This clinical algorithm has been developed to ensure the proper initial management of oncology patients with febrile illness. This algorithm excludes BMT (bone marrow transplant) patients. Patients with a source of infection should be managed accordingly. Please direct questions and patient referrals to Maine Children’s Cancer Program (MCCP), 207-396-7565.

All oncology patients with fever: ≥ 38.5 C (oral or axillary). **No rectal temperatures!**

**NO**

Patient with ANC < 1000?

**YES**

- Septic Shock OR
- Obvious Catheter-Related Infection OR
- Severe Mucositis OR
- Recent High Dose AraC/Cytarabine (patients with recurrent disease or AML) OR
- Colonization with MRSA or with Resistant Pneumococcus OR
- Allergy to cephalosporin or penicillin?
- History of previous culture positive infections

**NO**

Start Antibiotics:
- **Vancomycin** (10 mg/kg/dose Q6 hours) IV
- **Cefepime** (50 mg/kg/dose Q8 hours) IV
  • (if penicillin/cephalosporin allergic)
- **Meropenam** (30 mg/kg/dose Q8 hours) IV
- **Vancomycin** (10 mg/kg/dose Q6 hours) IV

Please also consider aminoglycoside (tobramycin) if the patient is unstable. Ensure appropriate coverage if there is a history of culture positive infections in the past (i.e. if the patient has a history of resistant Pseudomas, s/he requires directed coverage)

**YES**

Culture negative for MRSA, α-Strep, S. epi, resistant pneumococcus at 48 hours and pt stable

**NO**

D/C Vancomycin

Continue with regimen

Consider alternating ports for antibiotic doses

**LAB EVALUATION**
- On admission: CBC, CMP, Blood Culture from all CVL ports
- CBC QD and BMP as indicated
- Repeat Blood Culture daily with temperature spikes (≥ 38.5 C) or clinical deterioration on 5 consecutive days
- If Blood Culture is positive, repeat daily Blood Culture until negative on 3 consecutive days

Algorithms are not intended to replace providers’ clinical judgement or to establish a single protocol. Some clinical problems may not be adequately addressed in this guideline. As always, clinicians are urged to document management strategies. **Last revised June 2011, last reviewed May, 2014.**