

## Symptom Management Guidelines: FATIGUE NCI CTCAE GRADE AND MANAGEMENT | RESOURCES | CONTRIBUTING FACTORS

#### **Definition**

Cancer - Related Fatigue (CRF): A distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning.

	Focused Health Assessment	
PHYSICAL ASSESSMENT SYMPTOM ASSESSMENT		
Vital Signs  • Frequency – as clinically indicated	Normal  What is your normal energy/activity level/exercise?  Onset	
Observe for:  Pallor Blood loss Labored breathing Poor capillary refill Poor posture Cachexia Altered mobility, gait Peripheral edema Cognitive impairment Chest pain  Weight Take current weight and compare to pre-treatment or last recorded weight  Functional Status Activity Level/ECOG or PPS	<ul> <li>Onset</li> <li>When did the fatigue begin? Did it start suddenly or gradually over time?</li> <li>How long does it last?</li> <li>Does it follow the same pattern every day?</li> <li>Is it related to a change in cancer treatment?</li> <li>Provoking / Palliating</li> <li>What brings on the fatigue?</li> <li>Is there anything that makes the fatigue better? Worse?</li> <li>When do you feel the most tired?</li> <li>Quality</li> <li>Describe the feeling of fatigue in your own words</li> <li>Does your body feel tired?</li> <li>Does your mind feel tired?</li> <li>Region/ Radiation- Not Applicable</li> <li>Severity / Other Symptoms</li> <li>Since your last visit, how would you rate your fatigue between 0-10 with 0 being no fatigue and 10 being the worst fatigue possible? What is it now? At worst? At best? On average?</li> <li>Do you have any other accompanying symptoms such as shortness of breath at rest or with activity, rapid heart rate, and chest pain or leg heaviness?</li> <li>Have you had any changes in your mood or ability to concentrate?</li> <li>Treatment</li> <li>How have you or the health care team tried to manage your fatigue in the past? Any medications? Has this been effective? Any side effects?</li> <li>Have you had a blood transfusion? When?</li> <li>When was your last cancer treatment?</li> <li>Understanding / Impact on You</li> <li>How much distress does fatigue contribute to your life?</li> <li>How is your fatigue impacting your activities of daily living?</li> </ul>	
	<ul> <li>How many hours do you sleep at night? In the day?</li> <li>Value</li> <li>What do you believe is causing this symptom? How is this impacting you and/or your family?</li> <li>What is your comfort goal or acceptable level for this symptom? (0-10)</li> </ul>	

FATIGUE GRADING SCALE  NCI Common Terminology Criteria for Adverse Events (CTCAE) (Version 5.0)				
GRADE 1 (Mild)	GRADE 2 (Moderate)	GRADE 3 (Severe)	GRADE 4	GRADE 5
Fatigue relieved by rest	Fatigue not relieved by rest, limiting instrumental ADL	Fatigue not relived by rest, limiting self-care ADL		

### Immune-Mediated Adverse Reactions

- Can cause severe and fatal immune-mediated adverse reactions including: enterocolitis, intestinal perforation, hepatitis, dermatitis, neuropathy, endocrinopathy, and toxicities in other organ systems
- Permanent discontinuation of treatment is recommended for severe immune-mediated reactions
- Onset usually occurs during the beginning of treatment, but may occur months after last dose
- All patients should be given an immunotherapy alert card, Immunotherapy Patient Letter, and SCIMMUNE patient handout when treatment is started

#### **Special Considerations for Immunotherapy (Bispecific Antibodies)**

# Overactivation and dysregulation of immune system

- Fatigue may be a sign and symptom of cytokine release syndrome (CRS) or Immune effector cell-associated neurotoxicity syndrome (ICANS)
- Prompt recognition and intervention are critical to prevent progression of symptoms
- Refer to SCCRS and SCICANS protocols for directions on symptomatic treatment
- All patients should be given <u>bispecific antibodies alert card</u>, <u>bispecific antibodies patient letter</u>, and <u>SCCRS/SCICANS patient handout</u> when treatment is started

\*Step-Up Approach to Symptom Management: Interventions Should Be Based On Current Grade Level and Include Lower Level Grade Interventions As Appropriate

#### **NORMAL- GRADE 1**



#### **NON - URGENT**

#### Support, teaching, & follow-up as clinically indicated

## Patient Care and Assessment

- Complete focus assessment
- Collaborate with physician to rule out other causes or concomitant causes of fatigue (such as anemia) and to determine need for further investigation
- If patients are on checkpoint inhibitors, fatigue may not be a direct side effect of the treatment, but rather a product of immune mediated side effects.
- If patients are on bispecific antibodies, fatigue may not be a direct side effect of the treatment, but rather a symptom related to CRS or ICANS.
- Assessment and management of contributing factors, if immunotherapy checkpoint inhibitor or bispecific antibody-related see <u>Special considerations for patients on Checkpoint</u> <u>Inhibitors or Bispecific Antibodies</u>

Exercise	<ul> <li>Exercise recommendations need to be individualized based on:         <ul> <li>Impairments (such as bone metastases, thrombocytopenia, anemia, fever or active infection)</li> <li>The patient's treatment phase (pre-treatment, active treatment or post treatment)</li> </ul> </li> <li>Goals should be specific, achievable and realistic based on current health status</li> <li>In general, progression of activity levels should be done purposefully using the principle of frequency, intensity, time and type (FITT). This can result in more physical energy, improved appetite and increased ability to perform ADLs.</li> <li>Consider initial plan discussed with health care team and any relevant referrals to physiotherapy, occupational therapy or community-based programs</li> </ul>
Energy Conservation	<ul> <li>Pacing         <ul> <li>Balance activities with rest</li> <li>Slow and steady pace uses less energy</li> </ul> </li> <li>Planning         <ul> <li>Organize your time, methods, and space</li> <li>Encourage activities at times of peak energy</li> <li>Develop a routine for rest and activity</li> </ul> </li> <li>Priority setting         <ul> <li>Postpone nonessential activities, delegate responsibilities and ask for help</li> </ul> </li> <li>Posture         <ul> <li>Change positions frequently</li> <li>Keep activities/work within easy range using correct body alignment</li> <li>Avoid bending and lifting</li> <li>Sitting while completing tasks when able</li> </ul> </li> <li>Proficiency         <ul> <li>Use labour saving devices (e.g. elevator) to maximize efficiency and minimize workload</li> </ul> </li> </ul>

Sleep Hygiene	<ul> <li>Encourage:         <ul> <li>Comfortable sleep surroundings</li> <li>Relaxing activities before bed time</li> <li>Limiting naps to less than 1hr to not interfere with night-time sleep</li> </ul> </li> <li>Avoid:         <ul> <li>Lying in bed at times other than sleep</li> <li>Distracting noise (e.g. television, radio) during sleep</li> <li>Caffeine and exercise near bedtime</li> </ul> </li> </ul>
Psychosocial and Wellness Support	<ul> <li>Supportive expressive therapies such as counseling, support groups (in person and online), and journal writing</li> <li>Mind body strategies such as meditation, yoga, acupuncture</li> <li>Cognitive Behavioral Therapy, Mindfulness Based Stress Reduction Therapy</li> <li>Attention restoring therapy such as games, music, reading and socializing</li> <li>Massage Therapy</li> <li>Bright white light therapy</li> </ul>
Dietary Management	<ul> <li>Encourage adequate hydration (e.g. 8 – 12 cups of fluid throughout the day) unless contraindicated</li> <li>Encourage adequate nutrition-if poor appetite, consider eating sources of protein first, smaller more frequent meals</li> <li>Provide resources and referrals as necessary</li> </ul>
Pharmacological Management	<ul> <li>Avoid/discontinue any medications that may cause or exacerbate fatigue in collaboration with physician and pharmacist (medication reconciliation)</li> <li>Medications may be prescribed to correct causative factors (e.g. iron supplement)</li> <li>Refer to <u>SCIMMUNE</u> if patient is on checkpoint inhibitors</li> <li>Refer to <u>SCCRS</u> and <u>SCICANS</u> if patient is on Bispecific Antibody</li> <li>*See special considerations for patients on Checkpoint Inhibitor or Bispecific antibodies</li> </ul>
Patient Education and Follow-Up	<ul> <li>Encourage self-monitoring of fatigue levels and patterns as well as times of peak energy</li> <li>Reinforce that Cancer Related Fatigue is:</li> </ul>

Normal, often treatable, and needs to be reported
 Different than 'normal' fatigue and may not be relieved by rest
 Not necessarily a sign of cancer progression or that treatment is not working
 Advise patient to contact healthcare providers if fatigue level increases or does not improve
 Re-assess at each visit and modify strategies as necessary
 Provide information on patient education resources and references as appropriate for management such as websites, informational videos, handouts (see separate section below)

#### **GRADE 2 - GRADE 3**



URGENT:		
	Requires medical attention within 24 hours	
Patient Care and Assessment	<ul> <li>Collaborate with physician:         <ul> <li>To rule out other causes or concomitant causes of fatigue and decide if further assessment required either at cancer center or by General Practitioner</li> </ul> </li> <li>If patient is on Immunotherapy, remind them to present their Immunotherapy Alert Card and patient letter</li> <li>If patient is on Bispecific Antibodies, remind patient to present Bispecific Antibodies Alert Card and patient letter</li> <li>Monitor vital signs as clinically indicated</li> <li>Lab tests that may be ordered:         <ul> <li>Hematology profile, transferrin, total iron- binding capacity, ferritin, iron levels, folic acid, B12 level, electrolyte profile, AST/ALT, total bilirubin, hormone levels</li> <li>Thyroid function, evaluate endocrine function if patient on Immunotherapy</li> <li>Urinalysis to rule out urinary tract infection</li> </ul> </li> </ul>	
Pharmacological Management	<ul> <li>Avoid/discontinue/reduce any medications that may cause or exacerbate fatigue in collaboration with physician and pharmacist</li> <li>Medications that may be prescribed:         <ul> <li>Iron supplement</li> <li>Psychostimulants/corticosteroids (limited benefit for fatigue in advanced cancer)</li> <li>Sleep-enhancing medications</li> <li>Refer to <u>SCIMMUNE</u> if patient is on checkpoint inhibitors</li> <li>Refer to <u>SCCRS</u> and <u>SCICANS</u> if patient is on Bispecific Antibodies</li> </ul> </li> </ul>	

	RESOURCES & REFERRALS
Referrals	<ul> <li>Patient Support Centre or Telephone Care Management</li> <li>Oncology Nutrition Services-both on site and through BC Healthlink (811)</li> <li>Pain and Symptom Management/Palliative Care (PSMPC) - if multiple symptoms</li> <li>Physiotherapist</li> <li>Occupational therapy</li> <li>Patient and Family Counseling for stress management, relaxation, counseling to deal with physical limitations, and support groups</li> <li>Home Nursing Care</li> </ul>
Immunotherapy – Checkpoint Inhibitors	<ul> <li>Immunotherapy Nursing Process</li> <li>Immunotherapy Patient Letter</li> <li>Immunotherapy Alert Card</li> <li>SCIMMUNE protocol</li> <li>SCIMMUNE patient handout</li> </ul>
Immunotherapy - Bispecific Antibodies	<ul> <li>Bispecific Antibodies Nursing Process</li> <li>Bispecific Antibodies Patient letter</li> <li>Bispecific Antibodies Alert Card</li> <li>SCICANS protocol</li> <li>SCCRS protocol</li> </ul>

The information contained in these documents is a statement of consensus of BC Cancer professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is at your own risk and is subject to BC Cancer's terms of use, available at <a href="www.bccancer.bc.ca/terms-of-use">www.bccancer.bc.ca/terms-of-use</a>

Page 4 of 6

Patient Education	<ul> <li>Coping with Fatigue: <a href="http://www.bccancer.bc.ca/health-info/coping-with-cancer/managing-symptoms-side-effects/diarrhea-caused-by-medications">https://www.bccancer.managing-symptoms-side-effects/diarrhea-caused-by-medications</a></li> <li>Alberta Health Services Cancer and Fatigue Video Series and PDF on How to Manage Cancer-Related Fatigue:         <a href="https://www.youtube.com/playlist?list=PLi1tOF1I5ZoUFt61X8KxkCGE4PYI92wNB">https://www.bccancer.bc.com/playlist?list=PLi1tOF1I5ZoUFt61X8KxkCGE4PYI92wNB</a></li> <li>Cancer related fatigue patient education video: <a href="http://youtu.be/YTFPMYGe86s">http://youtu.be/YTFPMYGe86s</a> (open in chrome)</li> <li>Patient Education Materials for Decreased Appetite: <a href="http://www.bccancer.bc.ca/nutrition-site/Documents/Patient%20Education/Food-ideas-to-help-with-decreased-appetite.pdf">http://www.bccancer.bc.ca/nutrition-site/Documents/Patient%20Education/Food-ideas-to-help-with-decreased-appetite.pdf</a></li> <li>Resources about sleep, deep breathing, positive thinking, etc <a href="http://www.bccancer.bc.ca/nealth-info/coping-with-cancer/emotional-support/managing-stress">http://www.bccancer.bc.ca/health-info/coping-with-cancer/emotional-support/managing-stress</a></li> <li>Fatigue management video: Tired of Being Tired?         <a href="http://www.bccancer.bc.ca/our-services/services/library">http://www.bccancer.bc.ca/nutrition-site/Documents/Patient%20Education/Food-ideas-to-help-with-decreased-appetite.pdf</a></li> <li>Library Support Pathfinder "Fatigue" <a href="http://www.bccancer.bc.ca/our-services/services/library">http://www.bccancer.bc.ca/our-services/services/library</a></li> <li>Canadian physical activity guidelines</li> <li><a href="https://csepguidelines.ca/">https://csepguidelines.ca/</a></li> </ul>
BC Centre for Palliative Care	BC Inter-Professional Palliative Symptom Management Guidelines (2017) <a href="https://www.bc-cpc.ca/cpc/wp-content/uploads/2018/06/03SMG-Clinical-Best-Practices-print-col-fatigue-2018.pdf">https://www.bc-cpc.ca/cpc/wp-content/uploads/2018/06/03SMG-Clinical-Best-Practices-print-col-fatigue-2018.pdf</a>
Bibliography List	http://www.bccancer.bc.ca/health-professionals/clinical-resources/nursing/symptom- management

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Contributing Factors	
Relevant Medical History (cancer, cancer related or pre-existing conditions)	*Extent of disease may affect level of fatigue*  Systemic Therapy-chemotherapy, hormone therapy Immunotherapy checkpoint inhibitors/Biotherapy Immunotherapy - Bispecific Antibodies – fatigue may be a symptom of cytokine release syndrome (CRS) or Immune effector cell-associated neurotoxicity syndrome (ICANS) Radiation Therapy Surgery Fever and/or infection Anemia Advanced age History of emotional distress or depression Hypothyroidism Diabetes Electrolyte disturbances (Sodium, Potassium, Calcium, Magnesium) Cardiopulmonary, hepatic, endocrine, neurological or renal dysfunction
Medications	*Consider recent changes in medications*  Opioids Antidepressants Antihistamines Beta blockers Phenytoin and anticonvulsants Benzodiazepines Antiemetics
Diet and Activity	<ul> <li>Sleep/wake disturbance</li> <li>Pain</li> <li>Decreased activity, bed rest, deconditioning</li> <li>Nutritional deficits, malnutrition and dehydration</li> </ul>

#### Consequences

- Systemic therapy dose delays, dose reductions, or discontinuation of treatment
- Reduced quality of life leading to emotional distress, changes in cognition, decreased functional status, and exacerbation of other symptoms

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