

To: Emergency Department Physician/Nurse
 RE: **CHECKPOINT INHIBITOR ADVERSE REACTION**

From: Dr. _____ (patient's oncologist) at _____
 _____ (cancer centre).

This patient has received treatment with a Checkpoint Inhibitor called:
 _____.

Immune-related side effects are known to occur following this treatment. Side effects occur due to unintended tissue injury following treatment with immunotherapy, and **any organ system may be involved.**

These immune-related side-effects **may be severe or life-threatening, and require different management from chemotherapy associated toxicities.**

If immune-related side-effects are suspected, **contact the medical oncologist listed above (or the covering designate).** With prompt management, immune-related side-effects are generally reversible, however immunosuppression may be required.

Signs and symptoms suggestive of immune-related side-effects:	
Gastrointestinal: ♦ Colitis ♦ Pancreatitis ♦ Enteritis ♦ Hepatitis	<ul style="list-style-type: none"> • Diarrhea • Nausea • Elevated lipase • Gastrointestinal bleeding • Elevated liver enzymes • Abdominal pain/cramping
Pulmonary: ♦ Pneumonitis	<ul style="list-style-type: none"> • Shortness of breath • Cough • Chest pain • Fever
Skin: ♦ Dermatitis	<ul style="list-style-type: none"> • Pruritic rash
Endocrine: ♦ Hypophysitis ♦ Adrenal failure ♦ Thyroiditis ♦ Diabetes ♦ Hypo- or hyper-thyroidism	<ul style="list-style-type: none"> • Fatigue, lethargy • Dehydration • Hypotension • Headache, visual disturbances • Mental status changes • anxiety, nervousness, tremors
Musculoskeletal: ♦ Arthritis ♦ Myositis	<ul style="list-style-type: none"> • Joint pain/swelling • Fatigue/myalgias
Neurological: ♦ Peripheral neuropathy ♦ CNS inflammation	<ul style="list-style-type: none"> • Numbness/pain • Mental status change • Headache • Focal neurological deficit

Signs and symptoms suggestive of immune-related side-effects:

Renal: ♦ Acute kidney injury	<ul style="list-style-type: none"> • Swelling • Elevated serum creatinine
Cardiac: ♦ Myocarditis ♦ Pericarditis	<ul style="list-style-type: none"> <li style="width: 50%;">• Chest pain <li style="width: 50%;">• ECG changes <li style="width: 50%;">• Fever <li style="width: 50%;">• Elevated cardiac enzymes
Fever:	
38.9 °C or higher with any of the following:	<ul style="list-style-type: none"> <li style="width: 50%;">• lasts longer than 24 hours <li style="width: 50%;">• with other symptoms: cough, shortness of breath, pain, dizziness, nausea or diarrhea <li style="width: 50%;">• feels unwell
*If the patient is also taking chemotherapy, follow the chemotherapy fever guidelines instead:	<ul style="list-style-type: none"> • They have been told to report to the nearest ER as soon as possible if febrile (a single oral temperature of 38.3°C/100.9°F or higher or an oral temperature reading of 38.0°C/100.4°F measured at 2 occasions, 1 hour apart). If left untreated, this complication of febrile neutropenia could lead to life-threatening sepsis.

For complete recommendations and evidence, access the full guideline at:

www.ahs.ca/guru > Symptom Management > Checkpoint Inhibitor Toxicities

CONTACT INFORMATION:

Daytime Weekdays	
Calgary (Arthur Child)	Call patient's oncologist/hematologist as listed above directly or call 587-231-3131 and ask to speak to the patient's oncologist/hematologist. After hours, weekends and holidays call 587-231-3100, press 0, and request the on-call oncologist/hematologist, or use ROCA
Edmonton (Cross Cancer Institute)	780-432-8771 After hours, weekends and holidays ask to speak to the medical oncologist on call.
Grande Prairie (Grande Prairie Cancer Centre)	825-412-4200
Lethbridge (Jack Ady Cancer Centre)	403-388-6802
Medicine Hat (Margery E. Yuill Cancer Centre)	403-529-8817
Red Deer (Central Alberta Cancer Centre)	403-343-4526
After Hours	
RAAPID North at 1-800-282-9911	
RAAPID South at 1-800-661-1700	

Thank you for your assistance in the care of this patient