Cancer Care Alberta

Triage Letter - take this letter with you to the Emergency Department and give it to the Nurse or Doctor when you arrive.

To: Emergency Department Physician/Nurse
RE: Febrile Neutropenia

From: Dr. ___________________________ (patient's oncologist or hematologist) at
_____________________________ (cancer centre)

This patient recently received chemotherapy**.** They have been told to report to the ER as soon as possible if febrile (a single oral temperature of 38.3°C/100.9°F or higher or of 38.0°C/100.4°F measured at two occasions, one hour apart). Left untreated, it could lead to life-threatening sepsis.

Assessment:

If febrile, they should have a:

- history and physical exam to determine the site of infection
- chest X-ray
- complete hematological and chemistry profile (see table below)

Table 1. Hematological, Chemistry and Culture Recommendations:

Recommendation	Notes
CBC with differential/absolute neutrophil count (ANC)	Neutropenia is an absolute neutrophil count (ANC) less than 0.5x109 cells/L or an ANC less than 1.0x109 cells/L with an expected fall to less than 0.5x109 cells/L within the next 48 hours
Blood cultures x 2	
Electrolyte panel	
CR, Bilirubin, Alk Phos, Transaminases (ALT or AST)	
Urinalysis and culture	Absence of pus cells on urinalysis does not rule out UTI in the setting of neutropenia
Sputum gram stain and culture	If productive
Nasopharyngeal swab for viral respiratory panel PCR	If respiratory symptoms are present

For complete recommendations and evidence, access the full guideline at:
www.ahs.ca/guru > Symptom Management > Febrile Neutropenia

Treatment - No focus of infection identified and **ANC is between 0.5 and 1.0×10^9 cells**.

- Call the oncologist/hematologist for antibiotic administration, hospitalization or follow-up arrangements

Treatment Recommendations – Focus of infection identified or **ANC is less than 0.5x109 cells**	
Combination therapy	• Piperacillin-tazobactam 4.5 grams IV every 8 hours • Hemodynamically unstable or septic shock patients: β-Lactam plus an aminoglycoside plus vancomycin until C&S results are available [Vancomycin 15 mg per kg IV every 12 hours, with either gentamicin 5-7 mg/kg IV every 24 hours or tobramycin 7 mg/kg IV every 24 hours].
Monotherapy (alternative for patients allergic to penicillin)	• Cefepime 2 grams IV every 8 hours for penicillin-allergic or anaphylactic patients. Alternatives include combination therapy listed above, Carbapenem monotherapy or empiric vancomycin listed below. • Carbapenem monotherapy. In order to prevent carbapenem resistance, carbapenems should not be used in first line unless there is a known or suspected infection with ESBL/Amp C cephalosporinase-producing organisms or a penicillin allergy.
Empiric vancomycin	Consult guideline **www.ahs.ca/guru** (Symptom Management > Febrile Neutropenia)

Please call the patient's oncologist:

Daytime Weekdays	
Calgary	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	780-432-8771 **After hours, weekends and holidays** call 780-432-8771 and ask for the medical oncologist on call
Grande Prairie 825-412-4200	**Lethbridge** 403-388-6802
Medicine Hat 403-529-8817	**Red Deer** 403-343-4526
After Hours	
To locate the oncologist on call after hours, or if septic shock is a concern	**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.