

III Appearing Oncology Patient/Oncologic Fever (Emergency Department)

Inclusion Criteria:

- Oncology patient receiving chemotherapy/radiation within the last 6 months
AND
- Any of the following:
 - Ill Appearing
 - Positive Sepsis Screen
 - High Risk Vital Signs
 - Fever (location does not matter)
 - ≥ 38.5°C once
 - ≥ 38°C x 2 (30 mins apart) within a 24h period

Risk factors of serious infection for children with cancer

- Chemotherapy-induced neutropenia
- Central Venous Catheters
- Functional neutropenia (secondary to hematologic malignancies)
- Breakdown of skin and mucosal barriers
- Altered humoral, cellular immunity (if neutropenia is anticipated to last more than 7days)

TIME

0 Min

30 Min

60 Min

Nurse Initiated

- Assign ESI Level 1 or 2 (ER only)
- Obtain vital signs including O2 saturation
- Avoid NSAIDS & rectal temperatures**
- Order and draw labs – CBC with differential, blood culture, CMP
 - Central access (PICC/Port/CVL) – obtain blood culture from all lumens
 - If unable to access PICC/Port/CVL do not delay care. Place PIV and obtain blood culture from PIV

GOAL ≤ 30 minutes from patient arrival

Causes of Neutropenic Fever

Infectious:

- Bacteremia
- GI tract (oral, intestinal mucositis)
- Upper and lower respiratory tract
- Urinary tract
- Soft tissue

Noninfectious:

- Drug fever
- Cancer-related fever
- DVT
- PE
- Transfusion reaction
- Dysautonomia

Provider Assessment and Treatment

- Obtain History and Physical Exam including oncologic treatment stage
- Order antibiotics, use appropriate **EPIC order set**
- Consider further workup as indicated†
- Alert Heme/Onc attending

Signs of Sepsis with Organ Dysfunction or Septic Shock?

YES → Follow Sepsis/Septic Shock Guideline

NO

†Further Workup (as indicated)

- CRP, ESR, Procalcitonin, Lactic Acid, Respiratory viral testing (as warranted)
- SOB, cough, hypoxia, tachypnea → CXR
- Urinary symptoms, history of UTI/urinary tract abnormalities → UA/Uc (clean-catch, midstream; **NO CATH**)
- Loose bowel movements without a known source → C. diff (if >2 years old)
- If acute abdomen, AMS, or meningeal signs, discuss with H/O attending for advanced imaging

Administer antibiotics within 60 min (ASAP) → Do NOT wait until labs have returned

Definition of absolute neutrophil count (ANC) = WBC x (Neutrophils% + Bands%)

Empiric antibiotics choices based on labs & clinical indications

- CBC not yet available **OR** ANC < 500 **OR** ANC expected to fall (based on discussion with H/O)
 - Cefepime 50mg/kg/dose IV Q8H (max 2g/dose)
- ANC > 500 **AND** well-appearing
 - Ceftriaxone 50 mg/kg/dose IV q24H (max 2g/dose)
- Suspected intra-abdominal infection, typhilitis, perirectal pathology
 - Piperacillin-tazobactam 75mg/kg/dose IV Q6hr (max 3g)

OR

- Cefepime 50mg/kg/dose IV Q8H (max 2g/dose) **AND**
- Metronidazole 10 mg/kg/dose IV Q8H (max 500 mg/dose)

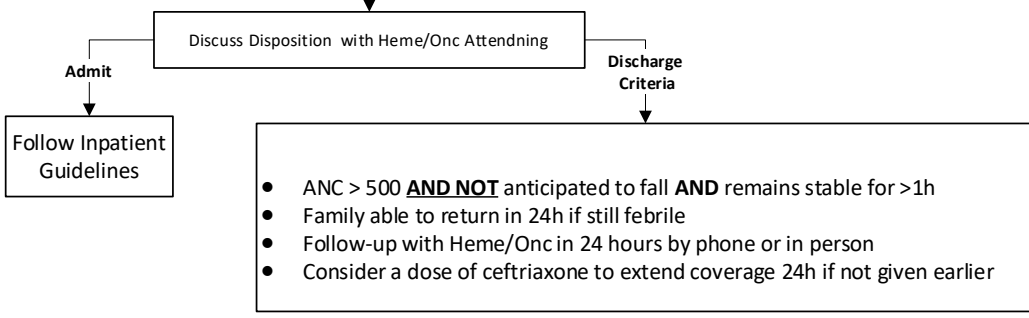
- Severe beta-lactam allergy
 - Consult ID

Additional considerations for antibiotics ‡

‡Additional Antibiotics Consider Vancomycin

- Suspected catheter-related infection
- Suspected bacterial meningitis
- Concern for sepsis
- Known colonization with MRSA or skin/soft tissue infection

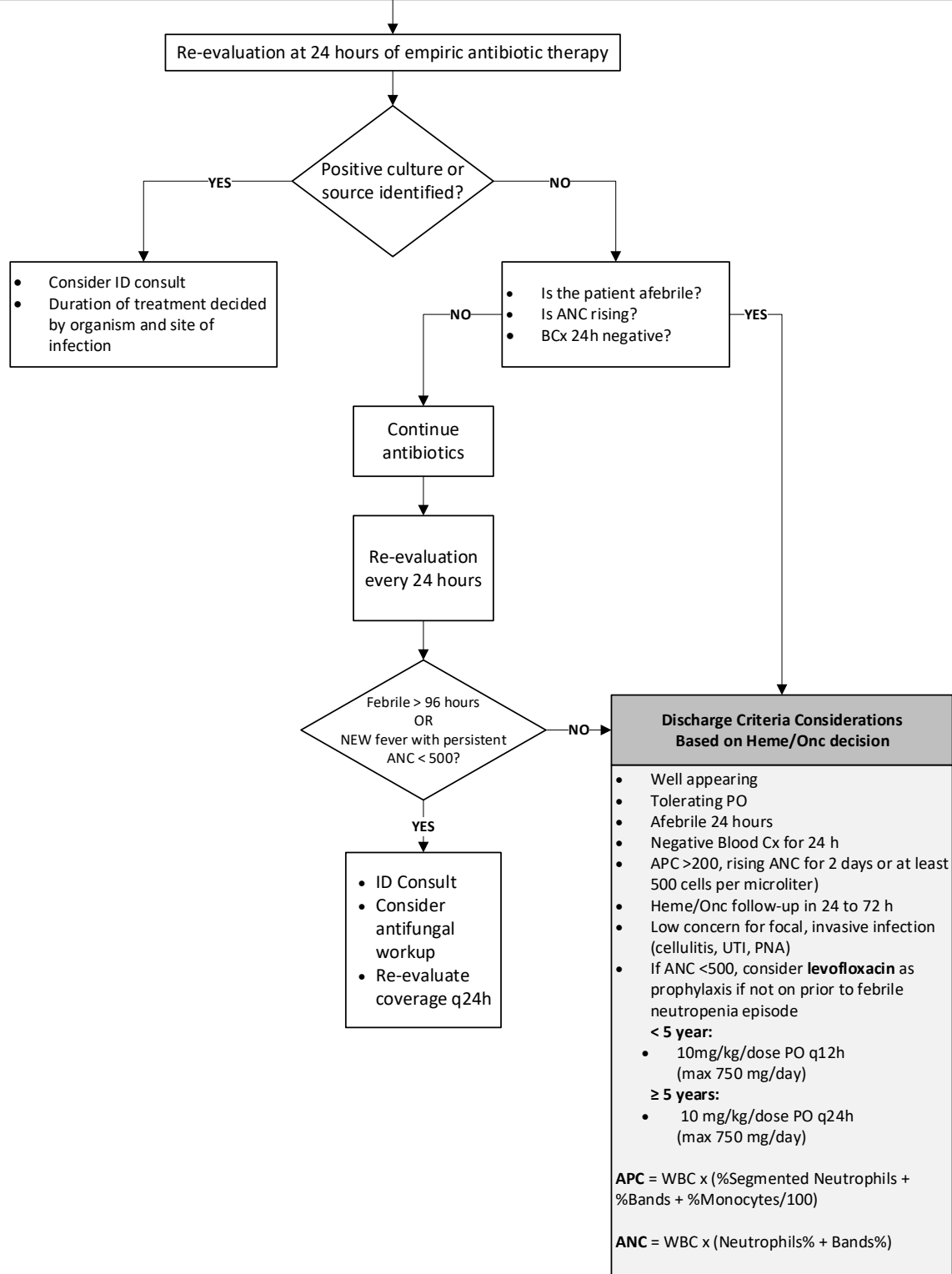
AAH Neonatal and Pediatric Vancomycin Dosing and Monitoring Guidelines



Created by	Department	Creation Date	Version Date
Peds Heme Onc, ED, ID	Pediatrics	8/2022	12/2024

Ill Appearing Oncology Patient/Oncologic Fever (Inpatient)

- Inpatient Floor Management**
- Continue antibiotic therapy
 - Labs: CBC with diff q24h, Blood culture q24h from all central line lumens while febrile and type & screen q72h
 - Reassess every shift
 - Review of systems/physical assessment
 - I/Os
 - Weights



Reviewers:

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