



Remote Symptom Practice Guides for Adults on Cancer Treatments

**Of the Pan-Canadian Oncology Symptom Triage and Remote Support
(COSTaRS) Team**

Pocket Guide

October 2024

Table of Contents

Copyright and Disclaimer	1
COSTaRS Steering Committee	2
Overview and Practice Guide Development	3
Example General Assessment Form	5
Practice Guides	
Anxiety.....	6
Appetite Loss	8
Bleeding	10
Breathlessness/Dyspnea	12
Constipation	14
Depression	16
Diarrhea	18
Fatigue/Tiredness	20
Fever with Neutropenia	22
Mouth Dryness/Xerostomia	24
Mouth Sores/Stomatitis	26
Nausea & Vomiting	28
Pain	30
Peripheral Neuropathy	32
Skin Rash	34
Skin Reaction	36
Sleep Changes	38
Swallowing Difficulty	40
Full list of references.....	42

Copyright

Our intent is for the COSTaRS Remote Symptom Practice Guides for Adults on Cancer Treatments to be used in part or as a whole as needed. Therefore, these practice guides can be reproduced without permission, although we respectfully request that you cite the resource appropriately, as follows:

Remote Symptom Practice Guides for Adults on Cancer Treatments © 2024 D Stacey for the Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) Team. University of Ottawa School of Nursing and the Ottawa Hospital Research Institute, Ottawa, Canada.

If you translate any of this material into languages other than English or French, we would appreciate that you notify Dawn Stacey RN, PhD, University of Ottawa, Ottawa, Canada.

Disclaimer

These COSTaRS Remote Symptom Practice Guides for Adults on Cancer Treatments are intended for use by trained nurses. They provide general guidance on appropriate practice that is informed by a synthesis of evidence (e.g., clinical practice guidelines, systematic reviews) and their use is subject to the nurses' judgment in each patients' individual situation. The COSTaRS Remote Symptom Practice Guides for Adults on Cancer Treatments are designed to provide information to assist decision-making and are not meant to be prescriptive. Individuals who use these practice guides are required to make their own determination regarding specific safe and appropriate clinical practices. While care has been taken to ensure that these practice guides reflect the state of general knowledge and expert consensus about practice in the field at the date of publication, neither the COSTaRS Steering Committee nor the Canadian Partnership Against Cancer who funded the original project make any warranty or guarantee in respect to any of the content or information contained in these practice guides. Neither group accept responsibility or liability whatsoever for any errors or omissions in these practice guides, regardless of whether those errors or omissions were made negligently or otherwise.

Funding

The COSTaRS project has received funding for development, updates, and evaluation studies from:

- Canadian Partnership Against Cancer (2008-2011)
- Canadian Institutes of Health Research (CIHR) (2012-2014)
- Ontario Institute for Cancer Research (OICR) (2016-2017)
- Canadian Institutes of Health Research (CIHR) Planning and Dissemination Grant (2017)
- Cancer Care Ontario (CCO) - Clinical Programs and Quality Initiatives (CPQI) (2017-2018)
- Canadian Cancer Society (2022-2024)
- University Research Chair in Knowledge Translation to Patients, University of Ottawa (2012-2024)

COSTaRS Steering Committee

Current Committee Members

Executive Team:

Co-lead: Dawn Stacey RN, PhD, FRSC, FCAHS, FAAN, FCAN, CON(C), University of Ottawa, Ottawa, Ontario
 Co-lead: Gail Macartney RN(NP), PhD, CON(C), University of Prince Edward Island, Charlottetown, PEI
 Joy Tarasuk RN, MN, CHE, CON(C), Nova Scotia Health Authority Cancer Care Program, Nova Scotia
 Craig Kuziemsky PhD, MacEwan University, Edmonton, Alberta
 Meg Carley BSc, Ottawa Hospital Research Institute, Ottawa, Ontario

Steering Committee:

Kim Chapman RN, MSc(N), recently retired from Horizon Health Network, New Brunswick
 Carolyn Fifield, BSc(Biochem), MSc(A), RN, CON(C), NSHA Cancer Care Program, NS
 Lindsay Jibb RN, PhD, University of Toronto, Ontario
 Claire Ludwig, RN, PhD(c), University of Ottawa, and Patient Advisor, Ottawa, Ontario
 Lorraine Martelli, RN(EC), MN, Ontario Health/Cancer Care Ontario, Ontario
 Kristie Morydz, NP, CancerCare Manitoba, MB
 Jennifer Newton, BScN, Med, The Ottawa Hospital, ON
 Lorelei Newton, RN, BScN, PhD, CGNC, University of Victoria, BC
 Komal Patel Saini, RN, BScN, MN, CON(C), CHPCN(C), CVAA(C), de Souza Institute, Ontario
 Amanda Ross-White BA, MLIS, Queen's University, Kingston, Ontario
 Maureen Smith, Chair, Cochrane Consumer Network Executive and Caregiver Partner, Ontario

Immunotherapy Working Group Members (2020)

Jennifer Anderson, RN, MN, CON(C), Cancer Control Alberta, Calgary, AB
 Chyanne Dey, RN, CON(C), Tom Baker Cancer Center, Calgary, AB
 Carolyn Fifield BSc(Biochem), MSc(A), RN, CON(C), NSHA Cancer Care Program, NS
 Pam Ginex, MPH, RN, OCN, Oncology Nursing Society, Pittsburgh, PA
 Leah Jodoin MN, RN(EC), NP, CON(C) Kingston Health Sciences Centre, ON
 Karey McCann RN, BScN, Cancer Control Alberta, Edmonton, AB
 Kristie Morydz, NP, CancerCare Manitoba, MB
 Jennifer Newton, BScN, Med, The Ottawa Hospital, ON
 Cindy Railton, RN, MN, ACNP, CON(C), Tom Baker Cancer Centre, Calgary, AB

Committee Members 2012-2020

Debra Bakker RN, PhD, Laurentian University, ON	2012-2016
Julie Baisley, Allan Blair Cancer Centre, Regina, SK	2017-2020
Barbara Ballantyne RN, MScN, CON(C), CHPCN(C), Health Sciences North, ON	2016-2019
Lorna Butler RN, PhD, University of Saskatchewan, SK	2012-2016
Dauna Crooks RN, DNSc, University of Manitoba, MB	2012-2016
Greta Cummings RN, PhD, University of Alberta, AB	2012-2020
Andra Davis, RN, MN, PhD, Washington State University, Vancouver, WA, USA	2017-2020
Esther Green RN, MSc(T), Cancer Care Ontario, ON	2012-2020
Doris Howell RN, PhD, University of Toronto, ON	2017-2020
Barb Hues RN, MSN, CON(C), Cancer Care Manitoba, Winnipeg, MB	2017-2020
Lynne Jolicoeur RN, MScN, CON(C), The Ottawa Hospital, ON	2017-2020
Luisa Luciani Castiglia, RN, MScA, CON(C), McGill University Health Center, Montreal, QC	2017-2020
Katie Nichol RN, MScN, CON(C), The Ottawa Hospital, ON	2012-2020
Brenda Sabo RN, MA, PhD, Dalhousie University, NS	2012-2020
Ann Syme RN, MSN, PhD, Langara College, Vancouver, BC	2012-2020
Tracy Truant RN, MSN, PhD(c), University of British Columbia, Patient Advisor, BC	2012-2020
Linda Watson RN, PhD, CON(C), Cancer Control Alberta, AB	2017-2019
Myriam Skrutkowski RN, MSc, CON(C), MUHC, QC	2012-2019
Lucie Tardif RN, M.Sc, McGill University Health Centre, QC	2016-2019
Carolyn Tayler RN, BN, MSA, CON(C), Fraser Health, BC	2012-2016

CAN-IMPLEMENT© Team (2012), Canadian Partnership Against Cancer, Queen's University, School of Nursing

Lead: Margaret Harrison RN, PhD	Victoria Donaldson BA	Amanda Ross-White BA, MLIS
Val Angus BA	Janice McVeety RN, MHA	Joan van den Hoek BNSc
Meg Carley BSc	Kirsten Dean RN, BA, BScN	

Overview and Practice Guide Development

Management of cancer treatment-related symptoms is an important safety issue given that symptoms can become life-threatening and often occur when patients are at home. Over 50% of cancer nurses in Canada provide remote support, primarily by telephone.^{1,2} Higher quality telephone services require use of symptom practice guides to minimize risk; however, access to symptom practice guides and their use is variable.^{1,2} With funding from the Canadian Partnership Against Cancer in 2008 we established the pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) research project with representation from eight provinces.

The COSTaRS practice guides were developed using a systematic process guided by CAN-IMPLEMENT[®].^{3,4}

1. We convened a COSTaRS Steering Committee including researchers, an information systems researcher, library scientist, advanced practice nurses, and nurse leaders.
2. For the original project and each update, we conducted a systematic review for *each symptom* to identify clinical practice guideline(s), and if relevant, high quality systematic reviews published in the previous 5 years.
3. We developed 13 symptom practice guides based on the available clinical practice guidelines (median 3 guidelines per practice guide; range 1 to 7). In total, we identified > 40 practice guidelines and appraised their quality using the AGREE instrument (rigor scores range 8% to 87%).⁵ Higher rigour scores indicate higher confidence that potential biases in guideline development were addressed, and recommendations are valid and feasible for practice.⁶ Principles for developing the symptom practice guides included:
 - Using best available evidence.
 - Adding questions from the valid and reliable Edmonton Symptom Assessment System (ESAS) to be consistent with symptom assessment in oncology centres.^{7,8}
 - Using plain language to facilitate use of COSTaRS practice guides in communication between nurses and patients/families (Flesch–Kincaid Grade Level 6.4).
 - Testing the practice guide usability with cancer nurses to ensure they are easy to read; provide just the right amount of information; use appropriate terms; are likely to fit with clinical workflow; and include appropriate self-care strategies.
 - The practice guides were circulated for review and content validation by cancer experts across Canada.
4. In January 2016, the 13 symptom practice guides were updated with evidence from systematic reviews to identify clinical practice guidelines published up to August 2015. New practice guides for pain and sleep changes were added. AGREE Rigour Scores for source guidelines were removed given inconsistent reporting. Evidence ratings were changed to indicate how well the medications work (e.g., effective, likely effective, or expert opinion). The summary of changes for the 2016 update were published.⁹
5. In January 2020, the 15 symptom practice guides were updated and new practice guides for Mouth Dryness/Xerostomia and Skin Rash were added. At the COSTaRS priority setting meeting in 2017, adding evidence for patients receiving Immune Checkpoint Inhibitor therapy into the practice guides was identified as high priority given the increased use of immunotherapy and the special considerations required for managing treatment related symptoms. Key assessment and self-care items for patients receiving immunotherapy were added. End-users asked how severity assessment correlated with the NCI-CTCAE grading that they used in their assessments, clinical documentation and communications with physicians. NCI-CTCAE grading was linked to applicable assessment questions. The summary of changes for the 2020 update were published.¹⁰
6. Cetin and colleagues (2022) conducted a randomized controlled trial that showed patients on chemotherapy receiving telenursing (guided by COSTaRS) compared to usual care had decreased symptom severity, improved quality of life, and increased self-care management.¹¹
7. In October 2024, the 17 symptom practice guides were updated and a new practice guide for Swallowing Difficulty was added. The Self-Care Sections were re-formatted for clarity and usability. A family caregiver participated on our Steering Committee, reviewed each practice guide, and provided valuable feedback to further help write them in plain language.

In summary, we have developed 18 user-friendly remote symptom practice guides based on a synthesis of the best available evidence, validated the practice guides with oncology nurses, and used plain language to facilitate use with patients. They are available for use in routine remote support practices.

Evidence for medications is reported using the following categories:

Effective	Medications with strong evidence that they work well based on rigorously conducted studies, meta-analysis, or systematic reviews and for which the chance of harm is small compared to benefits.
Likely effective	Medications with some evidence that they work based on one rigorously conducted study (controlled trial) or multiple rigorously conducted studies using small sample size.
Expert opinion	Low-risk medications that are consistent with sound clinical practice, suggested by experts on a guideline panel, and for which limited evidence exists.
Benefits balanced with harm	Medications for which doctors or nurse practitioners and patients should weigh the benefits and harms based on patient-specific circumstances and priorities.

References:

- (1) Stacey D, Bakker D, Green E, Zanchetta M, Conlon M. Ambulatory oncology nursing telephone services: A provincial survey. *Canadian Oncology Nursing Journal* 2007;17(4):1-5.
- (2) Macartney G, Stacey D, Carley M, Harrison M. Priorities, Barriers and Facilitators for Remote Support of Cancer Symptoms: A Survey of Canadian Oncology Nurses. *Canadian Oncology Nursing Journal* 2012;22(4):235-240. Priorités, obstacles et facilitateurs concernant le traitement à distance des symptômes du cancer: enquête après des infirmières en oncologie du Canada. P 241-47.
- (3) Harrison MB, van den Hoek J, for the Canadian Guideline Adaptation Study Group. CAN-IMPLEMENT©: A Guideline Adaptation and Implementation Planning Resource. Kingston, Ontario: Queen's University School of Nursing and Canadian Partnership Against Cancer; 2012.
- (4) Stacey D, Macartney G, Carley M, Harrison MB, COSTaRS. Development and evaluation of evidence-informed clinical nursing protocols for remote assessment, triage and support of cancer treatment-induced symptoms. *Nurs Res Pract* 2013;2013:171872.
- (5) The AGREE Collaboration. Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument. www.agreecollaboration.org; 2001.
- (6) Brouwers M, Kho ME, Browman GP et al. Development of the AGREE II, part 2: assessment of validity of items and tools to support application. *Canadian Medical Association Journal* 2010;182(10):E472-E478.
- (7) Barbera L, Seow H, Howell D et al. Symptom burden and performance status in a population-based cohort of ambulatory cancer patients. *Cancer* 2010;116(24):5767-5776.
- (8) Nekolaichuk C, Watanabe S, Beaumont C. The Edmonton Symptom Assessment System: a 15-year retrospective review of validation studies (1991-2006). *Palliative Medicine* 2008;22(2):111-122.
- (9) Stacey D, Carley M, for the pan-Canadian Oncology Symptom Triage and Remote Support Group. Brief Communication: The pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS)—Practice guides for symptom management in adults with cancer. *Canadian Oncology Nursing Journal* 2017;27(1):92-98.
- (10) Stacey D, Carley M, Newton J, for the Pan-Canadian Oncology Symptom Triage and Remote Support Group (COSTaRS) team. Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) practice guides - What's changed in Version 2020? *Canadian Oncology Nursing Journal* 2020;30(4):269-276.
- (11) Cetin AA, Bektas H, Coskun HS. The effect of telephone triage on symptom management in patients with cancer undergoing systemic chemotherapy: A randomized controlled trial. *European Journal of Oncology Nursing* 2022;61:102221

Example General Assessment Form

Practice Guides for the Remote Assessment, Triage, and Self-care of Symptoms in Adults Undergoing Cancer Treatment

Date and time of encounter _____ Type of encounter (phone/in-person) _____

Type of Cancer(s) _____ Primary Oncologist _____

Other practitioners (most responsible) _____

1. Which symptom(s)

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Depression | <input type="checkbox"/> Mouth sores/Stomatitis | <input type="checkbox"/> Skin Reaction to radiation |
| <input type="checkbox"/> Appetite Loss | <input type="checkbox"/> Diarrhea | <input type="checkbox"/> Nausea & Vomiting | <input type="checkbox"/> Sleep changes |
| <input type="checkbox"/> Bleeding | <input type="checkbox"/> Fatigue/Tiredness | <input type="checkbox"/> Pain | <input type="checkbox"/> Swallowing Difficulty |
| <input type="checkbox"/> Breathlessness | <input type="checkbox"/> Fever with Neutropenia | <input type="checkbox"/> Peripheral Neuropathy | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Constipation | <input type="checkbox"/> Mouth dryness/Xerostomia | <input type="checkbox"/> Skin Rash | _____ |

2. Tell me about your symptom(s) (Supporting Evidence: Expert Consensus)

(PQRST- Provoking factors, Quality, Radiating, Relieving factors, Severity, Other symptoms, Timing, Triggers, Location)

3. Conduct general symptom assessment (Supporting Evidence: Expert Consensus)

Receiving cancer treatment:

☐ Radiation: Site of radiation _____

☐ Chemotherapy: Name of Chemotherapy _____

☐ Immune Checkpoint Inhibitor Therapy: Name of Immune Checkpoint Inhibitor _____

☐ Other systemic therapy (e.g., antiestrogen, monoclonal antibodies, targeted therapies): Name of therapy: _____

☐ Surgery: _____

Date of last treatment(s) _____

Length of time since symptom started? _____

New symptom? ☐ Yes ☐ No ☐ Unsure

Told symptom could occur? ☐ Yes ☐ No ☐ Unsure

Other symptoms? ☐ Yes ☐ No If Yes, specify _____

Recent exposure to known virus/flu? ☐ Yes ☐ No ☐ Unsure If Yes, specify _____

4. Assess current use of medications, herbs, natural health products (name, dose, current use)

Medication	Dose Prescribed	Taking as prescribed/Last dose if PRN
		<input type="checkbox"/> Yes <input type="checkbox"/> No /
		<input type="checkbox"/> Yes <input type="checkbox"/> No /
		<input type="checkbox"/> Yes <input type="checkbox"/> No /
		<input type="checkbox"/> Yes <input type="checkbox"/> No /
		<input type="checkbox"/> Yes <input type="checkbox"/> No /




Are any medications new or are there recent changes? ☐ Yes ☐ No If Yes, specify: _____

5. See relevant symptom practice guide(s) for further assessment, triage and self-care.

Anxiety Practice Guide

Anxiety: an emotional or physiologic response to known or unknown causes that ranges from a normal reaction to extreme dysfunction. It may impact on decision making, adherence to treatment, functioning, or quality of life; nervousness; concern; feeling of worry; apprehension.¹⁻⁵

1. Assess severity of the anxiety^{1-4,6-13}

Tell me what number from 0 to 10 best describes how anxious you are feeling (0= “no anxiety”; 10= “worst possible anxiety”) ^{2,4,6,7,14}	1 – 3	4 - 6	7 - 10
Are you having panic attacks: periods/spells of sudden fear, discomfort, intense worry, uneasiness? ^{1-4,6,7}	No	Yes, some	Yes, many
Does your anxiety affect your daily activities? ^{2-4,6,7,15}	Not at all ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
Does your anxiety affect your sleep? ^{2-4,6}	Not at all	Yes, some	Yes, a lot
Do any of these apply to you? ^{2-4,6,7} History of anxiety or depression, Lack of social support, Recurrent/advanced disease, Younger age, Substance use/withdrawal, Past trauma/ abuse, Cognitive impairment, Difficulty communicating, Financial problems, Female, Dependent children, On steroids, Other health issues unrelated to cancer	No	Yes, some	Yes, many
Do have any concerns that are making you feel more anxious? ^{2,6} Life events, Waiting for test results, New information about your cancer/ treatment, Recently completed treatment, Spiritual/religious concerns?	No	Yes, some	
Do you have any other symptoms? ^{2,3,6} Fatigue, Breathlessness, Pain, Sleep changes	None	Some	Yes, many
➔ Do you have (signs of hyperthyroidism): ⁸⁻¹³ weight loss, heart pounding or racing, tremors, feeling overheated, fatigue/ weakness, diarrhea, swollen base of neck	No		Yes
Have you had recurring thoughts of dying, trying to kill yourself or harming yourself or others? ^{2,6}	No		Yes
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)

2. Triage patient for symptom management based on highest severity^{2,3,6,7}

Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days	If potential for harm, refer for further evaluation immediately If no, refer for non-urgent medical attention and alert if on immunotherapy. Review self-care. Verify medications
--	--	--

Legend: ➔ Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for anxiety, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-4,7}

Examples of medications for anxiety*	Notes (e.g., dose)	Evidence
Benzodiazepines - lorazepam (Ativan®), diazepam, (Valium®), alprazolam (Xanax®) ^{1-4,7}		Likely effective
SSRIs/SNRIs - fluoxetine (Prozac®), paroxetine (Paxil®), citalopram (Celexa®), venlafaxine (Effexor XR®), sertraline (Zoloft®), escitalopram (Lexapro®), duloxetine (Cymbalta®) ^{2-4,7}		Likely effective
Antipsychotics for treatment-resistant anxiety – Olanzapine (Zyprexa®), Risperidone (Risperdal®), Quetiapine (Seroquel®) ^{2-4,7}		Expert opinion
Anticonvulsants for treatment-resistant anxiety – gabapentin (Neurontin®), pregabalin (Lyrica®) ^{3,4}		Expert opinion

*Use of medications should be based on severity of anxiety and potential for interaction with other medications.^{2,4} Benzodiazepines are intended for short term use. Caution: may cause confusion, ataxia and falls in the elderly.^{2,4,7} No guidance for the use of cannabinoids due to lack of studies and potential negative effects on mood.¹⁶

4. Discuss self-care strategies^{1-7,17-27}

- **What helps** when you feel anxious? Reinforce as appropriate. Specify:
- What is your goal?
- Have you shared your concerns and worries with your doctor or nurse practitioner?^{2,4,6}
- Would **more information about your symptoms, cancer or your treatment** help to ease your worries? If yes, provide relevant information or suggest resources.^{1-4,6}

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Physical activity including yoga. ^{1,2,17}
2.	Participate in support groups and/or rely on family/friends for support. ^{1-4,6,7}
3.	Activities such as relaxation therapy, meditation/breathing techniques, listening to music, progressive muscle relaxation, guided imagery, massage therapy with or without aromatherapy, acupuncture/acupressure, or other creative therapies (e.g., art). ^{1-4,6,7,18-22,27}
4.	Cognitive-behavioural therapy , mindfulness-based stress reduction, or personal or couple counseling that provides more in-depth guidance on managing anxiety and problem solving. ^{1-5,7,23-25,27}
5.	Spiritual counseling, meaning-focused meditation, prayer, worship, or other spiritual activities if your concerns are spiritual or religious in nature. ^{1,2,26}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur




References: 1) ONS 2019; 2) NCCN 2023; 3) ESMO 2023; 4) NCI 2023... (pages 42-55 for all references).

Appetite Loss Practice Guide

Appetite loss: a feeling of being without hunger that may be associated with cachexia.¹⁻³ In addition to an involuntary loss of appetite, cachexia can involve sustained loss of weight and skeletal muscle mass leading to functional impairment, increased treatment toxicity, poor quality of life, and reduced survival.⁴⁻⁶

1. Assess severity of the appetite loss^{2,3,7-16}

Tell me what number from 0 to 10 best describes your appetite (0= "best appetite" and 10= "Worst possible lack of appetite") ^{2,7,8,17}	1-3	4-6	7-10
Are you worried about your lack of appetite? ^{2,7,8}	No/Some	Yes, very	
How much have you eaten in the past 24 hours (e.g., at each meal)? ^{2,3,7-9,18}	Less than normal ^{G1}	Much less than normal ^{G2}	Not eating at all ^{G≥3}
Have you lost weight in the last 4 weeks without trying? ^{2,3,7-9} Amount: Unsure	0-2.9%	3-9.9%	≥10%
How much fluid are you drinking per day? ^{2,7}	6-8 glasses	1-5 glasses	Sips
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine? ^{2,3,7}	No ^{G0}	Yes, some ^{G1}	Yes, a lot ^{G≥2}
Is there anything causing your lack of appetite: ^{2,3,7,8} Recent surgery/treatment, New medication, Other	No	Yes, some	Yes, many
Do you have any other symptoms? ^{2,3,7-9} Sore or dry mouth, Early fullness, Taste/smell changes, Nausea/vomiting, Swallowing problems, Pain, Constipation, Diarrhea, Fatigue, Depression, Breathlessness	None	Some	Yes, many
→ Do you have (signs of endocrine toxicity): ¹⁰⁻¹⁶ fatigue/weakness, abdominal pain, headache, nausea/vomiting, vision changes, weight gain or loss, constipation, dizziness, mood or behaviour changes, decreased libido, confusion, dry skin, hair loss, feeling cold, puffy face	No		Yes
→ Do you have (signs of renal toxicity): ^{11-14,16} decreased urine, blood in urine, swelling of hands or legs, face, abdomen, sudden weight gain, abdominal or pelvic pain, nausea/ vomiting, high blood pressure, drowsiness	No		Yes
→ Do you have (signs of hepatic toxicity): ^{10,11,13-16} yellow skin/eyes, dark urine, fever, nausea, right side abdominal pain, fatigue, increase in bleeding/bruising	No		Yes
Does your poor appetite affect your daily activities? ^{2,3,7-9}	No	Yes, some	Yes, a lot

	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{2,7,8}	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days.	If severe loss of appetite is stabilized, review self-care strategies. If severe loss of appetite is new refer for medical attention immediately and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for appetite loss, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-9,13,14,19,20}

Examples of medications for appetite*	Notes (e.g., dose)	Evidence
Corticosteroids ^{1-4,7-9} (dexamethasone (Decadron®), prednisone)		Likely effective
Megestrol (Megace®) ^{1-3,7,8}		Benefits balanced with harms
Omega 3 fatty acids (EPA, Fish Oil) ^{2,5,9,20}		Expert Opinion
Prokinetics (metoclopramide, domperidone) for early satiety and nausea ^{2,7-9}		Expert Opinion

* Megestrol has potential for serious side effects such as blood clot.⁸ Corticosteroids offer short-lived benefit; long-term use is associated with significant toxicities.^{3,8,13,14} Prokinetics have the potential for serious side effects; metoclopramide on the central nervous system and domperidone on cardiac rhythm.⁷⁻⁹ Cannabis/Cannabinoids are not recommended.^{1,2,6,8,9,19}

4. Discuss self-care strategies^{1-5,7-9}

- **What helps** when you feel like you are not hungry?^{2,7} Reinforce as appropriate.
- What is your **goal**?^{2,3,7}
- Do you have **beliefs** about certain foods (e.g., cultural or think some foods cause cancer) or **pre-existing diet** (e.g., diabetes) that may affect your eating habits?^{2,7}
- Have you seen or spoken to a **dietitian**?^{1-5,7-9} If you are having taste changes, they can suggest ways to help lessen your symptoms.
- Would **more information** about your symptoms help you to manage them better?^{1,2} If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Eat small frequent meals and snacks. ^{2,3,7,8} Sitting upright for 30-60 min helps digestion.
2.	Eat foods that are cold, with less odour , or avoiding being in the kitchen during meal preparation if food odours bother you. ^{2,3}
3.	Eat more when you feel most hungry . ^{2,3}
4.	Eat foods that are higher in protein and calories. ^{2,3,7-9}
5.	Buy convenience foods or ask friends/family for help if you are unable to obtain groceries and prepare meals (access to food, financial resources). ^{2,7}
6.	Drink higher energy and protein drinks (Ensure, Glucerna). ^{1-3,7-9}
7.	Stay as active as possible. ^{2,3,5,7-9} (e.g., walking 15-20 minutes 1-2x/day; 30-60 minutes 3-5x/week)
8.	Track your food, fluid intake and weight in a diary . ^{2,3,8,9}
9.	Slowly increase your intake over several days, if your food intake has been very low for a long time (to prevent refeeding syndrome). ^{2,9}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur




References: 1) ONS 2024; 2) BCCA 2018, 3) NCI 2024... (pages 42-55 for all references).

Bleeding Practice Guide

Bleeding: Loss of blood, bruising or petechiae that may be the result of a reduction in the quantity or functional quality of platelets. Acute bleeding in patients with cancer can be due to the underlying malignancy, antineoplastic therapy, or non-malignancy related factors. The most common presentations are disseminated intravascular coagulation, hemoptysis, overt gastrointestinal bleeding, and hematuria.^{1,2}

1. Assess severity of the bleeding¹⁻¹¹

Where are you bleeding from?^{1,2,11} _____

How much blood loss? ^{1,2}	Minor (e.g., 1 tsp)	Some (e.g., 1 tbsp)	Gross (e.g., ¼ cup)
Are you worried about your bleeding	No/Some	Yes, very	
Do you have any new bruises? ¹	No	Few	Generalized
→ Bruising/bleeding more easily than normal? ^{3,10}	No		Yes
Have you had problems with blood clotting (e.g., >10-15min)? ^{1,4,6} Unsure	No		Yes
Do you have a fever > 38° C? ³⁻¹¹ Unsure	No		Yes
Do you have any blood in your: stool or is it black/tarry? ^{1-9,11} urine? ^{1-3,9} vomit or does it look like coffee grounds? ^{1,2} phlegm/sputum when you cough? ^{1,2} nose and mouth? ³ other	No		Yes
If you are having menstrual periods has there been an increase bleeding? ¹	No	Yes, some	Yes, a lot
→ Do you have (signs of hematological adverse effects): weakness, pallor, less urination, abdominal pain, vomiting, irritability, confusion, seizures, blood pressure changes, swelling of face, hands, feet, or entire body? ³⁻⁶	No		Yes
What was your last platelet count? ^{1-3,5} Date: Unsure	≥ 100,000	20,000-99,000	< 20,000
→ What were the results of your last liver function blood test? ³⁻¹¹ AST/ALT: Total bilirubin:	≤ 3x ULN ≤ 1.5x ULN	>3-5x ULN 1.5-3x ULN	> 5x ULN > 3x ULN
→ Do you have (signs of hepatic adverse effects): yellow skin/eyes, dark urine, fever, nausea, right side abdominal pain, fatigue, increase in bleeding/bruising? ^{4,9}	No		Yes
→ Do you have (signs of renal adverse effects): decreased urine output, blood in urine, swelling of hands or legs, face, abdomen, sudden weight gain, abdominal or pelvic pain, nausea, vomiting, high blood pressure, drowsiness? ^{3,5,9}	No		Yes
Are you taking medicines that increase risk of bleeding? (e.g., ibuprofen, acetylsalicylic acid, warfarin, heparin, dalteparin, tinzaparin, apixaban enoxaparin, herbal). ^{1-3,5,8} If warfarin: do you know your last INR blood count? Date: Unsure	No	Yes, acetylsalicylic acid	Yes, other blood thinners
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity¹⁻¹¹	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.	Refer for medical attention immediately and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications/treatment patient is using for bleeding, including prescribed, over the counter, traditional medicines, and/or herbal supplements¹⁻¹¹

Examples of medications for bleeding	Notes (e.g., dose)	Evidence
Platelet transfusion for thrombocytopenia ¹⁻⁵		Effective
Mesna oral or IV to prevent cystitis with bleeding ¹		Likely effective
Tranexamic acid (Cyklokapron®) ^{1,2,5}		Likely effective
Pantoprazole IV (Panto IV®) for GI bleeding ²		Expert opinion
Octreotide IV (Sandostatin®) for GI bleeding ²		Expert opinion
→ Corticosteroids/prednisone ³⁻¹¹		Expert opinion
→ Factor replacement for acquired hemophilia ³		Expert opinion
→ Eculizumab for hemolytic uremic syndrome ³		Expert opinion

Legend: → Immune Checkpoint Inhibitor therapy

4. Discuss self-care strategies^{1,3,5,7,8}

- Have you seen or spoken to a pharmacist, doctor, or nurse practitioner about **medications** you are taking that **may affect bleeding**?^{1,3,8}
- Would **more information** about your symptoms help you to manage them better? If yes, provide appropriate information or suggest resources.^{1,5,7,8}

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Apply direct pressure for 10-15 minutes when the bleeding occurs. ¹
2.	Use ice packs to control bleeding of a wound. ¹
3.	Minimize dressing changes when there is bleeding and use saline fluids to soak the dressing before it is removed. ¹
4.	Use special dressings to control bleeding of a wound (e.g., non-stick gauze, medicated dressing, packing). ¹

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #:
<input type="checkbox"/>	How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen
<input type="checkbox"/>	Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2019; 2) AHS 2022; 3) ASCO 2021; 4) CCO 2018... (pages 42-55 for all references).

Breathlessness/Dyspnea Practice Guide

Breathlessness/Dyspnea: A subjective experience described as breathing discomfort of varying intensities (e.g., hard to breathe, feeling smothered, tightness in chest, unable to catch breath, panting, gasping).¹⁻⁶

1. Assess severity of the breathlessness¹⁻²¹

What number from 0 to 10 best describes your shortness of breath (0= “no shortness of breath”; 10= “Worst possible shortness of breath”? ^{2-4,7,22}	1-3	4-6	7-10
Are you worried about your shortness of breath? ^{2-4,7}	No/Some	Yes, very	
Do you pause while talking every 5-15 seconds? ^{2,7}	No		Yes
Is your breathing noisy, rattily or congested? ^{2,7}	No		Yes
Do you have a new cough or wheezing? ^{2,8,9}	No	Yes (dry)	Yes (wet)
→Do you have (signs of pneumonitis): ^{1,2,5,10-18} cough, wheezing, chest pain, fever, fatigue, bluish coloured nail beds	No		Yes
Do you wake suddenly short of breath? ^{2,4,7-9}	No		Yes
Do you have a fever > 38° C? ^{2,8,19} Unsure	No		Yes
What was your last red blood cell count? ^{2,5,6,8,23} Unsure	≥100 ^{G1}	80-99 ^{G2}	<80 ^{G3}
Do you have new pale skin or bluish coloured nail beds? ^{2,7-9}	No		Yes
Do you have chest pain? ^{2,8}	No		Yes
♥ Does it go away with: Rest or Medication? ¹⁹	Yes		No
What activity level are you short of breath? ^{2,4,7,9,19,20,23}	Moderate ^{G1}	Mild ^{G2}	At rest ^{G≥3}
Do you have any other symptoms? ^{2,4,7,9,20} Fatigue, Anxiety, Depression, Pain	No	Yes, some	Yes, many
♥ Have you gained or lost weight in the last week? ⁹ Unsure	No	≥4lbs in 2 days; 5lbs in 1 week	≥5lbs in 2 days
Have you raised the head of your bed or increased the number of pillows you need to sleep? ^{2,7-9,19,20}	No	Yes	Need to sleep in a chair
Do you have swelling in your hands, ankles, feet, legs or stomach? ^{2,7-9,19-21}	No	Yes, some	Yes, a lot
Do you have a fast heartbeat that does not slow down when you rest? ^{2,8,19,21}	No		Yes
→Do you have (signs of cardiovascular toxicity): ^{10-13,17} irregular heartbeat (e.g., pounding, fast, skipping beats, fluttering), fatigue, chest pain	No		Yes
Does your shortness of breath affect your daily activities? ^{2,4,5,7}	No	Yes, some	Yes, a lot



Mild
(Green)



Moderate
(Yellow)



Severe
(Red)

2. Triage for symptom management based on highest severity^{2,5,7,8,10,11,13-18}

Review self-care
Verify medications

Review self-care
Verify medications
Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.

Refer for medical attention immediately and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy; ♥ Cardiology; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3+

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications for shortness of breath, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-20,24,25}

Examples of medications for shortness of breath*	Notes (e.g., dose)	Evidence
Immediate-release oral or parenteral opioids ^{1-7,9}		Effective
Non-invasive ventilation (CPAP mask) ^{1,3-5}		Likely effective
Oxygen for hypoxic patients ^{2-7,9}		Expert Opinion
Bronchodilators ^{2,3,6}		Expert Opinion
♥ Diuretics (Edocrin®, Lasix®, Lozide®, Zaroxolyn®) ^{2,5,8,9,19,20}		Effective
♥ Nitrates (Nitrostat®) ^{8,9,19,20,25}		Benefits Balanced with Harm
Benzodiazepines if anxiety related - lorazepam (Ativan®), diazepam, (Valium®), alprazolam (Xanax®) ^{2,4-7,9,24}		Expert Opinion
→ Corticosteroids, infliximab, mycophenolate mofetil, or cyclophosphamide for pneumonitis ^{1,3-5,10-18}		Expert Opinion

*Palliative oxygen is not recommended;^{1,4} Other medications may be prescribed for heart failure.

4. Discuss self-care strategies^{1-9,12,13,19,20,24,25}

- **What helps** when you are short of breath?^{2,3,7} Reinforce as appropriate. Specify:
- What is your **goal**?^{2,3,7,8}
- Would **more information about your symptoms** help you to manage them better?^{1,2,7,8} If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Try a fan, open window , or humidifier to increase air flow to your face. ^{1-7,9}
2.	Try turning down the temperature in your house. ²
3.	Try to rest in upright positions that can help you breathe. ^{2-4,7,9}
4.	Try different relaxation and breathing exercises (e.g., pursed lip breathing). ^{2-5,7}
5.	Try to conserve your energy (e.g., balance activity with rest) or use assistive devices (e.g., wheelchair) to help with activities that cause your shortness of breath. ^{2-4,6,7,9}
6.	Try physical activity (e.g., walking 15-30 min) twice a week when breathing stable. ^{1-4,8,9,19,24,25}
7.	Take nutrition supplements if you have difficulty eating. ¹
8.	♥ Watch weight gain from retaining fluid by weighing yourself daily at same time. ^{8,9,20}
9.	♥ Try limiting your salt intake to under 1/2 tsp (< 2000mg) per day. ^{8,9,20}
10.	♥ If you drink >1-2 alcohol drinks/day, try to reduce to 1 drink/day . ^{8,9,19,20}
11.	If you smoke, try to stop. ^{2,8,9,12,13,19,20,25}
12.	Try a program such as cognitive behavioural therapy , relaxation therapy, guided imagery, meditation, music therapy, acupressure, acupuncture, or supportive counselling . ^{1-5,7}

5. Document plan agreed upon with patient (check all that apply)




<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #:
<input type="checkbox"/>	How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2019; 2) BCCA 2018; 3) ASCO 2021; 4) ESMO 2020... (pages 42-55 for all references).

Constipation Practice Guide

Constipation: A decrease in the frequency or passage of stool usually characterized by stools that are hard.¹⁻⁶

1. Assess severity of the constipation¹⁻¹³

Tell me what number from 0 to 10 best describes your constipation (0= “no constipation”; 10= “worst possible constipation”) ^{2,3,6,14}	1 – 3	4 - 6	7 - 10
Are you worried about your constipation? ^{2,3}	No/Some	Yes, very	
How many days has it been since you had a bowel movement (compared to normal)? ¹⁻⁵	≤ 2 days	≥3 days	≥3 days on meds
How would you describe your stools (colour, hardness, odour, amount, blood, straining)? ¹⁻⁷			Blood in stool
Do you have hemorrhoids? ³	No	Yes	
Do you have any pain in your abdomen? ¹⁻⁶	No/Mild 0-3	Moderate 4-6	Severe 7-10
Do you have loss of bladder or bowel control, numbness in your fingers, toes or buttocks, feel unsteady on your feet, or difficulty walking? ^{2-4,6}	No		Yes
Does your abdomen feel bloated? ^{2-4,6} Unsure	No	Yes, some	Yes, a lot
Do you have lots of gas? ^{2-4,6}	No	Yes	
Does it feel like your rectum is not emptying after a bowel movement, or diarrhea (possible overflow around blocked stool)? ^{2-4,6}	No	Yes	
Have you recently had abdominal surgery? ^{2,3}	No		Yes
Do you have a fever > 38° C? ³ Unsure	No		Yes
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine? ²⁻⁶	No	Yes, some	Yes, a lot
Do you have any other symptoms? Appetite loss, ¹⁻³ Nausea/vomiting ^{2,6}	No	Yes, some	Yes, many
→ Do you have (signs of hypothyroidism): ^{1-3,5,7-13} weight gain, fatigue, depression, feeling cold, deeper voice, hair loss, dry skin	No		Yes
→ Do you have (signs of autonomic neuropathy): ^{3-5,7,8} nausea, urinary problems, sweating changes	No		Yes
Are you taking medications that cause constipation? ¹⁻⁶	No	Yes	
Does your constipation affect your daily activities? ^{2,3,15}	No ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity³	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours	Refer for medical attention immediately and alert if on immunotherapy

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for constipation, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-6,16}

Examples of medications for constipation*	Notes (e.g., dose)	Evidence
Oral sennosides (Senokot®) ^{1-6,16}		Likely effective
Polyethylene glycol (PEG; RestoraLAX®, Lax-a-day®) ^{1-6,16}		Likely effective
Bisacodyl (Dulcolax®) and/or lactulose ^{1-6,16}		Expert Opinion
Suppositories** (Dulcolax®/bisacodyl, glycerin) or Enema ^{2-6,16}		Expert Opinion
Picosulfate sodium-magnesium oxide-citric acid ^{2,4,6,16}		Expert Opinion
Methylnaltrexone injection for opioid as cause ¹⁻⁶		Effective
Naloxegol for opioid as cause ^{1,5}		Expert Opinion
Sorbitol ^{2,3,6}		Expert Opinion

*Some opioids cause less constipation (e.g., fentanyl);^{3,6} Docusate sodium (Colace®) was removed due to lack of evidence for its efficacy; **Verify blood count before using suppositories. Naloxegol and methylnaltrexone are contraindicated in bowel obstruction.^{3,5}

4. Discuss self-care strategies^{1-6,16}

- **What helps** when you are constipated?²⁻⁴ Reinforce as appropriate. Specify:
- What is your **goal**?^{1,2}
- What is your normal **bowel routine**?²⁻⁵ Reinforce as appropriate. Specify:
- Have you seen or spoken to a doctor, nurse practitioner, pharmacist or dietitian about the constipation?¹⁻³
- Would **more information** about your symptoms help you to manage them better?³ If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Try to use the toilet 30-60 minutes after meals . ^{3,4,6}
2.	Drink fluids, 6-8 glasses per day, especially warm or hot fluids. Limit your intake of caffeine or alcohol. ¹⁻⁶
3.	Slowly increase the fiber in your diet to 25g/day. (Only appropriate if adequate fluid intake (1500ml/24 hrs) and physical activity) ¹⁻⁴
4.	Eat fruit that are laxatives . ^{3,4} (pitted dates, prunes, prune nectar, figs)
5.	Try staying as active as possible. (e.g., walking 15-20 minutes 1-2x/day; 30-60 minutes 3-5x/week) ^{1-6,16}
6.	Have easy access to a private toilet or bedside commode. If possible, it is best to avoid a bedpan. ²⁻⁶
7.	If you have a low neutrophil count, avoid rectal exams, suppositories, enemas . ^{2-4,6}
8.	Consider trying acupuncture . ¹⁶

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2020; 2) CCO 2022; 3) BCCA 2018; 4) NCI 2023... (pages 42-55 for all references).

Depression Practice Guide

Depression: a range of feelings and emotions from normal sadness to chronic, depressed emotional affect, feelings of despair, irritable mood, hopelessness.¹⁻⁵

1. Assess severity of the depression^{1-4,6-12}

Are you currently receiving professional care for depression? Yes No Specify: _____

What number from 0 to 10 best describes how depressed you are feeling where 0 = "no depression" and 10 = "worst possible depression" ^{2,6,7,13}	1-3	4-6	7-10
Have you felt depressed or had a loss of pleasure for 2 weeks or longer? ^{1-4,6,7}	No	Yes, off/on	Yes, constant
Do you feel down or depressed most of the day? ^{3,4,6}	No	Yes, off/on	Yes, every day
Have you experienced any of the following for ≥ 2 weeks: feeling worthless, sleeping too little or too much, feeling guilty, weight gain or weight loss, unable to think or concentrate? ^{1-4,7}	No	Yes, some	Yes, a lot
Have you had recurring thoughts of dying, trying to kill yourself or harming yourself or others? ^{1-4,6,7}	No		Yes
Does feeling depressed affect your daily activities? ^{1-4,6,14}	No ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
Have you felt tired/fatigued? (ESAS-r fatigue rating) ^{1-4,7}	No, 1-3	Yes, 4-6	Yes, 7-10
Have you felt agitated (may include twitching or pacing), confused, or slowing down of your thoughts? ¹⁻⁴	No	Yes, some	Yes, often
Do any of these apply to you? ^{1-4,6,7} Lack of social support, History of depression, Substance use/withdrawal, Chronic/advanced disease, Younger age, Financial problems, Female, Dependent children, Past trauma/abuse, Cognitive impairment, Difficulty communicating, Other health issues unrelated to cancer?	None	Yes, some	Yes, a lot
Do have any concerns that are making you feel more depressed: ^{2,6} Life events, Waiting for test results, New information about cancer/treatment, Recently completed treatment, Spiritual/religious concerns?	No	Yes, some	
Do you have any other symptoms? ^{1,2,4,6,7} Fatigue, Pain, Sleep changes, Anxiety	None	Some	Yes, many
→Do you have (signs of hypothyroidism): ^{4,7-12} Weight gain, Fatigue, Constipation, Feeling cold, Deeper voice, Hair loss, Dry skin	No		Yes



Mild
(Green)



Moderate
(Yellow)



Severe
(Red)

2. Triage patient for symptom management based on highest severity^{1-3,6,7}

Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days	If potential for harm, refer for further evaluation immediately If no, refer for non-urgent medical attention and alert if on immunotherapy. Review self-care Verify medications
--	--	---

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for depression, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-4,7,15}

Examples of medications for depression*	Notes (e.g., dose)	Evidence
SSRIs - fluoxetine (Prozac®), sertraline (Zoloft®), paroxetine (Paxil®), citalopram (Celexa®), fluvoxamine (Luvox®), escitalopram (Lexapro®) ^{1-4,7,15}		Effective
SNRIs - venlafaxine (Effexor XR®), duloxetine (Cymbalta®) ^{1,3,4}		Effective
Tricyclic antidepressants - amitriptyline (Elavil®), imipramine (Tofranil®), desipramine (Norpramin®), nortriptyline (Pamelor®), doxepin (Sinequan®) ^{1,15}		Effective
Psychostimulants - methylphenidate (Ritalin®) ^{1-4,7}		Effective
Other antidepressants - bupropion (Wellbutrin®), trazodone (Mylan®), mirtazapine (Remeron®), Mianserina (Tolvon®) ^{1,4,7,15}		Effective

*Antidepressant medication is effective for major depression but use depends on side effect profiles of medications and the potential for interaction with other medications.¹⁻⁴ No guidance for the use of cannabinoids due to lack of studies and potential negative effects on mood.¹⁶

4. Discuss self-care strategies^{1-7,17-24}

- **What helps** when you feel depressed?⁷ Reinforce as appropriate. Specify:
- What is your **goal**?
- Do you feel you have **enough help at home** and with getting to appointments/ treatments (transportation, financial assistance, medications)?^{2,3,6}
- Are you agreeable to a referral to a mental health professional for further help?^{1-4,6,7}
- Would more **information about your symptoms, cancer or your treatment** help to ease your worries? If yes, provide relevant information or suggest resources.^{1,2,6,7}

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Physical activity including yoga. ^{1,2,6,7,17}
2.	Participate in support groups and/or rely on family/friends for support. ^{1-4,6,7}
6.	Activities such as relaxation therapy, meditation/breathing techniques, listening to music, progressive muscle relaxation, guided imagery, massage therapy with or without aromatherapy, acupuncture/acupressure, or other creative therapies (e.g., art). ^{1-4,7,19,24}
4.	Cognitive-behavioural therapy , mindfulness-based stress reduction or received personal or couple counseling that provides more in-depth guidance on managing depression. ^{1-7,20-22,24}
5.	Spiritual counseling, meaning-focused meditation, prayer, worship, or other spiritual activities if your concerns are spiritual or religious in nature. ^{2-4,23}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2019; 2) NCCN 2023; 3) ESMO 2023; 4) NCI 2024... (pages 42-55 for all references).

Diarrhea Practice Guide

Diarrhea: An abnormal increase in stool liquidity and frequency over baseline which may be accompanied by abdominal cramping.¹⁻⁶

1. Assess severity of the diarrhea¹⁻¹⁸

Have you been tested for c-difficile?^{1-5,7-17} Yes No Unsure Results_____

Tell me what number from 0 to 10 best describes your diarrhea (0 = “no diarrhea”; 10 = “worst possible diarrhea”) ¹⁹	1-3	4-6	7-10
Are you worried about your diarrhea? ^{2,3}	No/Some	Yes, very	
How many extra bowel movements are you having per day above normal for you? ^{1-3,5,7,15,20}	< 4 ^{G1}	4-6 ^{G2}	≥ 7 ^{≥G3}
Do you wake in the night to have bowel movements? ^{2,7}	No	Yes	
Ostomy: increase in output above normal? ^{2,7,15,20}	Small	Moderate	Large
→ Bowel movements/day above normal? ^{6,8-14,16,17,20}		< 4 ^{G1}	≥ 4 ^{≥G2}
→ Ostomy: increase in output above normal? ^{10,13,16,17}		Small	≥ Moderate
→ Diarrhea overnight or new incontinence? ^{8,9,11,14,16}	No		Yes
How would you describe your stools (colour, hardness, odour, amount, oily, blood, mucus, straining)? ^{1-3,5,7}			Blood in stool
→ Blood or mucus in stool? ^{6,8-14,16}	No		Yes
Do you have a fever > 38° C? ^{1-3,5,7-12,14-17} Unsure	No		Yes
Do you have pain in your abdomen or rectum with or without cramping or bloating? ^{1-3,5,7,15,18}	No	Yes, some	Yes, a lot
→ Pain or cramping in your abdomen? ^{6,8-12,14,16,17}	No		Yes
How much fluid are you drinking per day? ^{2,3,5}	6-8 glasses	1-5 glasses	Sips
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine? ^{1-3,5,7,9,12,15}	No	Yes, some	Yes, a lot
Does your diarrhea affect your daily activities? ^{2,3,7,8,10,11,14-16}	No	Yes, some	Yes, a lot
Do you have any other symptoms? ^{1-3,5,7,15,18} Appetite Loss, Fatigue, Nausea/vomiting, Mouth sores	No	Some	Yes, many
→ New severe fatigue, headache, rash, cough, nausea, vomiting, breathlessness, weight loss, vision changes, eye pain, muscle weakness, joint pains, or mood changes? ^{11-13,17}	No		Yes
Are you on medicines that increase risk of diarrhea (e.g., laxatives)? ^{2,3,5,10,15,17}	No	Yes	
Any recent travel or contact with others with diarrhea? ^{2,4,5,7,15}	No	Yes	
Do you have any rectal or ostomy skin breakdown? ^{2,3,7}	No	Yes	



1 Mild
(Green)



2 Moderate
(Yellow)



3 Severe
(Red)

2. Triage patient for symptom management based on highest severity^{1-3,5,7-17}

Review self-care
Verify medications

Review self-care
Verify medications
Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.

Refer for medical attention immediately and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for diarrhea, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-17,21}

Examples of medications for diarrhea*	Notes (e.g., dose)	Evidence
First line treatment: Loperamide (Imodium®) ^{1-5,7,15}		Likely effective
Octreotide (Sandostatin®) for severe chemo-induced ^{1-5,7,15}		Likely effective
Psyllium fibre for radiation-induced (Metamucil®) ^{1,4}		Likely effective
Probiotics for radiation-induced / for chemo-induced ^{1,4,5,15,21}		Effective / Likely effective
Atropine-diphenoxylate (Lomotil®) ^{5,11,15}		Expert opinion
Corticosteroid cream if rectal skin irritated ³		Expert opinion
→ Loperamide (Imodium®) ^{5,6,8-12,14,16,17}		Likely effective
→ Corticosteroids/prednisone, ^{2,5,6,8-17} Infliximab, ^{5,6,8-14,16,17} Vedolizumab, ^{5,8,10-13} or Budesonide ^{5,11,12} for severe diarrhea		Likely effective

→ Immune Checkpoint Inhibitor. *For radiation induced diarrhea, sucralfate^{1,18} and oral antibiotics are generally not recommended.²

4. Discuss self-care strategies^{1-5,7,9-12,15-18}

- **What helps** when you have diarrhea?^{2,3} Reinforce as appropriate. Specify:
- What is your **goal**?³
- Have you seen or spoken to a doctor, nurse practitioner, or pharmacist about **medications** you may be taking that **can cause or worsen your diarrhea**?^{2,3,5,7}
- Have you seen or spoken to a **dietitian**?^{5,7,16}
- Would **more information** about your symptoms help you to manage them better? If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1. **Drink fluids, 6-8 glasses per day.**^{1-5,7,9-12,15,16}
2. Try to **replace electrolytes** (e.g., potassium and salt).^{1-5,7,9,15,17} Suggest: bananas, potatoes, sports drinks, oral rehydration (1/2 tsp salt, 6 tsp sugar, 4C water)
3. Try eating **foods** such as: applesauce, oatmeal, bananas, barley, cooked carrots, rice, white toast, plain pasta, well cooked eggs, skinned poultry, mashed potatoes, fruit without skin (high in soluble fiber, low in insoluble fiber)^{1-3,9-12,18}
4. **Avoid** eating foods such as: greasy/fried and spicy foods, alcohol, <2-3 servings caffeine, excess fruit juice or sweetened fruit drinks, raw vegetables, whole grain bread, nuts, popcorn, skins, seeds, legumes, very hot or cold foods/fluids, sorbitol in sugar-free candy, lactose-containing products (milk, yoghurt, cheese).^{1-5,7,9-11,15,16}
5. **Eat small frequent meals and snacks.**^{1-3,7,15}
6. Try to keep **skin** around your **rectum** or **ostomy clean** to avoid skin breakdown (mild soap, sitz baths).^{2,3,5} Cleanse perianal skin with warm water (+/- mild soap) after each stool. Moisture barrier cream if not on radiation therapy. Hydrocolloid dressings may be used as a physical barrier to protect skin.
7. Keep track of the **number of stools** you are having and be aware of other problems such as fever and dizziness.^{2,5,7}
8. Use strategies to help **cope** such as planning all outings, carrying a change of clothes, knowing the location of restrooms, using absorbent undergarments.³

5. Document plan agreed upon with patient (check all that apply)




- ☐ No change, continue with self-care strategies and if appropriate, medication use
- ☐ Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
- ☐ Patient agrees to use medication to be consistent with prescribed regimen. Specify:
- ☐ Referral (service & date):
- ☐ Patient agrees to seek medical attention; specify time frame:
- ☐ Advise to notify in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2024; 2) BCCA 2018; 3) CCO 2022; 4) AGIHO/AGIHO 2018... (pages 42-55 for all references).

Fatigue/Tiredness Practice Guide

Fatigue: a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion prompted by cancer or cancer treatment that is disproportionate to the level of recent exertion, is not relieved by rest or sleep, and interferes with usual daily activities.¹⁻¹¹

1. Assess severity of the fatigue/tiredness^{1-5,12-21}

What number from 0 to 10 best describes how tired you are feeling where 0= "no tiredness" and 10= "worst possible tiredness" ^{1-3,5,12,22}	1-3	4-6	7-10
Are you worried about your fatigue? ^{1,12}	No/Some	Yes, very	
Do you have shortness of breath at rest, sudden onset of severe fatigue, need to sit or rest too much, rapid heart rate, rapid blood loss, or pain in your chest? ^{1,4,12}	No		Yes
How would you describe the pattern of fatigue? ^{1-5,12}	On and off	Constant < 2wks	Constant ≥ 2wks
Does your fatigue affect your daily activities? ^{1-5,12,23}	No ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
Do you have a fever > 38° C? ^{1,2,12} Unsure	No		Yes
Do you know the results of your last hemoglobin (Hgb) blood test? ^{1-4,12} Date: Unsure	<LLN-10.0g/dL	<10.0-8.0 g/dL	<8.0 g/dL
Have you lost or gained weight in the last 4 weeks without trying? ^{1,2,4,12} Amount: Unsure	0-2.9%	3-9.9%	≥10%
Do you have any other symptoms? ^{1-4,12} Anxiety, Pain, Appetite loss, Depression, Sleep changes, Poor food or fluid intake	No	Yes, some	Yes, many
→ Do you have (signs of endocrine toxicity): ^{2,4,13-21} appetite loss, abdominal pain, headache, nausea/ vomiting, vision changes, weight gain or loss, constipation, dizziness, mood or behaviour changes, decreased libido, confusion, dry skin, hair loss, feeling cold, puffy face	No		Yes
→ Do you have (signs of pneumonitis): ¹³⁻²¹ cough, wheezing, breathlessness, chest pain, fever, bluish coloured nail beds	No		Yes
→ Do you have (signs of cardiovascular toxicity): ^{13-18,20} irregular heartbeat (e.g., pounding, fast, skipping beats, fluttering), chest pain, breathlessness	No		Yes
→ Do you have (signs of hepatic toxicity): ¹³⁻¹⁹ yellow skin/eyes, dark urine, fever, nausea, right side abdominal pain, appetite loss, increase in bleeding/bruising	No		Yes
→ Do you have (signs of myositis): ^{13-16,19,20} limb weakness, difficulty standing up, lifting arms, moving around, muscle pain	No		Yes
→ Do you have (signs of hemolytic uremic syndrome): ¹⁴ blood in urine/stool or nose/mouth, less urine, new/unexplained bruises, abdominal pain, pale skin, vomiting, confusion/seizures, swelling	No		Yes
Do you have conditions that cause fatigue ^{1-5,12,13} (cardiac, lung, liver, kidney, endocrine, neurologic) or drink excess alcohol?	No	Yes	
Are you taking medicines that increase fatigue? ^{1-4,12,13,15} (e.g., for pain, depression, nausea/vomiting, allergies)	No	Yes	
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{1-3,5,12-16,18-20}	Review self-care	Review self-care. Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days.	If stable, review self-care strategies. If new, refer for non-urgent medical attention and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for fatigue, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-5,24}

Examples of medications for fatigue*	Notes (e.g., dose)	Evidence
Ginseng (American or Asian) ^{2,4,5,24}		Likely effective
Methylphenidate (Ritalin®) ^{2,4,5}		Expert opinion
Corticosteroids: dexamethasone (Decadron®), prednisone ¹⁻⁵		Benefits balanced with harms

*Use of pharmacological agents for cancer-related fatigue is experimental. Methylphenidate may be considered with caution after ruling out other causes of fatigue.^{2,4,5} Corticosteroids offer short-lived benefit; long-term use is associated with significant toxicities.^{2,3,5}

4. Discuss self-care strategies^{1-13,15,25-32}

- **What helps** when you feel fatigued/tired?^{1,12} Reinforce as appropriate. Specify:
- What is your **goal**?^{1,2}
- Do you understand the difference between **cancer-related fatigue** and normal fatigue?^{1-5,12}
Provide education about how it differs from normal fatigue, that it is expected with cancer treatment.
- If you need a **tailored plan**, have you seen or spoken to or would you like to speak with a health care professional to help guide you in managing your fatigue?^{1,2,5,25} (e.g., rehabilitation specialist)
- Would **more information** about your symptoms help you to manage them better?^{1-3,12,15} If yes, provide relevant information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Track your fatigue patterns in a diary to help with planning activities. ^{2-5,12,13}
2.	Save energy for things that are important to you. ^{1-5,12,13}
3.	Physical activity including yoga. ^{1-6,8,10,12,13,25-29} Set goals based on current health status. Suggest starting with light activity and gradually increase to 20 min of endurance activities (e.g., walking, jogging, swimming) and resistance activities (e.g., light weights). Use caution for patients with some conditions (e.g., bone metastases).
4.	Eat/drink enough to meet your body's energy needs. ^{1,2,4,5,12,13,15} Staying hydrated and a balanced diet (e.g., vitamins, minerals) can help fatigue.
5.	Try activities like reading, games, music, garden, experiences in nature. ^{4,12,30}
6.	Participate in support groups or rely on family/friends . ^{1,2,12}
7.	Activities such as relaxation therapy, deep breathing, guided imagery, massage with or without aromatherapy, acupressure or acupuncture. ^{1-5,11,13,32}
8.	Try the following to improve the quality of your sleep . ^{1,2,5,12,15} Ensure light exposure soon after waking; avoid long/late afternoon naps; limit time in bed to actual sleep; go to bed when sleepy; use bed for sleep and sexual activity only; have routine schedule for bedtime and getting up; avoid caffeine and stimulating activity in the evening; relax for 1 hour before going to bed; establish a bedtime routine.
9.	Try cognitive behavioural therapy or mindfulness-based stress reduction to manage your fatigue. ^{1-5,7,9,12,13,31}
10.	Try home-based bright white light therapy . ^{1,2}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur

References: 1) BCCA 2018; 2) NCCN 2023; 3) ESMO 2020; 4) NCI 2024... (pages 42-55 for all references).

Fever with Neutropenia Practice Guide

Fever with neutropenia: An absolute neutrophil count (ANC) < 500 cells/mcl (equivalent to < 0.5 x 10⁹/L) OR an ANC < 1000 cells/mcl (< 1.0 x 10⁹/L) and a predicted decline to 500 cells/mcl or less over the next 48 hours AND a single oral temperature of ≥38.3° C (101 °F) or a temperature of ≥38.0° C (100.4 °F) for ≥1 hour.¹⁻¹¹

1. Assess severity of the fever and neutropenia¹⁻¹⁹

If receiving chemotherapy or immunotherapy, what was the date of your last treatment?^{1,2,4} _____

Have you been recently taking antibiotics?^{1,9} ☐ No ☐ Yes <48 hours ☐ Yes ≥48 hours

What is your temperature in the last 24 hours?^{1-5,7-10} Current: _____ Previous temperatures: _____

Have you taken any acetaminophen (Tylenol®) or ibuprofen (Advil®),² if yes, how much and when? _____

Do you have an oral temperature of ≥38.0°C (100.4 °F)? ^{1-5,7-10} Adjust if measured by other methods (e.g., ear, forehead)	No	Yes for <1 hour	Yes for ≥1 hour
Last known neutrophil count ^{1-11,20} _____ Date: _____ Unsure	>1000 cells/mcl		Fever plus ≤500 cells/mcl or 1000 cells/mcl with expected drop ^{G3}
Do you have any other symptoms? ^{2,8,9} Bleeding, Breathlessness, Constipation, Diarrhea, Fatigue, Mouth sores, Mouth dryness, Nausea, Vomiting, Skin reaction to radiation, Urinary symptoms (burning, urgency, frequency)	None	Some	Yes, many
→ Do you have (signs of GI toxicity): ¹²⁻¹⁷ abdominal pain, diarrhea, blood or mucus in stool, fever, nausea, vomiting, weight loss	No		Yes
→ Do you have (signs of pneumonitis): ^{13,15-19} cough, wheezing, chest pain, fever, fatigue, bluish coloured nail beds	No		Yes
→ Do you have (signs of hepatic toxicity): ^{14,16,17,19} yellow skin/eyes, dark urine, fever, nausea, right side abdominal pain, fatigue, appetite loss, increase in bleeding/bruising	No		Yes
→ Do you have (signs of aseptic meningitis): ^{14,15,18} headache, eyes sensitive to light, neck stiffness, low-grade fever, nausea, vomiting	No		Yes



Mild
(Green)



Moderate
(Yellow)



Severe
(Red)

2. Triage patient for symptom management based on highest severity^{1-7,9-11,21}

Review self-care
Advise to notify if symptom worsens or new symptoms occur in 12-24 hours

Review self-care.
Advise to notify if symptom worsens or new symptoms occur in 12-24 hours
If ≥38.0° for <1 hour, advise to notify if still ≥38.0 after 1 hour.

Refer for medical attention immediately and alert if on immunotherapy.
Febrile neutropenia **treatment with antibiotics** should be initiated **within 1 hour** of presentation. Collect laboratory data to locate potential site or cause of infection prior to starting antibiotics.

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G3=Grade 3

Note: For consistency across symptom practice guides a temperature of 38.0° C is used.

3. Review medications patient is using for preventing febrile neutropenia or decreasing fever, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-11,21}

Examples of medications*	Notes (e.g., dose)	Evidence
G(M)-CSF for at-risk patients ^{1-6,8,10,21}		Effective
Antibiotics to prevent infection for high-risk patients ^{1-3,5-9,11}		Effective
Antifungals to prevent infection for at-risk patients ^{1-3,5,8,9,11}		Effective
Antivirals for select at-risk patients ^{1,3,5,8,9}		Effective

*Use of over the counter medications to lower fever in cancer patients (e.g., acetaminophen) is controversial and should not be used to mask a fever of unknown origin.²

4. Discuss self-care strategies^{1-3,5,8,9}

- Have you seen or spoken to a doctor or nurse practitioner about getting vaccines (e.g., flu shot, COVID-19 with inactivated vaccine)?^{1-3,5} All visitors and household members should **be up-to-date with vaccines** (e.g., influenza, COVID-19, measles, mumps, rubella, and varicella).
- Would **more information** about your symptoms help you to manage them better?² If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	If temperature not $\geq 38.0^{\circ}\text{C}$, perform regular checks using a thermometer in your mouth and track your temperature in a diary. ² Avoid rectal temperature measurements. ¹
2.	Wash your hands and/or use alcohol-based sanitizer prior to handling foods, before and after eating, after using the washroom, coughing or sneezing in hands. ^{2,3,8}
3.	Consider drinking fluids , 6-8 glasses per day to stay hydrated. ²
4.	Avoid enemas, suppositories, tampons, and invasive procedures (e.g., rectal exams, colonoscopy). Constipation and straining during bowel movements can cause trauma to rectal tissue. ²
5.	Avoid crowds and people who might be sick. ^{2,5,9}
6.	Eat well cooked foods and/or well cleaned uncooked raw fruits and vegetables. ²
7.	Brush your teeth with a soft toothbrush at least twice a day. ² Floss daily if it is your normal routine and tolerated.
8.	Take daily showers or baths if able (otherwise sponge bath daily). ²
9.	Check your mouth and your skin for potential sites of infection (e.g., access devices, rectal area) and keep these areas clean and dry. ²

5. Document plan agreed upon with patient (check all that apply)




<input type="checkbox"/>	No change, continue with self-care strategies
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) NCCN 2023; 2) BCCA 2018; 3) ONS 2019; 4) NCCN 2022... (pages 42-55 for all references).

Mouth Dryness/Xerostomia Practice Guide

Xerostomia: abnormal dryness in the oral cavity due to a reduction and/or thickening of saliva produced; the subjective experience of dry mouth secondary to salivary gland hypofunction; may be acute or chronic.¹⁻⁵

1. Assess severity of the dry mouth^{1-4,6-11}

What number from 0 to 10 best describes your dry mouth where 0= "no dry mouth" and 10= "worst possible dry mouth"? ^{1,2,12}	1-3	4-6	7-10
Are you worried about your dry mouth? ^{1,2}	No/Some	Yes, very	
Is your saliva thick or less saliva than normal? ^{1,2,4,13}	No/A bit ^{G1}	Somewhat ^{G2}	Yes, a lot ^{G≥3}
➔ Do you have (signs of sicca syndrome): ⁷⁻¹¹ abrupt onset of dry mouth, thick saliva, saliva pooling on the floor of your mouth, dry eyes?	No		Yes
Is your mouth painful? ^{1,2,4,7}	No/Mild 0-3	Moderate 4-6	Severe 7-10
Do you see any redness, white patches, cracks, or blisters in your mouth? ^{1,2,4,7}	No		Yes
Do you have a fever >38°C? ^{1,2} Unsure	No		Yes
Is your mouth bleeding? ²	No	Yes, with eating or oral hygiene	Yes, spontaneously
Are you able to eat? ^{1,2,6}	Yes ^{G1}	Yes, soft food ^{G2}	No ^{G≥3}
➔ Are you able to eat? ⁷	Yes, all foods	Yes, most foods	No or soft foods only
How much fluid are you drinking per day? ^{1,2,7}	6-8 glasses	1-5 glasses	Sips/Unable to swallow
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine? ^{1-3,7}	No	Yes, some	Yes, a lot
➔ Do you have (signs of diabetic ketoacidosis): ⁷ increased thirst, frequent urination, fruity breath odour, stomach pain, weakness, fast heart rate, vomiting, confusion, dry skin?	No		Yes
➔ Do you have (signs of uveitis): ^{7,9,10} dry eyes, eye pain, eye redness, blurred/ double vision, new floaters, eyes sensitive to light, eyelid swelling, change in colour vision?	No		Yes
Does your dry mouth affect your ability to speak? ^{1,2,4,6}	No	Yes	
Are you having taste changes? ^{1,2,4,6}	No	Yes	
Have you lost weight in the last 1-2 weeks without trying? ^{1,2} Amount: Unsure	0-2.9%	3-9.9%	≥10%
Do you have trouble breathing? ¹	No		Yes
Are you taking any medications that can cause dry mouth? ^{1-4,11} (e.g., anticholinergics, antiemetics)	No	Yes	
Does your dry mouth affect your daily activities? ^{1,2,6}	No	Yes, some	Yes, a lot
Are you feeling worried? ^{1,2} If yes, see Anxiety guide.	No	Yes, some	Yes, often
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{1,7}	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.	Refer for medical attention immediately and alert if on immunotherapy.

Legend: ➔ Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for dry mouth, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-4,6,7,9,11}

Examples of medications for dry mouth	Notes (e.g., dose)	Evidence
Saliva substitutes (Biotene®, Moi-Stir®) ^{1-4,6,7}		Expert opinion
Pilocarpine (Salagen®) saliva stimulant ^{2-4,7,9,11}		Expert opinion
Anetholtrithion (Sialor®) salivary stimulant ¹		Expert opinion
Oral medications for pain ^{1,2,7}		Expert opinion

*Older adults may be more sensitive to the side effects of pilocarpine.³

4. Discuss self-care strategies^{1-7,14}

- **What helps** when you have a dry mouth?^{1,2} Reinforce as appropriate. Specify:
- What is your **goal** for managing your dry mouth?^{1,2}
- Would **more information** about your symptoms help you to manage them better?³ If yes, provide relevant information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Drink 6-8 glasses of clear fluids per day. ^{1,2,4,7,14}
2.	Avoid foods and drinks that are highly acidic, caffeinated, sugary, salty, spicy , or very hot (temperature). ^{1-4,7}
3.	If you have difficulty swallowing, eat a soft diet . ^{1,2,4,7} Suggest: oatmeal, bananas, applesauce, cooked carrots, rice, pasta, eggs, mashed potatoes, cooked or canned fruit without skin, soft cheese, creamed soups, puddings/milkshakes. Add extra moisture to foods using sauce, dressing, gravy, broth, or butter/margarine.
4.	Keep your mouth cool and moist with fresh, cold foods. ^{1,2,7,14} Suggest sugar-free popsicles, frozen grapes, cold water, or ice cubes.
5.	Brush your teeth at least twice a day using a soft toothbrush and fluoride toothpaste. Floss daily if it is your normal routine and tolerated. ^{1,2,4,14}
6.	If you wear dentures, remove before brushing your teeth, cleaning them with toothpaste, and leave them off for long periods of time (e.g. overnight). ^{1,2,4,14}
7.	Use a bland rinse 4 times/day . ^{1-4,14} For 1 cup warm water, add table salt (2.5 ml (1/2 tsp.)), baking soda (1/2 tsp.) or both (1/4 tsp. each). Swish in your mouth for at least 30 seconds and spit out. Prepare daily.
8.	Chew on sugar-free gum or sucking on hard candy to help create saliva. ^{1-4,6,7,14} Xylitol gum or lozenges can also be used, up to 6 grams a day.
9.	Avoid tobacco and alcohol , including alcohol-based mouthwashes. ^{1-4,14}
10.	Use moisturizers or lip balm to protect your lips. ^{1-4,14}
11.	Use saliva substitutes (gel, mouthwash, spray). ^{1-4,6,7,14} If already using, how long have you been using them, and do they help? Discourage use of glycerin-based swab sticks.
12.	Use a cool humidifier or bedside vaporizer to help reduce the dryness. ^{1,3}
13.	Consider trying acupuncture therapy. ^{1,4,5}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen.
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur




References: 1) BCCA 2019; 2) CCO 2021; 3) AHS 2019; 4) NCI 2024... (pages 42-55 for all references).

Mouth Sores/Stomatitis Practice Guide

Mouth sores/Stomatitis/Oral Mucositis: An inflammatory and potentially ulcerative process of the mucous membranes, that can result in severe discomfort that can impair patients' ability to eat, swallow, and talk, and is accompanied by a risk for life-threatening bacteremia and sepsis.¹⁻⁹

1. Assess severity of the mouth sores^{1-5,10-17}

What number from 0 to 10 best describes your mouth sores where 0= "no mouth sores" and 10= "worst possible mouth sores"? ^{2,10,11,18}	1-3	4-6	7-10
Are you worried about your mouth sores? ^{2,10,11}	No/Some	Yes, very	
How many sores/ulcers/blisters do you have? ^{1-3,5,10,11}	0-4	>4	Coalescing/ Merging/Joining
Do the sores in your mouth bleed? ^{1,2,10,11}	No	Yes, with eating or oral hygiene	Yes, spontaneously
Are the sores painful? ^{1-5,10,11,19}	No/Mild ^{G1} 0-3	Moderate ^{G2} 4-6	Severe ^{G≥3} 7-10
Do you see any redness or white patchy areas in your mouth? ^{2,3,10,11}	No	Yes, some	Yes, a lot
→Do you have (signs of skin toxicity): ¹²⁻¹⁷ sores/ ulcers/blisters in your mouth, redness or white patchy areas in your mouth, irritated gums and/or throat?	No		Yes
Do you have a fever > 38° C? ^{2,10,11} Unsure	No		Yes
Do you have a dry mouth? ^{2,3,10,11}	No	Yes	
Are you able to eat? ^{1-4,10,11}	Yes	Yes, soft food	No
→ Are you able to eat? ¹²	Yes, all foods	Yes, most foods	No or soft foods only
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine, dark urine? ^{2,3,10,11}	No	Yes, some	Yes, a lot
How much fluid are you drinking per day? ^{2,3,10,11}	6-8 glasses	1-5 glasses	Sips/Unable to swallow
Have you lost weight in the last 1-2 weeks without trying? ^{1,2,10,11} Amount: Unsure	0-2.9%	3-9.9%	≥10%
Are you having trouble breathing? ²	No	Yes, some	Yes, a lot
Does your mouth sore(s) affect your daily activities? ^{1,2,10,11}	No	Yes, some	Yes, a lot

	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{1-4,8,10-13}	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.	Refer for medical attention immediately and alert if on immunotherapy

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for mouth sores, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-5,10,11}

Examples of medications for mouth sores	Notes (e.g., dose)	Evidence
Benzydamine hydrogen chloride (Tantum [®] mouth rinse) ^{1-4,10,11}		Likely effective
Dexamethasone mouthwash ^{1,10,11}		Likely effective
Oral medications, ^{2-5,10,11} morphine mouth wash, ^{4,10,11} topical anesthetics (lidocaine), ^{2,4,5,10,11} transdermal fentanyl ^{5,10,11} for pain		Expert opinion
0.5% Doxepin mouth rinse for pain ^{10,11}		Expert opinion
Mucosal coating agents for pain (Gelclair [®]) ^{2,3,5,11}		Expert opinion
Saliva substitutes (Biotene [®] , Moi-Stir [®] , Caphosol [®]) ^{2,3,10,11}		Expert opinion
Nystatin for oral candida ³		Expert opinion

* Some benzydamine HCl formulations contain alcohol and can cause stinging.^{3,4,10,11} Chlorhexidine mouth rinse and sucralfate are not recommended for treatment.^{1-3,10} "Magic" Mouthwash (mixed medication mouthwash) is not recommended for practice.^{1,2} Local anesthetics for short term pain relief can make it hard to swallow; if used patients should be advised about increased risk of choking when eating.² Advise not to swallow morphine mouthwash or lidocaine due to systemic side effects including fatal arrhythmia.²

4. Discuss self-care strategies^{1-11,20-23}

- **What helps** when you have mouth sores?^{2,10,11} Reinforce as appropriate. Specify:
- What is your **goal**?^{2,10,11}
- If eating is difficult, have you seen or **spoken to a dietitian** or tried meal supplements?^{2,3,10}
- Would **more information** about your symptoms help you to manage them better? If yes, provide appropriate information or suggest resources.^{2,4,10}

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Use a bland rinse 4 times/day (more often if mouth sores). ^{1-3,5,10,11} For 1 cup warm water, add table salt (2.5 ml (1/2 tsp.)), baking soda (1/2 tsp.) or both (1/4 tsp. each). Swish in your mouth for at least 30 seconds and spit out. Prepare daily.
2.	Brush your teeth at least twice a day using a soft toothbrush (use soft foam toothette in salt/soda water if sores). Floss daily if it is your normal routine and tolerated. ^{1-3,5,6,10,11}
3.	Rinse your toothbrush in hot water before using and allow to air dry. ^{2,3,10,11}
4.	If you wear dentures , brush and rinse them after meals and at bedtime. Remove nightly and soak in a bland rinse. If mouth sensitive, use only at mealtimes . ^{2-4,10,11}
5.	Use moisturizers or lip balm to protect your lips. ^{2,3,10,11}
6.	Use lactobacillus lozenges ¹ or xylitol containing lozenges, gum, or popsicles. ^{10,11}
7.	Avoid tobacco and alcohol , including alcohol-based mouthwashes. ^{2-4,10,11}
8.	Drink 6-8 glasses of fluids per day. ^{2,3,10,11}
9.	Eat a soft diet . ^{2,4,10,11} Suggest: oatmeal, bananas, applesauce, cooked carrots, rice, pasta, eggs, mashed potatoes, cooked or canned fruit without skin, soft cheese, creamed soups, puddings/milkshakes.
10.	If on pain medicine , try taking it before brushing teeth and eating . ^{2,10,11}
11.	Avoid foods/drinks that are acidic, salty, spicy , or very hot. ^{2,4,5,10,11}
12.	During chemotherapy, take ice water or ice chips for 30 min. ^{1-7,9,10,20-22}
13.	Consider using low level laser therapy. ^{8,22,23}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur




References: 1) ONS 2019; 2) BCCA 2019; 3) NICaN 2022; 4) AHS 2019... (pages 42-55 for all references).

Nausea & Vomiting Practice Guide

Nausea: A subjective perception that vomiting may occur. Feeling of queasiness.¹⁻³ Vomiting: A forceful expulsion of stomach contents through the mouth and may include retching/dry heaves (gastric and esophageal movement without vomiting).¹⁻³

1. Assess severity of nausea/vomiting¹⁻¹⁷

What number from 0 to 10 best describes how you are feeling 0= "No nausea" and 10= "Worst possible nausea" ^{1,4,18}	1-3	4-6	7-10
Are you worried about your nausea/vomiting? ²⁻⁸	No/Some	Yes, very	
If vomiting: How many times per day? ^{1,3-6,19}	≤1 ^{G1}	2-5 ^{G2}	≥6 ^{G≥3}
What is the amount of vomit? ^{1,4,5}	Small	Medium	Large
Is there any blood or look like coffee grounds? ^{1,4,5}	No		Yes
Have you been able to eat within last 24 hours? ^{1,2,4,5}	Yes	No	
Have you lost weight in the last 1-2 weeks without trying? ^{1,4}	0-2.9%	3-9.9%	≥10%
How much fluid are you drinking per day? ^{1,2,4,5,9}	6-8 glasses	1 to 5 glasses	Sips
Are you feeling dehydrated, which can include feeling dizzy, a dry mouth, increased thirst, feeling faint, rapid heart rate, decreased amount of urine? ^{1,2,4,5,9}	No	Yes, some	Yes, a lot
Do you have any abdominal pain? ^{1,3-5}	No/Mild 0-3	Moderate 4-6	Severe 7-10
Does your nausea/vomiting affect your daily activities? ^{1,4}	No	Yes, some	Yes, a lot
Are you taking medicines that can cause nausea/vomiting? ^{1-6,9} (e.g., opioids, antidepressants, antibiotics, warfarin)	No	Yes	
Do you have any other symptoms? ^{1-6,8,9} Pain, Fever, Constipation, Diarrhea, Anxiety, Headache	No	Yes, some	Yes, many
→ Do you have (signs of endocrine toxicity): ¹⁰⁻¹⁷ fatigue/ weakness, abdominal pain, headache, appetite loss, vision changes, weight gain or loss, constipation, dizziness, mood or behaviour changes, decreased libido, confusion, dry skin, hair loss, feeling cold, puffy face	No		Yes
→ Do you have (signs of autonomic neuropathy): ¹⁰ constipation, urinary problems, sweating changes	No		Yes
→ Do you have (signs of aseptic meningitis): ¹⁰⁻¹⁷ headache, eyes sensitive to light, neck stiffness, low-grade fever	No		Yes
→ Do you have (signs of hepatic toxicity): ^{10-12,14-17} yellow skin/eyes, dark urine, fever, appetite loss, right side abdominal pain, fatigue, increase in bleeding/bruising	No		Yes
→ Do you have (signs of GI toxicity): ^{10,11,13-16} abdominal pain, diarrhea, blood or mucus in stool, fever, weight loss	No		Yes
→ Do you have (signs of hemolytic uremic syndrome): ¹⁰ blood in urine/stool or nose/mouth, less urine, new/unexplained bruises, abdominal pain, pale skin, fatigue, confusion/seizures, swelling	No		Yes

	Mild (Green)		Moderate (Yellow)		Severe (Red)
---	------------------------	---	-----------------------------	---	------------------------

2. Triage patient for symptom management based on highest severity^{1,2,4,5}

Review self-care. Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.	Refer for medical attention immediately and alert if on immunotherapy.
---	--	--

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for nausea/vomiting, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-9,20-23}

Examples of medications for nausea/vomiting*	Notes (e.g., dose)	Evidence
5-HT ₃ : ondansetron (Zofran®), granisetron (Kytril®), dolasetron (Anszemet®) ^{1-9,20-22}		Effective
Olanzapine (Zyprexa®) ^{1-4,6-9,20-23}		Effective
Fosaprepitant (Emend® IV), aprepitant (Emend®) ^{1-3,5-9,20-22}		Effective
Triple drug: ^{2,3,5-9,20-22} dexamethasone, 5 HT ₃ (palonosetron), neurokinin 1 receptor antagonist (netupitant) for high emetic risk		Effective
Cannabis/Cannabinoids ^{1-4,7-9,22}		Effective
Netupitant/palonosetron (NEPA) (Akynzeo®) ^{1-3,6-9,20,22}		Effective
Dexamethasone (Decadron®) alone or in combination ^{1-9,20-22}		Likely effective
Gabapentin (Neurontin®) ⁷		Likely effective
Progestins ⁷		Likely effective
Anticipatory: Lorazepam (Ativan®), haloperidol (Haldol®) ^{1-9,20,22}		Expert opinion
Metoclopramide (Maxeran®), prochlorperazine (Stemetil®) ^{1-6,9,20,22}		Expert opinion
Other: Cyclizine, ^{5,6} dimenhydrinate, ^{1,3,4,8} methotrimeprazine ¹		Expert opinion

*Patients are at increased risk of opioid overdose and serious side effects when taking gabapentin with an opioid.²⁴ Rectal administration should be avoided if neutropenic.

4. Discuss self-care strategies^{1-9,20,22,25}

- **What helps** when you have nausea/vomiting?^{1,4} Reinforce as appropriate. Specify:
- What is your **goal**?^{7,9}
- Have you seen or spoken to a **dietitian**?^{1,4,9}
- Would **more information** about your symptoms help you to manage them better?^{1,4} If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Drink 6-8 glasses of clear fluids per day. ^{1,4,9}
2.	Use relaxation techniques (e.g., guided imagery, progressive muscle relaxation, hypnosis, music therapy). ^{1,4,6-9,22}
3.	Take fast-acting anti-emetics (e.g., ondansetron (Zofran®), granisetron (Kytril®), dolasetron (Anszemet®) 30-60 minutes before meals so they are effective during/after meals. ^{1,4}
4.	If vomiting, limit food and drink until vomiting stops . After 30-60 min without vomiting, sip clear fluids. When clear fluids stay down, add dry starchy foods (crackers, dry toast, dry cereal, pretzels). If starchy foods stay down, add protein rich foods (e.g., eggs, chicken). ^{1,4}
5.	If nausea, eat small, frequent meals and snacks . ^{1,4,9} Eat foods that reduce your nausea and are your “comfort foods” cold or room temperature. ^{1,4,9} Avoid greasy/fried, highly salty, spicy, and foods with strong odors. ^{1,4,9} Avoid tobacco and alcohol. ^{1,6,9}
6.	Sit upright or recline with your head raised for 30-60 minutes after meals. ^{1,4}
7.	If vomiting, use a bland rinse 4 times/day . ⁴ For 1 cup warm water, add table salt (2.5 ml (1/2 tsp.)), baking soda (1/2 tsp.) or both (1/4 tsp. each). Swish in your mouth for at least 30 seconds and spit out. Prepare daily.
8.	Try acupressure (e.g., acupressure bracelet) or acupuncture . ^{1,4,9,22,25}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) BCCA 2018; 2) NCI 2023; 3) INESSS 2020; 4) CCO 2019... (pages 42-55 for all references).

Pain Practice Guide

Pain: subjective sensory or emotional discomfort associated with actual or potential tissue damage or described in terms of such damage.¹⁻⁸

1. Assess the pain and severity^{1-7,9-25}

Tell me about the pain (location, onset, radiating, what does it feel like, what makes it better or worse):^{1-7,9-15}

Do you know what may be causing the pain (surgery, injury, illness, pre-existing pain/arthritis, spinal cord compression)?^{1,2,4-7,9-13,16}

What number from 0 to 10 best describes your level of pain where 0="No pain" and 10="Worst possible pain" ^{1,2,6,7,9-17,26}	0 – 3	4 – 6	7 - 10
Rating of worst pain and pain 2hr after medicine? ^{1,2,9,11,14}	0 - 3	4 – 6	7 - 10
Are you able to easily distract yourself from the pain? ¹¹	Yes, often	Yes, sometimes	No, never
Are you worried about your pain? ^{1,2,5,6,11,12}	No/Some	Yes, very	
Did the pain start suddenly? ^{1-3,6,7,9-14}	No	Yes	Yes
Is the pain from a new location? ^{1,2,6,7,9-11,13} Describe.	No	Yes	Yes
Do you have loss of bladder or bowel control, numbness in your fingers, toes or bum, feel unsteady on your feet, or difficulty walking? ^{1,6}	No		Yes
Do you feel confused, very sleepy, nauseous, hallucinate, or have muscle spasms? ^{1,2,6,7,9,11,12,15}	No		Yes
Does your pain interfere with your daily activities? ^{1,2,6,7,9-14,17,27}	No ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
Does your pain interfere with your mood? ^{1,2,6,9-11,13}	No	Yes	
Are you able to get pain relief from your medicines? ^{1,2,6,7,9-13}	Yes, relief	Yes, some	No
Do the pain medicines restrict your daily activities? ^{1,2,10,11,13,17}	No	Yes, some	Yes, a lot
Do you have (risk factors for opioid misuse): ^{2,6,7,9-11,13,15,17} past alcohol or drug misuse, psychiatric disorder, younger age, legal problems, past sexual abuse, poor financial and/or social support, current heavy smoker?	No	Yes	
Do you have other symptoms: ^{1,2,4-6,11,12} Constipation, Nausea/Vomiting, Depression, Fatigue, Sleep changes, Itchiness, Peripheral neuropathy (hands, feet)	No	Yes, some	Yes, many
→ Do you have (signs of musculoskeletal toxicities): ¹⁸⁻²⁴ joint pain/swelling, stiffness after inactivity, muscle weakness, movement/heat improves pain	No		Yes
→ Do you have (signs of hepatic toxicity): ^{18,19,21-24} yellow skin/eyes, dark urine, fever, nausea, right side abdominal pain, fatigue, increase in bleeding/bruising	No		Yes
→ Do you have (signs of endocrine toxicity): ¹⁸⁻²⁵ fatigue/weakness, abdominal pain, appetite loss, headache, nausea/vomiting, vision changes, weight gain or loss, constipation, dizziness, mood or behaviour changes, decreased libido, confusion, dry skin, hair loss, feeling cold, puffy face	No		Yes
→ Do you have (signs of ocular toxicity): ^{18-20,22,24} dry eyes, eye pain, eye redness, blurred/double vision, new floaters, eyes sensitive to light, eyelid swelling, change in colour vision	No		Yes



Mild
(Green)



Moderate
(Yellow)



Severe
(Red)

2. Triage patient for symptom management based on highest severity^{1,2,6,7,9-12,17,28}

Review self-care
Review medications

Review self-care.
Review medications
Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days.

Refer for medical attention immediately and alert if on immunotherapy

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for pain, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-7,9,11-24,28-32}

Examples of medications for pain (steps according to WHO)*	Notes (e.g., dose)	Evidence
Step 1: Non-opioid: acetaminophen (Tylenol®), NSAIDs (Ibuprofen®), COX-2 inhibitors (Celebrex®), nefopam (Acupan®) ^{1-3,5-7,9,11-13,15-25,29,30}		Likely effective
Step 2: Weak opioid: codeine, tramadol, tapentadol ^{2,3,5-7,9,11-13,15,17,28-30}		Effective
Step 3: Strong opioid: morphine, oxycodone, fentanyl, hydromorphone ^{1,2,5-7,9,11-13,15-17,28-31}		Effective
Breakthrough pain: extra dose of immediate-release oral opioids or transmucosal fentanyl ^{1,2,6,7,9,11-17,29}		Effective
Chronic pain: Transdermal buprenorphine, transdermal fentanyl, systemic anesthetics (e.g., mexiletine) ^{1,2,5,7,9,12,13,15,17}		Effective
Chronic pain: Cannabis/Cannabinoids ^{1,2,5,7,11}		Likely effective
Refractory pain: Ketamine ^{4,6,7,13,30}		Benefits balanced with harm
Neuropathic pain: Antidepressant or anticonvulsant ^{2,3,5-7,9,11,12,16-18,20,23,24,29,32}		Likely effective
→ Prednisone for immunotherapy-related pain ¹⁸⁻²⁴		Expert opinion
Constipation prophylaxis: stimulant (sennosides or bisacodyl) plus osmotic laxative (lactulose or PEG) ^{1,2,6,7,9,11-13,15,17,29}		Likely effective/expert opinion

*Use NSAIDs with caution due to risk of renal, GI, or cardiac toxicities, thrombocytopenia, or bleeding disorder.^{2,6,7,9,11,18-20,24,28} Avoid use of long-acting opioids during severe acute pain. Use opioids with caution in patients with kidney or liver dysfunction.^{1,2,6,7,9,11,12,15,17,29,30,32} Avoid tricyclic antidepressants in the elderly.^{2,6,11}

4. Discuss self-care strategies^{1-3,5-17,29,33-44}

- **What helps** when you have pain? Reinforce as appropriate.^{1,2,7,10-13}
- What is your **goal** for pain relief (e.g., target on scale of 0 to 10)?^{1,2,6,7,9-11,13-15}
- Do you understand the plan for **taking routine and breakthrough medicines** for pain? If no, educate about pain and pain management.^{1,2,5-7,9,11,15,17}
- Do you have any **concerns about taking pain medicines**? If yes, explore and educate.^{1-3,6,7,9,10,12,13,15}
- If you have other symptoms, are they under control?^{2,6,9}

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Track your pain level when taking medicine and 1-2 hr. after. ^{1,2,12,15}
2.	Use medicines to prevent constipation if taking opioids. ^{1,2,6,7,9,11-13,15,17,29}
3.	Try massage (+/- aromatherapy), physio , acupressure , acupuncture , heat/cold, or transcutaneous electrical nerve stimulation. ^{1,2,6,8,11,16,33-36}
4.	Try light physical activity (walk, swim, cycle, stretch, yoga). ^{1,2,7,11,12,16,37-39}
5.	Try activities to help you cope with pain (e.g., listening to music, meditation, breathing exercises, activities for distraction, relaxation, mindfulness-based stress reduction, cognitive behavioural therapy (CBT), biofeedback, guided imagery, progressive muscle relaxation, hypnosis). ^{1-3,7,11,12,16,33,40-44}
6.	Participate in patient and family counselling and/or rely on friends/family for support. ^{1,2,11,12}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not, 10=very)?
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur

References: 1) BCCA 2018; 2) NCCN 2023; 3-5) ONS 2019; 6) NCI 2024... (pages 42-55 for all references).




Peripheral Neuropathy Practice Guide

Neuropathy: Numbness, tingling, burning, pins and needles, tremor, balance disturbances, pain in hands, feet, legs or arms. The end result of peripheral, motor, sensory, and autonomic neuron damage caused by neurotoxic chemotherapy agents that inactivate the components required to maintain the metabolic needs of the axon.¹⁻¹⁰ Other causes of peripheral neuropathy include surgical trauma, treatment with immune checkpoint inhibitors, and radiation involving the spine.^{1,3,8}

1. Assess severity of the neuropathy^{1-8,11-17}

If receiving chemotherapy, what was the date of your last treatment?

Tell me about the neuropathy (location, onset, radiating, what does it feel like, what makes it better or worse):^{1,3,5-7}

What number from 0 to 10 best describes your neuropathy where 0="No neuropathy" and 10="Worst possible neuropathy" ^{1,3-7,18}	1-3	4-6	7-10
Are you worried about your neuropathy? ⁸	No/Some	Yes, very	
Do you have pain in your _____ (neuropathy location)? ^{1-5,7}	No/Mild 0-3	Moderate 4-6	Severe 7-10
→ Pain in lower back or thighs ^{8,11,12}	No 0	Mild 1-3	> Moderate 4-10
Do you have new weakness in your arms or legs? ^{1,2,7}	No	Yes, some	Yes, a lot
→ Rapid onset of weakness in arms or legs ^{8,12-16}	No		Yes
Have you noticed problems with your balance or how you walk or climb stairs? ^{1,2,5,7} If yes, how much?	No/Mild	Yes, some	Yes, a lot
Are you constipated? ^{1,2,5}	No/Mild	Yes, some	Yes, a lot
Do you have difficulty emptying your bladder of urine? ^{1,5}	No/Mild	Yes, some	Yes, a lot
→ Constipation or urinary problems ^{8,11,14}	No		Yes
Does your neuropathy/numbness/tingling affect your daily activities? (e.g., buttoning clothing, writing, holding coffee cup)? ^{1,5-7,19}	No ^{G1}	Yes, some ^{G2}	Yes, a lot ^{G≥3}
→ Neuropathy interferes with daily activities ^{8,11,13-17}	No ^{G1}		Yes ^{G≥2}
→ Do you have: Difficulty walking, Double vision, Facial weakness, Drooping eyelid(s), Breathlessness, Swallowing or speaking problems, Nausea, Sweating changes? ^{8,11,13-15}	No		Yes
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{1,3,5-8,11,13-17,20}	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 days.	Refer for medical attention immediately and alert if on immunotherapy.

Legend: → Immune Checkpoint Inhibitor therapy; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for neuropathy, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1-6,8-17,20-23}

Examples of medications for neuropathy*	Notes (e.g., dose)	Evidence
Duloxetine ^{1-6,8-12,16,20-22}		Likely effective
Gabapentin (Neurontin®) and opioid combination ^{2,3,6,8}		Likely effective
Corticosteroids - prednisone/methylprednisolone ^{1,3,6,8,11-17}		Expert opinion
Anti-convulsants gabapentin, pregabalin (Lyrica®) ^{1,3-6,8,9,11,12,16,23}		Expert opinion
Tricyclic anti-depressants: amitriptyline (Elavil®), nortriptyline (Pamelor®), duloxetine (Cymbalta®), venlafaxine (Effexor®), bupropion (Wellbutrin®, Zyban®) ^{1,3-6,9,11,23}		Expert opinion
Opioids – fentanyl, morphine (Statex®), hydromorphone (Dilaudid®), codeine, oxycodone (OxyContin®), tapentadol (Nucynta®), methadone (Dolophine®) ^{1,3,5,9,21}		Expert Opinion
Topical – lidocaine patch 5% ^{1,3,5,6,9}		Expert Opinion

*Opioids combined with anticonvulsants or anti-depressants increase CNS adverse events requiring careful titration.²³ Avoid tricyclic antidepressants in the elderly.³⁻⁶ Carnitine/L-carnitine and human leukemia inhibitory factor are not recommended for practice.^{2,5,20}

4. Discuss self-care strategies^{1-3,5-7,9,10,21,22}

- **What helps** with managing your neuropathy?^{1,5,7} Reinforce as appropriate.
- What is your **goal**?^{1,3,5,7}
- Have you seen or spoken to a doctor, nurse practitioner, or pharmacist about the peripheral neuropathy?^{1,3}
- Have you seen or spoken to a **physiotherapist** about: A walker, cane, or splint to help with balance and improve walking,^{1-3,5-7} physical training plan,^{1-3,9,10} or transcutaneous electrical nerve stimulation (TENS)?^{1,3,5,10}
- Have you seen or spoken to an **occupational therapist** about using loafer-style shoes or Velcro shoe laces,¹ adaptive equipment (e.g., larger handles on eating utensils)?⁵
- Would **more information** about your symptoms help you to manage them better?¹ If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Look at your hands and feet every day for sores/blisters that you may not feel. ¹ Talk to your doctor or nurse practitioner if the sores/blisters do not heal.
2.	Neuropathy in feet: Wear footwear that fits you properly and avoid going barefoot. ^{1,2,5}
3.	Neuropathy in hands: Wear gloves when cooking, using oven, or doing dishes. ^{1,2}
4.	In your home: ensure the walkways clear of clutter. ¹ Use a skid-free shower or bath mat in your tub. ^{1,2} Remove throw rugs that may be a tripping hazard. ^{1,2}
5.	When walking on uneven ground , try to look at the ground to help make up for the loss of sensation in your legs or feet. ¹
6.	If any neuropathy, to avoid burns: Lower the temperature of your hot water heater. Use a thermometer to ensure shower or tub water is <110°F/43°C. ^{1,2}
7.	Avoid exposing your fingers and toes to very cold temperatures . ¹
8.	Try dangling your legs before you stand up to avoid feeling dizzy. ¹
9.	For constipation , try eat a high-fiber diet and drink adequate fluids . ^{1,3}
10.	For urinary issues, try to empty bladder at same time every day, bladder re-training exercises, and drink adequate fluids. ¹
11.	Try acupuncture , acupressure, massage, yoga, relaxation therapy, or guided imagery. ^{1,3,5,6,21,22}

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 days if no improvement, symptom worsens, or new symptoms occur

References: 1) BCCA 2018; 2) ONS 2019; 3) NCCN 2023; 4) CCO 2018... (pages 42-55 for all references).

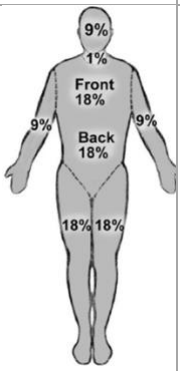
Skin Rash Practice Guide

Skin rash/alteration: A change in the colour, texture or integrity of the skin.¹⁻¹⁰

This practice guide is intended for any rash except for skin changes from radiation reaction. If the rash is in the radiation therapy area, refer to the Skin Reaction to Radiation practice guide.

1. Assess severity of the skin rash¹⁻¹⁶

Tell me about the skin rash (e.g., location, onset, what does it look like):^{11,13}

What number from 0 to 10 best describes your skin rash where 0="No skin rash" and 10="Worst possible skin rash" ^{13,17}		1-3	4-6	7-10	
Are you worried about your skin rash? ¹³		No/Some	Yes, very		
Is the skin rash on one small part of your body (localized) or does it cover other areas (generalized)? ^{5-7,11,13,18}			<10% BSA ^{G1}	10-30% BSA ^{G2}	>30% BSA ^{≥3}
Adult Body Part	% of total BSA				
Arm	9%				
Head	9%				
Neck	1%				
Leg	18%				
Anterior trunk	18%				
Posterior trunk	18%				
➔ Is the skin rash localized or generalized? ^{1-4,8-10,12,15,16}			<10% BSA ^{G1}	>10% BSA ^{G≥2}	
Do you have any open wounds or blisters? ^{1,3-8,15,16}		No		Yes	
Do you have pain or feel burning at the skin rash area? ^{1,2,5-7,11,13}		No/Mild 0-3	Moderate 4-6	Severe 7-10	
Is the rash itchy? ¹⁻¹⁶		No	Yes		
Does the affected area feel tight or swollen? ^{1-4,10,11,13}		No	Yes		
Have you ever had a rash like this before? ^{1-3,9,14-16}		No/controlled with treatment		Yes, did not respond to treatment	
Does your skin rash affect your daily activities? ^{1-9,11-15}		No	Yes, some	Yes, a lot	
		1 Mild (Green)	2 Moderate (Yellow)	3 Severe (Red)	
2. Triage patient for symptom management based on highest severity^{1-12,14-16}		Review self-care. Verify medications	Review self-care. Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1-2 weeks.	Refer for medical attention immediately and alert if on immunotherapy.	

Legend: ➔ Immune Checkpoint Inhibitor therapy; BSA=Body surface area; NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for skin rash, including prescribed, over the counter, traditional medicines, and/or herbal supplements¹⁻¹⁶

Examples of medications for skin rash	Notes (e.g., dose)	Evidence
Topical corticosteroids (hydrocortisone, betamethasone, clobetasol propionate) ¹⁻¹⁶		Expert opinion
Antihistamines or antipruritics (hydroxyzine diphenhydramine, cetirizine, loratidine) ^{1-5,8-10,12,14,15}		Expert opinion
Oral corticosteroids (prednisone, methylprednisolone) ^{1-12,14-16}		Expert opinion
Antibiotics for infection, or prophylaxis ^{4-7,11-13,15}		Likely effective
Prophylaxis: Vitamin K cream ⁵		Expert opinion

*Low-dose corticosteroid cream should be used sparingly.¹ Higher potency topical steroids are preferred for short-term use (days to a few weeks) for immune-related dermatitis, compared to longer term use (several weeks to months) of lower potency steroids.²

4. Discuss self-care strategies¹⁻¹⁶

- **What helps** when you have a skin rash?^{9,13} Reinforce as appropriate.
- What is your **goal**?
- Have you seen or spoken to a **dermatologist**?^{1,2,4,7-9,11-16}
- Would **more information** about your symptoms help you to manage them better? If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Avoid sun and protect your skin with sunscreen and clothes. ^{3-8,12-14}
2.	Avoid skin irritants (e.g., alcohol or perfume based creams, over the counter acne medications, clothes washed in scented laundry soap, tight fitting clothes or irritating fabrics like wool). ^{1,3,5-7,9,13,14}
3.	Use moisturizing cream on your skin (e.g., urea-based) daily. ^{1,3-6,8-15}
4.	Use oatmeal baths if itchy. ⁴
5.	Take warm showers using mild non-scented soap . ^{5-7,12,13} Avoid hot water and bathing too long.
6.	Use a cool compress for itchy skin. ⁴

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1-2 weeks if no improvement, symptom worsens, or new symptoms occur ¹




References: 1) ASCO 2021; 2) NCCN 2023; 3) ESMO 2022; 4) CCO 2018... (pages 42-55 for all references).

Skin Reaction to Radiation Practice Guide

Skin reaction/alteration: A change in the colour, texture or integrity of the skin. Radiation-induced skin reactions can vary from redness and skin darkening that usually progresses to dry peeling causing itchiness and thin skin. Open sores may weep causing wetness.^{1,2}

1. Assess severity of the skin reaction to radiation¹⁻¹²

Site of skin reaction(s)³ _____ Size of skin reaction(s)³ _____

What number from 0 to 10 best describes your skin reaction where 0="No skin reaction" and 10="Worst possible skin reaction" ^{3,13}	1-3	4-6	7-10
Are you worried about your skin reaction?	No/Some	Yes, very	
Is your skin red? ^{1-3,5-10}	None	Faint/dull	Tender/bright, necrotic
Is your skin peeling/flaking? ^{1-3,6-8,14}	No/Dry ^{G1}	Patchy, moist ^{G2}	Generalized, moist ^{G3}
Do you have any swelling around the skin reaction area? ^{1,3,6,8}	No	Yes, some	Yes, pitting edema
Do you have pain at the skin reaction area? ^{1-3,5-7,10-12}	No/Mild 0-3	Moderate 4-6	Severe 7-10
Do you feel itchy at the skin reaction area? ^{1,3,5,6,10-12,14}	No/Mild ^{G1}	Yes, often ^{G2}	Yes, constant ^{G3}
Do you have any open, draining wounds? ^{1,3,5,6,8}	No		Yes
Is there any odour from the skin reaction area? ^{1,3}	No		Yes, strong/foul
Do you have any bleeding? ^{3,5}	No		Yes, from minor trauma
Do you have a fever > 38° C? ³ Unsure	No		Yes
Have you started a new medication? ³	No	Yes	
Does your skin reaction affect your daily activities? ^{2-5,7,9,11,12}	No	Yes, some	Yes, a lot
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity^{3,5-7}	Review self-care. Verify medications	Review self-care. Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 12-24 hours.	Refer for medical attention immediately.

Legend: NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for skin reaction, including prescribed, over the counter, traditional medicines, and/or herbal supplements^{1,3-7,10-12}

Examples of medications for skin reaction to radiation therapy*	Notes (e.g., dose)	Evidence
Low-dose corticosteroid cream ^{1,3-7,10}		Likely effective
Infection: Silver Sulfadiazine (Flamazine) ^{1,3,4}		Likely effective
Open areas: Hydrocolloid & hydrogel Dressings ^{1,3-5}		Expert opinion
Moist desquamation: Silicone Dressings ^{1,3,4,6,7}		Expert opinion
Infection: Topical antibiotics ^{1,3,6}		Expert opinion

*Insufficient evidence to support or refute other agents for skin reaction (i.e., sucralfate cream,⁴ chamomile cream,⁴ oral antihistamines,⁴ emu oil,^{4,5} oral curcumin,^{4,11} specialty non-steroidal creams (e.g., Cavilon)^{4,5,7}). Low-dose corticosteroid cream should be used sparingly on intact skin.^{1,3,6,7} Silver sulfadiazine (**Flamazine**) should not be used if allergy to sulfa, history of severe renal or hepatic disease or during pregnancy.³ Hydrocolloid & hydrogel dressings are not advised for infected wounds and wounds with heavy exudate, or applied directly prior to treatment.^{1,3} Trolamine (Biafine®),^{4,5,7,12} calendula ointment,^{4,5} and aloe vera^{1,4,5,7} are not recommended for radiation skin reaction.

4. Discuss self-care strategies^{1-6,8,9}

- **What helps** when you have a skin reaction?³ Reinforce as appropriate.
- What is your **goal**?³
- Would **more information** about your symptoms help you to manage them better?^{1,3,6} If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Take lukewarm/tepid showers or baths using mild non-perfumed soap, and patting dry (no rubbing). ^{1,3,8,9}
2.	Avoid petroleum jelly , alcohol-based, and perfumed products. ^{1,3,4,6} Use non-scented creams on intact skin. ^{1,3,5,6,8}
3.	Wear loose clothes (e.g., soft breathable fabric like cotton). ^{1,3,8,9}
4.	Use deodorant on intact skin only. ^{1,3,5,8} Stop using if skin becomes irritated, blisters, or peels.
5.	Use an electric razor instead of a wet razor for shaving. ^{1,3} Stop shaving if area becomes irritated.
6.	Avoid waxing or other hair removal creams. ³
7.	Avoid talcum powder, baby powder, and cornstarch especially on treatment areas. These products promote fungus growth and infections. ^{1,3}
8.	Shower after swimming in pools and lakes. Avoid swimming if skin is blistered, peeling or irritated. ^{1,3,8}
9.	Avoid temperature extremes (e.g., ice pack or heating pad) to the reaction area. ^{1,3} Protect the treatment area from the sun and the cold . ^{3,8}
10.	Use warm or room temperature normal saline compresses up to 4 times a day if the reaction area is itchy. ^{1,3}
11.	Avoid trauma to the treatment area by not using tape or Band-aids, not rubbing or scratching your skin, and opting to wear loose fitting clothing. ^{1,3}
12.	Eat a well-balanced diet that includes fruit, vegetables, whole grains, and lean protein and drink fluids, 6-8 glasses per day. ^{1,3,8}

5. Document plan agreed upon with patient (check all that apply)




<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

References: 1) CCMB 2018; 2) Aguiar 2021; 3) BCCA 2018; 4) MASCC 2023... (pages 42-55 for all references).




Sleep Changes Practice Guide

Sleep changes: actual or perceived changes in night sleep resulting in daytime impairment.¹⁻⁴

1. Assess severity of the sleep changes¹⁻⁵

What number from 0 to 10 best describes how much your sleep changes affect your daytime activities at home and work where 0 = “No problems” and 10 = “Worst possible problems” ^{1,2,4-6}	1-3	4-6	7-10
Are you worried about your sleep changes? ^{1,2,4,5}	No/Some	Yes, very	
Do you have difficulty falling asleep? ^{1,2,4,5}	<3 nights/week	3+ nights/week	Takes ≥30 min every night
Do you have difficulty staying asleep? ^{1,2,4,5}	<3 nights/week	3+ nights/week	Takes ≥30 min every night to go to sleep again
Do you have early morning waking when not desired? ^{1,2,4,5}	<3 nights/week	3+ nights/week	
How long have these sleep changes been present? ^{2,4,5} Describe the sleep pattern change.	Less than 1 month	More than 1 month	
Did the onset of this problem occur with another issue? ¹⁻⁵ Describe.	No	Yes	
Are you taking any medicines that affect sleep (e.g., opiates, steroids, sedatives, etc.) ²⁻⁵	No	Yes	
Do you have other sleep disorders (e.g., loud snoring, choking/gasping, sleep apnea, restless movement, restless legs)? ¹⁻⁵	No		Yes
Do you have other symptoms: ¹⁻⁵ fatigue, pain, nausea, anxiety, depression, hot flashes, itchy skin, breathlessness	None	Some	Yes, many
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)

2. Triage patient for symptom management based on highest severity^{1-3,5}

	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
	Review self-care. Verify medications	Review self-care. Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 2-3 days.	Review self-care (If ≥30 minutes see 4.12). Verify medication use, if appropriate. For other sleep disorders, refer to sleep disorder clinic.

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for sleep changes, including prescribed, over the counter, traditional medicines, and/or herbal supplements¹⁻⁴

Examples of Medications for sleep changes*	Notes (e.g., dose)	Evidence
Benzodiazepines - lorazepam (Ativan®), diazepam, (Valium®), alprazolam (Xanax®) ²⁻⁴		Expert opinion
Non-benzodiazepine Hypnotics - Zolpidem (Ambien®) ¹⁻⁴		Expert opinion
Tricyclic Antidepressants - Amitriptyline (Elavil®) ²⁻⁴		Expert opinion
Neuroleptics - Chlorpromazine (Thorazine®), Ormazine® ^{2,4}		Expert opinion
Herbal supplements (Melatonin, Kava, Valerian) ²⁻⁴		Expert opinion
Melatonin receptor agonists - Ramelteon (Rozerem®) ⁴		Expert opinion
Trazadone (Desyrel®) ²⁻⁴		Expert opinion
Antihistamines: Diphenhydramine (Benadryl®), Hydroxyzine (Atarax®) ^{2,4}		Expert opinion
Antipsychotics - Quetiapine (Seroquel®) ²⁻⁴		Expert opinion

*Medications for sleep changes should be short term (7-10 days) and depends on side effect profiles of the medicine and the potential for interaction with other current medications; need to balance benefits with harms.¹⁻⁴ Tricyclic antidepressants should be avoided in the elderly.² Antipsychotics are a last option.^{2,4}

4. Discuss self-care strategies^{1-5,7-14}

- **What helps** when you have problems sleeping?^{2,5} Reinforce as appropriate.
- What is your **goal** for sleeping (is it realistic e.g., 6 -10 hours sleep/night)?^{2,5}
- If you have **other symptoms**, are they under control?^{2,3,5}
- Do you understand the **effect of some medications on sleep**?^{2,3,5} Provide education.
- Would **more information** about your symptoms help you to manage them better? If yes, provide appropriate information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Track your sleep patterns in a diary . ^{1,2,5}
2.	Try to go to sleep and wake at the same time each day. ¹⁻⁵
3.	Try to get exposed to light soon after waking and see if it affects your sleep. ^{1,2,4,5}
4.	Try to clear your head early evening (problem solve, write down plan). ^{1,2,4,5,7}
5.	Have a 90-minute buffer zone before bedtime (e.g., read, watch TV, crossword puzzle, relax, listen to music, yoga, deep breathing, meditation, muscle relaxation/guided imagery, aromatherapy). ^{1-5,8,9}
6.	Go to bed when you are sleepy . ^{1-3,5} If you can't fall asleep within 20-30 minutes, get out of bed and return when sleepy.
7.	Limit the use of the bedroom for sleep and/or sex . ^{1,2,5}
8.	Restrict napping in the daytime. ¹⁻⁵ If needed, limit to one nap (20-30 minutes) and spend at least four hours awake before bedtime.
9.	Have a comfortable sleep environment . ^{1-5,7} Suggest removing bedroom clock and avoid computer screens. If noisy or too bright, use ear plugs or eye masks .
10.	Exercise regularly. ^{1-5,7,10}
11.	Limit caffeine after noon, limit smoking or alcohol, spicy or heavy meals, excessive fluids, intense activities close to bedtime. If you are hungry a protein snack is best. ^{1-4,7}
12.	Try a program like cognitive-behavioural therapy or personal counseling that provides more in-depth guidance on managing sleep changes. ^{1-5,11}
13.	Try acupressure or acupuncture. ^{7,12-14}

5. Document plan agreed upon with patient (check all that apply)




<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen. Specify:
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 2-3 days if no improvement, symptom worsens, or new symptoms occur

References: 1) ONS 2019; 2) BCCA 2019; 3) AHS 2019; 4) NCI 2024; 5) CCO 2022... (pages 42-55 for all references).

Swallowing Difficulty Practice Guide

Swallowing difficulty or dysphagia is the process of passing food or drink from the mouth through the esophagus to the stomach. It may also present as a sensation of food sticking in the throat or chest.¹

1. Assess severity of swallowing difficulty¹

Tell me what number from 0 to 10 best describes how difficult it is to swallow (0= no difficulty; 10= worst possible). ¹	0 – 3	4 - 6	7 - 10
Are you worried about your difficulty swallowing? ¹	No/Some	Yes, very	
How much have you had to eat or drink in the last 24 hours? ^{1,2}	Close to normal ^{G1}	About half my normal amount ^{G2}	Minimal to none ^{G3}
How long does it take for you to eat an average meal? ¹	< 30 minutes	About 30 minutes	>60 minutes or unable to swallow
Does food stick in your throat when you swallow? ¹	No	Yes, some	Yes, a lot
Does swallowing take a great effort? ¹	No	Yes, some	Yes, a lot
Do you have difficulty swallowing pills? ¹	No	Yes, some	Yes, a lot
Do you cough or choke when you eat?	No	Yes, some	Yes, a lot
Have you lost weight because of swallowing problems? ¹	No	Yes, some	Yes, a lot
Do you cough or choke when you drink liquids? ¹	No	Yes, some	Yes, a lot
Do you gag or drool often? ¹	No	Yes, some	Yes, a lot
Were you recently diagnosed with aspiration pneumonia? (fever, short of breath, feeling unwell, change in mucous amount/colour)? ¹	No		Yes
Do you have any other symptoms? ¹ mouth dryness, anxiety	No	Yes, some	Yes, many
	 1 Mild (Green)	 2 Moderate (Yellow)	 3 Severe (Red)
2. Triage patient for symptom management based on highest severity¹	Review self-care Verify medications	Review self-care Verify medications Advise to notify if symptom worsens, new symptoms occur, or no improvement in 1 to 2 days	Refer for medical attention immediately.

Legend: NCI-CTCAE G1=Grade 1, G2=Grade 2, ≥G3=Grade 3 or higher

If patient has other symptoms, did you refer to the relevant practice guide(s)?

3. Review medications patient is using for swallowing difficulty, including prescribed, over the counter, traditional medicines, and/or herbal supplements¹

Examples of medications for swallowing difficulty	Notes (e.g., dose)	Evidence
Pain medicines 30-40 minutes before meals ¹		Expert opinion
Local anesthetic 5 to 10 minutes before eating if for painful swallowing ¹		Expert opinion

Local anesthetics for short term pain relief can make it hard to swallow; if used patients should be advised about increased risk of choking when eating.

4. Discuss self-care strategies¹

- **What helps** when you have difficulty swallowing?¹ Reinforce as appropriate. Specify:
- What is your goal?¹
- Have you seen or spoken to a **dietitian** or a speech language specialist?¹
- Would **more information** about your symptoms help you to manage them better?¹ If yes, provide relevant information or suggest resources.

Ask patient which of the following are being used, suggest what may be helpful to try, and ask what they are willing to try:

1.	Eat foods that are easier to swallow (e.g., cooked extra soft foods, add extra sauces or gravy). ¹
2.	Avoid dry solid food , nuts, skins, leafy vegetables. ¹
3.	When eating and drinking, sit upright (90 degrees), limit distractions/talking, eat slowly with small bites or sips of fluids, swallow twice with each mouthful, take a sip of liquid to clear any food from sticking in your throat, and swallow hard with effort (by sitting comfortably with mouth relaxed, press tongue against roof of mouth as hard as possible, with tongue in position, press lips together and swallow as hard as possible). ¹
4.	Try to brush your teeth at least twice a day using a soft toothbrush (use soft foam toothette in salt/soda water if sores). Floss daily if it is your normal routine and tolerated. ¹
5.	Try to use a bland rinse 4 times/day (more often if mouth sores). For 1 cup warm water, add table salt (2.5 ml (1/2 tsp.)), baking soda (1/2 tsp.) or both (1/4 tsp. each). Swish in your mouth for at least 30 seconds and spit out. Prepare daily. ¹

5. Document plan agreed upon with patient (check all that apply)

<input type="checkbox"/>	No change, continue with self-care strategies and if appropriate, medication use
<input type="checkbox"/>	Patient agrees to try self-care items #: How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
<input type="checkbox"/>	Patient agrees to use medication to be consistent with prescribed regimen
<input type="checkbox"/>	Referral (service & date):
<input type="checkbox"/>	Patient agrees to seek medical attention; specify time frame:
<input type="checkbox"/>	Advise to call back in 1 to 2 days if no improvement, symptom worsens, or new symptoms occur

References: 1) CCO 2021; 2) NCI-CTCAE 2017 (pages 42-55 for full references).

Full list of references

Anxiety

1. Oncology Nursing Society. Anxiety. 2019. <https://www.ons.org/pep/anxiety>
2. National Comprehensive Cancer Network. Distress Management (Version 2.2023). 2023
3. Grassi L, Caruso R, Riba MB, et al. Anxiety and depression in adult cancer patients: ESMO Clinical Practice Guideline. *ESMO Open*. Apr 2023;8(2):101155. doi:10.1016/j.esmoop.2023.101155
4. National Cancer Institute. Adjustment to Cancer: Anxiety and Distress (PDQ®)—Health Professional Version (Updated: April 12, 2023). <https://www.cancer.gov/about-cancer/coping/feelings/anxiety-distress-hp-pdq#section/all>
5. Fung JYT, Lim H, Vongsirimas N, Klainin-Yobas P. Effectiveness of eHealth mindfulness-based interventions on cancer-related symptoms among cancer patients and survivors: A systematic review and meta-analysis. *J Telemed Telecare*. Feb 25 2022;1357633X221078490. doi:10.1177/1357633X221078490
6. Cancer Care Ontario. Symptom Management Algorithm: Anxiety in Adults with Cancer. 2021
7. Alberta Health Services. Guideline Summary for Health Professionals: Anxiety. 2019
8. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
9. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
10. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
12. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
13. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
14. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
15. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
16. De Feo G, Case AA, Crawford GB, et al. Multinational Association of Supportive Care in Cancer (MASCC) guidelines: cannabis for psychological symptoms including insomnia, anxiety, and depression. *Support Care Cancer*. Feb 21 2023;31(3):176. doi:10.1007/s00520-023-07628-3
17. Ligibel JA, Bohlke K, May AM, et al. Exercise, Diet, and Weight Management During Cancer Treatment: ASCO Guideline. *J Clin Oncol*. Aug 1 2022;40(22):2491-2507. doi:10.1200/JCO.22.00687
18. Bro ML, Jespersen KV, Hansen JB, et al. Kind of blue: A systematic review and meta-analysis of music interventions in cancer treatment. *Psychooncology*. Feb 2018;27(2):386-400. doi:10.1002/pon.4470
19. Nguyen KT, Xiao J, Chan DNS, Zhang M, Chan CWH. Effects of music intervention on anxiety, depression, and quality of life of cancer patients receiving chemotherapy: a systematic review and meta-analysis. *Support Care Cancer*. Jul 2022;30(7):5615-5626. doi:10.1007/s00520-022-06881-2
20. Tan L, Fang P, Cui J, Yu H, Yu L. Effects of progressive muscle relaxation on health-related outcomes in cancer patients: A systematic review and meta-analysis of randomized controlled trials. *Complement Ther Clin Pract*. Nov 2022;49:101676. doi:10.1016/j.ctcp.2022.101676
21. Li F, Jiang T, Shi T. Effect of inhalation aromatherapy on physical and psychological problems in cancer patients: Systematic review and Meta-analysis. *J Psychosoc Oncol*. 2022;40(3):271-287. doi:10.1080/07347332.2021.2011529
22. Wang T, Tan JB, Yao LQ, et al. Effects of somatic acupoint stimulation on anxiety and depression in cancer patients: An updated systematic review of randomized controlled trials. *Complement Ther Clin Pract*. May 2023;51:101735. doi:10.1016/j.ctcp.2023.101735
23. Cillessen L, Johannsen M, Speckens AEM, Zachariae R. Mindfulness-based interventions for psychological and physical health outcomes in cancer patients and survivors: A systematic review and meta-analysis of randomized controlled trials. *Psychooncology*. Dec 2019;28(12):2257-2269. doi:10.1002/pon.5214
24. Lin LY, Lin LH, Tzeng GL, et al. Effects of Mindfulness-Based Therapy for Cancer Patients: A Systematic Review and Meta-analysis. *J Clin Psychol Med Settings*. Jun 2022;29(2):432-445. doi:10.1007/s10880-022-09862-z
25. McCloy K, Hughes C, Dunwoody L, Marley J, Gracey J. Effects of mindfulness-based interventions on fatigue and psychological wellbeing in women with cancer: A systematic review and meta-analysis of randomised control trials. *Psychooncology*. Nov 2022;31(11):1821-1834. doi:10.1002/pon.6046
26. Xing L, Guo X, Bai L, Qian J, Chen J. Are spiritual interventions beneficial to patients with cancer?: A meta-analysis of randomized controlled trials following PRISMA. *Medicine (Baltimore)*. Aug 2018;97(35):e11948. doi:10.1097/MD.00000000000011948

27. Carlson LE, Ismaila N, Addington EL, et al. Integrative Oncology Care of Symptoms of Anxiety and Depression in Adults With Cancer: Society for Integrative Oncology-ASCO Guideline. *J Clin Oncol.* Oct 1 2023;41(28):4562-4591. doi:10.1200/JCO.23.00857

Appetite Loss

1. Oncology Nursing Society. Anorexia. 2024. <https://www.ons.org/pep/anorexia>
2. BC Cancer Agency. Symptom Management Guidelines: ANOREXIA and CACHEXIA. 2018
3. National Cancer Institute. Nutrition in Cancer Care (PDQ®)—Health Professional Version (Updated: September 20, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/appetite-loss/nutrition-hp-pdq>
4. Roeland EJ, Bohlke K, Baracos VE, et al. Management of Cancer Cachexia: ASCO Guideline. *J Clin Oncol.* Jul 20 2020;38(21):2438-2453. doi:10.1200/JCO.20.00611
5. de Las Penas R, Majem M, Perez-Altozano J, et al. SEOM clinical guidelines on nutrition in cancer patients (2018). *Clin Transl Oncol.* Jan 2019;21(1):87-93. doi:10.1007/s12094-018-02009-3
6. Simon L, Baldwin C, Kalea AZ, Slee A. Cannabinoid interventions for improving cachexia outcomes in cancer: a systematic review and meta-analysis. *J Cachexia Sarcopenia Muscle.* Feb 2022;13(1):23-41. doi:10.1002/jcsm.12861
7. Cancer Care Ontario. Loss of Appetite Algorithm. 2021
8. Arends J, Strasser F, Gonella S, et al. Cancer cachexia in adult patients: ESMO Clinical Practice Guidelines(☆). *ESMO Open.* Jun 2021;6(3):100092. doi:10.1016/j.esmoop.2021.100092
9. Muscaritoli M, Arends J, Bachmann P, et al. ESPEN practical guideline: Clinical Nutrition in cancer. *Clin Nutr.* May 2021;40(5):2898-2913. doi:10.1016/j.clnu.2021.02.005
10. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
11. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol.* Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
12. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023;
13. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer.* Jun 2021;9(6)doi:10.1136/jitc-2021-002435
14. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol.* Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
15. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
16. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
17. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage.* May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
18. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
19. Alderman B, Hui D, Mukhopadhyay S, et al. Multinational Association of Supportive Care in Cancer (MASCC) expert opinion/consensus guidance on the use of cannabinoids for gastrointestinal symptoms in patients with cancer. *Support Care Cancer.* Dec 16 2022;31(1):39. doi:10.1007/s00520-022-07480-x
20. Crichton M, Yates PM, Agbejule OA, Spooner A, Chan RJ, Hart NH. Non-Pharmacological Self-Management Strategies for Chemotherapy-Induced Peripheral Neuropathy in People with Advanced Cancer: A Systematic Review and Meta-Analysis. *Nutrients.* Jun 9 2022;14(12)doi:10.3390/nu14122403

Bleeding

1. Oncology Nursing Society. Prevention of Bleeding. 2019. <https://www.ons.org/pep/prevention-bleeding>
2. Alberta Health Services. Oncologic Emergencies. 2022;Clinical Practice Guideline SUPP-007 – Version 3.
3. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol.* 2021;39(36):4073-4126.
4. Cancer Care Ontario. *Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline.* 2018.
5. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer.* 2021;9(6).
6. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med.* 2018;55(4):489-502.
7. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol.* 2022;33(12):1217-1238.
8. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023.
9. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022.
10. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1.
11. Northern Ireland Cancer Network. *Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines.* 2022.

Breathlessness/Dyspnea

1. Oncology Nursing Society. Dyspnea (This topic was updated on August 26, 2019). <https://www.ons.org/pep/dyspnea>
2. BC Cancer Agency. Symptom Management Guidelines: DYSPNEA. 2018

3. Hui D, Bohlke K, Bao T, et al. Management of Dyspnea in Advanced Cancer: ASCO Guideline. *J Clin Oncol.* Apr 20 2021;39(12):1389-1411. doi:10.1200/JCO.20.03465
4. Hui D, Maddocks M, Johnson MJ, et al. Management of breathlessness in patients with cancer: ESMO Clinical Practice Guidelines. *ESMO Open.* Dec 2020;5(6):e001038. doi:10.1136/esmoopen-2020-001038
5. National Cancer Institute. Cardiopulmonary Syndromes (PDQ®)—Health Professional Version (Updated: February 21, 2023). <https://www.cancer.gov/about-cancer/treatment/side-effects/cardiopulmonary-hp-pdq>
6. Alberta Health Services. Palliative Care Tip – Issue#4: DYSPNEA/BREATHLESSNESS / April 20, 2018. 2018
7. Cancer Care Ontario. Symptom Management Algorithm: DYSPNEA (SHORTNESS OF BREATH) in Adults with Cancer. 2022
8. Atherton JJ, Sindone A, De Pasquale CG, et al. National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Guidelines for the Prevention, Detection, and Management of Heart Failure in Australia 2018. *Heart Lung Circ.* Oct 2018;27(10):1123-1208. doi:10.1016/j.hlc.2018.06.1042
9. Ezekowitz JA, O'Meara E, McDonald MA, et al. 2017 Comprehensive Update of the Canadian Cardiovascular Society Guidelines for the Management of Heart Failure. *Can J Cardiol.* Nov 2017;33(11):1342-1433. doi:10.1016/j.cjca.2017.08.022
10. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol.* Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
12. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer.* Jun 2021;9(6)doi:10.1136/jitc-2021-002435
13. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol.* Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
14. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med.* Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
15. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
16. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
17. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
18. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
19. Lyon AR, Lopez-Fernandez T, Couch LS, et al. 2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS). *Eur Heart J.* Nov 1 2022;43(41):4229-4361. doi:10.1093/eurheartj/ehac244
20. Heidenreich PA, Bozkurt B, Aguilar D, et al. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation.* May 3 2022;145(18):e895-e1032. doi:10.1161/CIR.0000000000001063
21. Curigliano G, Lenihan D, Fradley M, et al. Management of cardiac disease in cancer patients throughout oncological treatment: ESMO consensus recommendations. *Ann Oncol.* Feb 2020;31(2):171-190. doi:10.1016/j.annonc.2019.10.023
22. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage.* May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
23. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
24. Ligibel JA, Bohlke K, May AM, et al. Exercise, Diet, and Weight Management During Cancer Treatment: ASCO Guideline. *J Clin Oncol.* Aug 1 2022;40(22):2491-2507. doi:10.1200/JCO.22.00687
25. Virizuela JA, Garcia AM, de Las Penas R, et al. SEOM clinical guidelines on cardiovascular toxicity (2018). *Clin Transl Oncol.* Jan 2019;21(1):94-105. doi:10.1007/s12094-018-02017-3

Constipation

1. Oncology Nursing Society. Constipation.2020. <https://www.ons.org/pep/constipation>
2. Cancer Care Ontario. Symptom Management Algorithm: Constipation in Adults with Cancer. 2022
3. BC Cancer Agency. Symptom Management Guidelines: Constipation. 2018
4. National Cancer Institute. Gastrointestinal Complications (PDQ®)—Health Professional Version (Updated: August 24, 2023). <https://www.cancer.gov/about-cancer/treatment/side-effects/constipation/gi-complications-hp-pdq>
5. Alberta Health Services. Constipation in Advanced Illness. 2018
6. Larkin PJ, Cherny NI, La Carpia D, et al. Diagnosis, assessment and management of constipation in advanced cancer: ESMO Clinical Practice Guidelines. *Ann Oncol.* Oct 1 2018;29(Suppl 4):iv111-iv125. doi:10.1093/annonc/mdy148
7. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023

8. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
9. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
10. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
11. Cancer Care Ontario. *Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline*. 2018.
12. Northern Ireland Cancer Network. *Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines*. 2022.
13. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
14. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
15. National Institutes of Health: National Cancer Institute. *Common terminology criteria for adverse events (CTCAE) v5.0*. 2017.
16. Lam WC, Zhong L, Liu Y, et al. Hong Kong Chinese Medicine Clinical Practice Guideline for Cancer Palliative Care: Pain, Constipation, and Insomnia. *Evid Based Complement Alternat Med*. 2019;2019:1038206. doi:10.1155/2019/1038206

Depression

1. Oncology Nursing Society. *Depression*. 2019. <https://www.ons.org/pep/depression>
2. National Comprehensive Cancer Network. Distress Management (Version 2.2023). 2023
3. Grassi L, Caruso R, Riba MB, et al. Anxiety and depression in adult cancer patients: ESMO Clinical Practice Guideline. *ESMO Open*. Apr 2023;8(2):101155. doi:10.1016/j.esmoop.2023.101155
4. National Cancer Institute. Depression (PDQ®)—Health Professional Version (Updated: July 25, 2024). <https://www.cancer.gov/about-cancer/coping/feelings/depression-hp-pdq>
5. Fung JYT, Lim H, Vongsirimas N, Klainin-Yobas P. Effectiveness of eHealth mindfulness-based interventions on cancer-related symptoms among cancer patients and survivors: A systematic review and meta-analysis. *J Telemed Telecare*. Feb 25 2022;1357633X221078490. doi:10.1177/1357633X221078490
6. Cancer Care Ontario. *Symptom Management Algorithm: Depression in adults with cancer*. 2019.
7. Alberta Health Services. Depression. 2019
8. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
9. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
10. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. Northern Ireland Cancer Network. *Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines*. 2022.
12. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
13. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
14. National Institutes of Health: National Cancer Institute. *Common terminology criteria for adverse events (CTCAE) v5.0*. 2017.
15. Vita G, Compri B, Matcham F, Barbui C, Ostuzzi G. Antidepressants for the treatment of depression in people with cancer. *Cochrane Database Syst Rev*. Mar 31 2023;3(3):CD011006. doi:10.1002/14651858.CD011006.pub4
16. De Feo G, Case AA, Crawford GB, et al. Multinational Association of Supportive Care in Cancer (MASCC) guidelines: cannabis for psychological symptoms including insomnia, anxiety, and depression. *Support Care Cancer*. Feb 21 2023;31(3):176. doi:10.1007/s00520-023-07628-3
17. Ligibel JA, Bohlke K, May AM, et al. Exercise, Diet, and Weight Management During Cancer Treatment: ASCO Guideline. *J Clin Oncol*. Aug 1 2022;40(22):2491-2507. doi:10.1200/JCO.22.00687
18. Bro ML, Jespersen KV, Hansen JB, et al. Kind of blue: A systematic review and meta-analysis of music interventions in cancer treatment. *Psychooncology*. Feb 2018;27(2):386-400. doi:10.1002/pon.4470
19. Wang T, Tan JB, Yao LQ, et al. Effects of somatic acupoint stimulation on anxiety and depression in cancer patients: An updated systematic review of randomized controlled trials. *Complement Ther Clin Pract*. May 2023;51:101735. doi:10.1016/j.ctcp.2023.101735
20. Cillessen L, Johannsen M, Speckens AEM, Zachariae R. Mindfulness-based interventions for psychological and physical health outcomes in cancer patients and survivors: A systematic review and meta-analysis of randomized controlled trials. *Psychooncology*. Dec 2019;28(12):2257-2269. doi:10.1002/pon.5214
21. Lin LY, Lin LH, Tzeng GL, et al. Effects of Mindfulness-Based Therapy for Cancer Patients: A Systematic Review and Meta-analysis. *J Clin Psychol Med Settings*. Jun 2022;29(2):432-445. doi:10.1007/s10880-022-09862-z

22. McCloy K, Hughes C, Dunwoody L, Marley J, Gracey J. Effects of mindfulness-based interventions on fatigue and psychological wellbeing in women with cancer: A systematic review and meta-analysis of randomised control trials. *Psychooncology*. Nov 2022;31(11):1821-1834. doi:10.1002/pon.6046
23. Xing L, Guo X, Bai L, Qian J, Chen J. Are spiritual interventions beneficial to patients with cancer?: A meta-analysis of randomized controlled trials following PRISMA. *Medicine (Baltimore)*. Aug 2018;97(35):e11948. doi:10.1097/MD.00000000000011948
24. Carlson LE, Ismaila N, Addington EL, et al. Integrative Oncology Care of Symptoms of Anxiety and Depression in Adults With Cancer: Society for Integrative Oncology-ASCO Guideline. *J Clin Oncol*. Oct 1 2023;41(28):4562-4591. doi:10.1200/JCO.23.00857

Diarrhea

1. Oncology Nursing Society. Diarrhea. 2024. <https://www.ons.org/pep/chemotherapy-induced-diarrhea>; <https://www.ons.org/pep/radiation-induced-diarrhea>
2. BC Cancer Agency. Symptom Management Guidelines: Diarrhea. 2018
3. Cancer Care Ontario. Symptom Management Algorithm: Diarrhea In Adults with Cancer. 2022
4. Schmidt-Hieber M, Bierwirth J, Buchheidt D, et al. Diagnosis and management of gastrointestinal complications in adult cancer patients: 2017 updated evidence-based guidelines of the Infectious Diseases Working Party (AGIHO) of the German Society of Hematology and Medical Oncology (AGIHO). *Ann Hematol*. Jan 2018;97(1):31-49. doi:10.1007/s00277-017-3183-7
5. Bossi P, Antonuzzo A, Cherny NI, et al. Diarrhoea in adult cancer patients: ESMO Clinical Practice Guidelines. *Ann Oncol*. Oct 1 2018;29(Suppl 4):iv126-iv142. doi:10.1093/annonc/mdy145
6. Oncology Nursing Society. Immunotherapy-Induced Diarrhea. 2019. <https://www.ons.org/pep/immunotherapy-induced-diarrhea>
7. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
8. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
9. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
10. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
12. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
13. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
14. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
15. National Cancer Institute. Gastrointestinal Complications (PDQ®)—Health Professional Version (Updated: August 24, 2023). <https://www.cancer.gov/about-cancer/treatment/side-effects/constipation/gi-complications-hp-pdq>
16. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
17. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
18. Elad S, Cheng KKF, Lalla RV, et al. MASCC/ISOO clinical practice guidelines for the management of mucositis secondary to cancer therapy. *Cancer*. Oct 1 2020;126(19):4423-4431. doi:10.1002/cncr.33100
19. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
20. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
21. Wei D, Heus P, van de Wetering FT, van Tienhoven G, Verleye L, Scholten RJ. Probiotics for the prevention or treatment of chemotherapy- or radiotherapy-related diarrhoea in people with cancer. *Cochrane Database Syst Rev*. Aug 31 2018;8(8):CD008831. doi:10.1002/14651858.CD008831.pub3

Fatigue/Tiredness

1. BC Cancer Agency. Symptom Management Guidelines: FATIGUE. 2018
2. National Comprehensive Cancer Network. Cancer-Related Fatigue (Version 2.2023). 2023
3. Fabi A, Bhargava R, Fatigoni S, et al. Cancer-related fatigue: ESMO Clinical Practice Guidelines for diagnosis and treatment. *Ann Oncol*. Jun 2020;31(6):713-723. doi:10.1016/j.annonc.2020.02.016
4. National Cancer Institute. Fatigue (PDQ®)—Health Professional Version (Updated: July 17, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/fatigue/fatigue-hp-pdq>

5. Rau KM, Shun SC, Hung SH, et al. Management of cancer-related fatigue in Taiwan: an evidence-based consensus for screening, assessment and treatment. *Jpn J Clin Oncol*. Jan 6 2023;53(1):46-56. doi:10.1093/jjco/hyac164
6. Dong B, Qi Y, Lin L, et al. Which Exercise Approaches Work for Relieving Cancer-Related Fatigue? A Network Meta-analysis. *J Orthop Sports Phys Ther*. Jun 2023;53(6):343-352. doi:10.2519/jospt.2023.11251
7. He J, Hou JH, Qi J, Zhang T, Wang YL, Qian M. Mindfulness Ased Stress Reduction Interventions for Cancer Related Fatigue: A Meta-Analysis and Systematic Review. *J Natl Med Assoc*. Aug 2020;112(4):387-394. doi:10.1016/j.jnma.2020.04.006
8. Herranz-Gomez A, Cuenca-Martinez F, Suso-Marti L, et al. Effectiveness of Therapeutic Exercise Models on Cancer-Related Fatigue in Patients With Cancer Undergoing Chemotherapy: A Systematic Review and Network Meta-analysis. *Arch Phys Med Rehabil*. Aug 2023;104(8):1331-1342. doi:10.1016/j.apmr.2023.01.008
9. McCloy K, Hughes C, Dunwoody L, Marley J, Gracey J. Effects of mindfulness-based interventions on fatigue and psychological wellbeing in women with cancer: A systematic review and meta-analysis of randomised control trials. *Psychooncology*. Nov 2022;31(11):1821-1834. doi:10.1002/pon.6046
10. Penna GB, Otto DM, da Silva TC, Pedroni AS, Macagnan FE. Physical rehabilitation for the management of cancer-related fatigue during cytotoxic treatment: a systematic review with meta-analysis. *Support Care Cancer*. Jan 23 2023;31(2):129. doi:10.1007/s00520-022-07549-7
11. Tian H, Chen Y, Sun M, et al. Acupuncture therapies for cancer-related fatigue: A Bayesian network meta-analysis and systematic review. *Front Oncol*. 2023;13:1071326. doi:10.3389/fonc.2023.1071326
12. Cancer Care Ontario. Symptom Management Algorithm - FATIGUE In Adults with Cancer. 2023
13. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
14. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
15. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
16. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
17. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
18. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
19. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
20. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
21. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
22. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
23. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
24. Li H, Hou T, Sun S, et al. Efficacy of ginseng oral administration and ginseng injections on cancer-related fatigue: A meta-analysis. *Medicine (Baltimore)*. Nov 18 2022;101(46):e31363. doi:10.1097/MD.00000000000031363
25. Ligibel JA, Bohlke K, May AM, et al. Exercise, Diet, and Weight Management During Cancer Treatment: ASCO Guideline. *J Clin Oncol*. Aug 1 2022;40(22):2491-2507. doi:10.1200/JCO.22.00687
26. Chen X, Li J, Chen C, et al. Effects of exercise interventions on cancer-related fatigue and quality of life among cancer patients: a meta-analysis. *BMC Nurs*. Jun 13 2023;22(1):200. doi:10.1186/s12912-023-01363-0
27. Contreras LB, Cid RC, Lorca LA, Ribeiro IL. Effectiveness of Resistance Training on Fatigue in Patients Undergoing Cancer Treatment: A Meta-Analysis of Randomized Clinical Trials. *Int J Breast Cancer*. 2022;2022:9032534. doi:10.1155/2022/9032534
28. Loughney LA, West MA, Kemp GJ, Grocott MP, Jack S. Exercise interventions for people undergoing multimodal cancer treatment that includes surgery. *Cochrane Database Syst Rev*. Dec 11 2018;12(12):CD012280. doi:10.1002/14651858.CD012280.pub2
29. Tanriverdi A, Ozcan Kahraman B, Ergin G, Karadibak D, Savci S. Effect of exercise interventions in adults with cancer receiving palliative care: a systematic review and meta-analysis. *Support Care Cancer*. Mar 8 2023;31(4):205. doi:10.1007/s00520-023-07655-0
30. Bro ML, Jespersen KV, Hansen JB, et al. Kind of blue: A systematic review and meta-analysis of music interventions in cancer treatment. *Psychooncology*. Feb 2018;27(2):386-400. doi:10.1002/pon.4470
31. Lin LY, Lin LH, Tzeng GL, et al. Effects of Mindfulness-Based Therapy for Cancer Patients: A Systematic Review and Meta-analysis. *J Clin Psychol Med Settings*. Jun 2022;29(2):432-445. doi:10.1007/s10880-022-09862-z

32. Cillessen L, Johannsen M, Speckens AEM, Zachariae R. Mindfulness-based interventions for psychological and physical health outcomes in cancer patients and survivors: A systematic review and meta-analysis of randomized controlled trials. *Psychooncology*. Dec 2019;28(12):2257-2269. doi:10.1002/pon.5214

Fever with Neutropenia

1. National Comprehensive Cancer Network. Prevention and Treatment of Cancer-Related Infections (Version 1.2023). 2023
2. BC Cancer Agency. Symptom Management Guidelines: FEVER and NEUTROPENIA. 2018
3. Oncology Nursing Society. Prevention of Infection. 2019. <https://www.ons.org/pep/prevention-infection-general>
4. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
5. Taplitz RA, Kennedy EB, Bow EJ, et al. Antimicrobial Prophylaxis for Adult Patients With Cancer-Related Immunosuppression: ASCO and IDSA Clinical Practice Guideline Update. *J Clin Oncol*. Oct 20 2018;36(30):3043-3054. doi:10.1200/JCO.18.00374
6. Classen AY, Henze L, von Lilienfeld-Toal M, et al. Primary prophylaxis of bacterial infections and *Pneumocystis jirovecii* pneumonia in patients with hematologic malignancies and solid tumors: 2020 updated guidelines of the Infectious Diseases Working Party of the German Society of Hematology and Medical Oncology (AGIHO/DGHO). *Ann Hematol*. Jun 2021;100(6):1603-1620. doi:10.1007/s00277-021-04452-9
7. Alberta Health Services. Oncologic Emergencies. 2022;Clinical Practice Guideline SUPP-007 – Version 3
8. Carmona-Bayonas A, Jimenez-Fonseca P, de Castro EM, et al. SEOM clinical practice guideline: management and prevention of febrile neutropenia in adults with solid tumors (2018). *Clin Transl Oncol*. Jan 2019;21(1):75-86. doi:10.1007/s12094-018-1983-4
9. Rapoport BL, Cooksley T, Johnson DB, Anderson R, Shannon VR. Treatment of infections in cancer patients: an update from the neutropenia, infection and myelosuppression study group of the Multinational Association for Supportive Care in Cancer (MASCC). *Expert Rev Clin Pharmacol*. Mar 2021;14(3):295-313. doi:10.1080/17512433.2021.1884067
10. Tralongo AC, Antonuzzo A, Pronzato P, et al. Management of chemotherapy-induced neutropenia in patients with cancer: 2019 guidelines of the Italian Medical Oncology Association (AIOM). *Tumori*. Aug 2020;106(4):273-280. doi:10.1177/0300891620927093
11. Kochanek M, Schalk E, von Bergwelt-Baildon M, et al. Management of sepsis in neutropenic cancer patients: 2018 guidelines from the Infectious Diseases Working Party (AGIHO) and Intensive Care Working Party (iCHOP) of the German Society of Hematology and Medical Oncology (DGHO). *Ann Hematol*. May 2019;98(5):1051-1069. doi:10.1007/s00277-019-03622-0
12. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
13. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
14. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
15. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
16. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
17. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
18. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
19. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
20. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
21. Becker PS, Griffiths EA, Alwan LM, et al. NCCN Guidelines Insights: Hematopoietic Growth Factors, Version 1.2020. *J Natl Compr Canc Netw*. Jan 2020;18(1):12-22. doi:10.6004/jnccn.2020.0002

Mouth Dryness/Xerostomia

1. BC Cancer Agency. Xerostomia. 2019
2. Cancer Care Ontario. Xerostomia. 2021
3. Alberta Health Services. Oral Care. 2019

4. National Cancer Institute. Oral Complications of Cancer Therapies (PDQ®)–Health Professional Version (Updated: February 16, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/mouth-throat/oral-complications-hp-pdq>
5. Ni X, Tian T, Chen D, et al. Acupuncture for Radiation-Induced Xerostomia in Cancer Patients: A Systematic Review and Meta-Analysis. *Integr Cancer Ther*. Jan-Dec 2020;19:1534735420980825. doi:10.1177/1534735420980825
6. Mercadante V, Jensen SB, Smith DK, et al. Salivary Gland Hypofunction and/or Xerostomia Induced by Nonsurgical Cancer Therapies: ISOO/MASCC/ASCO Guideline. *J Clin Oncol*. Sep 1 2021;39(25):2825-2843. doi:10.1200/JCO.21.01208
7. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
8. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
9. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
10. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
12. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
13. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
14. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022;

Mouth Sores/Stomatitis

1. Oncology Nursing Society. Mucositis. 2019. <https://www.ons.org/pep/mucositis>
2. BC Cancer Agency. Oral Mucositis. 2019
3. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
4. Alberta Health Services. Oral Care. 2019
5. National Cancer Institute. Oral Complications of Cancer Therapies (PDQ®)–Health Professional Version (Updated: February 16, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/mouth-throat/oral-complications-hp-pdq>
6. Elad S, Cheng KKF, Lalla RV, et al. MASCC/ISOO clinical practice guidelines for the management of mucositis secondary to cancer therapy. *Cancer*. Oct 1 2020;126(19):4423-4431. doi:10.1002/cncr.33100
7. Al-Rudayni AHM, Gopinath D, Maharajan MK, Veettil SK, Menon RK. Efficacy of Oral Cryotherapy in the Prevention of Oral Mucositis Associated with Cancer Chemotherapy: Systematic Review with Meta-Analysis and Trial Sequential Analysis. *Curr Oncol*. Jul 29 2021;28(4):2852-2867. doi:10.3390/currenol28040250
8. Al-Rudayni AHM, Gopinath D, Maharajan MK, Veettil SK, Menon RK. Efficacy of Photobiomodulation in the Treatment of Cancer Chemotherapy-Induced Oral Mucositis: A Meta-Analysis with Trial Sequential Analysis. *Int J Environ Res Public Health*. Jul 12 2021;18(14)doi:10.3390/ijerph18147418
9. Amiri Khosroshahi R, Talebi S, Travica N, Mohammadi H. Cryotherapy for oral mucositis in cancer: review of systematic reviews and meta-analysis. *BMJ Support Palliat Care*. Nov 30 2022;doi:10.1136/spcare-2022-003636
10. Cancer Care Ontario. Oral Mucositis. 2021
11. Cancer Care Ontario. Oral Stomatitis. 2021
12. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
13. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
14. Schneider BJ, Naidoo J, Santomaso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
15. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
16. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
17. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.

18. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
19. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
20. Steinmann D, Babadag Savas B, Felber S, et al. Nursing Procedures for the Prevention and Treatment of Mucositis Induced by Cancer Therapies: Clinical Practice Guideline Based on an Interdisciplinary Consensus Process and a Systematic Literature Search. *Integr Cancer Ther*. Jan-Dec 2021;20:1534735420940412. doi:10.1177/1534735420940412
21. Wilairat P, Kengkla K, Kaewpanan T, et al. Comparative efficacy and safety of interventions for preventing chemotherapy-induced oral mucositis in adult cancer patients: a systematic review and network meta-analysis. *Eur J Hosp Pharm*. Mar 2020;27(2):103-110. doi:10.1136/ejhpharm-2018-001649
22. Lai CC, Chen SY, Tu YK, Ding YW, Lin JJ. Effectiveness of low level laser therapy versus cryotherapy in cancer patients with oral mucositis: Systematic review and network meta-analysis. *Crit Rev Oncol Hematol*. Apr 2021;160:103276. doi:10.1016/j.critrevonc.2021.103276
23. Faggion CM, Jr. Low-Level Laser Therapy May Reduce the Risk of Severe Oral Mucositis in Patients Receiving Chemotherapy or Radiotherapy. *J Evid Based Dent Pract*. Dec 2021;21(4):101654. doi:10.1016/j.jebdp.2021.101654

Nausea & Vomiting

1. BC Cancer Agency. Symptom Management Guidelines: Nausea and Vomiting. 2018
2. National Cancer Institute. Nausea and Vomiting Related to Cancer Treatment (PDQ®)—Health Professional Version (Updated: July 20, 2023). <https://www.cancer.gov/about-cancer/treatment/side-effects/nausea/nausea-hp-pdq>
3. L'Institut national d'excellence en santé et en services sociaux (INESSS). Guide pour la prévention et le traitement des nausées et vomissements induits par la chimiothérapie ou la radiothérapie chez l'adulte 2020
4. Cancer Care Ontario. Symptom Management Algorithm: Nausea and Vomiting in Adults with Cancer. 2019.
5. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
6. Roila F, Molassiotis A, Herrstedt J, et al. MASCC/ESMO Antiemetic Guideline 2016 With Updates in 2019. *Ann Oncol*. Sep 2019;27(suppl 5):v119-v133. doi:10.1093/annonc/mdw270
7. Oncology Nursing Society. Chemotherapy-Induced Nausea and Vomiting—Adult. 2019. <https://www.ons.org/pep/chemotherapy-induced-nausea-and-vomiting-adult>
8. Alberta Health Services. Endorsement of the 2017 American Society of Clinical Oncology's Guideline for Antiemetics. 2019
9. National Comprehensive Cancer Network. Antiemesis (Version 2.2023). 2023
10. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
11. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
12. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
13. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6):doi:10.1136/jitc-2021-002435
14. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
15. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
16. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
17. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
18. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
19. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
20. Hesketh PJ, Kris MG, Basch E, et al. Antiemetics: ASCO Guideline Update. *J Clin Oncol*. Aug 20 2020;38(24):2782-2797. doi:10.1200/JCO.20.01296
21. Alderman B, Hui D, Mukhopadhyay S, et al. Multinational Association of Supportive Care in Cancer (MASCC) expert opinion/consensus guidance on the use of cannabinoids for gastrointestinal symptoms in patients with cancer. *Support Care Cancer*. Dec 16 2022;31(1):39. doi:10.1007/s00520-022-07480-x
22. Majem M, de Las Penas R, Virizuela JA, et al. SEOM clinical guideline emesis (2021). *Clin Transl Oncol*. Apr 2022;24(4):712-723. doi:10.1007/s12094-022-02802-1

23. Sutherland A, Naessens K, Plugge E, et al. Olanzapine for the prevention and treatment of cancer-related nausea and vomiting in adults. *Cochrane Database Syst Rev.* Sep 21 2018;9(9):CD012555. doi:10.1002/14651858.CD012555.pub2
24. Health Canada. Health Canada advises Canadians to exercise caution when taking gabapentin or pregabalin with opioids. <https://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2019/71003a-eng.php>
25. Yan Y, Lopez-Alcalde J, Zhang L, Siebenhuner AR, Witt CM, Barth J. Acupuncture for the prevention of chemotherapy-induced nausea and vomiting in cancer patients: A systematic review and meta-analysis. *Cancer Med.* Jun 2023;12(11):12504-12517. doi:10.1002/cam4.5962

Pain

1. BC Cancer Agency. Symptom Management Guidelines: Pain. 2018
2. National Comprehensive Cancer Network. Adult Cancer Pain (Version 1.2023). 2023
3. Oncology Nursing Society. Acute Pain. 2019. <https://www.ons.org/pep/acute-pain>. See also: Sundaramurthi et al. 2017. Cancer-Related Acute Pain: A Systematic Review of Evidence-Based Interventions for Putting Evidence Into Practice. *Clin J Oncol Nurs.* 2017 Jun 1;21(3 Suppl):13-30. doi: 10.1188/17.CJON.S3.13-30.
4. Oncology Nursing Society. Refractory/Intractable Pain. 2019. <https://www.ons.org/pep/refractoryintractable-pain>. See also Brant et al. 2017. Chronic and Refractory Pain: A Systematic Review of Pharmacologic Management in Oncology. *Clin J Oncol Nurs.* 2017;21(3 Suppl):31-53.
5. Oncology Nursing Society. Chronic Pain. 2019. <https://www.ons.org/pep/chronic-pain> See also: Eaton et al. 2017. Nonpharmacologic Pain Interventions: A Review of Evidence-Based Practices for Reducing Chronic Cancer Pain. *Clin J Oncol Nurs.* 2017;21(3 Suppl):54-70.
6. National Cancer Institute. Cancer Pain (PDQ®)—Health Professional Version (Updated: July 25, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/pain/pain-hp-pdq>
7. Alberta Health Services. Cancer Pain. 2018
8. Mai Q, Li X, Yang D, Zhang X, Peng K, Hao Y. Effects of acupressure on cancer-related pain management: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Integrative Medicine.* 2022;51:1-9.
9. Fallon M, Giusti R, Aielli F, et al. Management of cancer pain in adult patients: ESMO Clinical Practice Guidelines. *Ann Oncol.* Oct 1 2018;29(Suppl 4):iv166-iv191. doi:10.1093/annonc/mdy152
10. Chatterjee A, Thota RS, Ramanjulu R, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines, for the Diagnosis and Assessment of Cancer Pain. *Indian J Palliat Care.* Apr-Jun 2020;26(2):164-172. doi:10.4103/0973-1075.285691
11. Cancer Care Ontario. Symptom Management Algorithm: Pain in Adults with Cancer 2018.
12. Jara C, Del Barco S, Gravalos C, et al. SEOM clinical guideline for treatment of cancer pain (2017). *Clin Transl Oncol.* Jan 2018;20(1):97-107. doi:10.1007/s12094-017-1791-2
13. Bennett MI, Eisenberg E, Ahmedzai SH, et al. Standards for the management of cancer-related pain across Europe-A position paper from the EFIC Task Force on Cancer Pain. *Eur J Pain.* Apr 2019;23(4):660-668. doi:10.1002/ejp.1346
14. Oncology Nursing Society. Breakthrough Pain. 2019. <https://www.ons.org/pep/breakthrough-pain>. See also: Brant et al. 2017. Breakthrough Cancer Pain: A Systematic Review of Pharmacologic Management. *Clin J Oncol Nurs.* 2017;21(3 Suppl):71-80.
15. Paice JA, Bohlke K, Barton D, et al. Use of Opioids for Adults With Pain From Cancer or Cancer Treatment: ASCO Guideline. *J Clin Oncol.* Feb 1 2023;41(4):914-930. doi:10.1200/JCO.22.02198
16. Mao JJ, Ismaila N, Bao T, et al. Integrative Medicine for Pain Management in Oncology: Society for Integrative Oncology-ASCO Guideline. *J Clin Oncol.* Dec 1 2022;40(34):3998-4024. doi:10.1200/JCO.22.01357
17. Thota RS, Ramanjulu R, Ahmed A, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines on Pharmacological Management of Cancer Pain (Part II). *Indian J Palliat Care.* Apr-Jun 2020;26(2):180-190. doi:10.4103/0973-1075.285693
18. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol.* Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
19. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol.* Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
20. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer.* Jun 2021;9(6)doi:10.1136/jitc-2021-002435
21. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
22. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
23. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
24. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023

25. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
26. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
27. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
28. Ramanjulu R, Thota RS, Ahmed A, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines on Pharmacological Management of Cancer Pain (Part I). *Indian J Palliat Care*. Apr-Jun 2020;26(2):173-179. doi:10.4103/0973-1075.285692
29. Mawatari H, Shinjo T, Morita T, Kohara H, Yomiya K. Revision of Pharmacological Treatment Recommendations for Cancer Pain: Clinical Guidelines from the Japanese Society of Palliative Medicine. *J Palliat Med*. Jul 2022;25(7):1095-1114. doi:10.1089/jpm.2021.0438
30. Aman MM, Mahmoud A, Deer T, et al. The American Society of Pain and Neuroscience (ASPN) Best Practices and Guidelines for the Interventional Management of Cancer-Associated Pain. *J Pain Res*. 2021;14:2139-2164. doi:10.2147/JPR.S315585
31. Schmidt-Hansen M, Bennett MI, Arnold S, et al. Oxycodone for cancer-related pain. *Cochrane Database Syst Rev*. Jun 9 2022;6(6):CD003870. doi:10.1002/14651858.CD003870.pub7
32. Ramanjulu R, Thota RS, Ahmed A, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines on Pharmacological Management of Cancer Pain (Part III). *Indian J Palliat Care*. Apr-Jun 2020;26(2):191-197. doi:10.4103/0973-1075.285694
33. Ahmed A, Thota RS, Bhatnagar S, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines on Complementary Therapies for Cancer Pain. *Indian J Palliat Care*. Apr-Jun 2020;26(2):198-202. doi:10.4103/0973-1075.285695
34. Ge L, Wang Q, He Y, et al. Acupuncture for cancer pain: an evidence-based clinical practice guideline. *Chin Med*. Jan 5 2022;17(1):8. doi:10.1186/s13020-021-00558-4
35. He Y, Guo X, May BH, et al. Clinical Evidence for Association of Acupuncture and Acupressure With Improved Cancer Pain: A Systematic Review and Meta-Analysis. *JAMA Oncol*. Feb 1 2020;6(2):271-278. doi:10.1001/jamaoncol.2019.5233
36. Lam WC, Zhong L, Liu Y, et al. Hong Kong Chinese Medicine Clinical Practice Guideline for Cancer Palliative Care: Pain, Constipation, and Insomnia. *Evid Based Complement Alternat Med*. 2019;2019:1038206. doi:10.1155/2019/1038206
37. Plinsinga ML, Singh B, Rose GL, et al. The Effect of Exercise on Pain in People with Cancer: A Systematic Review with Meta-analysis. *Sports Med*. Sep 2023;53(9):1737-1752. doi:10.1007/s40279-023-01862-9
38. Tanriverdi A, Ozcan Kahraman B, Ergin G, Karadibak D, Savci S. Effect of exercise interventions in adults with cancer receiving palliative care: a systematic review and meta-analysis. *Support Care Cancer*. Mar 8 2023;31(4):205. doi:10.1007/s00520-023-07655-0
39. Cuthbert C, Twomey R, Bansal M, et al. The role of exercise for pain management in adults living with and beyond cancer: a systematic review and meta-analysis. *Support Care Cancer*. Apr 11 2023;31(5):254. doi:10.1007/s00520-023-07716-4
40. Bro ML, Jespersen KV, Hansen JB, et al. Kind of blue: A systematic review and meta-analysis of music interventions in cancer treatment. *Psychooncology*. Feb 2018;27(2):386-400. doi:10.1002/pon.4470
41. Cillessen L, Johannsen M, Speckens AEM, Zachariae R. Mindfulness-based interventions for psychological and physical health outcomes in cancer patients and survivors: A systematic review and meta-analysis of randomized controlled trials. *Psychooncology*. Dec 2019;28(12):2257-2269. doi:10.1002/pon.5214
42. Feng B, Hu X, Lu WW, Wang Y, Ip WY. Are mindfulness treatments effective for pain in cancer patients? A systematic review and meta-analysis. *Eur J Pain*. Jan 2022;26(1):61-76. doi:10.1002/ejp.1849
43. Lin LY, Lin LH, Tzeng GL, et al. Effects of Mindfulness-Based Therapy for Cancer Patients: A Systematic Review and Meta-analysis. *J Clin Psychol Med Settings*. Jun 2022;29(2):432-445. doi:10.1007/s10880-022-09862-z
44. Tan L, Fang P, Cui J, Yu H, Yu L. Effects of progressive muscle relaxation on health-related outcomes in cancer patients: A systematic review and meta-analysis of randomized controlled trials. *Complement Ther Clin Pract*. Nov 2022;49:101676. doi:10.1016/j.ctcp.2022.101676

Peripheral Neuropathy

1. BC Cancer Agency. Peripheral Neuropathy. 2018
2. Oncology Nursing Society. Peripheral neuropathy. 2019. <https://www.ons.org/pep/peripheral-neuropathy>
3. National Comprehensive Cancer Network. Adult Cancer Pain (Version 1.2023). 2023
4. Cancer Care Ontario. Symptom Management Algorithm: Pain in Adults with Cancer 2018.
5. Alberta Health Services. Peripheral Neuropathy. 2019
6. National Cancer Institute. Cancer Pain (PDQ®)—Health Professional Version (Updated: July 25, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/pain/pain-hp-pdq>

7. Chatterjee A, Thota RS, Ramanjulu R, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines, for the Diagnosis and Assessment of Cancer Pain. *Indian J Palliat Care*. Apr-Jun 2020;26(2):164-172. doi:10.4103/0973-1075.285691
8. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
9. Crichton M, Yates PM, Agbejule OA, Spooner A, Chan RJ, Hart NH. Non-Pharmacological Self-Management Strategies for Chemotherapy-Induced Peripheral Neuropathy in People with Advanced Cancer: A Systematic Review and Meta-Analysis. *Nutrients*. Jun 9 2022;14(12)doi:10.3390/nu14122403
10. Tamburin S, Park SB, Schenone A, et al. Rehabilitation, exercise, and related non-pharmacological interventions for chemotherapy-induced peripheral neurotoxicity: Systematic review and evidence-based recommendations. *Crit Rev Oncol Hematol*. Mar 2022;171:103575. doi:10.1016/j.critrevonc.2021.103575
11. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
12. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
13. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
14. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
15. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
16. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
17. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
18. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
19. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.
20. Loprinzi CL, Lacchetti C, Bleeker J, et al. Prevention and Management of Chemotherapy-Induced Peripheral Neuropathy in Survivors of Adult Cancers: ASCO Guideline Update. *J Clin Oncol*. Oct 1 2020;38(28):3325-3348. doi:10.1200/JCO.20.01399
21. Mao JJ, Ismaila N, Bao T, et al. Integrative Medicine for Pain Management in Oncology: Society for Integrative Oncology-ASCO Guideline. *J Clin Oncol*. Dec 1 2022;40(34):3998-4024. doi:10.1200/JCO.22.01357
22. Xu Z, Wang X, Wu Y, Wang C, Fang X. The effectiveness and safety of acupuncture for chemotherapy-induced peripheral neuropathy: A systematic review and meta-analysis. *Front Neurol*. 2022;13:963358. doi:10.3389/fneur.2022.963358
23. Ramanjulu R, Thota RS, Ahmed A, et al. Indian Society for Study of Pain, Cancer Pain Special Interest Group Guidelines on Pharmacological Management of Cancer Pain (Part III). *Indian J Palliat Care*. Apr-Jun 2020;26(2):191-197. doi:10.4103/0973-1075.285694

Skin Rash

1. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. Dec 20 2021;39(36):4073-4126. doi:10.1200/JCO.21.01440
2. National Comprehensive Cancer Network. Management of Immunotherapy-Related Toxicities (Version 2.2023). 2023
3. Haanen J, Obeid M, Spain L, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann Oncol*. Dec 2022;33(12):1217-1238. doi:10.1016/j.annonc.2022.10.001
4. Cancer Care Ontario. Immune Checkpoint Inhibitor Toxicity Management: Clinical Practice Guideline. 2018.
5. Gravalos C, Sanmartin O, Gurrupide A, et al. Clinical management of cutaneous adverse events in patients on targeted anticancer therapies and immunotherapies: a national consensus statement by the Spanish Academy of Dermatology and Venereology and the Spanish Society of Medical Oncology. *Clin Transl Oncol*. May 2019;21(5):556-571. doi:10.1007/s12094-018-1953-x
6. Lacouture ME, Sibaud V, Gerber PA, et al. Prevention and management of dermatological toxicities related to anticancer agents: ESMO Clinical Practice Guidelines(☆). *Ann Oncol*. Feb 2021;32(2):157-170. doi:10.1016/j.annonc.2020.11.005
7. Alberta Health Services. Acneiform Rash. 2020
8. Hryniewicki AT, Wang C, Shatsky RA, Coyne CJ. Management of Immune Checkpoint Inhibitor Toxicities: A Review and Clinical Guideline for Emergency Physicians. *J Emerg Med*. Oct 2018;55(4):489-502. doi:10.1016/j.jemermed.2018.07.005
9. Choi J, Anderson R, Blidner A, et al. Multinational Association of Supportive Care in Cancer (MASCC) 2020 clinical practice recommendations for the management of severe dermatological toxicities from checkpoint inhibitors. *Support Care Cancer*. Dec 2020;28(12):6119-6128. doi:10.1007/s00520-020-05706-4

10. Apalla Z, Nikolaou V, Fattore D, et al. European recommendations for management of immune checkpoint inhibitors-derived dermatologic adverse events. The EADV task force 'Dermatology for cancer patients' position statement. *J Eur Acad Dermatol Venereol*. Mar 2022;36(3):332-350. doi:10.1111/jdv.17855
11. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
12. BC Cancer Agency. BC Cancer Protocol Summary for Management of Immune-Mediated Adverse Reactions to Checkpoint Inhibitor Immunotherapy. 2022
13. Oncology Nursing Society. Skin Toxicities. 2020. <https://www.ons.org/pep/skin-reactions>
14. Alberta Health Services. Checkpoint Inhibitor Related Toxicities. 2020;Clinical Practice Guideline SUPP-018-Version 1
15. Northern Ireland Cancer Network. Checkpoint Inhibitor Immunotherapy Toxicity Management Guidelines. 2022.
16. Brahmer JR, Abu-Sbeih H, Ascierto PA, et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *J Immunother Cancer*. Jun 2021;9(6)doi:10.1136/jitc-2021-002435
17. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
18. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.

Skin Reaction to Radiation

1. Cancer Care Manitoba (CCMB). Management of Acute Radiation-Induced Skin Toxicities. 2018
2. Aguiar BRL, Guerra ENS, Normando AGC, Martins CC, Reis P, Ferreira EB. Effectiveness of photobiomodulation therapy in radiation dermatitis: A systematic review and meta-analysis. *Crit Rev Oncol Hematol*. Jun 2021;162:103349. doi:10.1016/j.critrevonc.2021.103349
3. BC Cancer Agency. Radiation Dermatitis. 2018
4. Behroozian T, Bonomo P, Patel P, et al. Multinational Association of Supportive Care in Cancer (MASCC) clinical practice guidelines for the prevention and management of acute radiation dermatitis: international Delphi consensus-based recommendations. *Lancet Oncol*. Apr 2023;24(4):e172-e185. doi:10.1016/S1470-2045(23)00067-0
5. Gosselin T, Ginex PK, Backler C, et al. ONS Guidelines for Cancer Treatment-Related Radiodermatitis. *Oncol Nurs Forum*. Nov 1 2020;47(6):654-670. doi:10.1188/20.ONF.654-670
6. Northern Ireland Cancer Network. Acute Oncology Clinical Guidelines. 2022
7. International Society of Nurses in Cancer Care. Evidence-based guidelines for the Prevention and Management of Radiation Dermatitis. 2021
8. Chan DCW, Wong HCY, Riad MA, et al. Prevention of radiation dermatitis with skin hygiene and washing: a systematic review and meta-analysis. *Support Care Cancer*. Apr 22 2023;31(5):294. doi:10.1007/s00520-023-07720-8
9. Yu HB, Han BJ, Cao HJ. Prevention of Radiodermatitis With Topical Chinese Herbal Medicine: A Systematic Review and Meta-Analysis. *Front Pharmacol*. 2022;13:819733. doi:10.3389/fphar.2022.819733
10. Tam S, Zhou G, Trombetta M, et al. Topical corticosteroids for the prevention of severe radiation dermatitis: a systematic review and meta-analysis. *Support Care Cancer*. Jun 6 2023;31(7):382. doi:10.1007/s00520-023-07820-5
11. E Vasconcelos SCCM, Guerra ENS, de Meneses AG, Dos Reis PED, Ferreira EB. Effects of oral supplementation to manage radiation dermatitis in cancer patients: a systematic review. *Support Care Cancer*. Mar 28 2023;31(4):240. doi:10.1007/s00520-023-07685-8
12. Meneses AG, Reis P, Guerra ENS, Canto GL, Ferreira EB. Use of trolamine to prevent and treat acute radiation dermatitis: a systematic review and meta-analysis. *Rev Lat Am Enfermagem*. 2018;26:e2929. doi:10.1590/1518-8345.2035.2929
13. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013
14. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017.

Sleep Changes

1. Oncology Nursing Society. Sleep-wake disturbances. 2019. <https://www.ons.org/practice-resources/pep/sleep-wake-disturbances>
2. BC Cancer Agency. Symptom Management Guidelines: SLEEP-WAKE DISTURBANCE. 2019
3. Alberta Health Services. Guideline Summary for Health Professionals: Sleep Disturbance. 2019
4. National Cancer Institute. Sleep Disorders (PDQ®)—Health Professional Version (Updated: July 17, 2024). <https://www.cancer.gov/about-cancer/treatment/side-effects/sleep-disorders-hp-pdq#section/all>
5. Cancer Care Ontario. Symptom Management Algorithm: SLEEP PROBLEMS In Adults with Cancer. 2022
6. Hannon B, Dyck M, Pope A, et al. Modified Edmonton Symptom Assessment System including constipation and sleep: validation in outpatients with cancer. *J Pain Symptom Manage*. May 2015;49(5):945-52. doi:10.1016/j.jpainsymman.2014.10.013

7. Lam WC, Zhong L, Liu Y, et al. Hong Kong Chinese Medicine Clinical Practice Guideline for Cancer Palliative Care: Pain, Constipation, and Insomnia. *Evid Based Complement Alternat Med.* 2019;2019:1038206. doi:10.1155/2019/1038206
8. Cillessen L, Johannsen M, Speckens AEM, Zachariae R. Mindfulness-based interventions for psychological and physical health outcomes in cancer patients and survivors: A systematic review and meta-analysis of randomized controlled trials. *Psychooncology.* Dec 2019;28(12):2257-2269. doi:10.1002/pon.5214
9. Li F, Jiang T, Shi T. Effect of inhalation aromatherapy on physical and psychological problems in cancer patients: Systematic review and Meta-analysis. *J Psychosoc Oncol.* 2022;40(3):271-287. doi:10.1080/07347332.2021.2011529
10. Ligibel JA, Bohlke K, May AM, et al. Exercise, Diet, and Weight Management During Cancer Treatment: ASCO Guideline. *J Clin Oncol.* Aug 1 2022;40(22):2491-2507. doi:10.1200/JCO.22.00687
11. Gao Y, Liu M, Yao L, et al. Cognitive behavior therapy for insomnia in cancer patients: a systematic review and network meta-analysis. *J Evid Based Med.* Sep 2022;15(3):216-229. doi:10.1111/jebm.12485
12. Cheung DST, Xu X, Smith R, et al. Invasive or noninvasive? A systematic review and network meta-analysis of acupuncture and acupressure to treat sleep disturbance in cancer patients. *Worldviews Evid Based Nurs.* Jun 2023;20(3):202-211. doi:10.1111/wvn.12617
13. Ou Y, Lin D, Ni X, et al. Acupuncture and moxibustion in patients with cancer-related insomnia: A systematic review and network meta-analysis. *Front Psychiatry.* 2023;14:1108686. doi:10.3389/fpsyt.2023.1108686
14. Zhang J, Zhang Z, Huang S, et al. Acupuncture for cancer-related insomnia: A systematic review and meta-analysis. *Phytomedicine.* Jul 20 2022;102:154160. doi:10.1016/j.phymed.2022.154160

Difficulty Swallowing

1. Cancer Care Ontario. Symptom Management Algorithm: Oropharyngeal Dysphagia In Adults with Cancer. 2021
2. National Institutes of Health: National Cancer Institute. Common terminology criteria for adverse events (CTCAE) v5.0. 2017