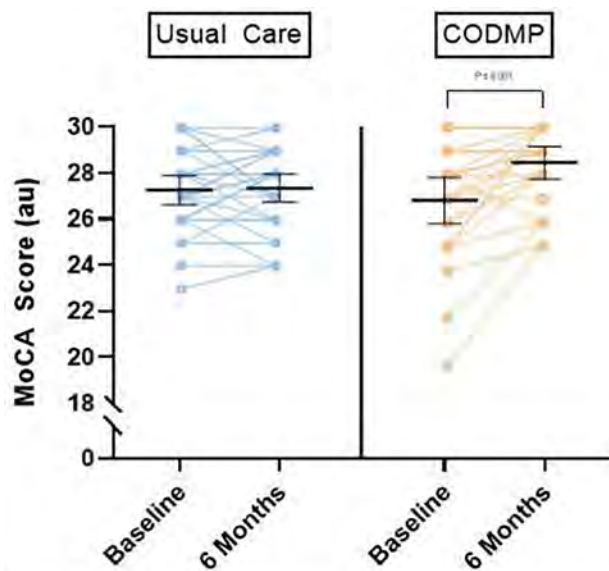


Figure 1. The individual change and group mean (95% CI) for Montreal Cognitive Assessment (MoCA) total score from pre- to post-intervention are shown for the usual care (blue circles) and cardio oncology disease management plan (CODMP; orange squares) groups, respectively. There was a significant group $\times$ time interaction effect on MoCA total score ($P \leq 0.001$). MoCA total score increased from pre- to post-intervention in the CODMP group ($P \leq 0.001$), but there was no change in the usual care group ($P = 0.728$).

Conclusions

This randomised controlled trial demonstrates that cardioprotective strategies improve neurocognitive outcomes in long-term cancer survivors with SBHF. The MoCA score improvement exceeds the minimal clinically important difference in other populations (≥ 1.2), though long term follow up data are needed to determine the clinical relevance in cancer survivorship.

SURVI-097

COMPARING FINANCIAL TOXICITY BETWEEN CANCER AND NON-CANCER HOUSEHOLDS IN THE UNITED STATES

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Introduction

Income, wealth and expenditure are shared among household members but few national studies have examined the impact of cancer history on financial toxicity at the household level. We compared financial toxicity in a matched cohort of households with and without a history of cancer.

Methods

We conducted a cross-sectional analysis of Health and Retirement Study data (2006-2022), which includes individuals >51 years old in the US. Respondents identifying as spouses/partners were analyzed as a single household. Households in the cancer subgroup had ≥ 1 respondent reporting a past cancer diagnosis (excluding skin cancer) and were matched to non-cancer households by survey wave, respondent age, and race/ethnicity using coarsened exact matching. Respondents self-reported annual out-of-pocket costs (OOPC) and rated perceived financial strain and satisfaction using 4- and 5-point Likert-type scales, respectively. Generalized linear models with gamma distribution and log links estimated differences in OOPC (adjusted for household size, residence, and comorbidity burden), while ordinal logistic regression evaluated financial strain and satisfaction (additionally adjusted for household income and non-housing assets).

Results

A total of 3769 cancer households and 16949 non-cancer households were analyzed (**Table 1**). Cancer households (marginal mean=US\$7147, 95% CI: US\$6568-US\$7726) had higher annual OOPC than non-cancer households (marginal mean=US\$4915, 95% CI: US\$4695-US\$5135) with a mean difference of US\$2232 (95% CI: US\$1649-US\$2815). Adjusting for covariates, cancer households had higher odds of ongoing financial strain than non-cancer households (OR=1.17, 95% CI: 1.06, 1.30), but financial satisfaction did not differ between groups (OR=0.98, 95% CI: 0.90, 1.07) (**Table 2**).

Table 1. Household respondent characteristics stratified by cancer history

Characteristics	Cancer	Non-Cancer
Age ^a , weighted median (Q1-Q3)	67.0 (58.0-75.0)	68.0 (58.0-78.0)
Sex ^a , weighted %		
Male	46.0	47.5
Female	54.1	51.4
Missing	0	1.1
Race composition of household, weighted %		
All White	68.5	69.0
Mixed	4.8	3.4
All non-White	26.6	27.6
Ethnicity composition of household, weighted %		
All non-Hispanic	86.9	87.5
Mixed	2.8	2.2
All Hispanic	10.4	10.4
Marital status ^a , weighted %		
Married/partnered	93.8	95.0
Non-married/partnered	6.2	5.0
Highest education level attained ^a , weighted %		
Below high school	13.6	16.6
GED/high school graduate	28.0	31.2
Some college and higher	58.5	52.2
Missing	0	0.1
Number residing in household, weighted %		
1	22.6	35.6
2	50.1	37.7
3	14.5	13.9
4	6.9	6.8
5+	6.0	5.9
Residence, weighted %		
Urban/suburban	64.1	64.3
Rural	23.1	22.7
Missing	12.8	13.0
Household income, weighted median (Q1-Q3)	40,860 (19,107-81,000)	31,944 (15,180-69,279)
Household non-housing wealth, weighted median (Q1-Q3)	30,000 (1,000-242,261)	20,000 (500-156,500)
Diagnosed non-cancer comorbidities ^a , weighted %		
Blood Pressure	64.2	60.3
Diabetes	26.9	25.5
Lung problems	13.2	11.0
Heart problems	27.5	25.8
Stroke	11.4	10.8
Psychological diagnosis	21.5	20.0
Arthritis	59.4	55.1
Memory/Dementia	6.0	5.8
Number of non-cancer comorbidities ^a , weighted %		
0	11.8	17.0
1	21.7	21.1
2	25.3	24.0
3	20.5	18.5
4	11.8	11.3
5	5.9	5.6
6	2.0	2.0
7	0.9	0.5
8	0.2	0.1

^aHousehold member with cancer history for cancer households; and oldest respondent for non-cancer households

Table 2. Association between cancer household and subjective financial toxicity

Variable	Ongoing financial strain			Satisfaction with financial situation		
	OR	95% CI	p-value	OR	95% CI	p-value
Predictor of interest						
Cancer household	1.17	1.00-1.30	<0.001***	0.98	0.90-1.07	0.61
Covariates						
Household size						
1	Ref.			Ref.		
2	1.09	0.98-1.22	0.10	0.86	0.78-0.94	<0.001***
3	1.70	1.48-1.96	<0.001***	0.58	0.51-0.66	<0.001***
4	1.79	1.50-2.13	<0.001***	0.52	0.44-0.61	<0.001***
5+	2.03	1.69-2.44	<0.001***	0.51	0.42-0.61	<0.001***
Residence						
Urban/suburban	Ref.			Ref.		
Rural	0.99	0.90-1.09	0.84	1.09	1.00-1.19	0.05*
Number of non-cancer comorbidities ¹						
0	Ref.			Ref.		
1	1.07	0.93-1.23	0.35	1.09	0.96-1.23	0.19
2	1.05	0.91-1.21	0.49	1.03	0.91-1.16	0.67
3	1.21	1.04-1.40	0.01**	0.99	0.87-1.13	0.85
4	1.36	1.14-1.63	<0.001***	0.79	0.68-0.92	<0.001***
5	1.67	1.29-2.18	<0.001***	0.71	0.57-0.89	<0.001***
6	2.03	1.44-2.86	<0.001***	0.62	0.43-0.89	0.01*
7	3.60	1.64-7.90	<0.001***	0.47	0.20-1.11	0.09
8	5.49	1.42-21.24	0.01**	1.08	0.26-4.55	0.91
Income under poverty threshold						
No	Ref.			Ref.		
Yes	1.78	1.56-2.02	<0.001***	0.52	0.46-0.60	<0.001***
Negative non-housing asset value						
No	Ref.			Ref.		
Yes	3.58	3.12-4.11	<0.001***	0.25	0.22-0.29	<0.001***

¹Comorbidities assessed include high blood pressure, diabetes, lung problems, heart problems, stroke, psychological health issues, arthritis, memory issues/dementia.

*p<0.05, **p<0.01, ***p<0.001

Abbreviations: CI, confidence interval, OR, odds ratio, Ref, reference.

Conclusions

This is the first national study to examine financial toxicity using a matched cohort of cancer and non-cancer households. Cancer households reported higher financial strain and OOPC than non-cancer households, while financial satisfaction did not differ. Findings suggest that material and psychological coping mechanisms, such as shifts in spending, may shape financial satisfaction and warrant further study.

SURVI-098

CANCER SURVIVORS IN NEW SOUTH WALES (NSW): A POPULATION-BASED STUDY (2005-2019)

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Introduction

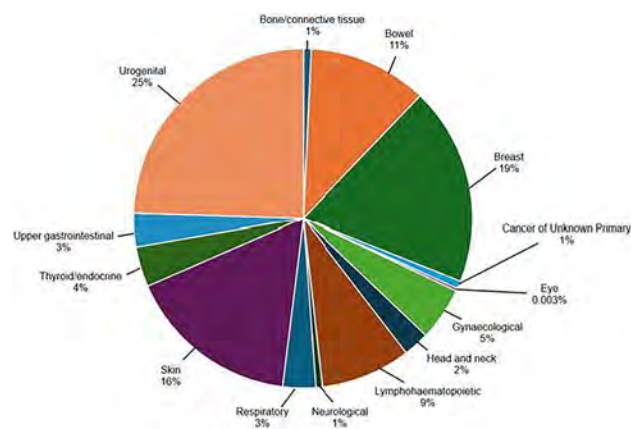
As cancer incidence rises and treatments become more effective, the number of cancer survivors in Australia is expected to grow. Survivors experience poorer physical and mental health and higher rates of non-cancer-related death than the general population. We aimed to describe changes in numbers, characteristics and demographics of adult cancer survivors in NSW to inform service planning and drive improvements in survivorship care.

Methods

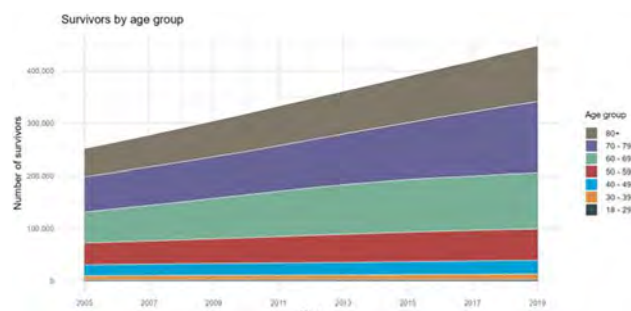
We used the Medicines Intelligence Data Platform, including linked cancer and death notifications for all adult NSW residents between 2005-2019. We defined survivors as people aged ≥18 years who were alive during any part of each year, who were diagnosed with an invasive cancer during or prior to that year. We counted the number of survivors in each year and described annual changes, overall and stratified by cancer type, age, and sex.

Results

The number of adult survivors increased from 251,266 in 2005 to 446,392 in 2019. The most common cancers affecting survivors remained stable: urogenital (24% of survivors in 2019), breast (19%), skin (16%) and bowel (11%) (Figure 1).



The median age of cancer survivors increased from 69 years (IQR 58-78) in 2005 to 71 years (IQR 61-79) in 2019. Survivors aged ≥70 years were the fastest growing age group, doubling from 120,036 to 240,236 in the study period (Figure 2).



The proportion of long-term survivors alive ≥10 years after cancer diagnosis increased from 40% in 2009 to 50% in 2019.

Conclusions

The number of adults diagnosed and surviving cancer in NSW increased by 78% between 2005 and 2019. Older and long-term survivors increased at faster rates, while other clinical and demographic characteristics remained stable. Policymakers and health system leaders need to adapt the Australian health system to meet the physical and psychosocial needs of the growing population of cancer survivors in NSW.

SURVI-099

SUPPORTING ONCOLOGY SURVIVORSHIP - DEVELOPMENT OF SUPPORTIVE CARE SCREENING TOOL

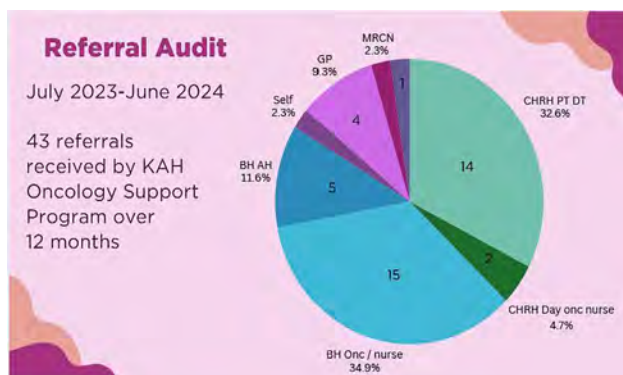
Wendy Taverna

Central Highlands Rural Health

Introduction

Supportive care screening within the Day Oncology Unit (DOU) at Kyneton Health was not meeting the goals of identifying client needs and delivering care that is personal, connected, right and safe. Resulting in clients not being informed of and linked to services to maximize their survivorship care; under-utilization of resources; increased staff frustration and the health service not meeting the Victorian Cancer Survivorship Framework Guidelines (VCSFG). An audit in June 2024 identified only 4.7% of referrals were received from the DOU to the Kyneton Allied Health (KAH) oncology support program.

Methods



A supportive Oncology Screening Tool (SOS-t) was developed and piloted with 28 admissions to the DOU over a 6 week period. The tool aimed to assist clients self identify supportive care needs and communicate this with allied health professionals.

Kyneton Health
SUPPORTIVE ONCOLOGY SCREENING TOOL

Date: _____

UR No: _____
Surname: _____
Given Names: _____
DOB: _____ GP: _____

Do you have concerns about how you are feeling?
No - Yes - A little - Comments:

Over the last 2 weeks how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3

Have you had any recent changes to your appetite, food intake or eating habits?
No - Yes - A little - Comments:

Within the last 6 months have you lost weight without trying? If yes how much weight have you lost
No - Yes 1-5kg 6-10kg 11-15kg 15+kg Unsure

Have you had any recent changes to your bowel movements? (constipation, diarrhoea)
No - Yes - A little - Comments:

Do you have any difficulties with swallowing or chewing food?
No - Yes - A little - Comments:

Do you have any concerns about how your pain is managed?
No - Yes - A little - Comments:

Have you had any trips or falls?
No - Yes - Comments:

Do you have concerns about your mobility (getting on & off bed or seat, walking)
No - Yes - A little - Comments:

Do you have concerns about your endurance, strength or sensation?
No - Yes - A little - Comments:

Do you have concerns about showering and dressing, cooking, cleaning or shopping?
No - Yes - A little - Comments:

Do you have concerns about your memory, concentration or fatigue level?
No - Yes - A little - Comments:

Do you have concerns about swelling in your arms or legs?
No - Yes - A little - Comments:

Do you have concerns about your finances, employment and returning to work?
No - Yes - A little - Comments:

Please list any other concerns you have:

Would you like to know more about the oncology support programs and services? Yes - No

Kyneton Health
SUPPORTIVE ONCOLOGY SCREENING TOOL
Health team to complete

UR No: _____
Surname: _____
Given Names: _____
DOB: _____ GP: _____

Current History and treatment regime:

Oncologist:

Past History (or attach summary):

Medications:

Referral to:

Mental wellbeing PHQ-4 score
☐ GP
☐ Oncologist
☐ Social work

Nutrition MST score
☐ Dietitian
☐ Speech Pathologist

Pain management VAS
☐ GP
☐ Oncologist
☐ Physiotherapist

Physical function
☐ Physiotherapist
☐ Exercise Physiologist
☐ Podiatrist

ADLs, Fatigue, Lymphoedema
☐ Occupational therapist
☐ Lymphoedema practitioner

Financial Distress
☐ Social work

Others:
☐ CHR Allied Health Oncology Support Program
☐ MRCN
☐ Cancer council
☐ Palliative care

For case discussion
Date: _____

Completed by: _____ Date: _____

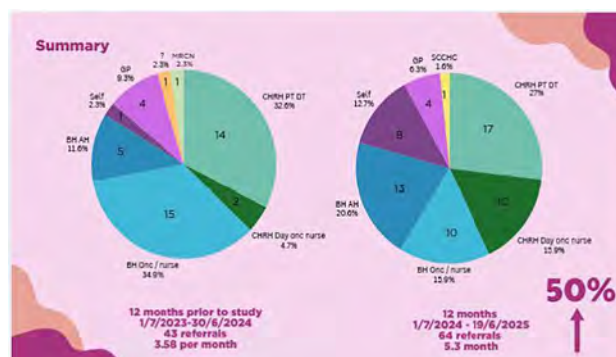
Supportive Oncology Screening Tool (SOST) CHR/287

Results

There was an overall 50% increase in referrals to the KAH oncology support program during the 12 month project.

Internal referrals from the DOU increased from 4.7% to 15.9%.

An increase in self-referrals was noted during the project (2.3% to 12.7%) and could be attributed to the increased media release about the program which occurred simultaneously during the project.



Conclusions

The screening tool is now implemented routinely to support the DOU screen clients for their level of distress, function and care needs. Additionally, monthly multidisciplinary team meetings with DOU and KAH teams assist with coordination of care and referral support. There are plans to refine and revise the relevant referral pathways and tailor to local services. The health service is committed to delivering quality cancer services that encompass both treatment and survivorship care practices and meeting the VCSFGs.

As a result, our clients are better off as their needs are being screened and they are connected to the right services and supports to improve their health, well being and survivorship outcomes.

SURVI-100

PATIENTS' AND NURSES' EXPERIENCES WITH EVIDENCE-INFORMED SYMPTOM MANAGEMENT IN OUTPATIENT MALIGNANT HEMATOLOGY: A QUALITATIVE DESCRIPTIVE STUDY

Kylie Teggart¹, Denise Bryant-Lukosius¹, Sarah Neil-Sztramko², Tammy De Gelder³, Kari Kolm³, Cheryl Page³, Nicole Smiciklas⁴, Jennifer Smyth³, John Watson⁴, Rebecca Ganann¹

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Introduction

Increased service demands for malignant hematology care have resulted in more patients managing complex symptoms in outpatient settings. Oncology nurses are well-positioned to provide high-quality outpatient symptom management using clinical practice guidelines. However, nurses face contextually dependent barriers to providing evidence-informed symptom management. The aim of this study was to describe a) patients' and oncology nurses' experiences with symptom management care, and b) influential barriers and facilitators to enhancing evidence-informed symptom management in an outpatient malignant hematology unit.

Methods

A qualitative descriptive study was conducted within the context of a larger experience-based co-design project. Patients with hematologic malignancies, registered nurses, and nurse practitioners from an outpatient unit in Ontario, Canada were identified using maximum variation sampling. Patients and nurses participated in individual, semi-structured interviews. A qualitative content analysis approach was used, informed by the Consolidated Framework for Implementation Research (CFIR). A Steering Group of patients, caregivers, oncology clinicians, and organizational leaders informed all study phases.

Results

Twenty-seven people participated (15 patients, 12 nurses). Patients reported an average of 8.1 ± 3.7 symptoms over the last three months. Symptom management was largely focused on medical management, with limited non-pharmacological strategies or patient education provided. The outpatient environment, staff, and service model impacted patients' symptoms and experiences. CFIR factors influencing evidence-informed symptom management delivery were *mission alignment*, the *relative priority* of symptom management compared to procedures and treatment, symptom management guideline *compatibility*, nursing *knowledge* and *access to information*, and symptom management *roles*.

Conclusions

Patients with hematologic malignancies receiving outpatient care experience a high symptom burden. Opportunities exist to enhance symptom management through evidence-informed oncology nursing practice. Organizational and unit-based strategies are needed to empower oncology nurses to work to their full scope when providing symptom management care. Implementing guideline-informed symptom management protocols may optimize the range of interventions offered and reduce suffering.

SURVI-101

PARTNERING WITH GENERAL PRACTITIONERS TO OPTIMIZE SURVIVORSHIP FOR PATIENTS WITH LYMPHOMA: A PHASE II RANDOMIZED CONTROLLED TRIAL (GOSPEL I TRIAL)

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Jones³, Louisa Collins⁴, Ria Joseph¹, Carolyn Ee¹, Jane Lee¹, Stephanie Buhagiar², Joel Rhee⁵, Raymond J Chan¹

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Introduction

Survival rates for lymphoma are high (79%) amongst haematological malignancies in Australia. Innovative models of survivorship care are needed to manage comorbidities, surveillance and long-term bio-psychosocial effects of lymphoma for this large population of survivors. The GOSPEL I trial aimed to test the feasibility of implementing an integrated, nurse-enabled shared care survivorship model involving both cancer specialists and general practitioners (GPs).

Methods

A phase II randomized controlled trial (1:1) was conducted at a tertiary cancer centre in Brisbane, Australia. Individuals diagnosed with lymphoma were randomised to usual care or the GOSPEL I intervention which included 1) Specialist lymphoma nurse consultation for survivorship care plan (SCP) development and goal setting, 2) Pharmacist consultation, 3) Case conference involving the patient's GP and 4) Shared follow-up care responsibilities. Feasibility and efficacy measures included health-related quality of life, patient experience, symptom distress, physical activity and financial distress assessed at baseline, 6 and 12 months. Health service use, safety and fidelity were also measured. Bivariate and multivariable analyses were conducted using intention-to-treat principles.

Results

Forty-nine out of 90 eligible lymphoma survivors were randomised (n=23 intervention; n=26 usual care); mean age 62.5 years (SD = 13.3 years). Examination of SCPs indicated the top three goals, exercise (n=7), mental well-being (n=6) and sleep (n=6) could be managed by primary care. No significant differences were observed between groups across primary and secondary outcomes, and unscheduled hospital visits and admissions, despite fewer post-treatment specialist team appointments in the intervention group. Intervention fidelity was high, with 20/23 participants (87%) receiving the specialist lymphoma nurse consultation, pharmacist consultation and GP case conference.

Conclusions

Nurse-enabled, shared-care arrangements for individuals with lymphoma may be feasible and acceptable, and may provide a more sustainable model of care over the longer term. Findings from this trial can inform a large, pragmatic, hybrid effectiveness-implementation trial for further evaluation.

SURVI-102

PREDICTORS OF PATIENT-REPORTED MODERATE-SEVERE FATIGUE AND SLEEP DISTURBANCE IN CANCER SURVIVORSHIP

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Introduction

Fatigue and sleep disturbance are among the most frequently reported symptoms in cancer survivorship and may persist long after completion of primary therapy. This study describes the prevalence and predictors of moderate-severe fatigue and sleep disturbance using patient-reported data collected from survivors treated in six survivorship clinics (breast, head and neck, genitourinary, lymphoma, thoracic, and thyroid).

Methods

This retrospective cross-sectional study evaluated 2548 unique survivors who completed the MD Anderson Symptom Inventory prior to a

survivorship clinic visit from January to December 2023. Fatigue and sleep disturbance severity was rated on a scale from 0–10 and categorized by not present–mild (0–3) or moderate–severe (4–10). Demographic (age, sex) and clinical (cancer type, years in survivorship care) data were obtained from the electronic medical record. Descriptive statistics summarized sample characteristics. Multivariate logistic regression models were used to identify predictors of moderate–severe fatigue and sleep disturbance, including age, sex, cancer type, and years in survivorship care.

Results

Among 2548 survivors (70% female, 52% <65 years old, 36% breast cancer, 39% in survivorship care 1–4 years), 25% reported moderate–severe fatigue and 24% reported moderate–severe sleep disturbance (Table 1). Younger survivors (<65 years) and females were more likely to report moderate–severe fatigue or sleep disturbance than older survivors (≥65 years) and males. Compared with breast cancer survivors, thyroid cancer survivors were more likely to report moderate–severe fatigue or sleep disturbance, while head and neck cancer survivors were more likely to report moderate–severe fatigue only. Thoracic cancer survivors were less likely to report moderate–severe sleep disturbance. Years in survivorship care was not significantly associated with either symptom (Table 2).

Conclusions

Moderate–severe fatigue and sleep disturbance varied according to age, sex, and cancer type, rather than time since entering survivorship care. These findings highlight subgroups of survivors who may benefit from more targeted symptom management in clinical practice.

Table 1. Demographic and Clinical Characteristics of Sample (N=2548) and Prevalence of Moderate–Severe Fatigue and Sleep Disturbance, n (%)

Demographic and clinical data	All survivors	Moderate–severe fatigue	Moderate–severe sleep disturbance
N = 2448		646 (25)	613 (24)
Age, median (IQR)	64 (17)		
<65 years	1334 (52.4)	389 (29.3)	374 (28.1)
≥65 years	1214 (47.6)	256 (21.2)	238 (19.7)
Sex			
Female	1782 (69.9)	509 (28.7)	489 (27.5)
Male	766 (30.1)	136 (17.8)	123 (16.2)
Cancer site			
Breast	929 (36.5)	210 (22.7)	220 (23.8)
Genitourinary	198 (7.8)	27 (13.6)	28 (14.2)
Head and neck	327 (12.8)	67 (20.7)	55 (17.0)
Lymphoma	273 (10.7)	62 (22.8)	61 (22.4)
Thoracic	80 (3.1)	19 (23.8)	7 (8.8)
Thyroid	741 (29.1)	260 (35.2)	241 (32.7)
Years in survivorship care			
<1 year	805 (23.7)	157 (26.0)	149 (24.8)
1–4 years	988 (38.8)	242 (24.6)	222 (22.6)
≥5 years	955 (37.5)	246 (25.8)	241 (25.3)

Table 2. Predictors Moderate–Severe Fatigue and Sleep Disturbance

Variables	OR	95% CI	p-value
Fatigue			
Age <65 years (reference: Age ≥ 65)	1.248	1.027–1.516	.026
Female (reference: Male)	1.825	1.461–2.536	<.001
Genitourinary cancer (reference: breast cancer)	1.102	0.658–1.846	.712
Head and neck cancer	1.456	1.103–2.094	.043
Lymphoma	1.304	0.926–1.836	.128
Thoracic cancer	1.343	0.772–2.339	.297
Thyroid cancer	2.149	1.696–2.723	<.001
<1 year in survivorship care (reference: ≥5 years)	1.264	0.983–1.625	.067
1–4 years in survivorship care	1.054	0.849–1.308	.634
Sleep Disturbance			
Age <65 years (reference: Age ≥ 65)	1.301	1.067–1.586	.009
Female (reference: Male)	1.843	1.381–2.460	<.001
Genitourinary cancer (reference: breast cancer)	1.061	0.632–1.780	.823
Head and neck cancer	1.048	0.716–1.535	.806
Lymphoma	1.170	0.829–1.650	.372
Thoracic cancer	0.385	0.173–0.858	.020
Thyroid cancer	1.747	1.378–2.214	<.001
<1 year in survivorship care (reference: ≥5 years)	1.209	0.939–1.556	.166
1–4 years in survivorship care	0.958	0.770–1.192	.142

Abbreviations: OR–odds ratio; CI–confidence interval.
Moderate–severe = fatigue and sleep disturbance severity rated 4–10.

SURVI-103

TRAUMA-INFORMED SUPPORTIVE CARE FOR A BREAST CANCER SURVIVOR EXPERIENCING DOMESTIC AND FAMILY VIOLENCE: A CASE STUDY

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Introduction

Survivorship in triple-negative breast cancer (TNBC) is not solely medical; it is profoundly psychosocial. Oncology environments can inadvertently trigger traumatic recall, particularly for patients navigating domestic and family violence (DFV), poverty, and unstable housing. Without trauma-informed care, surveillance attendance, treatment adherence, and psychosocial recovery are at risk of disruption. This case illustrates how a trauma-informed approach centering safety, choice, collaboration, trustworthiness, and empowerment can stabilize engagement, reduce distress, and enable continuity of care for a high-risk survivor in a resource constrained context.

Methods

A case study analysis using a trauma-informed framework was applied to a 36-year-old female with right-sided TNBC attending post-treatment surveillance. Clinic visits precipitated intense distress and re-experiencing of treatment related trauma. The patient disclosed DFV, lived in temporary housing with a 5-year-old child, had no income, and minimal social supports. Care was structured around emotional safety (predictable appointments, grounding strategies), empowerment (shared decision-making), and collaboration (warm referrals). The team liaised with external services (DFV housing, DFV, financial assistance) and delivered strong advocacy for secure and safe accommodation and income support.

Results

Multidisciplinary coordination facilitated rapid linkage to DFV and housing services, prioritization for stable accommodation, and access to financial supports. Flexible scheduling, trauma sensitive communication, and brief psychological interventions reduced clinic-triggered anxiety and improved perceived safety. The patient sustained engagement with surveillance and reported greater control, reduced hyperarousal, and improved coping capacity.

Conclusions

Trauma-informed practice is a critical determinant of survivorship engagement in psychosocial oncology, particularly for patients facing DFV and psychosocial stressors. Embedding trauma-informed principles paired with proactive advocacy and cross-sector collaboration can mitigate distress, enhance safety, and maintain continuity of cancer care. Implementation at program level warrants further evaluation to inform scalable models in survivorship clinics.

SURVI-104

MISSED OPPORTUNITIES TO PROMOTE FLOURISHING IN SUPPORTIVE CANCER CARE: A BRIEF EXAMINATION OF MULTIPLE MYELOMA

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Introduction

Recent theoretical and empirical advancements in well-being science can have meaningful implications for supportive cancer care when considering existential issues faced by people with incurable or life-limiting cancer diagnoses. We propose the possibility that certain elements of flourishing, such as meaning and purpose, deep personal relationships, and virtue, can be uniquely realised when life is ending.

Methods

Using exploratory data from a study focussed on identifying the unmet needs of patients living with the blood cancer multiple myeloma, we thematically analysed interviews with patients and clinicians to explore the possibility of flourishing at the end of life.

Results

Smouldering myeloma and multiple myeloma patients (n=25) reported personal growth following their diagnosis through acceptance, meaning-making, and connection. At the same time, they reported a sense of loneliness and a desire to discuss prognosis and death in addition to focusing on treatment. On the contrary, clinicians (n=10) were hesitant to discuss death, balancing hope in treatments with preparation for dying.

Conclusions

We argue that the hesitation to discuss death thwarts the opportunity to flourish during supportive care, and that existing solutions such as dignity therapy, meaning-centred psychotherapy, and multidisciplinary support could close this gap without diminishing hope in treatments.

SURVI-108

WHICH OUTCOMES IN CANCER SURVIVORSHIP MATTER MOST? - AN INTERNATIONAL, MULTISTAKEHOLDER, MODIFIED DELPHI STUDY

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Introduction

Improving care quality requires measuring outcomes and should take into account that diverse stakeholders often value different outcomes. This study aims to identify and prioritize outcomes for cancer survivorship care from a global, multistakeholder perspective to inform research, policy, and practice.

Methods

A list of 56 potential outcomes was generated from a scoping review and 25 expert interviews, and mapped to the Quintuple Aims for

healthcare improvement: (1) survivor health, (2) care experience, (3) wellbeing of healthcare professionals, (4) equity, and (5) costs. Experts with ≥ 2 years of lived or work experience in survivorship care were recruited through international survivorship networks and direct outreach using an open-link survey (~2150 people contacted). In a two-round Delphi process, experts first rated the importance of the 56 outcomes (consensus criteria: $\geq 70\%$ "very" or "extremely" important and $\leq 15\%$ "not" or "slightly" important), provided feedback on existing outcomes, and suggested additional ones. In Round Two, experts ranked their top five outcomes in each domain, rated the feasibility of measuring them, and recommended instruments or measures for key outcomes.

Results

Of 769 individuals who accessed the survey, 155 experts completed it, representing 38 countries, including 13 low- and middle-income countries. Among these experts, 46 had lived experience and 109 had work experience. In Round One, 47 outcomes reached agreement, 7 were rejected, and 3 were partially met. Two new outcomes were suggested. In total, 45 experts provided 96 comments, mostly clarifying or emphasizing that all outcomes are important. The Round Two survey was distributed on 20th November 2025. Final results are expected in early 2026.

Conclusions

Global stakeholders with lived or work experience prioritized outcomes for cancer survivorship care to be applied across cancer types, subpopulations, and care settings. These findings will support the development of a standardized toolkit to measure and improve the quality of cancer survivorship care.

SURVI-109

EFFECT OF COGNITIVE REHABILITATION ON COGNITIVE FUNCTION IN CANCER PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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Introduction

Cancer-related cognitive impairment (CRCI) involves cognitive decline that frequently occurs in cancer survivors, negatively affecting their daily life and overall quality of life. Cognitive rehabilitation (CR) has become a promising approach for enhancing cognitive function in patients with CRCI, as evidenced by previous qualitative reviews that synthesized its effects. Despite increasing research on the effects of CR, related meta-analyses remain limited. This review aims to quantify the effects of CR on subjective and objective cognitive function in cancer survivors.

Methods

Seven databases were searched from January 2010 to August 2025. Study selection, data extraction, and critical appraisal were conducted by two independent reviewers. Both pairwise and network meta-analyses were performed based on categories of technology use (i.e., web-based, computerized, and online intervention) and CR approaches [i.e., cognitive training (CT), compensatory strategy training (CST), and combined CR].

Results

We included 31 RCTs with 2769 participants. The pooled results demonstrated significant benefits of CR on total objective cognitive function and objective domains in attention/concentration, executive function, and learning and memory ($g = 0.51$ to 0.77). Small benefits were also observed in subjective cognitive function and in objective domains of visuospatial and motor function and language ($g = 0.25$ to 0.41). Among the subgroup analyses for all cognitive outcomes, a statistically significant group difference based on technology use occurred only in total objective

function ($p = 0.02$), while non-significant differences among the three CR approaches were detected. In the NMA results, technology-assisted CST ranked first for subjective cognitive function, whereas non-technology CST ranked first for attention/concentration, and executive function. Technology-assisted CT ranked first for learning and memory.

Table 1. Summary of pairwise meta-analysis pooled results for all cognitive outcomes

Cognitive Outcome	Overall Effect Size g (95%CI)	Technology Use		Between Study p -value	CR Approach			Between Study p -value
		No	Yes		CST	CT	Combined CR	
		g (95%CI)	g (95%CI)		g (95%CI)	g (95%CI)	g (95%CI)	
Subjective cognitive function	0.41 (0.28, 0.54)	0.44 (0.21, 0.66)	0.39 (0.23, 0.55)	0.70	0.50 (0.31, 0.70)	0.22 (-0.03, 0.47)	0.44 (0.19, 0.69)	0.21
Total objective cognitive function	0.51 (0.34, 0.68)	0.70 (0.47, 0.91)	0.30 (0.06, 0.53)	0.02	0.40 (-0.10, 0.80)	0.60 (0.41, 0.80)	-0.04 (-0.87, 0.80)	0.07
Attention/concentration	0.55 (0.21, 0.89)	0.96 (-0.09, 2.01)	0.37 (-0.10, 0.64)	0.28	0.88 (-0.21, 1.98)	0.30 (0.03, 0.57)	0.75 (0.19, 1.30)	0.25
Executive function	0.77 (0.34, 1.20)	1.13 (-0.13, 2.36)	0.67 (0.21, 1.13)	0.51	1.00 (-0.33, 2.34)	0.77 (0.22, 1.31)	0.31 (-0.17, 1.23)	0.79
Visuospatial and motor function	0.27 (0.04, 0.47)	0.42 (0.10, 0.74)	0.11 (-0.19, 0.41)	0.16	0.31 (-0.11, 0.72)	0.23 (-0.08, 0.54)	0.24 (-0.22, 0.69)	0.90
Language	0.38 (0.15, 0.62)	0.29 (-0.06, 0.64)	0.46 (0.15, 0.77)	0.49	0.42 (-0.07, 0.92)	0.38 (0.07, 0.68)	0.36 (-0.18, 0.89)	0.98
Learning and memory	0.70 (0.28, 1.11)	0.66 (0.39, 0.93)	0.77 (0.11, 1.34)	0.84	0.61 (0.31, 0.91)	0.77 (0.03, 1.51)	0.58 (0.09, 1.07)	0.91

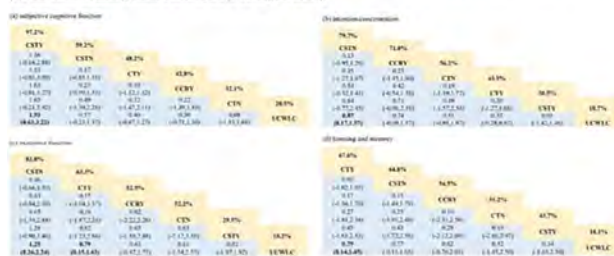
Notes: CST, compensatory strategy training; CT, cognitive training; CR, cognitive rehabilitation; CI, confidence interval; g , Hedges' g .

Table 2. Summary of rank probabilities of SUCRA

CR Intervention	Subjective cognitive function		Attention/concentration		Executive function		Learning and memory	
	SUCRA (%)	Rank	SUCRA (%)	Rank	SUCRA (%)	Rank	SUCRA (%)	Rank
CTV	48.2	1	43.9	4	63.3	2	67.0	1
CTN	32.1	5	56.2	3	52.2	4	51.2	4
CSTV	97.2	1	30.5	5	29.9	5	43.7	5
CSTN	58.2	2	79.7	1	83.8	1	64.8	2
CCRV	42.8	4	71.0	2	52.9	3	54.5	3
UCWLC	20.5	6	18.7	6	18.2	6	18.1	6

Notes: The shaded values highlight the top-ranked interventions for each domain. CCRV: combined cognitive rehabilitation with technology; CSTN: compensatory strategy training with technology use; CSTV: compensatory strategy training without technology use; CTN: cognitive training with technology use; CTV: cognitive training without technology use; UCWLC: usual care or waitlist control.

Table 3a-d. League tables show the relative effect estimates on improving (a) subjective cognitive function, and objective cognitive domains in (b) attention/concentration, (c) executive function, and (d) learning and memory.



Notes: Each cell shows the comparison of the column intervention's effect relative to the intervention in the row. Significant results are highlighted in bold. SUCRA values on top of interventions indicate the rank probabilities of being among the top-ranked interventions. Abbreviations: CCRV: combined cognitive rehabilitation with technology; CSTN: compensatory strategy training without technology use; CSTV: compensatory strategy training with technology use; CTN: cognitive training without technology use; CTV: cognitive training with technology use; UCWLC: usual care or waitlist control.

Conclusions

CR can improve both subjective and objective cognitive functions in adult cancer survivors, with the CST approach significantly enhancing subjective cognitive function and the CT approach significantly enhancing objective cognitive function.

SURVI-111 LEVERAGING FACILITATORS, ADDRESSING BARRIERS, AND ENSURING SUSTAINABILITY: A SWOT-INFORMED EVALUATION OF A STATEWIDE CANCER SURVIVORSHIP SERVICE

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Mater Statewide Cancer Survivorship Service

Introduction

Global advances in cancer detection and treatment have increased five-year survival rates across most tumor streams, creating a growing population with complex post-treatment needs. Survivorship

care, however, remains variable and inconsistently integrated across health systems, particularly during the transition from acute treatment to community-based support. To address these gaps, the Mater Statewide Cancer Survivorship Service, a multidisciplinary model spanning public and private sectors and serving metropolitan and regional populations, was launched in Queensland, Australia, in October 2024. This project examines the facilitators, barriers, and sustainability of implementing and scaling this statewide model using a SWOT framework to inform future system-level adoption.

Methods

A qualitative SWOT analysis was undertaken in December 2025 using implementation data, patient satisfaction surveys, and patient-reported outcome measures (PROMs) collected over the preceding 12 months, including the validated Cancer Survivor Unmet Needs (CaSUN) and Distress Screening Thermometer tools. These data sources were synthesized using descriptive and thematic analysis to assess service performance, acceptability, and sustainability.

Results

Strengths included a holistic, person-centred model that addressed key unmet needs, such as fear of recurrence, sexual health, menopause, and weight management, supported by strong interdisciplinary collaboration and equitable access for public and private patients. Weaknesses involved high resource demands and scalability challenges. Opportunities included expanding regional access via telehealth, adding tumour streams, embedding PROMs, and aligning with national and international frameworks. Threats included funding uncertainty, workforce limitations, and system-level barriers. Outcomes from 160 patients showed a 523% increase in referrals, 89.3% (4.53/5) satisfaction among 27 feedback, reduced distress scores, and improvements in the psychological, financial, and informational unmet needs domains.

Conclusions

This SWOT analysis shows the service's potential as a scalable survivorship model. Long-term success will require investment in digital systems, workforce capability, and policy alignment. Findings offer practical guidance for health services aiming to strengthen post-treatment support for people living beyond cancer.

SURVI-112

SEX AFTER CANCER - WHERE TO TURN FOR HELP

Fiona White, Alan White

The Prostate Zone

Introduction

Sexual dysfunction is common following cancer treatment. While survivors often experience long-term problems that affect their quality of life, healthcare professionals lack access to appropriate resources to assist their patients. Prostate cancer survivors, for example, often face incontinence and persisting erectile dysfunction many years after treatment. We aimed to determine what information cancer survivors need to support their future as sexual beings and what healthcare providers need to know so that their patients can access that information.

Methods

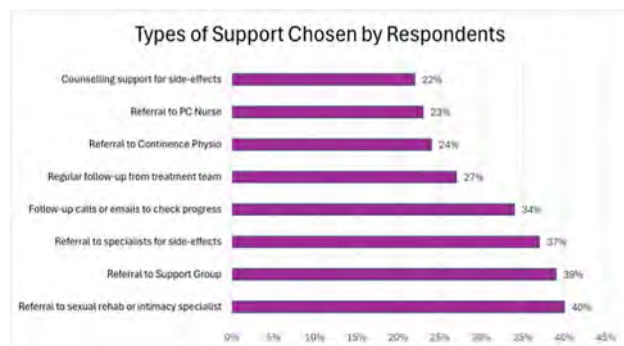
We conducted three online surveys via our website, between 2023 and 2026. Invitations to respond were emailed to website subscribers and leaders of prostate cancer support groups. Each survey investigated different aspects of survivorship and respondents' assessment of their own needs. Responses were all anonymous. Respondents could select from a range of options for each question.

Results

83, 264 and 84 responses were received for the first, second and third surveys, respectively. Respondents ranged in age from 46 to 83. All treatment types were included. Some respondents had finished

their treatment, whilst others had ongoing therapy. 92% of respondents wanted to see better follow-up care and support in future. Only 12% of respondents felt that no additional support or follow-up was needed.

Table 1: Types of Support Chosen by Respondents



Conclusions

Responses highlighted a range of unmet needs affecting quality of life. Although survey participants were prostate cancer survivors, we believe their responses are broadly applicable for other cancer types. Healthcare providers need to know what help is available outside the healthcare system so they can inform their patients. Useful resources are available, some free of charge and others at a range of prices. When patients are informed, they can make their own decisions about what help they wish to access.

SURVL-113

BEYOND THE CAST: MEANING, CONNECTION, AND WELL-BEING OUTCOMES OF A NATURE BASED INTERVENTION FOR CANCER SURVIVORS

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Introduction

Fly-fishing retreats for cancer survivors are a nature-based intervention (NBI) that allows participants to engage in an immersive, outdoor activity. Little is known about the impact of NBI for people with cancer. This study aims to understand the experiences of male and female cancer survivors attending fly-fishing retreats and explore whether experiences vary by gender.

Methods

The study was conducted in partnership with 'Mending Casts' an Australian not-for-profit organisation that runs 3-day fly-fishing retreats for those living and beyond with cancer. 'Mending Casts' emailed study invitations to attendees of three most recent retreats ($n=80$). Those interested provided consent and took part in a qualitative interview. Interview transcripts were analysed using reflexive thematic analysis.

Results

Eight women and 11 men were interviewed. Three themes emerged with some differences in experiences of males and females emerging. 1) *Wellbeing and restoration*. Fly-fishing's immersion in nature led to opportunities for mindfulness, meditation and flow-like states. The group nature of the retreat allowed sharing of experiences, learning from others, and placing their experience in context of others. Males more often than females noted that listening to others' stories helped

to process their experiences. 2) *Social and personal fulfilment* was experienced with many describing a feeling of connection through shared experiences with other participants. Participants noted social support generated through retreat activities. However, some male participants found aspects of sharing experiences emotionally confronting. 3) *Value and impact*. The retreats value related to its ability to build social connections, improve wellbeing and help participants gain a new perspective.

Conclusions

Fly-fishing retreats are a promising NBI that may support the wellbeing of cancer survivors through developing mindfulness and social connection. While the retreat's outcomes were generally similar for males and females, differences emerging suggest further work exploring possible gendered dimensions of NBI experiences and outcomes is needed.

SURVL-114

ACUPUNCTURE FOR MANAGEMENT OF TREATMENT-RELATED SIDE EFFECTS FOR MEN WITH LOCALISED AND ADVANCED PROSTATE CANCER. A SCOPING REVIEW

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Introduction

Prostate cancer is the most diagnosed male cancer worldwide, with improved survival across all stages. Despite effective cancer treatments, options to manage side effects and enhance quality of life are limited. Acupuncture is increasingly used as a supportive care intervention. This scoping review maps the extent and nature of the evidence for acupuncture for men localised and advanced prostate cancer, experiencing treatment-related side effects.

Methods

The scoping review follows JBI guidelines (Peters et al., 2020). Eight databases were searched - four English (MEDLINE, EMBASE, EBSCO, CINAHL) and four Chinese (China National Knowledge Infrastructure (CNKI), Wanfang, Chinese Specific Journal (VIP), Chinese Biomedical Literature (SINOMED) – for studies published between January 1, 2003, and May 31, 2025.

Results

The search identified 534 records across all databases (394 from English-language databases and 140 from Chinese-language databases). Following screening, 20 studies were included. Most studies focused on acupuncture for urinary incontinence (UI) and urinary symptoms ($n=13$). A smaller number examined acupuncture for hot flashes (HF), erectile dysfunction (ED), peri-operative pain, and nocturia. Considerable heterogeneity was found in acupuncture protocols, outcome measures and reporting practices. There was a strong focus on using acupuncture points in the sacral area.

Conclusions

This review identified key evidence gaps, including the limited number of studies on treatment-related side effects beyond urinary symptoms; inconsistent selection of patient-reported outcome measures (PROMs); and poor adherence to the Standards for Reporting Clinical Trials of Acupuncture (STRICTA). Available evidence suggests potential benefits of acupuncture for treatment side effects and quality of life. However rigorous, adequately powered studies using standardised outcomes are needed to inform clinical practice and guideline development.

SURVI-115**ELECTROACUPUNCTURE FOR ERECTILE DYSFUNCTION AFTER ROBOTIC ASSISTED RADICAL PROSTATECTOMY. A MIXED METHODS RANDOMISED CONTROLLED TRIAL**

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Introduction

Robotic-assisted laparoscopic prostatectomy (RALP) is a standard treatment for prostate cancer; but erectile dysfunction (ED) remains a common side effect, significantly affecting quality of life (QoL). Effective supportive interventions are limited. This mixed-methods feasibility randomised controlled trial evaluated the feasibility of electroacupuncture (EA) for erectile dysfunction after RALP.

Methods

This feasibility study (ACTRN12621000886886) recruited men following RALP through five surgeons. Participants were randomised to EA (n = 24) or standard care (SC) (n = 21). The EA group received 10 sessions of EA over 8 weeks. Outcomes were assessed at baseline, week 4 and week 8 using validated measures, including the Expanded Prostate Cancer Index Composite (EPIC), Erection Hardness Score (EHS), and Memorial Anxiety Scale for Prostate Cancer (MAX-PC). Participants in the EA group were invited to participate in semi-structured interviews at study completion. Quantitative data were analysed using analysis of covariance (ANCOVA) adjusted for baseline and paired t-test; qualitative data were analysed thematically.

Results

Forty-five participants completed the study. Between-group differences showed no statistically significant differences in EPIC sexual domain scores at week 4 (p=0.24) or week 8 (p=0.21). However, within-group analyses showed significant improvements in the EA group at week 4 (p=0.01) and week 8 (p=0.002), with no significant change in the SC group. The minimal clinically important difference was detected within the 95% confidence interval. Qualitative findings indicated high acceptability, with participants reporting acupuncture was relaxing, they felt more hopeful, optimistic and confident, and it was a positive recovery experience. Clear communication and health professional referral were important for trial participation.

Conclusions

Electroacupuncture following RALP was feasible and acceptable, with preliminary signals of benefit for erectile function recovery. Semi-structured interviews revealed positive experiences. These findings support the conduct of larger, adequately powered mixed methods randomised controlled trials to determine effectiveness and inform integration of acupuncture into supportive prostate cancer care.

SURVI-120**SETTING THE AGENDA: GLOBAL RESEARCH PRIORITIES FOR SURVIVORSHIP CARE IN ADVANCED OR METASTATIC CANCER**

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Introduction

People affected by advanced or metastatic cancer have complex and ongoing care needs. However, they are often excluded from survivorship research and services, resulting in limited evidence to guide survivorship care. The study aimed to identify global research priorities for survivorship care for this population and explore differences across socioeconomic settings.

Methods

A two-round modified Delphi study was conducted with international experts in survivorship care. Initial priority items, derived from the literature, were organised into six priority areas: epidemiology and surveillance; symptom management; psychosocial and spiritual care; health-care delivery; health behaviours; and caregiver support. In Round 1 (R1), participants rated 77 items on a five-point Likert scale (very low to very high priority) and proposed additional priorities. In Round 2 (R2), participants rated new/amended priorities, ranked their top five within each area, and voted on cross-cutting themes derived from R1. Priorities were included if ≥70% of participants rated them high or very high (Likert 4–5). Priority rankings were compared between high-income countries (HICs) and low- and middle-income countries (LMICs).

Results

Experts (R1:n=164; R2:n=95) included people with lived experience/carers (14%), researchers (50%), cancer specialists (50%) and other health professionals (24%), representing HICs (78%) and LMICs (22%). Following R1, 13 priorities were added and 27 reworded. R2 finalised 65 research priorities across the six priority areas. Six cross-cutting themes were identified: cultural responsiveness; digital health; health equity; lived experience; collaboration and integration; and economic evaluation. There was alignment between HICs and LMICs in some areas (e.g. top priority under symptom management was palliative care), but differences in others.

Conclusions

This global study identified 65 research priorities and six cross-cutting themes to advance survivorship care for people affected by advanced or metastatic cancer. Findings identify shared priorities and context-specific differences, providing strategic guidance for researchers, policymakers, and funders, while amplifying voices of those affected.

SURVI-121**EMPLOYMENT, QUALITY OF LIFE AND DEPRESSIVE SYMPTOMS IN PATIENTS WITH COLORECTAL CANCER IN CHINA**

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Introduction

Colorectal cancer (CRC) is one of the most prevalent malignancies worldwide with high morbidity and mortality rates. With advancements

in modern medicine, the survival duration of CRC patients has gradually extended, making the quality of life (QoL) of survivors an increasing concern. This study aims to explore the relationship between employment status, QoL, and depressive symptoms among CRC survivors in China.

Methods

A cross-sectional study design was adopted, enrolling 106 CRC patients treated at Beijing Cancer Hospital. Participants completed surveys including employment trajectories and work-related issues. Assessment tools included the Functional Assessment of Cancer Therapy-Colorectal (FACT-C) and the Patient Health Questionnaire-9 (PHQ-9) to evaluate QoL and depressive symptoms, respectively. Correlation analyses were performed to examine intervariable relationships.

Results

Table 1. Participant characteristics

Tumor Site	Colon cancer	Rectal cancer	Rectosigmoid junction cancer	<i>p</i>
<i>n</i>	62	41	3	
Age	47.45 ± 9.55	50.66 ± 6.00	50.00 ± 7.55	0.159
Sex				0.905
Male	43 (69.35%)	30 (73.17%)	2 (66.67%)	
Female	19 (30.65%)	11 (26.83%)	1 (33.33%)	
Marital Status				0.434
Unmarried/Divorced	9 (14.52%)	3 (7.32%)	0 (0.00%)	
Married	53 (85.48%)	38 (92.68%)	3 (100.00%)	
Education Level				0.789
High school diploma or below	33 (53.23%)	22 (53.66%)	1 (33.33%)	
College degree or above	29 (46.77%)	19 (46.34%)	2 (66.67%)	
Medical Expenses				0.791
Self-pay/Other	3 (4.84%)	3 (7.32%)	0 (0.00%)	
Health insurance/Public healthcare	59 (95.16%)	38 (92.68%)	3 (100.00%)	
Family history				0.672
Yes	13 (20.97%)	8 (19.51%)	0 (0.00%)	
No	49 (79.03%)	33 (80.49%)	3 (100.00%)	

Table 2. Comparison of occupational and demographic changes before and after cancer diagnosis

Participant characteristics	Pre-Cancer Diagnosis	Post-Cancer Diagnosis	<i>p</i>
Occupational group			
Employment	100 (94.34%)	62 (58.49%)	<0.001
Unemployment/Sick leave	6 (5.66%)	44 (41.51%)	
Workload			0.003
Hard physical work	27 (25.47%)	10 (9.43%)	
Intermediate and easy physical work	79 (74.53%)	96 (90.57%)	
Weekly working hours			<0.001
>40h	54 (50.94%)	19 (17.92%)	
≤40h	52 (49.06%)	87 (82.08%)	
Average monthly net income of the patient			0.126
>10000RMB	51 (48.11%)	39 (36.79%)	
≤10000RMB	55 (51.89%)	67 (63.21%)	
Average monthly net income of the household			0.128
>10000RMB	65 (61.32%)	53 (50.00%)	
≤10000RMB	41 (38.68%)	53 (50.00%)	
Smoking status			0.001
Yes	36 (33.96%)	15 (14.15%)	
No	70 (66.04%)	91 (85.85%)	
Drinking status			<0.001
Yes	43 (40.57%)	12 (11.32%)	
No	63 (59.43%)	94 (88.68%)	

Table 3. Quality of life and psychological factors after cancer diagnosis

After Cancer Diagnosis	All patients	Employment	Unemployment/Sick leave	<i>p</i>
<i>n</i>	106	62	44	
FACT-PWB	14.03 ± 4.86	13.68 ± 4.96	14.52 ± 4.72	0.399
FACT-EWB	11.37 ± 3.77	11.34 ± 3.67	11.41 ± 3.96	0.969
FACT-SWB	27.94 ± 6.28	28.76 ± 5.72	26.50 ± 7.05	0.199
FACT-FWB	23.14 ± 6.40	24.13 ± 6.38	21.75 ± 6.23	0.038
FACT-C	22.95 ± 5.24	23.79 ± 5.34	21.77 ± 4.91	0.064
PHQ-9	15.24 ± 5.46	14.61 ± 5.50	16.11 ± 5.34	0.078

Among 106 respondents, 100 had pre-diagnosis employment income. At follow-up, 38 patients were unemployed or on sick leave. The employment rate dropped from 94.34% pre-diagnosis to 58.49% post-diagnosis. Post-diagnosis work intensity and working hours significantly declined, while smoking and alcohol consumption rates decreased, and dietary habits became more regular. Lower-educated patients appeared more vulnerable to unemployment. Unemployed survivors exhibited relatively lower FACT functional scores and higher PHQ-9 depression scores.

Conclusions

Psychosocial factors are significantly associated with employment status among CRC survivors. Further research is needed to validate these associations.

A. Okasha, F.	NEURO-023		SUPPO-012
ABID, F. B.	PSYCH-008	Aframian, K.	ONCOD-001
	SURVI-006	Agar, M.	PALLI-011
Aapro, M.	ANTIE-004		SURVI-120
	ANTIE-010	Agarwal, A.	PERSO-020
	OTHER-048		SUPPO-068
	SUPPO-012		SURVI-054
Abdalla-Aslan, R.	MUCOS-027	Agbejule, A.	EDUCA-005
	OTHER-002	Agbejule, O. A.	SUPPO-012
Abdeen, A.	NUTRI-026		SURVI-101
Abdel-Wahab, N.	FATIG-020	Aggarwala, S.	SURVI-052
Abdel-Wahab, R.	NUTRI-042	Agho, K.	PERSO-020
Abdelwahab, N.	NUTRI-042		SURVI-054
Abdul Aziz, A. F.	SUPPO-041	Agrawal, A.	LIFES-023
Abdul Hamid Hasani, N.	MUCOS-006	Aguayo, S.	SUPPO-008
Abdul Satar, N. F.	SUPPO-041	Ahamed, A.	CANCE-029
Abe, K.	SUPPO-038	Ahmed, R.	SUPPO-064
Abe, N.	NUTRI-001	Ahmed, S.	GERIA-005
Abel, T.	EXERC-035	Ahumada-Canale, A.	HEMAT-001
	EXERC-036	Aimono, Y.	NUTRI-001
Abevit, D.	ORAL-001	Ajala, O. A.	OTHER-021
Abhyankar, A.	DIGIT-068	Ajinath, W. B.	OTHER-005
Abid, F. B.	PSYCH-005	Ajrovski, E.	DIGIT-053
Abo, M.	EXERC-043	Akabane, S.	CANCE-008
Abo, S.	EXERC-001	Akaishi, Y.	PALLI-049
	EXERC-005	Akamaru, Y.	NUTRI-050
	EXERC-045	Akeel, F.	EDUCA-008
Abraham, R.	FATIG-002	Akgün Citak, E.	SURVI-045
Abreu Alves, F.	MUCOS-013	Akhurst, T.	NUTRI-027
Acharya, M.	LIFES-028	Akita, K.	NUTRI-025
	PRECL-001	Akiyoshi, K.	PALLI-049
	PRECL-002	Aktas, A.	LIFES-021
Acharya, M. M.	LIFES-023		MUCOS-027
	NEURO-028		NUTRI-002
Ackerly, S.	NUTRI-014		NUTRI-003
Acet, L.	SUPPO-055	Akwarandu, D.	PERSO-021
	SUPPO-056	Al Hamami, S.	EMERG-039
Acuri, A. L.	SUPPO-013	Al-Hakimi, H.	EDUCA-028
Adair, M.	EXERC-001	Al-Hamami, S. S.	EMERG-033
	EXERC-045	Al-Khaifi, M.	DIGIT-005
Adam, S.	EMERG-010		DIGIT-013
Addison, O.	FATIG-011		DIGIT-021
Adeleke, S.	SUPPO-079		DIGIT-032
Adison, R.	SUPPO-083		DIGIT-037
Adlard, K.	EXERC-014		DIGIT-038
	EXERC-030		DIGIT-044
Adler, H.	LIFES-010		DIGIT-054
Admane, S.	DIGIT-001		DIGIT-059
	NUTRI-046		DIGIT-063
	PALLI-001		FATIG-025
Advani, P.	OTHER-038		ONCOD-019
Affronti, M. L.	ANTIE-006		SURVI-013

Al-Qadami, G.	MUCOS-026	Amarelo, A.	EXERC-010
Al-Sattar, H.	SUPPO-079	Amendolea, M.	ORAL-020
Al-Talib, H.	MUCOS-006	An, K.	PERSO-039
Alagir Rajah, H. D.	SUPPO-041	Anand, R.	DIGIT-019
Alami, L.	PSYCH-005		PSYCH-035
	PSYCH-008	Ananda, S.	SUPPO-026
	PSYCH-027	Anavekar, N.	CANCE-015
	PSYCH-102		PALLI-041
	SURVI-006	Anazodo, A.	PALLI-056
Alberti, P.	OTHER-002	Andersen, C.	PALLI-004
Alcalde Castro, J.	PALLI-002		SUPPO-042
Alchin, J.	SURVI-065	Andersen, S.	NUTRI-005
Alchin, J. E.	DIGIT-039		NUTRI-047
Alem, M.	OTHER-039	Anderson, A.	HEMAT-003
	OTHER-040	Anderson, B. O.	SUPPO-012
Alexander, A.	SUPPO-094	Anderson, M.	EMERG-042
Alexander, K.	FATIG-002	Anderson, P.	MUCOS-005
	LIFES-025		MUCOS-022
	SUPPO-094	Andrew, J.	PSYCH-041
	SUPPO-095	Andrzejczak, K.	EDUCA-025
Alexander, M.	HEMAT-001	Ang, W. W.	NEURO-030
	PERSO-044	Anil, A.	OTHER-005
	SUPPO-008	Ankory, R.	DIGIT-054
	SUPPO-034		PERSO-034
Ali, A.	CANCE-015	Ann-Yi, S.	OTHER-027
	PERSO-030	Anton, L.	SUPPO-041
Ali, H.	PERSO-030	Anuar, N. F. H.	MUCOS-004
Ali, K.	PERSO-042	Aoki, M.	CANCE-018
	PSYCH-093	Aota, R.	NEURO-015
	SURVI-104	Aoyama, T.	ANTIE-012
Alkan, A.	PALLI-069	Apostolopoulos, V.	PRECL-006
Alkhaifi, M.	SURVI-003	Applebaum, A. J.	PSYCH-088
All, S.	CANCE-013	Apsari, W.	ORAL-001
Allan, C.	SUPPO-016	Aquilano, M.	PALLI-069
Allanson, E.	SUPPO-033	Arai, H.	EXERC-049
Allen, D.	NEURO-020	Arain, S.	PERSO-030
Allende Perez, S.	PALLI-002	Araki, K.	EXERC-018
Almeida, S.	NUTRI-036	Aras, D.	SUPPO-117
Alonzi, A.	ANTIE-013	Araujo, D.	SUPPO-026
Alsbrook, K.	SURVI-102	Araujo, L.	SUPPO-026
Alston, L.	SUPPO-057	Argall, B.	SUPPO-045
	SUPPO-089	Argyriou, A.	NEURO-020
	SUPPO-117	Arifi, S.	OTHER-040
Altieri, B.	PSYCH-041	Armitage, L.	SUPPO-002
Alva Bianchi, M.	ANTIE-004	Armoogum, J.	CANCE-007
Alvaro, F.	PEDIA-017		EDUCA-001
Alves, A.	EXERC-010		SURVI-003
Alviarez, D. L.	OTHER-046	Armstrong, G.	PEDIA-021
Amaadour, L.	OTHER-039	Armstrong, J.	LIFES-012
	OTHER-040	Arndt, V.	NUTRI-052
Amaral, N.	NUTRI-048	Arnet, S.	EMERG-029
Amaram-Davila, J.	OTHER-046		EMERG-030

Aronowitz, C.	ORAL-021		PSYCH-027
Arrato, N.	PERSO-003		SURVI-006
Arshad, I.	PSYCH-047	Babu, T.	HEMAT-007
Arthur, J.	CANCE-028	Babu, V.	EMERG-002
	PALLI-050	Bachir, S.	DIGIT-002
Arthur, J. A.	PALLI-048	Bachouchi, M.	PSYCH-005
Aryana, M.	EDUCA-015		PSYCH-008
Aryana, W.	EDUCA-015		PSYCH-027
Asgari, J.	SUPPO-083		SURVI-006
Ashida, R.	EXERC-031	Back, M.	SUPPO-102
	GERIA-002	Badawi, M.	NUTRI-026
	GERIA-011	Baden, P.	SURVI-022
Ashraf, N.	EMERG-042	Badwe, R.	HEMAT-005
Ashrafi, E.	NUTRI-005	Bae, J. H.	OTHER-025
Aso, S.	GERIA-002	Bae, K. R.	PSYCH-006
	GERIA-011		PSYCH-103
Assadihaghi, A.	EMERG-023	Baecker, J.	CANCE-025
Assafiri, H.	HEMAT-003	Bagai, P.	SURVI-052
Assis, M.	PEDIA-025	Bagal, B.	EMERG-002
	SURVI-088		HEMAT-012
Astbury, B.	EDUCA-003		HEMAT-018
Atchan, M.	SUPPO-002	Baggoley, C.	SUPPO-025
Ateyya, H.	NEURO-023	Baguley, B.	NUTRI-008
Athan, S.	SUPPO-083		NUTRI-009
Athavale, N.	SUPPO-011		NUTRI-015
	SURVI-010		NUTRI-034
Atife, M.	SUPPO-079		NUTRI-045
Atkin, C.	EDUCA-016		SUPPO-057
	SUPPO-039		SUPPO-090
Atrash, F.	NUTRI-026	Baharulnizam, S.	PERSO-004
Au, K.	NEURO-007	Bai, J.	EMERG-031
Au, K. Y.	LIFES-035		PEDIA-001
Au-Yeung, G.	EDUCA-017		PEDIA-002
	EMERG-016	Bailey, E.	EDUCA-016
Aung, L.	NUTRI-003		SUPPO-039
Aung, S. H. H.	PERSO-016	Bailey-Dorton, C.	LIFES-021
Auret, K.	PALLI-063	Baird, A. R.	OTHER-038
Austin, P.	CANCE-011	Bajel, A.	HEMAT-025
Avilez, L.	SURVI-027	Baker, B.	EXERC-037
Avraamides, M.	DIGIT-015		NUTRI-006
Awoyemi, D.	EMERG-023	Baker, P.	SUPPO-058
Axelsen, N.	NUTRI-035	Bakhshi, S.	ANTIE-015
Ayalew, E.	SUPPO-008		NEURO-001
Ayme, C.	GERIA-004		SURVI-052
Ayre, S.	NUTRI-006	Balbirsingh, S.	PEDIA-017
	SUPPO-005	Baldeo, R.	CANCE-030
	SUPPO-047	Baldock, J.	SUPPO-097
	SURVI-067		SURVI-082
Azraai, A. M.	MUCOS-004	Baldwin, R.	DIGIT-039
B S, G.	EMERG-002		SURVI-065
	HEMAT-012	Baldwin, S.	PALLI-004
BEN ABID, F.	PSYCH-008	Balson, J.	SUPPO-023

Ban, W.	LIFES-035	Bauer, J.	NUTRI-015
	LIFES-036		NUTRI-045
Bandgar, T.	HEMAT-012		SUPPO-077
Bandla, A.	NEURO-030	Baughman, F.	PERSO-024
Bando, H.	ANTIE-011		SURVI-038
Banks, H.	PSYCH-097	Baum, G.	DIGIT-052
Banotra, J.	NEURO-001	Bauters, T.	SUPPO-008
Bao, T.	LIFES-002	Bayrakdarian, S.	PALLI-069
	LIFES-029	Beatty, L.	DIGIT-003
	LIFES-033		PERSO-018
	LIFES-034		PSYCH-028
	NEURO-022		PSYCH-046
	OTHER-038		PSYCH-078
Barberio, M.	SUPPO-116		PSYCH-097
Barbour, A.	DIGIT-066		SUPPO-025
Bardet, H.	HEMAT-013		SURVI-051
Bardia, A.	SUPPO-013	Beaumont, A.	SUPPO-064
Bareham, M.	NUTRI-047	Beauplet, B.	GERIA-003
	ONCOD-019		GERIA-004
	PERSO-018		GERIA-016
	SURVI-013	Bechelli, M.	SUPPO-089
	SURVI-051	Bechthold, H.	PSYCH-077
Barker, D.	EXERC-051	Becker, C.	PSYCH-079
Barnes, A.	NUTRI-043	Beckmann, K.	PSYCH-068
Barnes, E. (.	DIGIT-013	Beecroft, L.	PSYCH-007
Barnes, T.	DIGIT-044	Beecroft, M.	SUPPO-066
Barr, L.	NEURO-014	Beeler, D.	FATIG-003
	SUPPO-033		FATIG-020
Barreto, M.	MUCOS-002		PEDIA-029
Barreto, M. P.	SUPPO-025	Beer, H.	PSYCH-093
Barreto, S. G.	SUPPO-025		SURVI-035
Barrett, C.	EMERG-027		SURVI-104
	SUPPO-078	Beesley, V.	SUPPO-047
Barrett, M.	EDUCA-003	Behrens-Spraggins, S.	NEURO-018
	SUPPO-083	Bektash, F.	EDUCA-033
	SURVI-085	Belay, S. Y.	FATIG-006
Barros, G.	SUPPO-006	Bell, R.	EXERC-040
Bartle, J.	NUTRI-028	Bellas, O.	NEURO-002
Bartlett, S.	PERSO-006		NEURO-003
Bartley, N.	PSYCH-097	Bellingham, K.	PALLI-052
Barton, C.	EXERC-008		SUPPO-085
Barton, M.	SUPPO-064	Bellon, M.	SUPPO-097
Basha, M.	PEDIA-001	Belo, B.	EXERC-010
	PEDIA-002	Ben Abid, F.	EMERG-031
Baskarane, H.	NEURO-001		PSYCH-005
Basson, M.	PSYCH-051	Benbrahim, Z.	OTHER-039
Basti, S.	GERIA-003	Benbrahim, z.	OTHER-040
Batalini, F.	FATIG-023	Bencheekroun, N.	SURVI-006
Bateman, E.	MUCOS-026	Bender, J.	SUPPO-007
Batra, A.	ANTIE-015	Benimana, D.	OTHER-008
	NEURO-001	Benitez-Fuentes, J.	SUPPO-079
	SURVI-052	Benn, A.	NUTRI-014

Benna-Doyle, S.	NUTRI-008	Binte Mustadi, H.	NEURO-030
	NUTRI-009	Binte Ramli, S. S.	NEURO-030
Bennett, A.	PERSO-024	Bird, L.	PALLI-007
Bennett, H.	EXERC-029	Birken, S.	FATIG-003
Bentley, M.	FATIG-002	Birrell, C.	PSYCH-011
Beom, S. H.	SURVI-056	Bishop-Gully, R.	PSYCH-009
Berchtenbreiter, K.	OTHER-019	Biswas, B.	HEMAT-015
Berger, L.	DIGIT-034	Biyi-Olutunde, O.	PERSO-021
Bergin, R.	EXERC-044	Blackberry, I.	PERSO-013
	SUPPO-048		SUPPO-088
Bergin, R. J.	SUPPO-089	Blackburn, N.	SURVI-086
	SUPPO-117	Blaes, A.	EDUCA-014
Berman, R.	CANCE-029	Blake, E.	EDUCA-011
Berman, T.	LIFES-002	Bland, K.	EXERC-003
Bernardin, P.	GERIA-003	Blayne, A.	ANTIE-006
Bernardo, B.	SURVI-078	Blennerhassett, R.	SURVI-022
Bernareggi, A.	ANTIE-002	Blijlevens, N.	OTHER-002
Berney, S.	LIFES-032	Bloomfield, J.	PERSO-016
Bernstein, L.	NEURO-020		SURVI-085
Best, S.	SUPPO-023	Blum MD, V.	DIGIT-053
Bethune, R.	EDUCA-016	Blyth, C.	PEDIA-030
	SUPPO-039	Boddy, L.	DIGIT-001
Bettariga, F.	EXERC-029	Boffa, S.	PSYCH-079
Beumer, A.	EMERG-045		SUPPO-089
	SUPPO-013	Bolam, K.	EXERC-041
Bevans, H.	SUPPO-064		SUPPO-090
Beverley, M.	SURVI-080	Boll Kristensen, M.	NUTRI-010
Bewley, T.	EXERC-015	Bolt, S.	SUPPO-024
Bhagwat, A.	HEMAT-015	Boltong, A.	SUPPO-117
Bhandari, R. S.	SUPPO-071	Bonadonna, C.	EMERG-011
Bhargava, P.	ANTIE-003	Bonda, N. A.	OTHER-005
	EMERG-018	Bonizzoni, E.	ANTIE-010
	HEMAT-005		ANTIE-013
	NEURO-001	Bonomo, M.	EMERG-011
Bharti, S.	PALLI-022	Bonomo, P.	DIGIT-032
Bhatt, G.	GERIA-016		MUCOS-027
Bhattacharjee, A.	HEMAT-015		OTHER-002
Bhonagiri, D.	DIGIT-062		PALLI-069
Bhoo Pathy, N.	SUPPO-087	Boonyasurakul, B.	OTHER-031
Bhoo-Pathy, N.	SUPPO-041	Boreddy, U.	HEMAT-021
Bianchini, G.	EMERG-011	Borghetti, L.	EMERG-011
Bianty, J.	EXERC-039	Bortz, H.	SUPPO-008
Biccler, J.	SURVI-095	Bose, R.	NUTRI-003
Bigaran, A.	EXERC-003	Boselli, D.	LIFES-021
	LIFES-032		NUTRI-003
Billan, S.	NUTRI-026	Bosnjak, S.	SUPPO-012
Billis, A.	EDUCA-010	Bossi, P.	EMERG-031
Bilson, T.	SUPPO-063		MUCOS-027
	SUPPO-083	Botha, T.	SUPPO-089
Binder, J.	NEURO-030	Botticelli, A.	EMERG-011
Bingham, S.	PSYCH-082	Bottomley, A.	FATIG-025
Binion, B.	LIFES-032		PSYCH-106

Bouche, O.	MUCOS-028	Braithwaite, J.	DIGIT-062
Boudin, G.	GERIA-003	Brand, G.	EDUCA-009
Boudoulas, K.	PERSO-030	Branson, D.	DIGIT-060
Boudoulas, K. D.	CANCE-015	Brar, R. S.	HEMAT-008
	PALLI-041	Brault, A.	CANCE-016
Bourdaniotis, X.	PSYCH-010	Brazer, J.	NUTRI-014
	PSYCH-011	Brennan, D.	OTHER-012
	SUPPO-005		OTHER-044
	SUPPO-047	Brierley, S.	PRECL-007
Bowden, K.	EDUCA-030	Briggs, N.	PALLI-056
Bowe, S.	PSYCH-076	Briggs, P.	OTHER-044
Bowen, J.	EMERG-031	Brinkman, T.	PEDIA-021
	EMERG-044	Brintzenhofeszoc, K.	GERIA-016
	HEMAT-016	Britto, J.	EDUCA-003
	MUCOS-026		SUPPO-083
	NEURO-002	Brock, FNP-BC, CNM, L.	SURVI-009
	NEURO-003	Brook, T.	DIGIT-004
	NEURO-020	Brooke-Smith, M.	SUPPO-025
	NUTRI-047	Brooks, P.	ORAL-025
	OTHER-002	Broome, S.	EXERC-041
	PERSO-012	Broughton, K.	SURVI-084
	SURVI-014	Broughton, S.	DIGIT-066
	SURVI-068	Brown, B.	SUPPO-009
Bowers, A.	PEDIA-006	Brown, C.	EXERC-021
	PEDIA-008		PALLI-011
	PEDIA-009	Brown, J.	PALLI-004
	PEDIA-017	Brown, J. A.	SUPPO-013
Bowley, C.	EDUCA-036	Brown, K.	DIGIT-041
Bowman, A.	SUPPO-032		PSYCH-020
Boyd, A.	EXERC-007	Brown, L.	SUPPO-009
Boyd, L.	EDUCA-003	Brozos Vázquez, E.	ANTIE-013
Boyer, M.	EXERC-038	Bruce, B.	OTHER-038
Boyle, F.	DIGIT-003	Bruera, E.	CANCE-028
	EDUCA-036		EXERC-039
	NEURO-007		FATIG-006
	PSYCH-078		FATIG-025
Boys, E.	LIFES-024		NUTRI-046
Boytar, A.	EXERC-014		OTHER-027
	SUPPO-090		OTHER-046
Bradford, N.	FATIG-002		PALLI-001
	LIFES-025		PALLI-028
	PEDIA-006		PALLI-060
	PEDIA-008	Bruest, L.	EDUCA-009
	PEDIA-009	Bruno, J.	OTHER-002
	PEDIA-017	Bryant, R.	HEMAT-016
	PEDIA-023	Bryant-Lukosius, D.	PERSO-040
	PSYCH-049		SURVI-100
	PSYCH-050	Bucci, L.	EXERC-021
	SUPPO-095	Buchler, T.	ANTIE-013
	SUPPO-103	Bucholc, J.	PSYCH-058
Bradhurst, B.	PERSO-046		SUPPO-063
Brain, D.	PSYCH-049	Buga, S.	PSYCH-075

Buhagiar, S.	SURVI-101	Campbell, C.	CANCE-030
Bui, V.	SUPPO-023	Campbell, I.	PERSO-038
Buick, C.	EDUCA-021	Campbell, K.	EDUCA-001
Bujang, M. A.	SUPPO-041	Campbell, R.	EXERC-051
Bujara, A.	EDUCA-025		FATIG-024
Bullen, J.	SUPPO-009	Candian, M.	ORAL-020
Bundhe, A.	PALLI-010	Canosa, A.	PSYCH-067
Burahmah, A.	ORAL-002	Cantley, M.	EMERG-044
Burbage, D.	EDUCA-014		PERSO-042
	EMERG-045		PSYCH-093
Burbury, K.	HEMAT-001		SURVI-104
	SUPPO-034	Cantrell, K.	PSYCH-010
Burkard, M. E.	SUPPO-013	Cao, K.	HEMAT-016
Burke, J.	HEMAT-025	Cao, L.	ANTIE-016
Burke, M. M.	PSYCH-013		NEURO-004
Burke, P.	NEURO-030		OTHER-010
Burns, K.	SUPPO-085	Cao, M. (.	OTHER-011
Burns-Lynch, P.	ORAL-021	Cao, T.	PEDIA-002
Bursill, C.	SURVI-014	Capron, K.	LIFES-032
Burton, E.	SUPPO-033	Cardoso, F.	OTHER-012
Busa, P.	HEMAT-021		OTHER-044
Busheri, L.	SUPPO-011		SURVI-064
	SURVI-010		SURVI-120
Butler, T.	CANCE-013	Carlson-Garbutt, S.	NEURO-013
	PSYCH-102	Carlson, M.	SUPPO-013
Butow, P.	EDUCA-036	Carmichael, J.	PSYCH-037
	PSYCH-037	Carmichael, M.	EDUCA-005
	PSYCH-046	Carrion, C.	DIGIT-007
Button, E.	SUPPO-012	Carson, J.	SURVI-098
Button, K.	PERSO-014	Casagrande, M.	EMERG-011
Byrne, E.	OTHER-036	Cashion, C.	PEDIA-006
Byrne, K.	DIGIT-003		PSYCH-049
Bækgaard Larsen, H.	PSYCH-040	Castle, D.	PSYCH-037
C S, M.	EMERG-002	Castro, J.	PRECL-007
	HEMAT-012	Castro, J. A.	PALLI-002
CHANDRAN, A.	SURVI-015	Catarinella, A.	PSYCH-026
CNM, L. B. F.	SURVI-009	Cathcart, A.	MUCOS-002
Caballero, J.	PERSO-030		ORAL-021
Cable, M.	PALLI-056	Cathhard-Rake, E.	OTHER-038
Cabral, J.	EXERC-010	Cavalheri, V.	EXERC-045
Cabutto, D.	DIGIT-007	Cavill, S.	SUPPO-083
Caeyenberghs, K.	NEURO-012	Cazzaniga, M. E.	ANTIE-004
	NEURO-013	Cecilia, H. P.	MUCOS-008
Cai, C.	DIGIT-005	Celis, E. S. P. d.	SUPPO-079
Cai, L.	SUPPO-104	Cella, D.	FATIG-025
Cai, W.	PERSO-009		PSYCH-106
Calabro, R.	SURVI-082	Cepeda, S.	DIGIT-001
	SURVI-083	Cezario Santos, L.	SURVI-023
Calache, T.	GERIA-003	Chahonyo, S.	PEDIA-029
Camilleri, C.	EDUCA-016	Chait-Rubinek, L.	PEDIA-010
Campbell, A.	EXERC-006	Chaiviboontham, S.	PALLI-054
	SUPPO-058	Chakraborty, D.	EMERG-018

Chalanitorkamani, S.	EDUCA-016		SURVI-101
	SUPPO-039		SURVI-120
Chalasani, P.	SUPPO-116	Chan, W.	GERIA-025
Chambers, S.	PALLI-053	Chan, W. L.	EXERC-046
	PALLI-054	Chand, N.	LIFES-027
	SUPPO-005	Chandran, A.	PSYCH-031
Champiat, S.	OTHER-048	Chang Swartz, M.	SUPPO-042
Champion, A.	PEDIA-017	Chang, C.	CANCE-004
Chan, A.	CANCE-007		ORAL-004
	DIGIT-032		OTHER-062
	LIFES-023	Chang, H.	FATIG-013
	LIFES-028	Chang, I.	OTHER-028
	NEURO-016	Chang, P.	SUPPO-043
	NEURO-020	Chang, S.	DIGIT-056
	NEURO-028		SURVI-087
	PERSO-010	Chang, T. C.	EDUCA-006
	PRECL-001	Chang, Y.	FATIG-004
	PRECL-002		NEURO-031
	PSYCH-066	Chapman, A.	SUPPO-048
	PSYCH-090		SUPPO-089
	PSYCH-092		SUPPO-117
	SUPPO-012	Charalambous, A.	ANTIE-004
Chan, A. W.	GERIA-025		DIGIT-007
	ONCOD-019		DIGIT-015
	PALLI-069		EDUCA-007
	PSYCH-106		EDUCA-010
Chan, B.	EMERG-027		OTHER-048
	SUPPO-078	Charitakis, K.	PERSO-030
	SUPPO-090	Chattopadhyay, S.	OTHER-005
	SURVI-022	Chau, A. T.	PALLI-040
Chan, C. F. G.	DIGIT-008	Chauhan, A.	DIGIT-062
Chan, C. W. H.	PEDIA-007		EXERC-028
Chan, F.	PERSO-010		PERSO-011
Chan, G.	SURVI-012		SUPPO-101
	SURVI-040	Chauhan, M.	OTHER-038
Chan, H.	EMERG-014	Chavez, A.	SURVI-080
Chan, J.	PSYCH-090	Chavez-Iglesias, E.	NEURO-016
Chan, J. C.	SURVI-013		PSYCH-090
Chan, L.	SURVI-022		PSYCH-092
Chan, N.	SURVI-014	Chay, P. L.	PEDIA-013
Chan, R.	CANCE-007	Ceah, S.	SUPPO-083
	EDUCA-005	Chee, C.	SURVI-040
	EDUCA-037	Chee, C. E.	SURVI-012
	FATIG-010		SURVI-040
	PSYCH-090	Cheema, B.	EXERC-004
	SUPPO-104	Cheema, B. S.	LIFES-024
	SURVI-013	Chen, C.	ORAL-025
	SURVI-061	Chen, H.	OTHER-059
Chan, R. J.	OTHER-002	Chen, J.	FATIG-023
	PSYCH-092		PALLI-011
	SUPPO-012	Chen, L.	OTHER-011
	SURVI-051		SURVI-016

Chen, M.	CANCE-028	Chmiel, K.	LIFES-004
	EMERG-009	Cho, B. C.	PSYCH-042
	NUTRI-046	Cho, E. K.	OTHER-025
	OTHER-028	Cho, H.	DIGIT-050
	PALLI-001	Cho, J.	DIGIT-050
Chen, P.	PSYCH-052		NUTRI-030
	SURVI-016		PSYCH-103
Chen, S.	SUPPO-062		SUPPO-120
	SURVI-016		SURVI-048
	SURVI-034	Cho, J. H.	OTHER-025
Chen, T.	ORAL-007	Cho, N. W.	NEURO-016
	PALLI-012	Choi, E.	SURVI-048
Chen, X.	LIFES-034		SURVI-102
Chen, Y.	PSYCH-016	Choi, J.	SURVI-048
	PSYCH-100	Choi, S. C.	CANCE-020
Chen, Y. H.	SURVI-017	Choi, V.	NEURO-005
Chen, Z.	PEDIA-007		NEURO-006
Cheng, H.	NUTRI-012		NEURO-007
Cheng, Y.	ANTIE-013		NEURO-025
	PALLI-013	Choi, Y.	SURVI-056
	PALLI-026	Choi, Y. S.	PALLI-032
Cheong, L. Y.	PSYCH-032	Chong, F. L. T.	SUPPO-041
Cheong, W. K.	SURVI-012	Chong, J.	SUPPO-008
Cherel, A.	GERIA-003	Choo, C.	LIFES-033
Cherifi, F.	HEMAT-013		LIFES-034
Cheruvu, S.	NEURO-014	Choo, J.	SURVI-012
Chesterfield, N.	EDUCA-037		SURVI-040
Cheuk, H. L.	NUTRI-042	Chou, Y.	FATIG-020
Cheung, Y. T.	PEDIA-007		NEURO-031
Cheung, A.	SUPPO-104		PSYCH-018
Cheung, A. T.	DIGIT-008		SURVI-053
Cheung, S.	PALLI-040	Choudhury, M.	EMERG-031
Cheung, Y. B.	SUPPO-051		MUCOS-027
Cheung, Y. T.	DIGIT-010	Chow, E.	DIGIT-005
	LIFES-013		DIGIT-013
	LIFES-035		DIGIT-021
	LIFES-036		DIGIT-032
	OTHER-002		DIGIT-037
	PEDIA-007		DIGIT-038
	PEDIA-029		DIGIT-044
	SUPPO-119		DIGIT-054
Chiang, K.	EMERG-031		DIGIT-059
Chiba, I.	DIGIT-009		DIGIT-063
Chichra, A.	PSYCH-031		FATIG-025
Chien, L.	OTHER-028		GERIA-025
Chimonas, S.	EMERG-019		ONCOD-022
Chin, O.	LIFES-027		OTHER-059
Chin, V.	HEMAT-011		PERSO-034
Chinaka, C.	EXERC-013		PSYCH-106
Chinnabhandar, V.	HEMAT-003		SURVI-013
Chittari, S.	HEMAT-005	Chow, R.	ANTIE-006
Chlan, L.	FATIG-023	Chow, Y. K.	DIGIT-010

	PEDIA-007		PERSO-004
Choy, K. H. A.	OTHER-014		PSYCH-020
Christie, E.	EDUCA-017	Cohen, P.	DIGIT-056
Christina, J.	EDUCA-037		SUPPO-033
Christini, K.	DIGIT-060		SURVI-087
Christoph, D. C.	ANTIE-013	Cohn, R.	DIGIT-039
Christy, F.	GERIA-004		PALLI-056
Chu, Q.	PERSO-043		SURVI-065
Chu, X.	PERSO-043	Cole, T.	PEDIA-010
Chua, W.	SUPPO-104		PEDIA-027
Chuang, P.	EMERG-009	Collaborative Group, E.	NUTRI-015
	OTHER-028	Collantes-Espinosa, L.	NEURO-008
Chumsri, S.	OTHER-038	Coller, J.	PERSO-012
Chung, C. W. K.	SURVI-019	Collier, B.	NEURO-007
Chung, E.	EMERG-029	Collins, A.	PALLI-052
	EMERG-030	Collins, J. L.	SUPPO-013
Chye, A.	PERSO-033	Collins, K.	CANCE-006
Ciampa, R.	PALLI-037		EXERC-037
Ciarleglio, A.	SUPPO-116		NEURO-003
Ciarrocca, K.	SURVI-003		PSYCH-011
Cilingiroglu, M.	CANCE-015		PSYCH-021
	PALLI-041		SURVI-022
	PERSO-030	Collins, L.	SUPPO-068
Cimino, L.	ORAL-010		SUPPO-075
Cira, M.	SURVI-108		SURVI-101
Cirone, B.	SURVI-020	Colman, K.	PEDIA-010
Claringbold, G.	SURVI-113	Colosimo, M.	FATIG-002
Clarisse, B.	GERIA-004	Combe, N.	SURVI-021
Clark, J.	PEDIA-030		SURVI-035
Clark, K.	PSYCH-075	Combes, R.	DIGIT-003
Clark, M.	CANCE-028	Cong, M.	PERSO-043
Clausen, M.	DIGIT-011	Conlin, M.	SUPPO-089
	DIGIT-043	Conlin, T.	NEURO-002
Claveria, A.	DIGIT-007	Connolly, B.	EXERC-012
	EDUCA-007	Conyers, R.	EDUCA-023
	EDUCA-010		EDUCA-024
Clavijo, C. S.	EMERG-036		PEDIA-014
Clay, T.	EXERC-040		PEDIA-015
Clayforth, C.	EDUCA-028		PEDIA-022
Cleary, S.	SURVI-021		PERSO-038
Cleyn, S.	PSYCH-077		PERSO-044
	SUPPO-021		SUPPO-114
Clifford, B.	NEURO-007	Cook, D.	DIGIT-017
	SUPPO-090	Cook, E.	SUPPO-063
Clifford, V.	PEDIA-027	Cook, O.	EDUCA-009
Clifton, M.	PERSO-004		EDUCA-040
Clingan, C.	FATIG-011		OTHER-054
Clinton-McHarg, T.	PSYCH-021		PERSO-006
Cmelak, A. J.	CANCE-013		PSYCH-046
Cobain, E. F.	LIFES-012		SURVI-051
Cogswell, M.	MUCOS-011	Cook, T.	SUPPO-055
Cohen, J.	EDUCA-008		SUPPO-056

Cooksley, T.	EMERG-010		NUTRI-013
	EMERG-033		NUTRI-014
	EMERG-039		NUTRI-043
	HEMAT-006		NUTRI-051
Corbett, A.	SUPPO-016		SUPPO-107
Cordon, C.	EDUCA-021	Crippa, A.	ANTIE-007
Cormie, P.	EXERC-003		PSYCH-080
Cornelisse, E.	DIGIT-012	Cross, C.	MUCOS-026
Coro, D.	SURVI-082		NEURO-002
	SURVI-083		NEURO-003
Corr, B.	SUPPO-058		NEURO-009
Corraro, B.	ORAL-019		NEURO-010
	ORAL-020		NEURO-020
Correia, J.	EXERC-010		NUTRI-047
Cortesi, L.	ANTIE-004		SURVI-014
Corthals, C.	DIGIT-003	Crotti, T.	EMERG-044
Cosco, T.	GERIA-005	Crowe, J.	EXERC-005
Cosgrove, S.	SURVI-022		EXERC-021
Cosman, R.	PERSO-004		NUTRI-045
Cossio, D.	SUPPO-047		SUPPO-064
Costa, D.	PSYCH-046	Crowley, C.	MUCOS-002
Costa, D. S.	FATIG-024	Cuartas-Abril, A.	OTHER-038
Costa, L.	ANTIE-004	Culhane, D.	PEDIA-011
Costantino, N.	PSYCH-026	Cummings, J.	PEDIA-008
Costanzo, D.	EXERC-021		PEDIA-009
Costello, S.	HEMAT-016		PSYCH-050
Coutsouvelis, J.	PERSO-032	Cummins, M.	NUTRI-027
	SUPPO-008	Cunningham, B.	EXERC-030
Cowan, D.	SURVI-085		SUPPO-090
Cowden, J.	EMERG-045	Cunningham, J.	SUPPO-009
	SUPPO-013	Curtis, A.	NUTRI-015
Cowdery, S.	SUPPO-017		SUPPO-057
Cox, K.	DIGIT-003	Cushion, T.	LIFES-032
Cox, R.	SUPPO-018	Cuthbert, C.	CANCE-007
Coyne, E.	CANCE-010		SURVI-023
Cracknell, A. (.)	SUPPO-008	Câmara, G.	NUTRI-048
Cramb, S.	PSYCH-049	DELAVALT, T.	MUCOS-028
	PSYCH-050	DENHAERYNCK, J.	GERIA-004
Cramp, F.	EDUCA-001	Dabkara, D.	HEMAT-015
Crane, J.	PALLI-004	Daddi, A.	HEMAT-012
Crawford, G.	PALLI-052	Dadha, P.	DIGIT-034
	SUPPO-085	Daga, H.	PALLI-049
	SURVI-104	Dains, J.	SURVI-102
Crawford, G. B.	SURVI-120	Dale, E.	LIFES-010
Crawford-Williams, F.	EDUCA-005	Dale, W.	PSYCH-075
	EDUCA-009	Dalla Via, J.	EXERC-006
	EDUCA-040	Dalla-Pozza, L.	PSYCH-024
	PSYCH-046	Daly, A.	DIGIT-003
	SUPPO-005	Daly, R.	EMERG-019
	SURVI-101	Daly, R. M.	NUTRI-015
Creigh, P.	NEURO-018	Damaj, G. L.	HEMAT-013
Crichton, M.	NUTRI-010	Damarell, R.	PERSO-018

Dan, N. T.	SUPPO-020	Deftereos, I.	SUPPO-045
Danaee, M.	SUPPO-041	Del Fabbro, E.	NUTRI-010
Dang, A. T.	PSYCH-047		NUTRI-022
Dangerfield, F.	SUPPO-083	Del Fiol, G.	DIGIT-060
Daniels, B.	SURVI-098	Delarue, E.	GERIA-003
Dao, M. T.	SUPPO-104	Demedui, L.	PALLI-016
Dare, S.	EDUCA-036	Demirjian, C.	GERIA-017
Darlington, A.	PALLI-056	Denehy, L.	EDUCA-034
Darwish, M.	PERSO-038		EXERC-001
Das, S.	EMERG-011		EXERC-005
	MUCOS-013		EXERC-012
	SUPPO-021		EXERC-040
Dasari, S.	FATIG-023		EXERC-044
Dashti, G.	PEDIA-028		EXERC-045
Dasu, S.	OTHER-005		NUTRI-015
Datta, R.	SUPPO-007		NUTRI-027
Dauer, E.	SURVI-024		SUPPO-064
	SURVI-038	Deng, G.	PERSO-010
Daugherty, C.	SUPPO-040	Dennett, A.	EXERC-008
Davenport, A.	EDUCA-014		EXERC-009
David, M.	EDUCA-040		EXERC-047
Davidson, K.	SUPPO-044		SUPPO-090
Davidson, M.	PRECL-006	Dennis, S.	PSYCH-024
Davies, A.	LIFES-009		PSYCH-055
	OTHER-002	Denniston, C.	SUPPO-083
	PALLI-015	Dent, S.	LIFES-014
Davies, M.	NEURO-009	Deodhar, J.	PALLI-010
	NEURO-010	Desai, J.	PERSO-039
Davies, T.	EXERC-012	Desai, T.	OTHER-017
Davis, C.	SURVI-067		SURVI-025
Davis, D.	SUPPO-002		SURVI-064
Davis, M.	NUTRI-002	Desouza, A.	EMERG-018
Davis, N.	SUPPO-044	Dettwiller, P.	OTHER-018
Davis, R.	EMERG-038		OTHER-043
Davis-Lameloise, N.	EXERC-007		PERSO-031
Day, D.	PERSO-039	Dev, R.	NUTRI-046
	SURVI-022		PALLI-060
Day, M.	CANCE-006	Deveze, T.	EDUCA-016
De Abreu Lourenco, R.	HEMAT-001		SUPPO-039
	PERSO-038	Devine, K.	ORAL-021
	SURVI-061	Dewantari, R.	PSYCH-085
de Graves, S.	SURVI-085	Dey, S.	PSYCH-025
de Manincor, M.	LIFES-008	Dhanawat, A.	ANTIE-003
de Oliveira, D. d. S. M.	PALLI-069	Dhillon, A.	DIGIT-013
de Silva, D.	PSYCH-058	Dhillon, H.	EXERC-051
de Zoete, B.	EXERC-021		NEURO-012
	SUPPO-064		NEURO-013
De Gelder, T.	PERSO-040		PALLI-011
	SURVI-100		PSYCH-083
De Silva, G.	PEDIA-008		PSYCH-084
	PEDIA-009		PSYCH-097
de la RUE, J.	PSYCH-011	Dhillon, S.	GERIA-005

Dhruva, A.	PSYCH-090	Dragon, S.	SUPPO-036
Di Mattei, V. E.	PSYCH-026	Drake, R.	PEDIA-017
Di Palma, M.	OTHER-048	Dranitsaris, G.	ANTIE-013
Dias Rato, N.	EXERC-010	Drayson, O. G. G.	LIFES-023
Diaz, J. P.	EMERG-011	Drumm-Owen, P.	LIFES-027
Dick, N.	SURVI-013	Drury, A.	SURVI-026
Dickinson, M.	NEURO-012	Dryden, T.	NEURO-012
	NEURO-013		NEURO-013
Dickman, A.	PALLI-018	Drysdale, S.	SUPPO-034
Dickson, K.	EMERG-024	Dsilva, C.	EXERC-011
	EMERG-036	Dsouza, C.	EXERC-011
Dickson-Swift, V.	PERSO-013	Dubose, K.	EMERG-038
Diepenhorst, N.	EDUCA-003		SURVI-097
Diez de los Rios de la Serna, C.	SURVI-026	Dubrovsky, S.	SURVI-021
Dill, C.	PALLI-004	Ducceschi, M.	ANTIE-007
Dillon, J.	DIGIT-047		PSYCH-080
Ding, P.	LIFES-024	Dudding, T.	NUTRI-052
Ding, X.	SUPPO-058	Dufton, P.	LIFES-032
Ding, Y.	DIGIT-001		PERSO-033
Dinh, T. T. H.	EDUCA-009		SUPPO-023
Dissanayake, R.	DIGIT-014	Duhig, M.	PEDIA-017
Dixit, N.	NEURO-016	Dumbrell, J.	GERIA-008
	PSYCH-090		SUPPO-024
	SURVI-027	Dumont, A.	GERIA-003
	SURVI-120	Dumont, D.	GERIA-003
Dixon, C.	PERSO-046	Duncan, N.	SUPPO-008
Dixon, S.	PEDIA-021	Dunn, J.	SUPPO-005
Djordjevic, S.	OTHER-044	Dunne, S.	EDUCA-011
Do, L.	EMERG-038		OTHER-019
Dobrowolski, C. S.	OTHER-038		SURVI-028
Dobson, T.	DIGIT-066	Dunwoody, L.	SURVI-086
Dodlek, N.	DIGIT-015	Duong, T.	SUPPO-104
	EDUCA-007	Dupoiron, D.	CANCE-016
	EDUCA-010	Dupree Jones, PhD, FNP, FAAN, K.	SURVI-009
Doh, R.	ORAL-029	Durston, V.	OTHER-019
Doi, A.	GERIA-006		SURVI-028
Doihara, H.	ORAL-024	Duteil, A.	GERIA-004
Doki, Y.	NUTRI-050	Dyas, R.	PEDIA-010
Dominguez Duque, J.	NEURO-012		PEDIA-022
Dominguez Garcia, A.	EDUCA-028	Dyer, M.	SURVI-035
Donders, G.	OTHER-044	Dylke, E.	LIFES-031
Donkin, L.	PEDIA-023		SURVI-077
Dora, T. K.	HEMAT-008	Dzhus, M.	EDUCA-010
Dornan, M.	SURVI-003	D'Andre, S. D.	OTHER-038
Dou, A.	ANTIE-006	Earl, A.	EDUCA-015
Dougan, M.	EMERG-029	Edbrooke, L.	EDUCA-034
	EMERG-030		EXERC-001
Dougan, S.	EMERG-029		EXERC-005
	EMERG-030		EXERC-012
Douglas, A. P.	HEMAT-025		EXERC-040
Douglas, G.	LIFES-032		EXERC-045
Doyle, L.	FATIG-002		FATIG-018

	NUTRI-015		SUPPO-103
	SUPPO-057	Elvidge, N.	PEDIA-009
	SUPPO-064	Elvin-Ivey, A.	EMERG-029
Edge, R.	PEDIA-011		EMERG-030
	PSYCH-020	Emery, J.	SUPPO-104
	PSYCH-024		SURVI-061
	PSYCH-050	Endo, J.	NUTRI-017
	PSYCH-055	Endo, Y.	EDUCA-012
Edib, Z.	PEDIA-025		EDUCA-018
	SURVI-029	Eng, L.	ANTIE-006
	SURVI-088	Engel, L.	SUPPO-063
Edmiston, K.	EMERG-027	Engineer, R.	EMERG-018
	SUPPO-078	Epstein, J.	OTHER-002
Edmunds, K.	EXERC-013	Ernst, B.	FATIG-023
Edney, L.	PSYCH-093	Escalante, C.	FATIG-020
Edwards, J.	SURVI-080	Etheridge, H.	NEURO-011
Edwards, K.	EXERC-038	Evans, A.	EDUCA-036
	EXERC-051	Evans, H.	EDUCA-037
Edwin, M.	PALLI-019		PALLI-020
Ee, C.	DIGIT-056		PALLI-056
	EDUCA-014	Evans, S.	SUPPO-089
	EXERC-028	Evenden, P.	GERIA-003
	LIFES-005	Evers, N.	LIFES-014
	LIFES-031	Extermann, M.	GERIA-025
	PERSO-020	Ezugwu, O.	PERSO-021
	SUPPO-104	FESMO, R. A. P. M. F.	DIGIT-053
	SURVI-054	Fadil, I.	PSYCH-005
	SURVI-087		PSYCH-008
	SURVI-101		PSYCH-027
Eguchi Nakajima, T.	GERIA-006		SURVI-006
Eguchi, H.	NUTRI-050	Fadol, A.	SURVI-102
Eiamprapaporn, P.	OTHER-038	Fahey, M.	NUTRI-013
Eid, I.	NUTRI-026		NUTRI-051
Eid, R.	EDUCA-033	Fahrner-Scott, K.	PALLI-039
Eipe, T.	EMERG-002	Faisal, W.	PERSO-013
	HEMAT-012		SUPPO-117
Eisenstat, D. D.	PSYCH-024	Faivre-Finn, C.	DIGIT-047
Ekberg, S.	PEDIA-023	Falandry, C.	HEMAT-006
Ekeaku, A.	PERSO-021	Faleiro, S.	SUPPO-026
El Nabhani, S.	OTHER-043	Fan, C.	SUPPO-092
	PERSO-031	Fang, S.	EDUCA-013
El-Khatib, S.	PRECL-001		EDUCA-019
	PRECL-002		EDUCA-038
Elad, S.	OTHER-002		PSYCH-101
Elder, E.	LIFES-031		SUPPO-020
Eldridge, P.	EXERC-006	Fang, Z.	PERSO-026
Elias, L.	EXERC-005	Fanos, J.	PSYCH-038
Ellington, L.	SURVI-097	Fantozzi, P. J.	EMERG-011
Elliott, D. A.	PEDIA-022	Faqeeh, H.	NUTRI-026
Ellis, N.	EDUCA-036	Fardell, J.	PSYCH-040
Elsheawy, R.	EDUCA-033	Fariman, S.	GERIA-016
Elsner, K.	SUPPO-102	Farley, M.	EXERC-014

FATIG-002	LIFES-032	Fong, D. Y. T.	SURVI-019
	NUTRI-043	Fong, Y. T.	EXERC-046
	SUPPO-094	Font, C.	HEMAT-006
	SUPPO-095	Fontillas, R.	EXERC-039
	SUPPO-107	Foo, C. C.	SURVI-019
Farley, M. J.	PSYCH-064	Foo, C. Q. Z.	OTHER-057
Farrell, C.	HEMAT-017	Foo, P. L.	NEURO-030
Farrer, C.	SURVI-023	Forbes, M.	PSYCH-037
Farris, D.	PALLI-060	Ford, E.	PSYCH-051
Fasching, P.	ANTIE-004	Forrest, L.	PERSO-038
Fassnacht, D.	PSYCH-093	Forret, L.	PERSO-039
Fatiregun, O.	PERSO-021	Forsyth, L.	SURVI-113
Fauer, A.	DIGIT-017	Fortington, L.	EXERC-006
	GERIA-010	Fosh, B.	NUTRI-047
Faveere, B.	EXERC-005	Fournier, E.	GERIA-003
Fazelzad, R.	ANTIE-006	Fowler, J.	PSYCH-007
	SUPPO-007	Fox, S.	PERSO-039
Fedele, P.	NUTRI-028	Franchini, F.	EMERG-016
Feldman, J.	EMERG-045	Francis, A.	HEMAT-007
Felgueiras, S.	NUTRI-048	Franco, G.	SURVI-034
Fellows, I.	SUPPO-006	Franco-Rocha, O.	NEURO-020
Fern, L.	PSYCH-040	Franekl, H.	EDUCA-015
Fernandes, T.	SUPPO-026	Franklin, K.	DIGIT-034
Fernando, R. A.	PALLI-056	Franks, E. M.	SURVI-013
Fernández-Viña, N.	EDUCA-014	Fraser, S.	EXERC-027
Ferrar, K.	PERSO-018		LIFES-032
	PSYCH-009		NUTRI-045
	SUPPO-025	Frazão, P.	NUTRI-036
	SURVI-051	Freedman, J.	HEMAT-010
Ferrari, B.	SUPPO-026		MUCOS-002
Ferrari, R.	SUPPO-026		ORAL-021
Ferreira, C. G.	SUPPO-026		PEDIA-029
Ferreira, R.	EXERC-010		PSYCH-013
Ferrero, A.	PSYCH-080	Freedman, J. L.	OTHER-002
Ferrero, A. M.	ANTIE-007	Freeman, N.	PSYCH-028
Ferrero, L.	ORAL-020		PSYCH-078
Fiechter BSc, E.	DIGIT-053	Fregnani, E. R.	SUPPO-026
Findaly, M.	SUPPO-045	Frenkel, M.	LIFES-013
Findlay, M.	NUTRI-045	Frentzas, S.	PERSO-039
	SUPPO-057	Freyer, G.	ANTIE-004
Finkelstein, J.	DIGIT-054	Friedlander Barenboim, S.	ORAL-017
	PALLI-069	Friedlander, M.	NEURO-029
	PERSO-034	Fritz, R.	DIGIT-017
Fischer-Carlidge, E.	DIGIT-018	Frustino, J.	MUCOS-011
Fitch, M.	EDUCA-021	Fry, S.	SUPPO-028
	OTHER-020	Ftanou, M.	EDUCA-016
	SURVI-030		EDUCA-040
	SURVI-120		PSYCH-062
Fiumano, C.	PALLI-063		SUPPO-039
Flam, J.	DIGIT-015		SUPPO-064
Flechas, M.	EXERC-005		SUPPO-109
Fok, R.	LIFES-007	Fu, M. R.	SURVI-077

Fua, T.	SUPPO-109	García Alfonso, P.	ANTIE-013
Fujii, H.	NUTRI-017	Garg, R.	PALLI-022
Fujii, K.	EXERC-018	Garvey, G.	SUPPO-009
Fujii, S.	CANCE-008		SUPPO-085
Fujimori, N.	NUTRI-033	Gasarin, E.	ANTIE-002
Fujita, K.	EXERC-048	Gasper, H.	NUTRI-013
	ORAL-009		SUPPO-047
Fujita, T.	ANTIE-011	Gates, P.	NEURO-012
Fujiwara, H.	MUCOS-014		NEURO-013
Fukahori, H.	GERIA-012	Gatland, A.	EDUCA-034
Fukushima, T.	EXERC-018	Gatti, F.	PSYCH-026
Fukuzaki, N.	GERIA-002	Gauci, L.	SURVI-087
	GERIA-011	Gautama, S. N.	DIGIT-050
Fung, H.	PSYCH-021	Gautier, A.	SURVI-064
Fung, S.	DIGIT-038	Gauvin, B.	SURVI-068
Furness, K.	NUTRI-034	Gaw, R.	SURVI-034
Furphy, E.	SURVI-035	Gelbart, B.	PEDIA-010
Furukawa, T.	DIGIT-027	Gell, E.	HEMAT-017
	EXERC-024	Geng, Y.	FATIG-006
Furuta, M.	ANTIE-017	Gennery, A.	PEDIA-010
Furuya, Y.	EDUCA-029	George, B.	OTHER-005
	PSYCH-029	George, C.	ORAL-021
Furuya, Y.	PSYCH-029	George, M.	OTHER-046
Fuseya, H.	EXERC-031		PALLI-004
Fushiki, K.	ONCOD-009	Georgopoulos, N.	NEURO-011
Futamura, M.	ANTIE-011	Georgopoulos, N. T.	DIGIT-004
GW Ow, S.	SUPPO-092	Georgy, J. T.	NEURO-020
Gale, N.	SUPPO-028	Getz, BA, T.	SURVI-009
	SUPPO-072	Ghadi, A.	HEMAT-005
	SUPPO-113	Ghebosu, R.	EDUCA-011
Galettis, P.	PERSO-038	Ghosh, J.	ANTIE-003
Gallegos, D.	NUTRI-006		HEMAT-015
Galloway, T.	SURVI-034	Gibson, C.	SURVI-070
Galpin, K.	PSYCH-097	Giffen, A.	PEDIA-001
Gan, K.	PALLI-033	Gilbertson, H.	NUTRI-028
Ganann, R.	PERSO-040	Gilchrist, J.	PSYCH-061
	SURVI-100		SUPPO-070
Gancia, A.	SUPPO-117	Gill, W.	NEURO-008
Gandhi, A.	EMERG-024	Gilroy, J.	SUPPO-009
	EMERG-036	Gioco, G.	ORAL-010
	MUCOS-019		ORAL-019
Gane, E.	SURVI-042		ORAL-020
Ganesh, A.	SUPPO-055	Giordano, PhD, RN, FAAN, N.	SURVI-009
Ganesh, S. Y.	OTHER-060	Giordano, S.	LIFES-015
Ganguly, S.	ANTIE-015	Girgis, A.	DIGIT-003
	HEMAT-015	Giunta, S.	PSYCH-046
	SURVI-052	Glen, H.	SUPPO-058
Ganju, P.	EMERG-012	Glewis, S.	PERSO-038
	HEMAT-008	Glidden, D.	LIFES-002
Gao, L.	SUPPO-057	Glogauer, M.	ORAL-011
	SUPPO-089		ORAL-025
	SUPPO-117		OTHER-050

Gniadek, A.	FATIG-012	Gore, C.	SURVI-061
Godfred, A. C.	PSYCH-031	Goshu, E.	CANCE-010
Goel, A. K.	EMERG-012	Goss, J.	ANTIE-009
	HEMAT-008	Goswami, U.	PSYCH-091
Gofin, S.	DIGIT-001	Gota, V.	EMERG-018
Gogia, A.	ANTIE-015	Goto, T.	SUPPO-031
Goh, A. D. Y.	DIGIT-010	Gough, I.	PALLI-037
Goh, E.	PSYCH-032	Gough, K.	NEURO-012
Goh, L.	HEMAT-025		NEURO-013
Goh, P.	DIGIT-005	Gouldthorpe, C.	LIFES-009
	DIGIT-013	Gourlay, P.	SUPPO-083
	DIGIT-021	Gourshettiwar, A.	EXERC-004
	DIGIT-032	Govender, D.	DIGIT-039
	DIGIT-037		SURVI-065
	DIGIT-038	Graetz, PhD, I.	SURVI-009
	DIGIT-044	Graham, I.	OTHER-020
	DIGIT-054	Graham, K.	NUTRI-020
	DIGIT-059		NUTRI-021
	DIGIT-063		NUTRI-044
	SURVI-013	Grajales, D. C.	ORAL-011
Goh, R. Y.	NEURO-030	Granger, C.	EXERC-012
Goh, W. Y.	PERSO-047	Grant, S.	EXERC-028
Goh, X. N.	PEDIA-013		LIFES-008
Gokhran, A.	ANTIE-003		LIFES-010
Gokita, T.	EXERC-019		LIFES-024
Goldbaum, E.	EXERC-038		LIFES-031
Goldstein, D.	NEURO-007		PERSO-020
	NEURO-018		SUPPO-104
	NEURO-025		SURVI-054
	NEURO-027		SURVI-114
	NEURO-029		SURVI-115
Gomersall, S.	SURVI-042	Gray, A.	EDUCA-023
Gomez, S.	SURVI-027		EDUCA-024
Gomez-Lumbreras, A.	EMERG-038	Gray, M.	SUPPO-064
Goncalves, R.	PERSO-013	Gray, S.	EDUCA-021
Gong, Y.	SUPPO-030	Grech, E.	SUPPO-032
Gonzalez, A.	EXERC-039		SURVI-035
Gonzalez, A. A.	FATIG-006	Grech, L.	OTHER-047
Gonzalez, B.	SUPPO-109		PERSO-014
Gonzalez, M.	LIFES-008		PERSO-019
	LIFES-010		PSYCH-021
	LIFES-024		SUPPO-076
	NUTRI-042		SURVI-022
Gonçalves, J.	EXERC-010	Green, H.	NEURO-012
Good, P.	PEDIA-017		NEURO-013
Goodwin, B.	CANCE-006	Greene, S.	EMERG-045
NUTRI-006	PSYCH-010	Gregg, J.	LIFES-015
	SUPPO-005	Greiner, R. S.	LIFES-021
	SUPPO-047	Griffin, G.	NEURO-014
	SURVI-022		SUPPO-033
Gordon, C.	NUTRI-047	Griffith, K. A.	LIFES-012
	SURVI-068	Grimison, P.	NEURO-005

	NEURO-006	Ha, L.	DIGIT-041
	NEURO-007	Haase, A.	LIFES-011
	NEURO-025		PSYCH-076
Grimshaw, S.	PEDIA-014	Haase, K.	GERIA-005
	PEDIA-015		GERIA-016
Grindem, D.	CANCE-015	Haberland, C.	OTHER-044
	PALLI-041	Hacker, E.	SURVI-102
	PERSO-030	Hadfield, K.	HEMAT-001
Grisotto, A. C. D.	GERIA-025	Hadi, R.	MUCOS-019
Grivanos, C.	SURVI-024	Haeusler, G.	HEMAT-003
Gruber MD, G.	DIGIT-053		HEMAT-025
Grundy, L.	PSYCH-093		PEDIA-010
Gu, N.	SURVI-090		PEDIA-027
Guarnera, J.	NEURO-012		PEDIA-028
	NEURO-013		PEDIA-030
Gubbels, L.	PEDIA-027	Hafeez, A.	NUTRI-046
Guccione, L.	EDUCA-017	Hafeez, U.	LIFES-032
	SUPPO-032	Haga, K.	ORAL-015
	SUPPO-034	Haga, N.	EXERC-043
	SUPPO-109	Haggarty, A.	LIFES-029
	SURVI-035		NEURO-022
Gudi, S.	EMERG-018	Hagiya, S.	GERIA-002
Guedes, A.	EXERC-010		GERIA-011
Guedes, H.	EDUCA-014	Hahm, B.	DIGIT-030
	EXERC-010		LIFES-018
	SURVI-003	Hahm, B. J.	PSYCH-045
Guevara, A.	DIGIT-052	Haifer, C.	HEMAT-016
Guidi, R.	SUPPO-026	Hairul Anuar, N. F.	MUCOS-004
Guillory, R.	PERSO-030	Haj Mohammad, M.	NUTRI-026
Guinan, E.	SURVI-003	Hajishengallis, E.	ORAL-021
Guitera, P.	NEURO-018	Halkett, G.	CANCE-010
Gulia, A.	EMERG-012		OTHER-054
	HEMAT-008		PERSO-024
Gulia, S.	EMERG-012		PSYCH-051
	HEMAT-005	Hall, D.	EXERC-004
	HEMAT-008	Hall, I.	PALLI-007
Gull, S.	LIFES-015	Halligan, I.	EXERC-040
Gullapalli, R.	HEMAT-021	Halm, J.	EMERG-024
Gunn, K.	SURVI-051	Halman, A.	PEDIA-022
Gunn, K. M.	SUPPO-117		PERSO-044
Guo, J.	EMERG-038	Ham, W. S.	SURVI-056
Guo, Y. J.	LIFES-027	Hamauchi, S.	ONCOD-009
Gupta, N.	PALLI-022	Hamon, M.	GERIA-003
Gupta, S.	ANTIE-003	Hampson, A.	LIFES-005
	EMERG-018	Han, A.	PERSO-012
	HEMAT-005	Han, C.	SURVI-036
	NEURO-001	Han, C. Y.	GERIA-025
	SURVI-052		SUPPO-025
Gurav, S.	ORAL-022		SURVI-036
Guru, A.	HEMAT-008		SURVI-101
Gutierrez BScN, MAS, A.	DIGIT-053	Han, D. Y.	CANCE-019
Gwee, A.	PEDIA-010	Han, H. H.	SURVI-056

Han, J.	DIGIT-050		SUPPO-101
Han, S. U.	NUTRI-023	Harrison, S.	HEMAT-025
Han, W. K.	SURVI-056	Hart, N.	EXERC-014
Han, Y.	ANTIE-016		EXERC-028
Hanai, A.	FATIG-022		EXERC-029
	NEURO-015		EXERC-041
Hananoe, A.	NEURO-015		NEURO-020
Hanna, D.	PEDIA-027		PERSO-024
Hanna, J.	DIGIT-019		PSYCH-037
	PSYCH-035		SUPPO-090
	PSYCH-082		SURVI-024
Hanna, L.	NUTRI-034		SURVI-038
	SUPPO-077		SURVI-108
Hannah, J.	ONCOD-001	Hart, N. H.	FATIG-025
Hannon, B.	PALLI-002		OTHER-002
Hansen, A.	SUPPO-047		SUPPO-117
Hansen, T.	ANTIE-009		SURVI-120
	PERSO-004	Hart, R.	DIGIT-066
Hanuska, E.	SUPPO-036	Hartel, G.	EXERC-030
Haque, S.	PALLI-004	Hartshorne, M.	EMERG-010
Hardcastle, N.	NUTRI-008	Harvey, J.	SURVI-028
	NUTRI-027	Hase, K.	EXERC-018
Hardikar, S.	EMERG-038	Haseli-Mashhadi, N.	OTHER-044
Harding, K.	EXERC-009	Hashimoto, H.	ANTIE-011
	EXERC-047		ANTIE-012
Hargreaves, B.	MUCOS-005		ONCOD-006
Hargreaves, S.	NUTRI-052	Hashimoto, R.	PSYCH-036
Haria, P.	EMERG-018	Hassall, T.	PSYCH-049
Hariharan, N.	HEMAT-021	Hassan-Dinif, J.	SUPPO-079
Harish, D.	LIFES-030	Hasuo, H.	CANCE-018
	SUPPO-037	Haverland, K.	PEDIA-011
Hariyanto, J.	ANTIE-020	Hawkes, E.	LIFES-032
Harle, A.	NUTRI-049	Hawley, P.	PERSO-015
Harper, S.	NUTRI-029	Hayakawa, N.	ONCOD-008
Harrington, A.	PRECL-007	Hayami, R.	ANTIE-011
Harris, C.	LIFES-002	Hayashi, T.	ORAL-015
	NEURO-007	Haydon, A.	EXERC-041
Harris, R.	EXERC-015	Hayes, M.	SURVI-037
Harris, R. E.	LIFES-023		SURVI-085
Harris, S.	HEMAT-001	Hayes, S.	EXERC-037
	PERSO-038		EXERC-040
Harrison, M.	EXERC-004		NUTRI-045
	NEURO-018		SUPPO-047
	NEURO-021	Hayes, T.	PERSO-038
	NEURO-029	Haywood, D.	EXERC-028
	OTHER-020		NEURO-020
Harrison, N.	PSYCH-021		PERSO-024
Harrison, P.	SUPPO-083		PSYCH-037
Harrison, R.	DIGIT-045		SURVI-024
	DIGIT-062		SURVI-038
	PERSO-011	Haywood, J.	PERSO-024
	PSYCH-095		SURVI-038

He, F.	EMERG-016	Hijkata, N.	SUPPO-038
He, Y. H.	EMERG-019	Hilderley, A.	PSYCH-077
Head, G.	SURVI-023	Hilkowitz, A.	DIGIT-013
Heaton, A.	SUPPO-042		DIGIT-021
Hegarty, S.	PERSO-046	Hill, M. M.	EXERC-030
	PSYCH-038	Hille, M.	NUTRI-035
Hegazy, A.	EDUCA-033	Hillman, R. J.	SURVI-037
Hegde, A.	SURVI-038	Hindle, E.	MUCOS-002
Heidemann, S.	HEMAT-010		ORAL-021
Helguero, L.	EXERC-010	Hirai, H.	ORAL-015
Heller, G.	NEURO-005	Hirakawa, S.	ONCOD-005
	NEURO-006		ONCOD-006
Hellman, M.	LIFES-024	Hirani, D.	EDUCA-016
	LIFES-031		SUPPO-039
Henckert, S.	EXERC-035	Hirano, A.	ONCOD-008
	EXERC-036	Hircock, C.	OTHER-059
Hendel, D.	SURVI-024	Hirooka, K.	GERIA-012
Hendel, I.	SURVI-024	Hirose, C.	NUTRI-017
Henden, A.	NUTRI-005	Hirota, T.	NUTRI-033
Henneghan, A.	NEURO-020	Hisham, N. S.	MUCOS-006
	SURVI-038		MUCOS-025
Hennessy, B.	ANTIE-004	Hlubocky, F.	SUPPO-040
Hennessy, D.	LIFES-032	Ho, C.	DIGIT-041
Henriksson, A.	PSYCH-039	SURVI-012	SURVI-040
Henry DNP, K.	EDUCA-032	Ho, J.	EMERG-040
Henry, N. L.	LIFES-012		HEMAT-011
Henwood, J.	EDUCA-036		SURVI-040
Heo, J. E.	SURVI-056	Ho, L.	PEDIA-007
Herath, H.	SUPPO-008	Ho, M.	SURVI-109
Herbert, A.	PALLI-056	Hoag, B.	ONCOD-019
	PEDIA-017	Hoang, T.	EDUCA-017
Heredia, N.	LIFES-015	Hoberg, H. H.	FATIG-002
Hermann, S.	NUTRI-052	Hodge, A.	EMERG-028
Heron, D.	CANCE-019	Holmes, K.	SURVI-085
Herrmann, D.	NEURO-018	Homokos, H.	GERIA-003
Herron, A.	DIGIT-034	Honan, K.	PERSO-030
Herron, E.	FATIG-002	Honcharov, V.	SURVI-027
Hertz, D.	EDUCA-015	Honeyball, F.	SUPPO-048
Hery, C.	SURVI-078	Hong, B.	DIGIT-022
Heshmatipour, M.	LIFES-023		SURVI-056
	LIFES-028	Hong, J.	DIGIT-031
Heslop, K.	PERSO-024	Hong, S.	EDUCA-014
Heussler, H.	PEDIA-017	GERIA-013	GERIA-014
Hewitt, C.	PERSO-039	Honjo, H.	PERSO-029
Heywood, E.	PERSO-006	Hoo, Y. Y.	SUPPO-041
Hibbert, L.	PEDIA-017	Hooper, M.	SUPPO-002
Hickey, M.	DIGIT-056	Hope, M.	EDUCA-036
	SURVI-029	Hopkins, A.	DIGIT-012
	SURVI-087	Hopkins, A. M.	DIGIT-040
Higashi, T.	EXERC-032	Hopkinson, J.	SUPPO-028
Higgins, PhD, M.	SURVI-009		SUPPO-072
Higham, S.	EXERC-029		SUPPO-113

Hoppel, C.	FATIG-010	Hughes, C.	SUPPO-118
Horie, Y.	GERIA-006	Hui Bon Hoa, S.	EXERC-005
Horvath, L.	NEURO-029	Hui, D.	DIGIT-001
Hoshikawa, M.	EXERC-043		DIGIT-063
Hoskin, P.	DIGIT-032		OTHER-046
	DIGIT-054		PALLI-001
Hosking, R.	LIFES-027		PALLI-004
Hosni, A.	ORAL-011		PALLI-028
	OTHER-050		PALLI-048
Hosoda, K.	CANCE-008		PALLI-050
Hosokawa, M.	EDUCA-012	Hui, I. S. Y.	LIFES-035
	EDUCA-018	Hulbert-Williams, N.	DIGIT-003
	FATIG-022	Hung, C.	EDUCA-019
Hossain, S.	OTHER-022	Hung, M.	EMERG-014
Hossam, L.	EDUCA-033	Hung, T. K.	EMERG-045
Hou, Y.	LIFES-017	Hunter, S.	EXERC-025
Houweling, R.	PALLI-020	Hurk, C. V. D.	ONCOD-019
	PSYCH-040	Hussain, A.	FATIG-011
Howarth, J.	PSYCH-007	Hussainy, S.	EDUCA-016
Howden, E.	SURVI-096		SUPPO-039
Howell, S.	DIGIT-047	Hussainy, S. Y.	PERSO-038
Howlett, C.	SUPPO-018	Huston, A.	LIFES-013
Hsiao, C.	FATIG-010		LIFES-014
Hsiao, F.	SURVI-016	Hutchinson, A.	PERSO-042
Hsiao, S.	SURVI-041		PSYCH-021
Hsiao, T.	PSYCH-016		PSYCH-041
	PSYCH-100		SUPPO-057
Hsiung, Y.	PALLI-035	Hutchinson, C.	PSYCH-058
Hsu, A.	SUPPO-042	Huynh, Q.	SURVI-096
Hsu, F.	SUPPO-043	Huynh, S.	SUPPO-008
Hsu, J.	PSYCH-016	Huynh, W.	NEURO-007
Htet Htet Aung, S.	PERSO-016	Hwang, G.	ORAL-002
Hu, J.	PERSO-043	Hwang, J.	LIFES-015
Hu, K.	MUCOS-011	Hwang, Y.	OTHER-026
Hu, X.	PALLI-021	Hyatt, A.	SUPPO-023
	SUPPO-046	Hyman, J.	EDUCA-020
Huang, B.	SURVI-024		EDUCA-021
Huang, F.	CANCE-032	I, R.	PSYCH-031
	EMERG-035	Iacob, E.	SURVI-097
	ORAL-014	Iasiello, M.	PERSO-042
Huang, J.	DIGIT-023		PSYCH-093
	DIGIT-057	Ibrahim, M. J.	MUCOS-004
	EMERG-013	Ibrahim, F.	SUPPO-007
	EXERC-016	Ichihara, K.	CANCE-018
	NEURO-024	Idossa, D.	OTHER-038
	ORAL-023	Iglesias Caride, G.	EDUCA-007
Huang, R.	EMERG-013		EDUCA-010
Huang, T.	SURVI-072	Iihara, H.	ANTIE-004
Huang, Y.	PERSO-043		ANTIE-006
Hudson, C.	NEURO-028		ANTIE-010
Hudson, J.	PALLI-007		ANTIE-011
Hudson, M.	PEDIA-021		ANTIE-012

	NUTRI-017	J, A.	PALLI-022
	OTHER-002	Jabaley, T.	OTHER-022
	SUPPO-012	Jacinto, T.	EDUCA-007
Iijima, T.	NUTRI-025		EDUCA-010
Imura, Y.	ANTIE-012	Jackson, C.	SUPPO-008
	ONCOD-006		SUPPO-034
Ijzerman, M.	EMERG-016	Jackson, P.	NUTRI-027
Ikeda, R.	EXERC-043	Jadhav, S.	HEMAT-012
Ikeda, S.	EXERC-018	Jagtiani, K.	ORAL-022
Ikoma, T.	EXERC-018	Jain, A.	EMERG-018
Iliescu, C.	CANCE-015	Jain, H.	EMERG-002
	PALLI-041	HEMAT-012	HEMAT-018
Iliescu, G.	PERSO-030	Jain, S.	EMERG-012
Iliescu, G. D.	CANCE-015		HEMAT-008
	PALLI-041	Jakob, MD, A.	DIGIT-053
Im, H.	DIGIT-031	James, P.	PERSO-038
Indramoh, K.	PSYCH-040	James, S.	MUCOS-026
Inglis, P.	FATIG-002	Jamieson-Wright, K.	EDUCA-021
Inoue, J.	SUPPO-038	Janda, M.	PSYCH-021
Ip, E.	FATIG-003	Janecki, M.	GERIA-016
Iqbal, A.	MUCOS-008	Jang, H.	PALLI-031
Ireland, M.	CANCE-006		PSYCH-042
	SUPPO-005	Jang, H. R.	DIGIT-024
Irving, H.	PEDIA-017	Jang, W. S.	SURVI-056
Isenring, E.	NUTRI-010	Jansen, F.	EXERC-007
	NUTRI-013	Janson, M.	HEMAT-013
	NUTRI-051	Jansz, L.	SUPPO-118
Ishak, G.	LIFES-032	Jarsania, D.	CANCE-015
Ishaque, S.	PSYCH-021		PALLI-041
Ishida, K.	EDUCA-022		PERSO-030
Ishida, S.	NUTRI-033	Javaid, A.	CANCE-015
Ishii, S.	ONCOD-008	Jayasinghe, Y.	PEDIA-025
Ishii, T.	EXERC-031		SURVI-029
Ishiki, H.	CANCE-018		SURVI-088
Ishioka, Y.	EDUCA-022	Jayathilaka, B.	EMERG-016
Ishiura, Y.	LIFES-016	SUPPO-008	SUPPO-034
	LIFES-022	Jeffery, E.	SUPPO-045
Ismail, H.	EXERC-040	Jefford, M.	CANCE-007
	SUPPO-064		DIGIT-056
Ismail, M.	OTHER-036		DIGIT-066
Ito, D.	SUPPO-038		EDUCA-014
Ito, F.	EDUCA-029		EXERC-041
Ito, S.	CANCE-008		OTHER-002
	LIFES-016		SUPPO-009
	LIFES-022		SUPPO-109
Itou, F.	PSYCH-029		SURVI-003
Ivers, R.	SUPPO-009		SURVI-021
Ives, K.	SUPPO-044		SURVI-061
Iwayama, T.	NUTRI-001		SURVI-087
Iwaz, S.	LIFES-027		SURVI-108
Izuegbuna, O.	NUTRI-022		SURVI-120
	OTHER-021	Jenkins, D.	EXERC-014

Jeon, H.	OTHER-026		SURVI-089
	PALLI-031	Jones, G.	DIGIT-047
Jeon, M.	PALLI-011	Jones, H.	OTHER-017
	PALLI-031		SURVI-025
	PSYCH-097		SURVI-064
Jeon, S.	DIGIT-031	Jones, J.	ONCOD-019
Jeon, S. Y.	LIFES-018	Jones, L.	SURVI-101
Jessop, S.	PSYCH-041	Jones, T.	EDUCA-034
Jeung, H.	NUTRI-023		EMERG-017
Ji, H.	GERIA-014		EXERC-040
Jiang, C.	PALLI-021		PSYCH-013
	SUPPO-046		SUPPO-090
Jiang, D.	ANTIE-016	Jones, W.	CANCE-019
Jiang, W.	PERSO-026	Jong, J.	SUPPO-032
Jiao, B.	SUPPO-046	Jongbloed, H.	PSYCH-079
Jiao, F.	PERSO-043		SUPPO-048
Jimbo, K.	EXERC-049		SUPPO-089
Jimenez-Torres, G. J.	FATIG-006		SUPPO-117
Jin, B.	EXERC-016	Jordan, K.	ANTIE-010
Joaquim, A.	EXERC-010		ANTIE-013
Joarder, R.	HEMAT-012		OTHER-048
Jobanputra, K.	GERIA-016	Joseph, L.	PSYCH-091
Joda, M.	NEURO-007	Joseph, R.	EDUCA-037
	NEURO-021		SUPPO-057
	NEURO-029		SURVI-101
Joergensen, G. H.	EMERG-045	Joshi, A.	ANTIE-003
Johansen, C.	SURVI-095	Joshi, R.	NUTRI-047
Johansson, B.	PSYCH-039	Joshi, S.	HEMAT-005
John, G.	ANTIE-003		PERSO-039
	HEMAT-005		SUPPO-011
John, T.	EXERC-012		SURVI-010
Johnson, C.	NUTRI-045	Joshua, A.	PERSO-004
Johnson, R.	DIGIT-047	Joyce, P.	NEURO-003
Johnson, S.	FATIG-023		SURVI-014
Johnston, A.	EMERG-031	Joyce, T.	EXERC-005
Johnston, D.	PSYCH-082		SURVI-035
Johnston, E.	CANCE-006	Ju, J.	ANTIE-016
	NUTRI-006		OTHER-010
	PSYCH-010	Juhrmann, M.	PALLI-020
	PSYCH-011		PALLI-056
	PSYCH-046	Jun, C.	CANCE-025
	SUPPO-005	Jun, H. J.	CANCE-020
	SUPPO-047	Jung, B.	ORAL-029
	SURVI-067	Jung, C. Y.	OTHER-025
Johnston, E. A.	NUTRI-043	Jung, D.	OTHER-026
Johnston, K.	SURVI-065		PALLI-031
Johnston, K. A.	DIGIT-039		SUPPO-049
Johnstone, D.	PSYCH-041	Jung, J.	ORAL-029
Johnstone, D. P.	OTHER-002	Jung, M.	DIGIT-022
Joly, F.	GERIA-004	Jung, S.	ANTIE-014
Jones, C.	PERSO-017		LIFES-018
	SURVI-042	Juraskova, I.	PSYCH-046

	PSYCH-061	Katsura, K.	MUCOS-028
	SUPPO-070		ORAL-015
Jyung, H.	LIFES-017	Katsushima, U.	EXERC-018
K, R. B.	PSYCH-031	Katz, S.	MUCOS-011
Kaadán, N.	EXERC-012	Kauark-Fontes, E.	MUCOS-027
Kaambwa, B.	SURVI-051	Kaur, A.	GERIA-005
Kadakia, K. C.	NUTRI-002	Kaur, D.	EMERG-012
	NUTRI-003		HEMAT-008
Kagan, S.	DIGIT-044	Kaur, G.	ANTIE-015
	GERIA-025	Kaur, J.	HEMAT-008
	ONCOD-022	Kaur, J. K.	EMERG-012
	PALLI-069	Kav, S.	SURVI-045
	PSYCH-106	Kawabata, R.	NUTRI-050
Kagan, Y.	DIGIT-044	Kawaguchi, T.	ANTIE-010
Kajizono, M.	ORAL-024		GERIA-006
Kakade, A.	EMERG-031	Kawaguchi, Y.	PALLI-049
Kale, A.	EMERG-018	Kawaja, A.	PALLI-065
Kalembo, F.	CANCE-010	Kawakami, E.	NEURO-015
Kalinsky, K.	SUPPO-013	Kawakami, T.	ONCOD-009
Kalinsky, MD, MS, FASCO, K.	SURVI-009	Kawamura, N.	GERIA-002
Kalman, N. S.	MUCOS-013		GERIA-011
Kaluzinski, L.	GERIA-003	Kawashima, A.	DIGIT-027
Kamen, C.	LIFES-014	Kawazoe, H.	ONCOD-008
Kamoshida, T.	NUTRI-001	Kay, S.	EXERC-004
Kanda, K.	EXERC-017		NEURO-007
Kanda, M.	ANTIE-017	Kazi, M.	EMERG-018
Kandwal, A.	MUCOS-027	Kazmierska, J.	DIGIT-054
Kane, A.	MUCOS-011	Ke, Y.	OTHER-057
Kang, D. Y.	DIGIT-031		PALLI-067
Kang, J.	DIGIT-031		PERSO-010
Kang, M.	PSYCH-102		SUPPO-051
Kang, Z. H.	LIFES-034	Keefe PSM MD, D.	SUPPO-018
Kani, M.	NUTRI-017	Keefe, D.	PERSO-031
Kanivatoa, E.	SUPPO-110		SUPPO-085
Kannan, S.	EMERG-018	Keita, D.	OTHER-039
	HEMAT-012		OTHER-040
Kannout, S.	ANTIE-006	Kelly, D.	SUPPO-042
Kanta, S.	HEMAT-015		SUPPO-058
Kantor, E. D.	EMERG-019		SURVI-026
Kao PA, J.	ONCOD-007	Kelly, H.	SURVI-021
Kao, C.	PALLI-013		SURVI-035
	PALLI-026	Kelly, N.	CANCE-015
Kao, S.	LIFES-024		PERSO-030
Karaki, S.	NUTRI-026	Kelly, T.	EXERC-006
Karam, I.	OTHER-059	Kemp, E.	DIGIT-003
Karikios, D.	SUPPO-068		PERSO-011
Karima, O.	OTHER-039		PERSO-018
Karpe, S.	PSYCH-061		PSYCH-009
	SUPPO-070		PSYCH-078
Karthaus, M.	ANTIE-013		SURVI-051
Kassa, A.	CANCE-010		SURVI-083
Kassianos, A.	DIGIT-015	Kendall, M.	SURVI-080

Kennedy, G.	PERSO-014	Kim, H. W.	SURVI-056
	SUPPO-045	Kim, J.	CANCE-011
Kennedy, M.	EXERC-006		DIGIT-030
	EXERC-013		LIFES-018
	NUTRI-045		ORAL-011
	SUPPO-090		PERSO-010
Kepka, D.	DIGIT-060		PSYCH-045
Kerr, L.	SUPPO-052	Kim, J. H.	NUTRI-023
Khadka, J.	PSYCH-058	Kim, J. W. (.	ORAL-025
Khalil, H.	PALLI-043	Kim, J. W. J.	OTHER-050
Khalil, Y.	EDUCA-033	Kim, J. h.	DIGIT-031
Khan, M.	FATIG-020	Kim, K.	ORAL-029
Khan, M. A.	OTHER-005	Kim, L.	PSYCH-048
Khan, R.	FATIG-006	Kim, M.	DIGIT-031
	OTHER-027	Kim, M. J.	PALLI-028
Khan, S.	NUTRI-046	Kim, M. K.	MUCOS-013
Khan, S. A.	SURVI-052	Kim, N.	PSYCH-103
Khanina, A.	DIGIT-029		SURVI-048
Khatri, D.	EDUCA-023	Kim, S.	OTHER-026
	EDUCA-024		PALLI-029
	PEDIA-022		PALLI-031
Khattry, N.	ANTIE-003		PSYCH-042
Khetan, R.	NEURO-003		PSYCH-045
Khor, M. M.	PEDIA-013		PSYCH-103
Khot, A.	EXERC-001		SUPPO-120
	EXERC-005		SURVI-048
	SURVI-035	Kim, S. H.	DIGIT-022
Khun, A.	SURVI-035	Kim, S. J.	DIGIT-050
Khurana, R.	MUCOS-019	Kim, S. Y.	PALLI-029
Ki Chung Li, V.	SURVI-022	Kim, W.	DIGIT-030
Kichenadasse, G.	ANTIE-009		PSYCH-103
	DIGIT-011	Kim, W. J.	DIGIT-024
	DIGIT-043	Kim, Y.	SUPPO-120
	SURVI-051	Kim, Y. I.	SUPPO-055
Kielsholm Thomsen, M.	SURVI-095	Kim, Y. S.	OTHER-025
Kiely, B.	DIGIT-003	Kimble, A.	HEMAT-003
Kiernan, M.	NEURO-027	Kimmick, G.	PERSO-003
Kiguchi, T.	ORAL-015	Kimura, Y.	NUTRI-050
Kikuchi, E.	ONCOD-008	King, T.	NEURO-027
Kikuchi, S.	NUTRI-001		PEDIA-002
Kikuchi, Y.	SUPPO-054	King-Okoye, M.	SUPPO-058
Killela, M.	DIGIT-060	Kinsella, S.	PEDIA-010
Kilpatrick, P.	CANCE-013	Kirchhoff, A. C.	DIGIT-060
Kim, B.	SUPPO-055		SURVI-097
	SUPPO-056	Kirk, D.	ONCOD-019
Kim, C. G.	SURVI-056	Kirkpatrick, C.	PERSO-038
Kim, D. K.	DIGIT-050	Kirsten, L.	PSYCH-061
Kim, H.	DIGIT-031		PSYCH-097
	PSYCH-042		SUPPO-070
	PSYCH-103	Kishimoto, T.	ORAL-024
	SUPPO-120	Kiss, N.	EXERC-027
Kim, H. K.	NUTRI-030		NUTRI-008

	NUTRI-009	Koh, M.	PSYCH-103
	NUTRI-015	Koh, S.	DIGIT-031
	NUTRI-020	Koh, S. P.	LIFES-007
	NUTRI-021	Koh, T. W.	LIFES-033
	NUTRI-027	Kohutek, Z.	CANCE-013
	NUTRI-032	Kojima, K.	SUPPO-038
	NUTRI-044	Kok, D.	EMERG-031
	NUTRI-045	Koketsu, N.	NUTRI-017
	SUPPO-045	Koller, M.	EMERG-017
	SUPPO-057	Kolm, K.	PERSO-040
Kitagawa, M.	EXERC-018		SURVI-100
Kitahora, M.	ANTIE-011	Kolotas, MD, C.	DIGIT-053
Kiyohara, Y.	ONCOD-009	Kondo, M.	DIGIT-009
Kiyomi, A.	MUCOS-028	Kondo, N.	LIFES-016
Klaic, M.	EXERC-044		LIFES-022
Kleckner, A.	FATIG-011	Kong, G.	NUTRI-027
	FATIG-020	Kong, H.	PALLI-029
Kleckner, A. S.	OTHER-002	Kong, R. Y. X.	NEURO-030
Kleckner, I.	FATIG-011	Kong, S.	NUTRI-030
Klepin, H.	FATIG-003	Kongsuphon, N.	OTHER-031
Kline-Quiroz, C.	SURVI-049	Kontny, U.	EXERC-035
	SURVI-050		EXERC-036
Klosky, J. L.	SURVI-088	Koo, H. J.	PALLI-029
Kluczna, A.	EDUCA-025	Koorts, H.	EXERC-044
Knaul, F.	PALLI-002	Kopattil, G.	NEURO-030
Knowles, R.	EDUCA-037	Koppiker, C. B.	SUPPO-011
	SURVI-036		SURVI-010
Ko, E.	DIGIT-001	Korenblum, C.	PSYCH-040
Kobayashi, D.	ANTIE-017	Kortbaoui, R.	CANCE-016
Kobayashi, R.	NUTRI-017	Koru-Sengul, T.	EDUCA-032
Kobayashi, T.	ONCOD-008	Kosaki, H.	ORAL-024
	ORAL-015	Kosinski, M.	FATIG-015
	SUPPO-038	Kosugi, T.	PALLI-045
Kober, K.	NEURO-016	Kot, Y. K.	DIGIT-010
	NEURO-028	Kotecha, R.	PEDIA-030
	PSYCH-092	Kothari, V.	MUCOS-011
Kober, K. M.	PSYCH-090	Kotoda, M.	NUTRI-025
Koczwara, B.	DIGIT-045	Kotov, R.	PSYCH-037
	OTHER-002	Kotro, M.	SURVI-083
	OTHER-047	Kotronoulas, G.	OTHER-002
	OTHER-052		SUPPO-058
	PERSO-018		SURVI-026
	PSYCH-068		SURVI-120
	PSYCH-078	Kouda, K.	SUPPO-038
	SUPPO-025	Kouroukis, T.	PERSO-040
	SUPPO-041		SURVI-100
	SURVI-051	Koyanagi, H.	EXERC-019
	SURVI-098	Kozar, S.	LIFES-012
	SURVI-120	Krause, K.	FATIG-020
	Kodera, Y.	Kreher, M.	ORAL-025
	ANTIE-017	Krishnamoorthy, G.	ORAL-011
Koeda, S.	EXERC-024		OTHER-050

Krishnamurthy, R.	HEMAT-005		SUPPO-076
Krishnan, A.	NUTRI-046		SURVI-022
Krishnasamy, M.	EXERC-003	Kwok, C.	SUPPO-104
	PALLI-052	Kwon, J.	DIGIT-031
	SUPPO-023	Kwon, K.	LIFES-010
	SUPPO-085	Kwon, K. K.	PERSO-020
Krishnatry, R.	EMERG-018		SURVI-054
Krok-Schoen, J.	SURVI-078	Kwon, W. S.	SURVI-056
Krueger, R.	PSYCH-037	Kwong MD, B.	ONCOD-007
Kruss, G.	EDUCA-009	Kwong, B.	ONCOD-001
Kubo, E.	CANCE-018	Kyriacou, E.	DIGIT-007
Kubota, A.	EXERC-018		EDUCA-007
Kuchiba, A.	EXERC-049		EDUCA-010
Kuchibhotla, N.	EMERG-043	L'Estrange, S.	NUTRI-035
Kularatna, S.	PSYCH-049	L'Orphelin, J.	GERIA-003
	PSYCH-050	LANGE, M.	GERIA-004
Kumakura, Y.	NUTRI-025	LAVIEC, H.	GERIA-004
Kumar, A.	ANTIE-015	LE BON, P.	GERIA-004
Kumar, C.	SURVI-052	LEBAUBE, S.	GERIA-004
Kumar, R.	SURVI-052	LECONTE, A.	GERIA-004
Kumar, S.	EMERG-012	Laapas, K.	OTHER-012
	HEMAT-008		OTHER-044
	NEURO-005	Lacey, J.	CANCE-007
	NEURO-006		EXERC-004
	NEURO-018		EXERC-038
	NEURO-021		EXERC-051
Kumari, M.	SURVI-052		LIFES-004
Kume, T.	ONCOD-009		LIFES-005
Kundu, D.	ONCOD-019		LIFES-008
Kuo, H.	PSYCH-018		LIFES-010
	SURVI-053		LIFES-013
Kuo, Y.	EMERG-009		LIFES-031
	NEURO-026		NEURO-005
	OTHER-028		NEURO-006
	PSYCH-016		PERSO-020
Kur, K.	EMERG-043		SURVI-054
	ORAL-017		SURVI-115
Kurata, T.	EXERC-018	Lacey, J. L.	SURVI-114
Kurihara, A.	NUTRI-017	Lad, D.	GERIA-005
Kurihara, M.	SUPPO-038	Ladwa, R.	EMERG-027
Kuroda, S.	ANTIE-012		SUPPO-078
	ONCOD-006	Laffan, A.	DIGIT-068
Kurokawa, Y.	NUTRI-050		EDUCA-014
Kutomi, G.	ANTIE-011	Laheij, A.	MUCOS-026
	SUPPO-054	Lahham, E.	NUTRI-026
Kuzumaki, N.	CANCE-018	Laidsaar-Powell, R.	PSYCH-046
Kwak, S.	DIGIT-031		PSYCH-061
Kwan, J.	SURVI-013		PSYCH-097
Kwan, J. Y. Y.	ONCOD-019		SUPPO-070
Kwete, X.	SUPPO-112	Laing, E.	NUTRI-008
Kwok, A.	PERSO-014		NUTRI-009
	PERSO-019		NUTRI-027

	NUTRI-028	Leal Alvarez, D.	OTHER-046
	NUTRI-035	Lebaube, S.	GERIA-003
	SURVI-061	Lederman, O.	SURVI-024
Lajolo, C.	ORAL-010	Lee, A.	SURVI-048
Lakshminarayanan, K.	PRECL-002	Lee, B.	PERSO-039
Lalla, R.	MUCOS-011		SUPPO-120
Laloni, M.	SUPPO-026	Lee, C.	HEMAT-016
Lam, A.	PSYCH-046	Lee, D.	PERSO-006
Lam, C. S.	EMERG-019	Lee, D. Y.	DIGIT-031
	LIFES-013	Lee, E. J.	PALLI-032
	LIFES-017	Lee, G.	NUTRI-030
	LIFES-035		SUPPO-120
	PEDIA-007	Lee, H.	LIFES-018
Lam, J.	OTHER-059		PSYCH-042
Lam, W.	PSYCH-037		SUPPO-043
Lam, W. W. T.	SURVI-019	Lee, I.	PEDIA-001
	SURVI-055	Lee, J.	CANCE-011
Lam, Y. H.	DIGIT-010		DIGIT-022
Lamonaca, M.	CANCE-011		EXERC-021
Lampart, G.	FATIG-012		LIFES-007
Lane, D.	SURVI-078		PALLI-031
Lane, S.	FATIG-002		PALLI-033
Lang, P.	SUPPO-109		PALLI-037
Lankester, A.	PEDIA-010		SURVI-017
Lannie, A.	SUPPO-058		SURVI-056
Laparra, A.	OTHER-048		SURVI-101
Lapresa, M.	PSYCH-080	Lee, J. Y.	GERIA-013
Lapresa, M. T.	ANTIE-007		GERIA-014
Lapuenta, M.	ANTIE-004	Lee, K.	CANCE-011
Larizza, M.	SUPPO-008	DIGIT-022	LIFES-018
Larkin, C.	PSYCH-062	Lee, K. S.	DIGIT-031
	PSYCH-063	Lee, M.	DIGIT-050
Lasebikan, N.	PERSO-021		DIGIT-070
Laskin, B.	HEMAT-010	Lee, P. Y.	SUPPO-087
Lasry, C.	NUTRI-029	Lee, R.	PALLI-060
Lau, C. K.	LIFES-035	Lee, S.	DIGIT-032
Lau, D.	LIFES-035		LIFES-018
Lau, J.	SUPPO-092		LIFES-023
Lavasani, S. M.	LIFES-023		NUTRI-023
Lavcanski, E.	SUPPO-089		SUPPO-120
	SUPPO-117	Lee, S. C.	SUPPO-092
Law, L.	NUTRI-013	Lee, S. F.	DIGIT-021
NUTRI-051	SUPPO-104		DIGIT-044
Lawn, C.	EDUCA-009		DIGIT-054
Lawn, S.	PERSO-018		DIGIT-063
Lazzara, J.	MUCOS-011		ONCOD-019
Le Bon, P.	GERIA-003		OTHER-059
Le, A.	PRECL-001	Lee, S. H.	DIGIT-030
	PRECL-002		PSYCH-045
Le, B.	PALLI-052	Lee, W.	CANCE-011
Le, P. "	PSYCH-047		CANCE-031
	PSYCH-048	Lee, X. W. M.	NEURO-030

Lee, Y.	EMERG-009		NEURO-025
	SURVI-058		NEURO-027
	SURVI-092		NEURO-029
Lee, Y. J.	PALLI-032	Li, X.	LIFES-017
Lee, Y. M.	NEURO-030		NEURO-004
Lee, Y. Y.	LIFES-033	Li, Y.	PALLI-064
Lee-Archer, P.	PEDIA-017		SUPPO-055
Lees, J.	EDUCA-034	Li, Z.	GERIA-020
Leggett, J.	PERSO-031	Liang, S.	PSYCH-052
Lehtinen B Soc Sci, I.	DIGIT-053	Liang, X.	PERSO-043
Leia, M.	SURVI-023	Librado, A.	PSYCH-077
Leigh, J.	ANTIE-006	Librett, J.	FATIG-015
	DIGIT-037	Liddington, J.	PERSO-024
	NEURO-020	Lieske, B.	SURVI-012
Leighton, L.	PSYCH-040	Lightbody, T.	EDUCA-034
Lek, K. X. D.	SURVI-036	Likhitsakulchai, N.	OTHER-031
Lelond, S.	EDUCA-021	Lila, A.	HEMAT-012
Lemonde, M.	EDUCA-021	Lill, C.	NEURO-002
Leow, E. J.	LIFES-033	Lim, A. S.	LIFES-007
Leske, M.	DIGIT-003	Lim, F. S.	SURVI-012
	PSYCH-078	Lim, M.	PSYCH-049
Leuenberger SPO, SGPO, C.	DIGIT-053		PSYCH-050
Leung, S.	DIGIT-038	Lim, S. H.	PSYCH-046
Levard, R.	GERIA-003	Lim, Y. Y.	PEDIA-013
Levy, J.	EDUCA-015	Lima, F.	SUPPO-006
Lewin, J.	EDUCA-016	Limoli, C. L.	LIFES-023
	EXERC-027	Lin, A.	PALLI-033
	NUTRI-028	Lin, B.	DIGIT-057
	SUPPO-039	Lin, B. R.	NEURO-031
Lewin, K.	SUPPO-016	Lin, C.	NEURO-021
Lewis, M.	DIGIT-034		SUPPO-111
Lewis, R.	NEURO-014	Lin, J. H.	PALLI-007
Lewis, S.	SURVI-089	Lin, K.	EMERG-009
	SURVI-090	Lin, P.	EMERG-014
Leão, I.	EXERC-010		SURVI-016
Li, A.	HEMAT-016	Lin, W.	EMERG-014
	PSYCH-088	Lin, W. H.	PALLI-035
Li, C.	FATIG-013	Lin, X.	PERSO-043
Li, C. K.	PEDIA-007	Lin, Y.	EDUCA-026
Li, H.	LIFES-035	Lin, Y. W.	EDUCA-041
Li, H. C. W.	DIGIT-008	Lin, Z.	LIFES-035
Li, I.	SUPPO-062		SURVI-012
Li, J.	NUTRI-027	Lindberg, R.	NUTRI-021
	PSYCH-066	Lindsay, J.	DIGIT-008
Li, K.	ANTIE-016	Lindsay, T.	PALLI-056
	PEDIA-021	Ling, D.	FATIG-018
Li, L.	DIGIT-012	Lins, P.	SUPPO-026
Li, M.	PSYCH-068	Linton, C.	SURVI-067
Li, R.	ONCOD-021	Lisy, K.	SURVI-061
Li, T.	NEURO-007	Litton, G.	FATIG-015
	NEURO-018	Liu, B.	PERSO-043
	NEURO-021	Liu, D.	HEMAT-001

Liu, J.	ANTIE-016	Loerzel, V.	ANTIE-028
	PERSO-004	Lofgren, R.	SURVI-080
	PERSO-043	Lofters, A.	SUPPO-007
	SUPPO-104	Loh, K. P.	GERIA-016
	SURVI-114	Loh, Y.	LIFES-004
Liu, J. (.)	EDUCA-040		PALLI-037
Liu, L.	EMERG-013	Loh, Y. Z.	LIFES-034
Liu, M.	SUPPO-107	Loi, S.	PERSO-038
Liu, P.	HEMAT-031	Lok, R.	SUPPO-104
Liu, T.	FATIG-018	Longo, S.	ORAL-019
Liu, W.	ANTIE-016	Loong, H. H.	LIFES-035
	CANCE-012		SUPPO-119
	NUTRI-014	Lopes, C.	SUPPO-026
	PERSO-046	Lopes, J.	NUTRI-048
	SUPPO-112	Lopez, A. M.	LIFES-013
	SURVI-121	Lopez, G.	LIFES-013
Liu, X.	DIGIT-067	Lopez-Olivo, M.	FATIG-020
Liu, Y.	EDUCA-027	Lorimer, J.	SURVI-086
	PERSO-043	Lorimer, W.	PSYCH-051
Liu, Z.	ANTIE-016	Loudon, A.	LIFES-031
	CANCE-012	Loureiro, C.	CANCE-016
	OTHER-010	Lovell, A.	PEDIA-010
	PALLI-064	Lovell, M.	SUPPO-085
	SUPPO-112	Low, A.	PSYCH-032
	SURVI-121	Low, M.	EXERC-004
Livingston, P.	DIGIT-065		LIFES-010
	DIGIT-066		LIFES-024
	NEURO-012	Lowe, J.	SUPPO-075
	PSYCH-058	Lu, S.	PSYCH-052
	SUPPO-017	Lu, W.	LIFES-013
Livingston, P. M.	SUPPO-089	Lu, X.	ANTIE-013
Livingstone, A.	SUPPO-063		ANTIE-016
Livshitz, E.	EMERG-043	Lu, Y.	PERSO-026
Liz-Pimenta, J.	EXERC-010	Lubrano di Ciccone, B.	OTHER-038
Liñares, D.	DIGIT-007	Luckett, T.	CANCE-011
Lkhoyaali, S.	PSYCH-008		OTHER-041
Llewellyn, A.	EDUCA-001	Ludlow, K.	PSYCH-010
Lo Sicco, K.	ONCOD-021	Lui, S. M.	NUTRI-012
Lo, S.	PALLI-002	Lulla, V.	SUPPO-011
Lobb, O.	SUPPO-110		SURVI-010
Lockney, N.	CANCE-013	Luo, S.	PERSO-043
Lodi, S.	SUPPO-026	Luppino, M. D.	SUPPO-025
Loeliger, J.	NUTRI-020	Lushington, K.	PSYCH-041
	NUTRI-021	Lustberg, M.	EMERG-045
	NUTRI-027		PSYCH-037
	NUTRI-028		SUPPO-013
	NUTRI-032		SURVI-006
	NUTRI-044		SURVI-013
	NUTRI-045		SURVI-120
	SUPPO-045	Lustburg, M.	DIGIT-005
	SUPPO-057	Lydeker, J.	EDUCA-011
	SUPPO-064		SURVI-028

Lynch, B.	EXERC-044	Mandasari, M.	ORAL-001
Lynch, F.	SUPPO-064	Mander, T.	SURVI-021
Lynch, L.	EXERC-009	Manias, E.	DIGIT-062
Lynch, P.	SUPPO-055	Manjaly, B. V.	PALLI-040
MD, D. K. P.	SUPPO-018	Mantiero, M.	ANTIE-007
Ma, A.	ANTIE-006		PSYCH-080
Ma, F.	ANTIE-004	Manuel, C.	PALLI-050
Ma, H.	DIGIT-052	Manuel, M.	PALLI-048
Ma, S.	PALLI-064	Manzullo, E.	FATIG-020
Ma, Y.	HEMAT-031	Mao, J. J.	EMERG-019
Maas, D.	ONCOD-021		LIFES-017
MacKay, K.	PALLI-041	Mapa, R.	DIGIT-064
	PERSO-030	Mapp, S.	SURVI-101
MacLaughlin, H.	NUTRI-014	Maranzano, E.	DIGIT-054
	NUTRI-043	Marathe, O.	MUCOS-011
MacLean, A.	SURVI-023	March, S.	CANCE-006
MacLean, S.	OTHER-054		SUPPO-005
Machado, I.	NUTRI-048	Margevicius, S.	FATIG-010
Macheras-Magias, M.	SURVI-029	Marino, J.	DIGIT-056
Macintyre, J.	DIGIT-018		SURVI-087
Mack, J.	PALLI-056	Marjolin, A.	PSYCH-020
Mackay, K.	CANCE-015		PSYCH-055
Mackey, R.	PALLI-039	Marmagkiolis, K.	CANCE-015
Mackil, V.	PSYCH-091	PALLI-041	PERSO-030
Madan, S.	PRECL-002	Marotta, M.	MUCOS-011
Madden, D.	EMERG-039	Marques, C.	EXERC-010
Madders, R.	NUTRI-006	Marshall, G.	CANCE-015
	PSYCH-011	PALLI-041	PERSO-030
Maddison, R.	EXERC-040	Marshall, N.	SURVI-070
Madrid-Alejos, C.	DIGIT-007	Marshall, S.	NUTRI-010
Maeda, Y.	MUCOS-014		NUTRI-013
Magnuson, A.	LIFES-014		NUTRI-014
Magro, C.	SUPPO-066		NUTRI-051
Magsambol, M.	SURVI-035		PSYCH-079
Maharaj, G.	EDUCA-021		SUPPO-048
Mahmoud Ahmed Shawqi Mahmoud, A.	NEURO-023		SUPPO-089
Mahmoud, H.	GERIA-020		SUPPO-117
Mahon, K.	EXERC-038	Marshall-Mckenna, R.	SUPPO-058
	EXERC-051	Marston, C.	FATIG-018
Mahony, J.	EDUCA-009		HEMAT-017
Mahran, N.	EDUCA-033	Marta, G.	DIGIT-032
Majem, M.	ANTIE-013	Marta, G. N.	DIGIT-054
Majumdar, S.	HEMAT-012		GERIA-025
Mak, C.	LIFES-031		ONCOD-019
Makihara, N.	EXERC-018		PALLI-069
Makita, T.	ORAL-024	Marta, H.	NUTRI-036
Makiyama, A.	NUTRI-017	Martin, A.	SUPPO-064
Makuwaza, T.	SUPPO-007		SURVI-061
Malalasekera, A.	SUPPO-104		SURVI-084
Malik, S.	LIFES-023	Martin, C.	PERSO-004
Mallari, S.	LIFES-021	Martin, J.	PERSO-038
Man, S. C.	PEDIA-007	Martin, M.	PEDIA-001

	PEDIA-002	McAuley, R.	EDUCA-036
Martin, P.	EXERC-003	McBain, R.	NUTRI-008
Martinez Iraolo, D.	DIGIT-029	McBride, K.	SUPPO-104
Martins, A.	NUTRI-036	McCaffrey, N.	PSYCH-058
Martyn, M.	PERSO-039		SUPPO-063
Maruyama, K.	ONCOD-009	McCahon, J.	SUPPO-034
Marvin, S.	EXERC-038	McCarthy, A.	SURVI-042
Marwick, T.	SURVI-096	McCarthy, M.	PEDIA-025
Marx, W.	NUTRI-010		SURVI-088
	NUTRI-013	McCarvell, V.	DIGIT-002
Mascan, L.	DIGIT-013	McCarvell, T.	DIGIT-013
	DIGIT-021	McCarvell, V.	DIGIT-002
	DIGIT-037		DIGIT-037
	DIGIT-038		FATIG-025
	DIGIT-044		ONCOD-022
	DIGIT-059		OTHER-059
Mason, G.	EMERG-045		PALLI-069
Mason, S.	PERSO-010	McCloy, K.	PSYCH-035
Massaccesi, M.	ORAL-019		PSYCH-082
Massard, C.	OTHER-048	McCluskey, C.	MUCOS-011
Matheson, H.	SUPPO-058	McCoy, K.	SURVI-023
Matsuhashi, N.	NUTRI-017	McCrary, J. M.	NEURO-007
Matsui, H.	PERSO-029	McCurdy Franks, E.	SURVI-013
Matsukane, R.	NUTRI-033	McCurdy-Franks, E.	DIGIT-005
Matsumoto, K.	ONCOD-008		DIGIT-032
Matsumoto, Y.	CANCE-018		DIGIT-038
Matsunuma, R.	ANTIE-011		DIGIT-063
Matsuoka, A.	GERIA-016		FATIG-025
Matsuoka, H.	CANCE-011		PALLI-069
	CANCE-018	McCurry, M.	PSYCH-041
Matsuoka, K.	MUCOS-014	McDonald, F.	PSYCH-009
Matsuoka, Y.	EXERC-049		PSYCH-020
Matsuura, K.	NUTRI-017		SUPPO-102
Matsuyama, J.	NUTRI-050		SUPPO-103
Matsuzaki, K.	ORAL-024	McDonald, G.	EDUCA-016
Mattei, V. E. D.	PSYCH-026		LIFES-010
Matthews, E.	PSYCH-056		PSYCH-007
	SUPPO-065		PSYCH-062
Matti, A.	GERIA-016		PSYCH-063
Maués, J.	SUPPO-013		SUPPO-039
Mavroudis, D.	ANTIE-013	McDowell, L.	SUPPO-109
Mawatari, H.	CANCE-018	McErlean, G.	EDUCA-009
Maxwell-Davis, N.	SUPPO-083	McGovern, L.	OTHER-022
Maxwell-Smith, C.	EDUCA-028	McGowan, S.	SUPPO-064
	NEURO-020	McGrady, M. E.	PSYCH-040
	PSYCH-021	McGregor, I.	PEDIA-017
	SURVI-070	McHutchison, S.	OTHER-017
May, S.	NUTRI-049		SURVI-025
Mc Cann, K.	ANTIE-004		SURVI-064
McAllister, R.	SUPPO-044	McIntosh, A.	EXERC-015
	SUPPO-066	McIntyre, C.	NUTRI-045
McAtamney, A.	SUPPO-068	McKinnon, F.	SUPPO-064

McKinnon, R.	DIGIT-012	Mesuria, M.	PERSO-017
McLachlan, S.	PALLI-052	Metsa, A.	SUPPO-090
McLaughlin, E.	SURVI-078	Mezaib, K.	CANCE-016
McLaughlin, M.	LIFES-010	Mgauci, L.	DIGIT-056
McLeman, L.	PEDIA-010	Mhamane, S.	PSYCH-035
McLeod, V.	GERIA-008	Mian, H.	GERIA-005
McLoone, J.	DIGIT-039	Michael, F.	PALLI-040
	SURVI-065	Michael, M.	HEMAT-001
McQuilten, Z.	NUTRI-005		NUTRI-027
	PERSO-037		PERSO-038
	SUPPO-098		SUPPO-034
McShane, E.	NUTRI-034	Michael, N.	EXERC-003
Mcloone, J.	PEDIA-029	Michalak, K.	EDUCA-025
Mcneill, K.	PSYCH-077	Midha, S.	OTHER-022
Md Ali, S.	DIGIT-070	Miguad, M.	PSYCH-102
Medhi, K.	MUCOS-008	Mihalopoulos, C.	DIGIT-065
Meehan, D.	SUPPO-068		SUPPO-063
Meel, R.	SURVI-052	Miki, Y.	EDUCA-029
Meghana, C. S.	HEMAT-018		PSYCH-029
Mehnert-Theuerkauf, A.	SURVI-095	Mikšić, Š.	DIGIT-015
Mehta, A.	ANTIE-003	Milano, F.	PSYCH-026
	HEMAT-005	Milch, V.	SUPPO-018
Mehta, N.	PSYCH-067		SUPPO-085
Mehta, R.	EMERG-045	Millard, H.	NUTRI-003
Mejia-Garcia, D.	PALLI-028	Miller, E.	PEDIA-023
Mekelenkamp, H.	PEDIA-010	Miller, M.	SURVI-036
Mellar, D.	OTHER-002	Minami, H.	NUTRI-033
Mellas, N.	OTHER-039	Minamikawa, M.	EDUCA-029
	OTHER-040		PSYCH-029
Mellerick, A.	LIFES-032	Minchin, E.	PSYCH-061
Mellerick, C.	LIFES-032		SUPPO-070
Mellet, K.	NUTRI-028	Mireles, I.	PEDIA-029
Melo, B.	SUPPO-026	Mirgh, S.	ANTIE-003
Menant, J.	NEURO-007	Mishra, A.	PSYCH-025
Menegazzi, C.	ANTIE-002	Mishra, A. K.	SUPPO-071
	ANTIE-013	Mishra, G.	HEMAT-012
Menon, N.	ANTIE-003	Mishra, I.	DIGIT-068
Menon, R.	ORAL-002	Mishra, R.	SUPPO-011
Mensah, K.	SUPPO-008		SURVI-010
Menten, J.	DIGIT-032	Mishra, S.	PALLI-022
	DIGIT-054	Mishra, V.	MUCOS-019
Menz, B.	DIGIT-012	Mislang, A.	DIGIT-003
Menz, B. D.	DIGIT-040		PSYCH-078
Mercuri, L.	PEDIA-028	Misoi, M.	LIFES-015
Meredith, P.	SUPPO-090	Mistiaen, J.	CANCE-016
Meredyth, D.	SUPPO-018	Mitchell, A.	SUPPO-028
Merollini, K.	SUPPO-075		SUPPO-072
	SURVI-067		SUPPO-113
Merrill, C.	EDUCA-015	Mitchell, C.	DIGIT-047
Merritt, K.	EMERG-045	Mitchell, E.	EMERG-027
Mesnilgrante, O.	GERIA-003		NUTRI-006
Messina BA, H.	ONCOD-007		SUPPO-078

Mitchell, L.	EMERG-023		PERSO-030
Mitchell, M.	DIGIT-060	Morganstein, D.	EMERG-023
Mitchell, R.	DIGIT-062	Mori, K.	ONCOD-009
	PSYCH-095	Morita, H.	ONCOD-008
Mitoma, M.	OTHER-034	Moroney, T.	OTHER-054
Mitsuhashi, N.	EXERC-031	Morphet, J.	EDUCA-009
Mittal, S.	EMERG-012	Morris, J.	SURVI-082
Miura, H.	EXERC-024	Morton, A.	DIGIT-043
Miura, Y.	NUTRI-017	Moscova, M.	DIGIT-062
Miyaji, T.	GERIA-006	Motoo, Y.	LIFES-016
Miyaji, Y.	PERSO-029		LIFES-022
Miyano, K.	LIFES-016	Mottershead, J.	EMERG-039
	LIFES-022	Moujahid, F. Z.	PALLI-044
Miyata, K.	ANTIE-017	Mount MS APRN, M.	EDUCA-032
Miyazaki, Y.	NUTRI-050	Mount, E.	NUTRI-028
Mizrahi, D.	DIGIT-041	Moura, A.	EMERG-017
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	NEURO-007		PSYCH-062
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Mizuno, M.	DIGIT-009		SUPPO-039
Mochizuki, L.	ONCOD-014	Moustafa, A. A.	SURVI-038
Modrzyk, M.	EDUCA-025	Mrozik, K.	NEURO-019
Moe, T.	GERIA-008		PRECL-007
Moftakhar, B.	LIFES-014	Mu, Y.	ANTIE-016
Mogi, A.	EXERC-043	Muddu, V. K.	OTHER-005
Mohile, S.	FATIG-011	Muhammad Zafar, A.	DIGIT-044
Molasiotis, A.	NUTRI-013	Mula-Hussain, L.	SUPPO-079
Mollee, P.	EXERC-030	Mulhall, J.	PSYCH-067
Mollica, M.	SURVI-108	Mulhern, B.	OTHER-041
	SURVI-120	Mullan, L.	SURVI-086
Mollings Puentes, C.	DIGIT-001	Mulrooney, D.	PEDIA-021
Monlezun, D.	PERSO-030	Mumford, V.	DIGIT-062
Monlezun, D. J.	CANCE-015		SUPPO-101
	PALLI-041	Mundy, L.	CANCE-013
Montaser, M.	EDUCA-033	Munem, F.	MUCOS-005
Monteiro, R.	EXERC-010	Munir, S.	NEURO-019
Montero, A.	FATIG-010		PRECL-007
Montgomery, M.	LIFES-027	Munro, E.	OTHER-002
Moodie, L.	SUPPO-057		PSYCH-064
Moody, K.	SUPPO-042	Murnane, A.	EXERC-027
Mooney, K.	DIGIT-060		NUTRI-028
Mooney, S.	CANCE-025		NUTRI-035
Moore, C.	PEDIA-022	Murnane, L.	NUTRI-034
	SUPPO-114	Murotani, K.	ANTIE-017
Moore, E.	SURVI-068	Murphy, B.	CANCE-013
Moore, M.	EDUCA-037		SURVI-049
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	EXERC-044	Murray, D.	EXERC-021
Moore, R.	PALLI-043	Murray, J.	EXERC-028
Moorin, R.	SURVI-070		EXERC-029
Moran, V.	CANCE-015	Musaelyan, A.	EMERG-024

Musella, G.	EMERG-036	Neeland, M.	PEDIA-027
Musgrave-Takeda, M.	MUCOS-013	Nehra, R.	EDUCA-011
Mwangi, W.	PALLI-007	Neil, S.	EDUCA-003
Myers, C.	SUPPO-008	Neil-Sztramko, S.	PERSO-040
Märtz RN CAS, C.	EXERC-051	SURVI-100	Nejjari, S.
N/a, M. A. S. G.	DIGIT-053		OTHER-039
N/a, M. E. T. S. G.	ANTIE-006		OTHER-040
Nightingale, S.	ANTIE-006	Nekhlyudov, L.	EDUCA-014
Na, J.	EXERC-040		SURVI-108
Na, M.	DIGIT-031		SURVI-120
Nabukalu, D.	PALLI-029	Nekkalapudi, N.	EDUCA-011
	SUPPO-075		SUPPO-083
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Nagano, M.	ONCOD-014	Nelles, R.	NUTRI-005
Nagashima, A.	ONCOD-008	Nelsen, V.	DIGIT-018
Nagashima, F.	GERIA-006	Nelson, A.	DIGIT-039
Nagata, Y.	EXERC-018	PEDIA-010	SURVI-065
Naghavi, N.	SURVI-051	Nelson, C.	GERIA-017
Nagla, A.	CANCE-031		PSYCH-067
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Naito, T.	GERIA-002	Neo, P. S. H.	SUPPO-051
	GERIA-011	Neo, S. H. S.	PALLI-046
	LIFES-016		PALLI-047
	LIFES-022	Neoh, C. F.	DIGIT-029
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Nakagaki, M.	OTHER-036	Netti, A.	ORAL-010
	PERSO-032	Neves, M. T.	NUTRI-036
Nakahama, K.	EXERC-018	Neville, K.	DIGIT-039
Nakajima, K.	GERIA-011		SURVI-065
Nakamura, M.	LIFES-016	Newton, J.	SURVI-070
Nakanishi, K.	ANTIE-017	Newton, L.	GERIA-005
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Nakano, J.	EXERC-018	Ng, A.	EXERC-039
Nakatani, Y.	PALLI-049		LIFES-036
Namerikawa, M.	EXERC-043		PALLI-046
Nanda, S.	MUCOS-020		PALLI-047
Nandikanti, M.	HEMAT-021	Ng, C.	OTHER-041
Nanri, T.	PALLI-045	Ng, C. J.	PALLI-065
Narapareddy, B. R.	OTHER-038	Ng, C. S.	DIGIT-010
Narayanan, S.	FATIG-006		LIFES-035
Narisawa, T.	EXERC-049	Ng, D.	SURVI-055
Nasr, R.	PSYCH-066	Ng, D. Q.	LIFES-023
Naughton, M.	SURVI-078		NEURO-028
Navari, R.	ANTIE-010		PSYCH-092
Navarro Perez, D.	PEDIA-025	Ng, H. S.	DIGIT-045
Navarro-Perez, D.	SURVI-088		OTHER-052
Nayak, L.	EMERG-002		PSYCH-068
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Neal MD PhD, J.	ONCOD-007	Ng, Q.	LIFES-028
Nebbs, A.	SURVI-084	Ng, S. M.	PERSO-014

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Ng, W. Y.	NEURO-030	Nortje, N.	PALLI-004
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Ngan, T. T.	SURVI-071	Nottage, M.	DIGIT-003
Ngo-Huang, A. T.	EXERC-039	Nowak, A. K.	PALLI-052
Nguyen, C.	PSYCH-066	Noyd, D.	PEDIA-029
Nguyen, L.	PALLI-048	Nuamek, T.	DIGIT-047
	PALLI-050	Nuica, A.	DIGIT-013
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Nguyen, M. C.	MUCOS-011	Nunes, A. C.	SUPPO-026
Nguyen, N.	PSYCH-047	Nunes, P.	NUTRI-036
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Nguyen, T.	CANCE-025	Nurhadijah, S.	PSYCH-101
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Nguyen, T. T.	SURVI-072	O'Brien, A.	MUCOS-002
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Nicholls, T.	NUTRI-045	O'CALLAGHAN, S.	PERSO-031
Nicholson, K.	PEDIA-010	O'Connor, M.	PSYCH-041
Nicol, A.	EXERC-030		PSYCH-051
Nicol, J.	EXERC-030	O'Donnell, C.	EXERC-045
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Nishibayashi, K.	EXERC-017	O'Neill, C.	SURVI-071
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Nishimura, R.	CANCE-018	Oase, K.	EDUCA-030
Nishiuchi, T.	LIFES-016	Ochi, E.	EXERC-018
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Nisselle, A.	EDUCA-023	Ogata, H.	ANTIE-011
	EDUCA-024	Ogata, Y.	ONCOD-014
Nitta, Y.	EDUCA-012	Ogawa, E.	NUTRI-001
	EDUCA-018	Ogawa, Y.	NUTRI-033
Nitu, A.	CANCE-015	Ogle, T.	FATIG-002
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Noe, G.	NUTRI-027	Ogura, S.	MUCOS-014
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Nogat, C.	EDUCA-025	Oh, E. G.	DIGIT-022
Noguchi, T.	DIGIT-027	Oh, S.	NUTRI-023
Noguera, A.	CANCE-019	Ohata, K.	NUTRI-017
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Nolte, S.	EMERG-017	Oikawa, N.	EDUCA-012
Nonaka, M.	NUTRI-025		EDUCA-018

Oja, J.	MUCOS-011		EMERG-018
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Okayama, T.	EXERC-031	Ott de Bruin, L.	PEDIA-010
Okazaki, Y.	EXERC-018	Oth, M.	PEDIA-029
Okizaki, A.	CANCE-018	Ouali, K.	OTHER-048
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Okugawa, Y.	LIFES-016	Ove, R.	MUCOS-011
	LIFES-022	Ow, S. G. W.	NEURO-030
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Okwu, G. C.	PSYCH-071	Oyedele, O.	SUPPO-079
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Oldenburger, E.	DIGIT-032	O'Donoghue, A.	NUTRI-002
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Ramirez Sanchez, Y.	ONCOD-020	Razavi, M.	PSYCH-075
Ramirez, C.	PSYCH-075	Razouki, Z.	LIFES-015
Ramos, G.	SUPPO-026		NUTRI-042
Ramos, J. P.	NUTRI-036	Reaume, V.	PSYCH-077
Ramos, R.	SUPPO-006	Reda, K.	EDUCA-033
Ramsey, I.	CANCE-007	Reddy, A.	CANCE-018
	PERSO-042		CANCE-028
	PSYCH-041		PALLI-001
	PSYCH-093	Redfearn, S.	PSYCH-083
Rana, S.	PEDIA-001		PSYCH-084
	PSYCH-076	Reed, E.	DIGIT-001

Reed, R.	PERSO-018	Rodrigues, A.	PERSO-004
Reed, R. L.	SURVI-051	Rodrigues, J.	GERIA-008
Reets, U.	SURVI-041	Rodriguez Garcia, I.	ANTIE-004
Reeves, M.	SUPPO-107	Rodriguez, A. B.	ANTIE-004
Regan, M.	PSYCH-038	Rodriguez, I.	ANTIE-004
Reid-Ellis, M.	LIFES-027	Rodriguez-Watson, C.	EMERG-045
Rembielak, A.	PALLI-069	Rodríguez Otero, C.	EDUCA-010
Ren, W. H.	EMERG-032	Roeland, E. J.	ANTIE-010
Reyes, K.	OTHER-022		ANTIE-013
Rha, S. Y.	DIGIT-022	Rogers, A.	NUTRI-043
	SURVI-056	Rogers, C.	DIGIT-047
Rhee, J.	SURVI-101	Rolfe, M.	PEDIA-009
Rhondali, W.	PSYCH-005		PEDIA-023
	PSYCH-008	Rolshoven, K.	DIGIT-056
	PSYCH-027		SURVI-087
Richard, P.	LIFES-013	Romeo, U.	EMERG-011
Richardson, G.	PERSO-039	Ronzulli, D.	ANTIE-007
Ridner, S.	SURVI-049		PSYCH-080
	SURVI-050	Rooker, J.	EMERG-042
Riedel, B.	SUPPO-064	Rose, C.	SUPPO-008
Rigal MA, J.	DIGIT-053	Rose, G.	SUPPO-090
Rigg, A.	DIGIT-003		SURVI-042
	PSYCH-028		SURVI-067
	PSYCH-078	Rose, J.	DIGIT-038
Riley, B.	ANTIE-009	Rose, M.	DIGIT-060
Rimayanti, M.	EXERC-008	Roseleur, J.	PERSO-018
Rimbaldo, K.	HEMAT-003	Rosenberg, A.	PALLI-056
Ritchie, D.	HEMAT-025	Ross, J.	FATIG-003
Riva, S.	PSYCH-079	Ross, K.	OTHER-036
	SUPPO-048	Ross, P.	PSYCH-079
	SUPPO-089	Ross, X. S.	SUPPO-102
Roberson, M. L.	SUPPO-013		SUPPO-103
Roberts, N.	PERSO-035	Rossell, S.	PSYCH-037
	SUPPO-094		SURVI-038
Robertson, A.	SUPPO-025	Roth, E.	MUCOS-002
	SURVI-082		ORAL-021
	SURVI-083	Rotimi, O.	PERSO-021
Robertson, E.	PEDIA-008	Rowe-Sykes, B.	PSYCH-050
	PEDIA-009	Rowland, A.	DIGIT-012
Robertson, J.	NEURO-020		DIGIT-040
Robien, K.	SUPPO-116	Roy, S.	HEMAT-015
Robinson, H.	EXERC-030	Roydhouse, J.	OTHER-041
Robinson, N.	PALLI-007		SURVI-084
	SURVI-113	Rozman de Moraes, A.	FATIG-006
Robison, L.	PEDIA-021	Rozova, V.	DIGIT-029
Robles, I.	OTHER-022	Ruddy, K.	FATIG-023
Rodd, E.	NEURO-021	Ruddy, K. J.	OTHER-038
Roder, D.	PSYCH-068	Ruegg, T.	EDUCA-032
Rodi, H.	PSYCH-079		GERIA-020
	SUPPO-048	Rugo, H.	ANTIE-004
	SUPPO-089		ANTIE-006
	SUPPO-117		EMERG-031

Rugo, H. S.	ANTIE-010	Sakurai, T.	SUPPO-038
	SUPPO-013	Salama, M.	SURVI-088
Ruhlmann, C.	ANTIE-006	Saleh Moussa, R.	PSYCH-093
	EMERG-031	Salehi Shahraki, A.	DIGIT-014
Ruiz Vozmediano, J.	LIFES-013	Saligan, L.	SUPPO-031
Rumbold, B.	PALLI-043	Salih Al-Hamami, S.	EMERG-033
Rundqvist, H.	EXERC-041	Salisbury, C.	EXERC-014
Rune, K.	SURVI-067	Samia, A.	OTHER-039
Rupe, C.	ORAL-010	Sampath Kumar, V.	SURVI-052
	ORAL-019	Samuel, S.	EXERC-011
	ORAL-020	Sancheti, S.	HEMAT-008
Russell, K.	EMERG-027	Sanchez, V.	EMERG-042
	SUPPO-078	Sanderson Tran Cao, H.	PALLI-004
Russell, L.	DIGIT-065	Sandhu, G.	EMERG-040
Russo, A.	ANTIE-007		HEMAT-011
	PSYCH-080	Sandhu, S.	CANCE-026
Rutherford, C.	FATIG-024	Sandler, C.	FATIG-018
	SURVI-037	Sanjida, S.	PSYCH-021
	SURVI-085	Sankar, V.	ORAL-002
Rutherford, T.	EMERG-042	Sansom-Daly, U.	PALLI-020
Rutz, S.	DIGIT-053		PALLI-056
Ryan, A.	EXERC-015		PSYCH-040
	FATIG-011		PSYCH-051
Ryan, F.	HEMAT-016	Santos, P.	EDUCA-007
Ryan, M.	OTHER-036		EDUCA-010
	PSYCH-093	Saracino, R.	GERIA-017
Ryan, P.	SUPPO-083	Saravanaraj, N.	OTHER-047
Ryder, T.	PSYCH-020	Sarimiye, F.	PERSO-021
Rye, S.	EXERC-037	Sarin, R.	HEMAT-005
Ryu, J.	SURVI-048	Sarkar, U.	SURVI-027
Río-González, Á.	ONCOD-019	Sarris, J.	LIFES-008
S, S.	EMERG-018		LIFES-010
Saba, MD FEBU, K.	DIGIT-053	Sasaki, M.	EXERC-032
Sachdev, G.	PALLI-028	Sasaki, Y.	LIFES-022
Sachdeva, M.	SUPPO-092	Sasi, A.	SURVI-052
Sacks, B.	PEDIA-017	Sasidharan, B. K.	PSYCH-031
Sadashima, E.	PALLI-045	Sato, C.	EXERC-024
Sadhukhan, S.	HEMAT-015	Sato, K.	DIGIT-027
Sadiq, N.	EMERG-036	Sato, T.	ONCOD-009
Safwat, J.	EDUCA-033	Satomi, E.	CANCE-018
Saggio, I.	PEDIA-025	Satou, W.	NUTRI-001
Sahni, S.	SURVI-052	Saunders, C.	DIGIT-056
Sahu, A.	PERSO-039		SURVI-029
Saito, M.	ANTIE-011		SURVI-087
	SUPPO-054	Saunders, T.	EDUCA-003
Sakae, M.	CANCE-025	Savva, J.	NUTRI-028
Sakai, H.	ANTIE-004	Sawant, S.	HEMAT-012
Sakai, Y.	SUPPO-038	Sawyer, R.	MUCOS-005
Sakaue, I.	ONCOD-008		MUCOS-022
Saklani, A.	EMERG-018	Sayer, M.	LIFES-028
Sakurai, H.	ONCOD-008	Scagnoli, S.	EMERG-011
Sakurai, N.	EXERC-049	Scanlon, B.	FATIG-002

	PSYCH-064		PSYCH-050
	SUPPO-094	Sengar, M.	ANTIE-003
	SUPPO-095		EMERG-002
Scarcella, C.	PEDIA-011		HEMAT-012
Scassa, L.	MUCOS-022		HEMAT-018
Schadler, K.	PEDIA-002	Seo, J.	DIGIT-031
	SUPPO-042	Seo, S.	PALLI-029
Schapira, L.	EDUCA-014	Seretny, M.	LIFES-027
Schaumberg, M.	EXERC-014		SUPPO-110
Scheu, K.	LIFES-012	Sergeant, L.	SUPPO-048
Schiavelli, A.	ORAL-019	Serino, R.	ANTIE-007
Schiena, E.	SUPPO-103		PSYCH-080
Schilstra, C.	PSYCH-040	Serwaa, D.	DIGIT-056
Schofield, E.	GERIA-017		SURVI-087
	PSYCH-067	Sevdalis-Fallow, O.	EXERC-045
Schofield, P.	SURVI-061	Seveque, M.	CANCE-016
Scholes, B.	SUPPO-016	Sexton, A.	SUPPO-097
Schuler, T.	SUPPO-102	Sexton, E.	PSYCH-062
	SUPPO-103	Seymour, J.	PERSO-038
Schumacher MD FEBU, M. C.	DIGIT-053	Sha, W.	FATIG-003
Schuppe, K.	MUCOS-002	Shadyab, A.	SURVI-078
Schutle, F.	PALLI-056	Shah, M.	ANTIE-003
Schwartzberg, L.	ANTIE-010	Shah, P.	MUCOS-011
	ANTIE-013	Shah, R.	SUPPO-079
Scilla, F.	ORAL-019	Shanahan, K.	EMERG-031
Scoleri, D.	PSYCH-093		SUPPO-013
Scott, J.	EMERG-031	Shanthikumar, S.	PEDIA-010
	NEURO-002		PEDIA-027
	NEURO-019	Shao, C.	LIFES-029
	PRECL-007		NEURO-022
Scott, K.	ANTIE-027	Shapiro, J.	ONCOD-021
Scotte, F.	HEMAT-006	Sharabati, W.	NUTRI-026
	OTHER-048	Shariff Marco, S.	SURVI-027
Scotté, F.	ANTIE-006	Shariff, A.	PERSO-003
	ANTIE-010	Sharifi, M.	PEDIA-025
Scupham, R.	SUPPO-025		SURVI-088
	SURVI-082	Sharma, A.	SURVI-052
Secor, M.	LIFES-012	Sharma, E.	PALLI-060
Seet-Lee, C.	EXERC-038	Sharma, M.	ORAL-022
	EXERC-051	Sharma, N.	EMERG-002
Seitz, C.	OTHER-012		HEMAT-012
	OTHER-044		HEMAT-018
Sekar, A.	ANTIE-003	Sharma, P.	NEURO-020
	HEMAT-005	Sharma, S.	NUTRI-015
Seki, Y.	LIFES-016		PERSO-039
	LIFES-022		SUPPO-057
Selvaraj, V.	EMERG-031		SURVI-052
Semple, C.	DIGIT-019	Sharman, A.	LIFES-005
	PSYCH-035		SURVI-089
	PSYCH-082		SURVI-090
	SURVI-086	Sharna, E. G.	EXERC-039
Senanayake, S.	PSYCH-049	Sharow, S.	SURVI-023

Sharp, A.	EDUCA-020		PEDIA-015
Sharp, J.	DIGIT-003	Shien, T.	ORAL-024
Sharpe, L.	PSYCH-097	Shim, Y. M.	NUTRI-030
Shash, E.	EDUCA-033	Shimizu, A.	EXERC-031
	NEURO-023	Shimizu, D.	ANTIE-017
Shaughnessy, S.	EMERG-029	Shimizu, M.	NUTRI-017
	EMERG-030	Shimizu, Y.	EXERC-049
Shaw, B.	PERSO-037		FATIG-022
	SUPPO-098	Shimoi, T.	ANTIE-011
Shaw, J.	PSYCH-021	Shimokawa, M.	ANTIE-011
	PSYCH-046	Shin, A.	DIGIT-050
	PSYCH-078	Shin, D. B.	OTHER-025
	PSYCH-097	Shin, J.	SUPPO-120
	SUPPO-009	Shin, J. S.	DIGIT-030
Shazib, M. A.	CANCE-026		LIFES-018
Sheeran, L.	EDUCA-016		PSYCH-045
	SUPPO-039	Shin, S.	DIGIT-031
Sheffield, L.	PERSO-038	Shin, S. J.	SURVI-056
Shehryar, K.	MUCOS-027	Shin, Y. J.	PSYCH-042
Shelby, R.	PERSO-003	Shinn, E.	DIGIT-052
Sheldon, M.	SUPPO-083	Shivasabesan, G.	NEURO-025
Sheldrake, A.	NEURO-030	Short, C.	EDUCA-034
Shelnutt, S.	MUCOS-011		EXERC-040
Shen, J.	EMERG-029	Short, C. E.	SUPPO-117
	EMERG-030	Showkat, F.	OTHER-050
Shen, S.	OTHER-028	Shun, S.	EMERG-009
Shen, V.	PERSO-038		FATIG-004
Shen, Z.	PERSO-043		NEURO-026
Sheng, J.	PERSO-043		NEURO-031
Sher, T.	SUPPO-040		OTHER-028
Sherman, K.	ONCOD-019		PSYCH-016
Sherman, K. A.	SURVI-051		PSYCH-018
Shetty, A.	EMERG-002		PSYCH-100
	HEMAT-012		SURVI-053
	HEMAT-018	Shunmuga Sundaram, C.	PSYCH-083
Shetty, V.	EXERC-011		PSYCH-084
	NEURO-001	Shyam Narayanan, D.	NUTRI-012
Shi, Y.	CANCE-032	Siao, C.	SURVI-092
	CANCE-033	Siddique, Z.	DIGIT-001
	DIGIT-023	Sidhu, S.	SURVI-068
	DIGIT-057	Signal, L.	PSYCH-076
	DIGIT-067	Signorelli, C.	SURVI-065
	EMERG-013	Silva, G. D.	PEDIA-008
	EMERG-035		PEDIA-009
	EXERC-016	Silva, S.	EXERC-010
	NEURO-024		SUPPO-049
	ORAL-014	Silvers, M.	NUTRI-028
	ORAL-023	Sim, H.	PERSO-004
	OTHER-056	Sim, J.	DIGIT-024
Shibutani, Y.	SUPPO-008	Sim, S.	LIFES-007
Shields, N.	EXERC-008	Sim, S. H.	DIGIT-031
	EXERC-009	Simbaqueba Clavijo, C.	EMERG-024

	EMERG-036	Slusher, B.	ANTIE-025
Simms-Moore, R.	EDUCA-001	Smati, K.	MUCOS-028
Simon, J.	OTHER-044	Smati, S.	MUCOS-028
Simon, S.	EDUCA-021	Smiciklas, N.	PERSO-040
Simon, T.	EXERC-035		SURVI-100
	EXERC-036	Smith, A.	EDUCA-036
Simoncini, T.	OTHER-012		NEURO-007
Simone, C.	DIGIT-032		SURVI-089
Simone, II, C. B.	DIGIT-054		SURVI-090
Simonsen, C.	SURVI-101	Smith, A. L.	SURVI-120
Sin, C.	DIGIT-031	Smith, B.	DIGIT-041
Sinarajoo, N.	SUPPO-041		EDUCA-040
Sinclair, J.	LIFES-010	Smith, C.	EMERG-028
Singh Brar, R.	EMERG-012	Smith, D.	CANCE-013
Singh Pawar, R.	EMERG-012		SURVI-049
Singh Uppal, R.	FATIG-020		SURVI-050
Singh, G.	NUTRI-043	Smith, K.	MUCOS-002
Singh, G. K.	PALLI-053		PERSO-039
Singh, G. P.	ORAL-022		SURVI-085
Singh, K.	FATIG-023	Smith, M.	EXERC-001
Singh, N.	HEMAT-025		EXERC-045
Singh, P.	GERIA-022		EXERC-051
	PSYCH-025		SUPPO-094
Singh, V.	EMERG-012		SURVI-034
	HEMAT-008	Smith, S.	SURVI-070
Singhal, A.	MUCOS-019	Smith, T. J.	SURVI-120
Singleton, C.	MUCOS-002	Smithers, B.	DIGIT-066
Singorelli, C.	DIGIT-039	Smyth, J.	PERSO-040
Singuluri, L. S.	SUPPO-100		SURVI-100
Sinton, C.	SUPPO-064	Sneyd, L.	OTHER-036
Siqueira, L.	SUPPO-026	Snyder, S.	LIFES-012
Siregar, N. N.	PSYCH-085	Soanes, L.	PSYCH-040
Siripurapu, I.	OTHER-005	Soares, A.	EXERC-010
Sirois, A.	GERIA-005	Soe, K.	SUPPO-009
	GERIA-016	Soeratman, A. R.	PSYCH-085
Sirota, M.	NEURO-016	Soga, M.	ORAL-015
Sivapalan, S.	SUPPO-101	Soga, Y.	MUCOS-014
Skariah, A.	OTHER-005		ORAL-024
Skinner, T.	EXERC-014	Sohtra, M.	EXERC-041
	EXERC-030	Soleymani, S.	DIGIT-039
	SUPPO-090	Soliman, H.	PALLI-069
Skjødt Rafn, B.	SURVI-013	Solomon, B.	HEMAT-001
Skrabal Ross, X.	PSYCH-020		SUPPO-034
	SUPPO-102	Somogyi, A.	PERSO-038
	SUPPO-103	Son, J. D.	ORAL-025
Slatter, M.	PEDIA-010	Son, K.	DIGIT-030
Slavin, M.	DIGIT-029		LIFES-018
	HEMAT-025	Son, S.	ORAL-025
	PEDIA-030	Sonego, S.	SUPPO-104
Slee, M.	SURVI-068	Song, M.	DIGIT-031
Slimano, F.	MUCOS-028	Song, Y. J.	PSYCH-103
Sloss, E.	DIGIT-060	Soni, S.	MUCOS-019

Sonis, S.	EMERG-011		NUTRI-028
Sonnens, J.	PSYCH-010		NUTRI-044
Sooi, K.	NEURO-030	Steer, C.	SUPPO-088
Sorice, F.	SUPPO-026	Stefanetti, A. S.	PSYCH-007
Sorich, M.	DIGIT-012	Stehn, J.	EXERC-004
Sorich, M. J.	DIGIT-040		LIFES-005
Soto Pérez de Celis, E.	GERIA-016	Stein RN, C.	DIGIT-053
	SUPPO-079	Stempler, N.	ORAL-017
Soto-Perez-de-Celis, E.	SUPPO-012	Stenta, T.	PEDIA-022
Souadka, A.	PSYCH-005	Stephens, C.	SURVI-097
	PSYCH-008	Stephenson, J.	SURVI-034
	PSYCH-027	Stevenson, K.	DIGIT-066
Souaid, T.	CANCE-015	Stewart, E.	SUPPO-058
	PALLI-041	Stewart, H.	OTHER-046
	PERSO-030	Stewart, J.	NUTRI-045
Souilhol, C.	NEURO-011	Stimamiglio, V.	ANTIE-013
Sousa, H.	NUTRI-036	Stoll, T.	EXERC-030
Sousa, M.	NUTRI-036	Strahley, A.	FATIG-003
	OTHER-041	Strange, E.	NUTRI-043
Southwood, J.	OTHER-018		SUPPO-107
Sova, N.	SURVI-024	Strasser, F.	ANTIE-004
Spadafora, S.	OTHER-059	Stringer, A.	MUCOS-005
Spalek, M. J.	DIGIT-054		MUCOS-022
Spalek, M.	DIGIT-032	Stringfellow, E.	PSYCH-102
Speckhart, S.	PEDIA-029	Strohschein, F.	SURVI-030
Spelman, T.	NUTRI-027	Strutt, L.	DIGIT-019
Spence, D.	PSYCH-058		PSYCH-035
	SUPPO-063	Su, A.	SUPPO-023
Spence, R.	EXERC-037	Su, Y.	SURVI-114
Spencer, A.	SURVI-020	Subbiah, I.	LIFES-013
Spindler, A.	ONCOD-021	Subramaniam, C. B.	MUCOS-027
Spolc, P.	EDUCA-011	Suehiro, N.	ONCOD-008
Springer, F.	SURVI-095	Suen, J.	EDUCA-037
Squire, A.	CANCE-029	Suga, M.	EXERC-043
	EMERG-039	Sugimori, N.	SUPPO-038
Sridhar, A.	LIFES-023	Sugimura, K.	NUTRI-050
Srikanthan, A.	PSYCH-077	Sugita, S.	ANTIE-017
	SUPPO-021	Sugiura, M.	MUCOS-028
	DIGIT-059	Sugiura, T.	EXERC-031
Sriranjan, D.	MUCOS-019		GERIA-002
Srivastava, A.	PEDIA-021	Sullivan, K.	OTHER-019
Srivastava, K.	GERIA-008	Sullivan, K. M.	EMERG-029
Srivastava, R.	EXERC-029		EMERG-030
Stadnyk, A.	SURVI-029	Sumila MD, M.	DIGIT-053
Stafford, L.	OTHER-038	Sumita, Y.	ORAL-015
Stan, D.	NUTRI-049	Sumiyoshi, K.	LIFES-022
Starkings, R.	DIGIT-018	Sun, C.	EDUCA-038
Starr, B.	NUTRI-047	Sun, W.	SUPPO-058
Staudacher, H.	EDUCA-011	Sun, Y.	ANTIE-016
Steel, J.	NUTRI-020	Sundaram, S.	EMERG-018
Steer, B.	NUTRI-021	Sundararajan, V.	PALLI-052
	NUTRI-027	Sundaresan, D.	ORAL-026

Sundaresan, P.	PSYCH-083		SURVI-097
	PSYCH-084	Tan, D. C.	NEURO-030
Sung, J. H.	DIGIT-022	Tan, G.	EXERC-047
Super, L.	NUTRI-028	Tan, J.	SURVI-020
Susanto, N.	DIGIT-056	Tan, K. K.	SUPPO-092
	SURVI-087	Tan, L.	PERSO-039
Susiriatananont, T.	OTHER-038	Tan, P.	ANTIE-009
Suto, A.	EXERC-049	Tan, R. Y.	LIFES-007
Sutton, K. S.	PEDIA-001	Tan, S.	NEURO-027
	PEDIA-002	Tan, S. Y. (.	SURVI-036
Suzuki, A.	NUTRI-017	Tan, V. K.	LIFES-033
Suzuki, K.	EXERC-031	Tan, Y. P.	PSYCH-032
	GERIA-002	Tan, Y. Y.	SUPPO-051
	PSYCH-036	Tanabe, S.	ORAL-015
Suzuki, S.	EXERC-043	Tanaka, A.	PALLI-049
	SUPPO-008	Tanaka, C.	ANTIE-017
Suzuki, Y.	PALLI-068	Tanaka, N.	ONCOD-008
Suzuki-Chiba, H.	PSYCH-087	Tanaka, S.	EXERC-048
Sverdlov, A.	EXERC-040		ORAL-009
Swain, C.	EXERC-044	Tanaka, T.	NUTRI-033
	EXERC-045	Tanaka, Y.	ORAL-024
Swain, C. T. V.	EXERC-001	Tanco, K.	OTHER-060
Swaminathan, V.	SUPPO-065	Tane, K.	ONCOD-019
Swartz, M.	PEDIA-002		SURVI-013
Sym, S. J.	DIGIT-031	Tang, C.	EXERC-008
	OTHER-025	Tang, L.	OTHER-059
Symons, X.	SURVI-104	Tang, M.	CANCE-028
Syrgos, K.	ANTIE-013		NEURO-007
T, H. M. T.	PSYCH-031		SURVI-098
THOMAS-POREE, M.	GERIA-004	Tang, X.	NUTRI-013
Tafuna'i, L.	CANCE-011		PSYCH-079
Taglieri-Sclocchi, A.	CANCE-006		SUPPO-057
	SUPPO-005		SUPPO-117
Tahiliani, B.	SURVI-052	Tang, Y.	SUPPO-046
Tait, M.	FATIG-024	Tangteerakoon, P.	OTHER-031
Taka, S.	SUPPO-054	Tanuma, A.	SUPPO-038
Takagai, J.	EXERC-017	Tanveer, A.	FATIG-020
Takagi, T.	CANCE-018	Tao, D.	HEMAT-030
Takahashi, T.	GERIA-002	Tarasuk, J.	EDUCA-021
Takakura, Y.	SUPPO-038	Tardjono, T.	FATIG-018
Takamura, M.	ORAL-015	Tart, A.	PERSO-046
Takayama, S.	EXERC-049	Tasca, G.	ANTIE-007
Takehara, S.	ORAL-001		PSYCH-080
Takei, D.	CANCE-018	Tatematsu, N.	SUPPO-038
Takemura, N.	EXERC-046	Tattersall, I.	ONCOD-020
PSYCH-088	SURVI-019		ONCOD-021
Takemura, Y.	EXERC-032	Taube, L.	SURVI-085
Takeno, A.	NUTRI-050	Tavares, V. D.	CANCE-007
Takeyasu, Y.	EXERC-018		SURVI-023
Talbot, J.	SURVI-096	Taverna, W.	SURVI-099
Talwar, S.	ANTIE-006	Tay, D.	DIGIT-060
Tan, C. J.	EMERG-038		EMERG-038

	SURVI-097	Thomas, A. G.	ANTIE-025
Taylor, C.	SURVI-108	Thomas, B.	HEMAT-007
	SURVI-120		PSYCH-091
Taylor, J.	NUTRI-014	Thomas, D.	HEMAT-016
Taylor, N.	DIGIT-062	Thomas, H.	SUPPO-083
	EDUCA-040	Thomas, P.	EMERG-036
	EXERC-008	Thompson, K.	NUTRI-028
	EXERC-009		SUPPO-109
	EXERC-047	Thompson, M.	EMERG-029
	PEDIA-015		EMERG-030
Taylor, R. M.	PSYCH-040	Thomson, P.	SUPPO-058
Taylor, S.	SUPPO-008	Thong, M.	NUTRI-052
Taymans, O.	PALLI-044	Thong, M. S.	FATIG-020
Tayildiz, N.	PEDIA-029	Thorat, J.	HEMAT-012
te Marvelde, L.	SUPPO-089	Thornton, C.	MUCOS-002
te Jaswini, A.	SUPPO-037		NEURO-020
Teggart, K.	PERSO-040	Thornton-Benko, E.	DIGIT-039
	SURVI-100		SURVI-065
Tejaswini, A.	LIFES-030	Thota, R. S.	PALLI-010
Templeton, S.	LIFES-031	Thuillier, C.	CANCE-016
Teng, J.	DIGIT-029	Thursky, K.	DIGIT-029
Teng, T.	NEURO-026		HEMAT-006
Teng, Y.	HEMAT-031		PEDIA-030
Tennent, Q.	EDUCA-016	Thursky, K. A.	HEMAT-025
Tennison, J.	NEURO-020	Tiblom Ehrsson, Y.	PSYCH-039
	NUTRI-046	Tie, J.	HEMAT-001
	PALLI-060		SUPPO-034
Tenore, G.	EMERG-011	Tien, Y.	SURVI-053
Teo, W. Y.	PERSO-045	Tieu, M.	SURVI-061
Teo, X. L.	LIFES-033	Tilola, S. O.	ANTIE-002
Teramoto, H.	ANTIE-017		ANTIE-025
Terrin, M.	FATIG-011	Tinianov, S.	EMERG-045
Tescione, A.	ORAL-010	Tlusty, G.	SURVI-102
Tey, Y. Q.	NEURO-030	To, L. H.	NUTRI-047
Tha Kyaw, K.	SURVI-022	Tobin, L.	SURVI-028
Thai, A.	SUPPO-023	Todaro, C.	SURVI-022
Thakur, P.	EMERG-012	Toftthagen, C.	FATIG-023
Thamm, C.	EDUCA-009	Togashi, S.	DIGIT-027
	EDUCA-037	Tognon, G.	ANTIE-007
	SUPPO-104		PSYCH-080
	SURVI-101	Tohmatsu, Y.	EXERC-031
Thanigasalam, R.	SURVI-114	Tokumaru, Y.	ANTIE-011
	SURVI-115	Tokunaga, S.	PALLI-049
Thati, N.	PSYCH-090	Tomihara, K.	ORAL-015
	PSYCH-092	Tomita, T.	ONCOD-014
Thia, Z. Y.	LIFES-034	Tomlins, E.	ANTIE-013
Thiagarajan, M.	SUPPO-041		EMERG-023
Thianhlun, P.	MUCOS-005		NEURO-008
	MUCOS-022	Too, Q. S.	LIFES-033
Thirza, S.	CANCE-029	Topalian, A.	SURVI-108
	EMERG-033	Torres Corredor, J.	PERSO-039
	EMERG-039	Torres, J.	PERSO-038

Torres, M.	SURVI-013	Uchida, M.	NUTRI-033
Tovbin, M.	OTHER-046	Udagawa, R.	ANTIE-011
Toy, W. Q.	PERSO-045	Udeogu, K.	PERSO-021
Traill, A.	SUPPO-064	Ueda, K.	NUTRI-033
Tran, A.	NUTRI-013	Uehara, R.	EXERC-031
Tran, B.	PRECL-001	Uemura, S.	NUTRI-017
Tran, L.	PSYCH-047	Ueno, T.	EXERC-049
	PSYCH-048	Uesaka, K.	GERIA-002
Tran, M.	SUPPO-109	Uezono, Y.	LIFES-016
	SURVI-103		LIFES-022
Tran, T.	SUPPO-017		NUTRI-025
Tranfa, M.	ORAL-019	Ugalde, A.	EXERC-027
Trapani, D.	SUPPO-079		NUTRI-032
Treacy, C.	OTHER-052		PSYCH-037
Treister, N.	MUCOS-011		PSYCH-079
Treolar, A.	NEURO-025		SUPPO-048
Trethewie, S.	PALLI-056		SUPPO-057
Trevaskis, M.	EXERC-003		SUPPO-089
	EXERC-041		SUPPO-117
Trieu, S.	ONCOD-001	Ugwu, N. I.	NUTRI-022
Trinh, E.	PALLI-007	Ul Hussain, H.	FATIG-020
Trinh, T.	NEURO-007	Ulapane, N.	DIGIT-014
Trudeau, J.	LIFES-023		DIGIT-064
	LIFES-028	Umanski-Sommer, M.	ORAL-017
	NEURO-028	Umeda, Y.	ONCOD-005
	PSYCH-066	Underhill, C.	HEMAT-001
	PSYCH-092	Unesoko, A.	DIGIT-027
Trudeau, J. E.	PSYCH-090	Uomori, T.	ANTIE-011
Truong, D.	GERIA-010	Usubuchi, M.	ORAL-028
Tsangari, H.	MUCOS-005	Uwagawa, T.	EXERC-043
	MUCOS-022	VIEIRA JALES, I.	GERIA-004
Tschanz, J.	PALLI-061	Vagholkar, S.	PERSO-011
Tse, N.		Vaidya, V.	SURVI-052
	EXERC-046	Valente, R.	SUPPO-026
Tsitsi, T.	DIGIT-007	Valentin, S.	MUCOS-011
	EDUCA-007	van Agteren, J.	PSYCH-093
	EDUCA-010	van Loon, L.	EXERC-003
Tsubata, Y.	NUTRI-017	van Waart, H.	LIFES-027
Tsuji, K.	EXERC-049		SUPPO-110
	FATIG-022	van den Hurk, C.	DIGIT-004
Tsuji, T.	SUPPO-038		SURVI-013
Tsuneizumi, M.	ANTIE-011	van de Poll-Franse, L.	SURVI-108
Tsushima, T.	ONCOD-009	van der Velden, J.	DIGIT-032
Tuckey, N.	PERSO-042	Van Der Stoep, E.	PEDIA-010
PSYCH-093	SURVI-104	Van Onselen, J.	EMERG-038
Tuffin, P.	PALLI-063	Vandenberg, K.	ANTIE-027
Tuke, J.	PERSO-012		PEDIA-026
Turner, J.	LIFES-032	Vandyke, A.	DIGIT-062
Turner, V.	EDUCA-009	Vandyke, K.	NEURO-019
	PSYCH-079		PRECL-007
Tutelman, P.	PSYCH-040	Vardy, J.	NEURO-012
Tyriakidis, K.	DIGIT-053		SURVI-036

Varlow, M.	SUPPO-048	Wahlroos, S.	EXERC-004
	SUPPO-068	Wahyudi, L.	OTHER-012
Vassili, C.	PERSO-037		OTHER-044
Vassiliou, V.	PALLI-069	Wakamatsu, C.	PSYCH-029
Vatandoust, S.	DIGIT-003	Wakasugi, A.	LIFES-016
	PSYCH-078		LIFES-022
Vaughan, S.	DIGIT-014	Wakefield, C.	PALLI-056
Veach, A. J.	SUPPO-013		SURVI-065
Vedel Kessing, L.	SURVI-095	Wakefield, C. E.	DIGIT-039
Veit, A.	CANCE-030	Wakefield, C.	PALLI-020
Velasquez, D.	PSYCH-041	Wakeham, K.	SUPPO-079
Vellayappan, B. A.	PALLI-069	Walbaum, B. V.	ANTIE-004
Velonis, D.	EMERG-031	Walker, A.	SURVI-113
Venkateswari, R.	PSYCH-094	Walker, H.	HEMAT-003
Verma, R.	MUCOS-019		PEDIA-027
Verma, S.	ONCOD-022	Walker, S.	SUPPO-013
	PALLI-069	Wallen, M.	EDUCA-037
Vernicos, S.	NEURO-018		EXERC-025
	NEURO-021		ONCOD-019
	NEURO-029		SURVI-013
Verrico, M.	EMERG-011	Wallen, M. P.	SUPPO-025
Verspoor, K.	DIGIT-029		SURVI-051
Verwaaijen, E.	PEDIA-014	Walls, A.	NUTRI-047
Via, J. D.	EXERC-006	Walpole, E.	SUPPO-009
Viamonte, S.	EXERC-010	Walsan, R.	DIGIT-045
Viana, C.	NUTRI-048		DIGIT-062
Viana, J.	EXERC-010		PSYCH-095
Vicario, J.	PSYCH-021		SUPPO-101
Victor, J. C.	PSYCH-071	Walsh, D.	FATIG-003
Vig, S.	PALLI-022		LIFES-021
Vilela, E.	EXERC-010		NUTRI-002
Villa, A.	EMERG-011		NUTRI-003
	MUCOS-011	Walsh, R.	SURVI-012
	MUCOS-013	Walsh, R. J.	SURVI-040
	ORAL-002	Walsh, S.	SURVI-114
Villemain, M.	GERIA-003		SURVI-115
Vinette, B.	EDUCA-021	Walter, Z.	PSYCH-010
Vize, C.	PSYCH-037	Wan Maharuddin, I.	SUPPO-041
von Heymann, A.	SURVI-095	Wan Mohamad Zain, W. N. I.	MUCOS-004
Von Ah, D.	SUPPO-031		MUCOS-006
Vos, J.	SURVI-108		MUCOS-025
Vrbnjak, D.	DIGIT-007	Wang, B.	SUPPO-119
	EDUCA-007	Wang, D.	PALLI-064
	EDUCA-010		SUPPO-112
Vuong, K.	SUPPO-104	Wang, H.	DIGIT-001
Waart, H. v.	SUPPO-110		PERSO-026
Wadsadwala, T.	HEMAT-005		PERSO-043
Waghorn, M.	PALLI-015	Wang, J.	PERSO-043
Wagman, E.	DIGIT-054	Wang, L.	CANCE-012
	GERIA-025		PERSO-043
	PERSO-034		SURVI-109
	PSYCH-106	Wang, N.	DIGIT-063

	PEDIA-028		EMERG-033
Wang, S.	PERSO-044		EMERG-039
Wang, T.	FATIG-018	Weaver, M.	PALLI-056
	OTHER-062	Web, N.	SUPPO-088
	PSYCH-052	Webb, K.	PSYCH-046
	SUPPO-111		PSYCH-097
Wang, Y.	ANTIE-016	Webber, K.	NEURO-029
	CANCE-012		PERSO-014
	NEURO-004		PERSO-019
	OTHER-010		PSYCH-056
	PALLI-064		SUPPO-076
	SUPPO-112		SURVI-022
	SURVI-121	Weber RN CAS, F.	DIGIT-053
Wankah, P.	SUPPO-007	Weber, N.	EXERC-030
Waran, G.	PSYCH-031	Webster, C.	PEDIA-002
Ward, A.	SUPPO-058	Webster, M.	EXERC-005
Ward, E.	EMERG-027	Webster, R.	PEDIA-021
	GERIA-019	Webster, T.	DIGIT-062
	SUPPO-078	Weddle, K. J.	SUPPO-008
Wardill, H.	EMERG-031	Weerdenburg, H.	HEMAT-003
	HEMAT-016	Wei, Y.	PEDIA-029
	MUCOS-026	Weil, J.	EXERC-003
	NEURO-002	Weller, J.	SUPPO-110
	NEURO-003	Weller, S.	SURVI-085
	NEURO-009	Wells, E.	PSYCH-041
	NEURO-010	Wells, J.	FATIG-011
	NEURO-019	Wells, S.	SUPPO-042
	NUTRI-047	Wen, Y.	PALLI-064
	PERSO-042	Westbrook, J.	DIGIT-062
	PRECL-007	Wetzstein, G.	EMERG-042
	PSYCH-093	Wheelright, S.	SUPPO-072
	SURVI-014	Wheelwright, S.	NUTRI-049
	SURVI-068		SUPPO-113
	SURVI-104	White, A.	EDUCA-016
Wardill, H. R.	MUCOS-027		SUPPO-039
Warnakulasuriya, S.	EMERG-040		SURVI-112
	HEMAT-011	White, F.	SURVI-112
Warner, J.	LIFES-002	White, G.	SUPPO-107
Washbourne, M.	OTHER-036	White, K.	FATIG-024
Watanabe, D.	NUTRI-017		PERSO-016
Watanabe, N.	ORAL-009		SUPPO-055
Waterhouse, B.	CANCE-031		SUPPO-056
Watson, D.	DIGIT-066		SURVI-037
Watson, E.	ORAL-011		SURVI-085
	ORAL-025	White, M.	PERSO-014
	OTHER-050		PERSO-019
Watson, J.	PERSO-040		SUPPO-076
	SURVI-100	White, V.	DIGIT-065
Watson, P.	PSYCH-038		DIGIT-066
Watts, T.	SUPPO-072		OTHER-047
Way, L.	SURVI-111		PSYCH-058
Weaver, J.	EMERG-010		SUPPO-017

	SUPPO-063	Won, G. H.	ANTIE-014
	SURVI-113		LIFES-018
White, V. M.	SUPPO-089	Wong Shee, A.	SUPPO-089
Whittaker, K.	SUPPO-048		SUPPO-117
	SUPPO-068	Wong, A. B.	CANCE-031
	SUPPO-117	Wong, A. K.	CANCE-011
Whyte, C.	PSYCH-041		CANCE-031
Wickramasinghe, N.	DIGIT-014	Wong, C.	ONCOD-019
	DIGIT-064	Wong, E.	LIFES-032
Wicks, M.	EXERC-009		SURVI-114
Wiener, L.	PALLI-020		SURVI-115
	PALLI-056	Wong, G.	SUPPO-092
Wignall, A.	NEURO-003	Wong, H.	DIGIT-002
Wijaya, S. T.	SURVI-040		DIGIT-005
Wilding, E.	CANCE-019		DIGIT-032
Wiley, J.	PSYCH-056		DIGIT-038
	SUPPO-109		DIGIT-044
Wiley, K.	DIGIT-018		DIGIT-063
Wilkins, K.	SUPPO-083		OTHER-059
Willey, C.	MUCOS-011		SURVI-085
Williams, A.	DIGIT-003	Wong, H. C.	DIGIT-013
Williams, C.	MUCOS-026		DIGIT-021
	NEURO-002		DIGIT-037
Williams, E.	PEDIA-010		DIGIT-054
	PEDIA-022		FATIG-025
	SUPPO-114		GERIA-025
Williams, G. R.	GERIA-025		ONCOD-019
Williams, J.	PERSO-014		ONCOD-022
	PERSO-019		PALLI-069
	SUPPO-076		PERSO-034
	SUPPO-083		PSYCH-106
	SURVI-022		SURVI-013
Williams, M.	PEDIA-017	Wong, H. C. Y.	DIGIT-059
Williams, N.	NEURO-014	Wong, H. L.	SUPPO-032
	OTHER-054	Wong, J.	SURVI-096
	PERSO-046	Wong, K. H.	NUTRI-012
	SUPPO-033	Wong, N.	SUPPO-041
Williams, S.	CANCE-025	Wong, R.	SUPPO-092
Wilson, J. V.	PSYCH-031	Wong, R. S.	NEURO-030
Wimardhani, Y. S.	ORAL-001	Wong, S. F.	LIFES-007
Wimmer, K.	EDUCA-030	Wong, V.	PALLI-065
Winiata, A.	EDUCA-011		PERSO-045
Winter, N.	DIGIT-065	Wong, W.	LIFES-036
	DIGIT-066	Wong, Z. W.	SUPPO-065
	SUPPO-017	Woo, H.	SURVI-115
Wiseman, F.	SUPPO-068	Woo, H. H.	SURVI-114
Wisener, N.	PALLI-069	Wood, E.	PERSO-037
Wishart, L.	EMERG-027		SUPPO-098
	SUPPO-078	Woodall, S.	OTHER-047
Wolf, J. R.	ONCOD-019	Woodbury, A.	DIGIT-060
Wolf, U.	LIFES-013	Woodman, R.	DIGIT-003
Wolfram, J.	EDUCA-011		SURVI-051

Woodrow, C.	EXERC-030	Yamaguchi, T.	GERIA-006
Woodrow, P.	SUPPO-047	Yamaki, A.	EXERC-043
Woodyatt, S.	SUPPO-024	Yamamoto, K.	NUTRI-050
Wopat, H.	SUPPO-116	Yamanaka, M.	CANCE-018
Worth, L.	DIGIT-029	Yamanaka, Y.	EXERC-018
Wright, A.	PSYCH-037	Yamashita, K.	NUTRI-050
	SUPPO-058	Yamazaki, K.	ONCOD-009
Wright, C.	NUTRI-013	Yamazaki, T.	OTHER-058
	PSYCH-079	Yan, K.	ANTIE-028
	SUPPO-048	Yan, L.	HEMAT-031
	SUPPO-089	Yan, S.	DIGIT-023
	SUPPO-117	Yan, Y.	HEMAT-030
Wright, H.	SUPPO-090	Yanagimoto, Y.	NUTRI-050
	SURVI-067	Yanagisawa, N.	ANTIE-011
Wright, P.	PSYCH-063	Yanaizumi, R.	PALLI-068
Wright, T.	SURVI-020	Yancey, J.	DIGIT-060
Wu, C.	PSYCH-100	Yang, C.	OTHER-059
Wu, V.	EDUCA-040		PALLI-069
Wulandari, S. M.	EDUCA-038		PSYCH-100
	PSYCH-101	Yang, G.	PALLI-067
Wyld, D.	SUPPO-094		SUPPO-051
Wynen, T.	SUPPO-118	Yang, G. M. J.	OTHER-057
Xia, L.	ANTIE-016	Yang, H.	DIGIT-030
	CANCE-012		NEURO-026
	OTHER-010		NEURO-031
	SURVI-121		OTHER-028
Xiao, P.	SUPPO-119		PSYCH-016
Xie, B.	PSYCH-066		PSYCH-100
Xie, L.	LIFES-023	Yang, L.	PSYCH-087
	PEDIA-021		SURVI-023
Xu, H.	CANCE-032	Yang, M.	LIFES-029
	DIGIT-067		LIFES-033
	EMERG-035		LIFES-034
	OTHER-056		NEURO-022
Xu, J.	DIGIT-001	Yang, S.	DIGIT-023
Xu, X.	HEMAT-030		DIGIT-050
Xu, Y.	ORAL-002		ORAL-029
Xu, Z.	CANCE-033	Yang, S. F.	EDUCA-041
	EMERG-035	Yang, X.	LIFES-035
	OTHER-056		LIFES-036
Xu, Z. S.	OTHER-057	Yang, Y. J.	PALLI-029
Yabusaki, N.	ANTIE-017	Yannarakis, K.	OTHER-047
Yadavalli, R.	DIGIT-068	Yao, Y. S.	PSYCH-020
Yagisawa, T.	NUTRI-001	Yap, K.	DIGIT-070
Yaguda, S.	LIFES-021	Yap, K. Y.	DIGIT-010
Yakushiji, K.	EXERC-048	Yap, L.	ORAL-021
Yamada, H.	ONCOD-005	Yap, M. L.	SURVI-098
Yamada, J.	EXERC-024	Yarbrough, C.	PSYCH-102
Yamada, M.	EXERC-031	Yarom, N.	EMERG-043
Yamada, Y.	NUTRI-017		ORAL-017
Yamaguchi, M.	EXERC-024	Yasufuku, I.	NUTRI-017
Yamaguchi, S.	CANCE-018	Yatam Ganesh, S.	OTHER-060

Yates, P.	FATIG-002		SURVI-040
	GERIA-019	Yoo, D.	DIGIT-030
	NUTRI-013	Yoo, J.	PSYCH-103
	NUTRI-014	Yoo, S.	DIGIT-022
	NUTRI-043	Yoon, H.	PALLI-029
	NUTRI-051	Yoon, J.	DIGIT-050
	PALLI-053		SURVI-048
	PALLI-054	Yoon, P.	EMERG-043
	PERSO-046	Yorke, J.	DIGIT-047
	SUPPO-095	Yoshida, K.	EXERC-018
Yaw, S.	SURVI-035		MUCOS-028
Yee, J.	EXERC-038	Yoshida, N.	LIFES-016
	EXERC-051		LIFES-022
	SURVI-120	Yoshida, Y.	LIFES-022
Yee, R.	PEDIA-013	Yoshikawa, S.	ONCOD-009
Yee, Y. E.	NEURO-030	Yoshino, S.	PALLI-068
Yeh, Y.	SURVI-016	Yoshitomi, A.	ORAL-024
Yennu, S.	FATIG-006	You, J.	PSYCH-018
	GERIA-016	You, S.	SUPPO-120
	PALLI-061	Young, A. M.	NUTRI-022
Yeo, A. S. H.	PEDIA-013	Young, K.	PSYCH-049
Yeo, B.	LIFES-032	Young, R.	SUPPO-058
Yeo, C. Y. Y.	PERSO-047	Youssef, O.	EDUCA-033
Yeo, G.	EXERC-045	Yu Tajima, J.	NUTRI-017
Yeo, H.	LIFES-007	Yu, C. H.	OTHER-062
Yeo, J.	SURVI-012	Yu, J.	LIFES-035
	SURVI-040		LIFES-036
Yeo, S.	PALLI-046	Yu, L.	EMERG-019
	PALLI-047		LIFES-002
Yeo, W.	DIGIT-005	Yun, D.	SUPPO-055
Yeoh, D.	HEMAT-003	Yun, S.	SUPPO-120
	PEDIA-028	Zafar, A. M.	DIGIT-044
	PEDIA-030	Zahaykah, M.	NUTRI-026
Yeom, C.	ANTIE-014	Zain, W. N. I. W. M.	MUCOS-025
	DIGIT-030	Zaina, E.	PSYCH-028
	LIFES-018		PSYCH-078
Yeung, D.	HEMAT-016	Zajdlewicz, L.	SUPPO-047
Yeung, E.	EXERC-028	Zakhary, I.	EDUCA-040
Yi, T.	ORAL-029	Zamami, Y.	ORAL-024
Yildiz-Kabak, V.	CANCE-007	Zang, H.	NUTRI-003
Yilmaz, B.	MUCOS-027	Zangari, S.	SURVI-082
Yip, C. H.	SUPPO-041	Zannettino, A.	NEURO-019
Yip, D.	DIGIT-003		PRECL-007
Yokota, T.	ONCOD-009	Zappi, I.	ONCOD-021
Yokoyama, T.	NUTRI-033	Zdenkowski, N.	DIGIT-003
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Yonemori, K.	ANTIE-011	Zekry, O.	LIFES-004
Yonenaga, Y.	EXERC-031	Zeman, F.	EMERG-017
Yong, A.	HEMAT-016	Zengin, A.	SURVI-022
	SURVI-104	Zhang, B.	DIGIT-005
Yong, M.	PEDIA-028		DIGIT-013
Yong, W. P.	SURVI-012		DIGIT-021

	DIGIT-032	Zhang, Z.	DIGIT-057
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	DIGIT-038	Zhao MS, X.	EDUCA-032
	DIGIT-044	Zhao, X.	EMERG-032
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	SURVI-013	Zhou, K. R.	LIFES-035
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	OTHER-059	Zimmermann, C.	PALLI-002
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Zhang, P.	ANTIE-016		EXERC-013
	CANCE-012	Zoanetti, C.	NUTRI-034
	HEMAT-031	Zobrist BScN, RN, C.	DIGIT-053
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	LIFES-036		

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Supportive Care Makes Excellent Cancer Care Possible

ABOUT US

MASCC

The Multinational Association of Supportive Care in Cancer (MASCC) is an international multidisciplinary organization dedicated to research and education in all aspects of supportive care for people with cancer regardless of the stage of their disease. Founded in 1990, MASCC now includes members from more than 88 countries.

Because supportive care encompasses all aspects of care, it involves a variety of disciplines and specialists. Membership is open to medical, surgical, and radiation oncologists, nurses, dentists, dental hygienists, pharmacists, social workers, dietitians, outcomes specialists, psychologists, statisticians, infectious disease specialists, educators, representatives from industry and nonprofit sectors, and others interested in supportive care. MASCC is a tax-exempt 501(c)3 corporation.

ISOO

In 1998, MASCC partnered with the International Society of Oral Oncology (ISOO) to promote scientific exchange among healthcare professionals concerned with the oral effects of cancer treatment. ISOO, established in 1984, addresses the management of complications arising in oral and maxillofacial tissues secondary to cancer and its treatment.

STUDY GROUPS

The strengths of MASCC and ISOO lie in our Study Groups, which advance research and education in each of their speciality areas. Study Group membership is an excellent way to get involved in research activities and collaborate with colleagues.

Learn more about our Study Groups and their activities available at the mascc.org website.

ANNUAL MEETING

At the MASCC/ISOO Annual Meeting, members of both organizations share recent research in supportive care through presentations, e-posters, workshops and satellite seminars. These meetings are a perfect time to network with professional colleagues from around the world.

BENEFITS OF MEMBERSHIP

MASCC

- Collaboration and networking with global experts through participation in up to three MASCC Study Groups
- Free online access to the official MASCC journal, Supportive Care in Cancer (SCC)
- Society News, a monthly publication with news about member activities and upcoming events
- Access to members-only content, MASCC Member Directory, supportive care resources (guidelines, tools, webinars, courses), book discounts
- Discounted meeting registration fees
- Access to scholarships and awards

ISOO

- *ISOO Newsletter*
- Access to the ISOO Continuing Education Course held during the MASCC/ISOO Annual Meeting

MEMBERSHIP OPTIONS

- Membership options for one or two years
- Trainee/Student reduced-rate membership, with a letter from training director/supervisor
- Low-income country reduced rate
- Scholarship membership, restricted to low-resource countries (Requirements found at www.mascc.org)
- Patient Partner membership (Requirements found at www.mascc.org)

APPLY OR RENEW ONLINE

Go to www.mascc.org/join-mascc to become a new member or renew your membership.

CONTACT MASCC

For questions or further information, contact:
Executive Director: Melissa Chin, H.BSc, MBA, CHE
Multinational Association of Supportive Care in Cancer
16 Industrial Parkway South Unit 412
Aurora, ON L4G 0R1 Canada
e-mail: mascc.office@mascc.org

Membership Application

Online application available at www.mascc.org



Name: _____ ☐ New
first middle initial last credentials ☐ Renewal

Preferred Address (For Print Journal): _____

City: _____ State: _____

Country: _____ Zip code: _____

E-mail: _____ Twitter Handle: _____

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- | | | | |
|------------------------------------|---|--|--|
| ☐ Physician | ☐ Dentist/Oral Surgeon | ☐ Pharmacist | ☐ Physiotherapist |
| ☐ Nurse | ☐ Dental Hygienist | ☐ Researcher/Research Scientist | ☐ Patient Partner |
| | ☐ Dietitian | ☐ Trainee/Student | ☐ Other _____
please state |

STUDY GROUP INTEREST

Select up to 3 study groups.

**Subgroup membership requires parent Study Group membership but does not count toward the three selections.*

- | | | |
|--|---|---|
| ☐ Antiemetics | ☐ Hematological Toxicities | ☐ Oncodermatology |
| ☐ Digital Health & New Technologies | ☐ Lifestyle and Integrative Medicine | ☐ Oral Care |
| ☐ Emerging Toxicities | ☐ Subgroup: Exercise Oncology* | ☐ Palliative Care |
| ☐ Subgroup: Organ Based Toxicities (Cardiac)* | ☐ Mucositis | ☐ Subgroup: Cancer Pain* |
| ☐ Subgroup: Organ-Based Toxicities (Kidney)* | ☐ Neurological Complications | ☐ Pediatrics |
| ☐ Fatigue | ☐ Nutrition & Cachexia | ☐ Psychosocial |
| ☐ Geriatrics | | ☐ Survivorship |

ANNUAL MEMBERSHIP OPTIONS AND FEES: (All amounts are in US Dollars)

Membership with print and online journal

- ☐ \$195 - 1 year | ☐ \$350 - 2 years

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Trainee/Student membership with online journal

- ☐ \$65 - 1 year | ☐ \$115 - 2 years

(Requires a letter from training program director/supervisor indicating that the applicant is a full-time student that is not full-time employed)

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- ☐ \$20 - 1 year | ☐ \$35 - 2 years

(Requires a letter of support from an authorized person and form outlining your role & experience as an advocate)

Low-income country membership with online journal

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(Requires proof of residence in a country listed on the eligible country list found at mascc.org)

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- ☐ \$0 - 1 year

(If you are age 65 or greater, you qualify for a retiree membership with online journal) You will be required to show ID for proof of age.

Additional ISOO membership fee

- ☐ \$35 - 1 year | ☐ \$60 - 2 years



Contribute toward MASCC/ISOO Development Funds

- ☐ \$ _____ - Thank you

Wire Transfer Fee

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