

Febrile Neutropenia Pathway
Hematology & Oncology Patients
Evidence Based Outcome Center

- Criteria for High Risk Febrile Neutropenia Episode**
- Age < 1 year
 - Diagnosis of Trisomy 21
- Cancer associated co-morbidities**
- AML
 - Infant ALL
 - ALL at diagnosis/relapse < 28 days or not yet in remission
 - ALL not yet in remission
 - Intensive B-NHL/relapse Leukemia protocol
- Medical conditions**
- Evidence of Focal Infection
 - Hypotension, shock, hemorrhage, dehydration, or organ failure
 - Changes in respiratory status (i.e. hypoxia, distress, compromise, pneumonitis)
 - New onset abdominal pain, mucositis (requiring IV narcotics, unable to tolerate PO), or perirectal/other soft tissue abscess
 - Altered mental status, neurological changes, or irritability/meningism
- Other**
- Readmission after discharge as "Low Risk" patient

- High Risk of Invasive Fungal Disease**
- AML
 - High Risk ALL
 - High Dose Steroids
 - Relapsed ALL/AML
 - Allogenic HSCT

- Inclusion Criteria (Clinic, Emergency Department, or Hospitalized patients)**
- Fever defined as oral or axillary temperature > 101°F (38.3°C) once **OR** two temperatures > 100.4°F (38.0°C) in a 1 hour period
 - Neutropenia defined as ANC < 500/mm³ or expected decline to < 500/mm³ in the next 48 hours
 - Actively receiving treatment or within 6 months of completing treatment for the cancer diagnosis

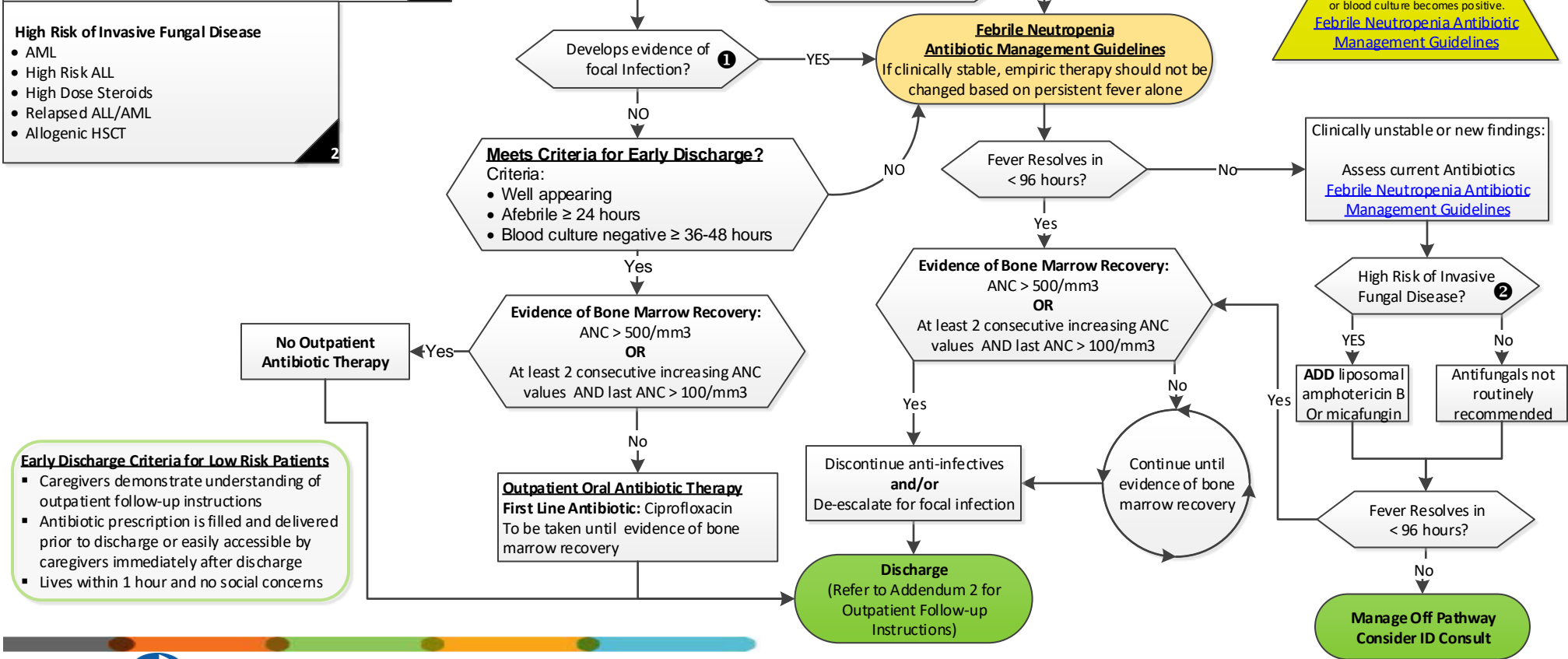
- **Always admit patient and begin intravenous antibiotics for minimum 36-48 hours, initiate Cefepime** Consider additional or alternative antibiotic if known history of resistant pathogen or allergy (Refer to Addendum 1 for additional antibiotic guidance)
- **Obtain blood culture from all lumens of central venous catheter (CVC)**
- Consider peripheral blood culture when obtaining culture from CVC

- EXCLUSION CRITERIA**
- Aplastic Anemia (due to no expected bone marrow recovery)
 - Bone Marrow Failure Syndrome (acquired/congenital)
 - Lack of oncology diagnosis (i.e. viral suppression)

ALERT!

Refer to addendum 1 for antibiotic guidance if patient experiences clinical deterioration, hemodynamic instability, new fever, diagnosed with focal infection, or blood culture becomes positive.

[Febrile Neutropenia Antibiotic Management Guidelines](#)



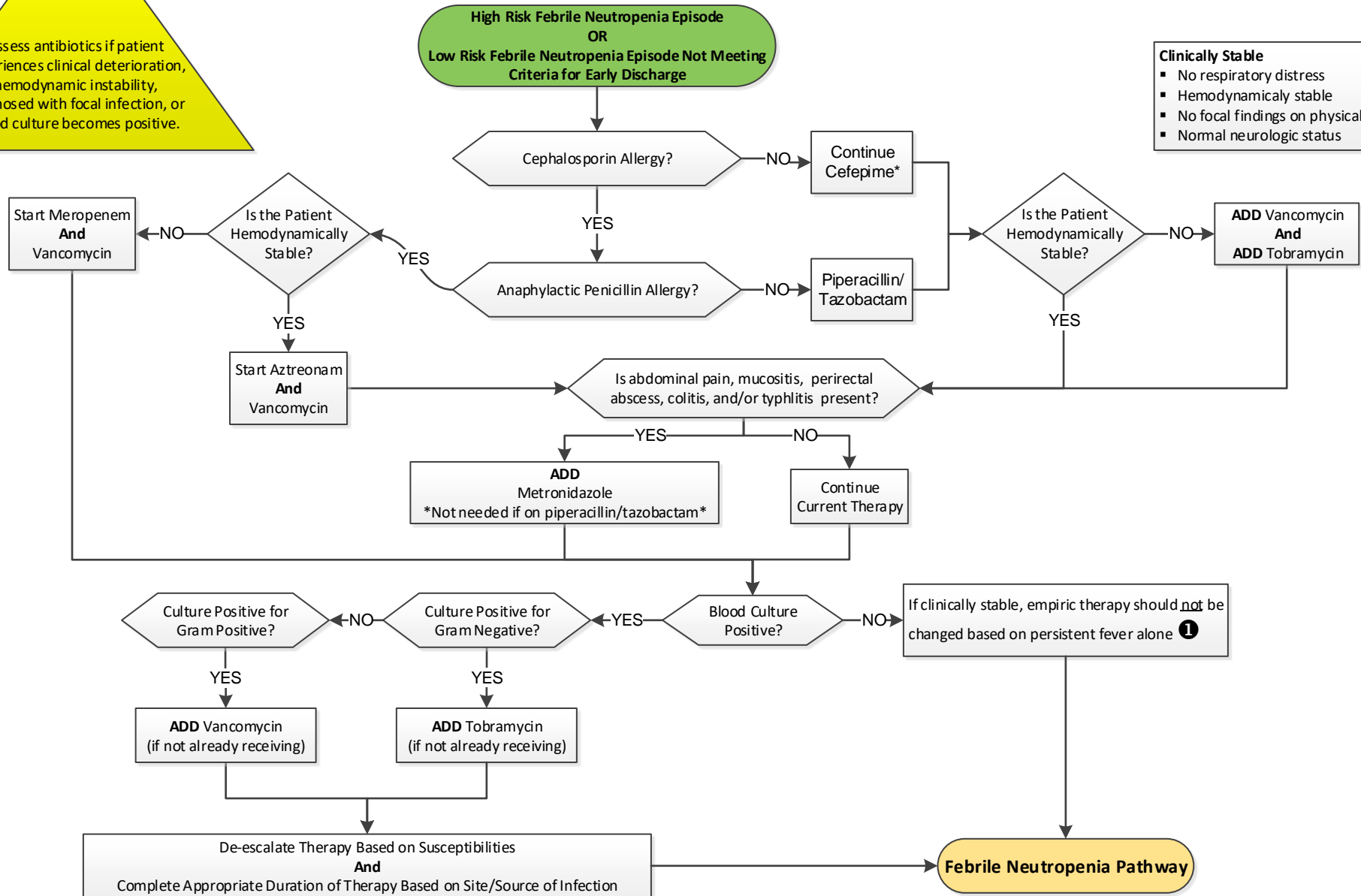
Febrile Neutropenia Antibiotic Management Guidelines Hematology & Oncology Patients

ALERT!

Assess antibiotics if patient experiences clinical deterioration, hemodynamic instability, diagnosed with focal infection, or blood culture becomes positive.

Clinically Stable

- No respiratory distress
- Hemodynamically stable
- No focal findings on physical exam
- Normal neurologic status



* if patient has penicillin allergy cefepime can be used*