

Name:	
PHN:	
Medical Oncologist:	
Treatment Regimen:	

To Whom It May Concern:

This patient is receiving a **Bispecific Antibody** at BC Cancer and is at risk of **Cytokine Release Syndrome** (CRS) and **Neurotoxicity** (specifically immune effector cell-associated neurotoxicity syndrome – ICANS) which can be **life threatening** and require **urgent management**.

Toxicities associated with bispecific antibodies are different from those seen with standard chemotherapies or targeted therapies, as well as other types of immunotherapy (i.e. checkpoint inhibitors). Bispecific antibodies can cause over activation and dysregulation of the immune system, with a large number of activated white blood cells releasing inflammatory cytokines. **They may also increase the risk of infection despite normal blood counts**.

CRS is an acute systemic inflammatory reaction characterized by fever, hypotension, hypoxia and multiorgan dysfunction. **ICANS** is a neurological syndrome that ranges from mild confusion to speech disturbances, seizures, motor weakness, and rarely cerebral edema or coma. CRS and ICANS may occur together or independently.

For more details, see BC Cancer CRS and ICANS management guidelines (SCCRS, SCICANS) at: http://www.bccancer.bc.ca/health-professionals/clinical-resources/chemotherapy-protocols/supportive-care

Adverse events can occur during or following treatment and can be life threatening. They can present with mild symptoms that lead to rapid clinical deterioration. **Fever alone may represent Grade 1 CRS.** Treatment, such as tocilizumab, may be required for Grade 2 or higher.

CRS Grading

Grade	Fever	Hypotension	and/or Hypoxia
1	<u>></u> 38° C	None	None
2	<u>></u> 38° C	Responsive to IV fluids	Requiring <u><</u> 6 L/min
3	<u>></u> 38° C	Requiring a vasopressor with or without vasopressin	Requiring >6 L/min
4	<u>></u> 38° C	Requiring multiple vasopressors (with or without vasopressin)	Requiring CPAP, BIPAP or intubation

Management of bispecific toxicities necessitates prompt coordination with a medical oncologist and potential initiation of high-dose corticosteroids and other treatments (i.e. tocilizumab). It may require other supportive therapies or referral to the Intensive Care Unit if severe. If you suspect your patient is presenting with a toxicity secondary to their bispecific antibody, please contact the patient's medical oncologist/hematologist directly or, if after hours, contact the on-call physician, or as per your local centre's process (next page).

BC CANCER CENTRES	FOR HEALTHCARE PROVIDERS: *To contact a patient's medical oncologist/hematologist directly by calling the centre's switchboard as listed below.
Abbotsford	Call the Abbotsford Regional Hospital and Cancer Centre switchboard at (604) 851-4700 and ask for the patient's oncologist/hematologist, or after hours, for the on-call medical oncologist.
Kelowna	Call the Kelowna General Hospital switchboard at (250) 862-4000 and ask for the on-call medical oncologist.
Prince George	Call University Hospital of Northern British Columbia switchboard at (250) 565-2000 and ask for the on-call medical oncologist.
Surrey	Call the Surrey Memorial Hospital switchboard at (604) 581-2211 and ask for the Fraser Valley on-call medical oncologist.
Vancouver	Call the BC Cancer Switchboard at (604) 877-6000 and press 1, and ask for the on-call medical oncologist.
Victoria	Call the Royal Jubilee Hospital switchboard at (250) 370-8000 and ask for the on-call medical oncologist.

BC CANCER CENTRES	FOR PATIENTS: Telephone Nurse Lines
Abbotsford	Between 8:00 am – 3:30 pm Monday to Friday (excluding Statutory holidays), • Telephone Nurse Line at (604) 870-7451.
Kelowna	Between 9:00 am 4:00 pm Monday to Friday (excl. Statutory holidays) call: • Telephone Nurse Line call (250) 712-3944.
Prince George	Between 8:00 am – 3:30 pm Monday to Friday (excl. Statutory holidays) call: • Telephone Nurse Line call (250) 645-7313.
Surrey	Between 8:30 am – 4:00 pm Monday to Friday (excluding Statutory holidays) call: • Telephone Nurse Line at (604) 930-4053.
Vancouver	Between 8:30 am – 5:00 pm Monday to Friday (excluding Statutory holidays) call: • Telephone Nurse Line at (604) 877-6025.
Victoria	Between 8:30 am – 4:30 pm Monday-Friday (excluding Statutory holidays) call: • Telephone Nurse Line at (250) 519-5596.