Outpatient Management of Fever in “Low Risk” Designated Oncology Patients with Central Line Care Guideline

Inclusion Criteria: ***“Low Risk”*** designated patients who are well-appearing with fever and Absolute Neutrophil Count (ANC) > 500. Must not have any ***“High Risk”*** factors

Exclusion Criteria: Meets any ***“High Risk”*** features

Determination of *“High”* versus *“Low” Risk* must be made in consultation with Oncology

“High Risk”

Having *any* of the following *“High Risk”* factors *excludes* a patient from initial outpatient management:

- ANC <500 cells/mm³ or expected to fall <500 cells/mm³ in next 48 hours
- Inpatient at time of initial fever
- Shaking chills regardless of temperature
- History of overwhelming sepsis within previous 6 months
- Age <12 months
- Down Syndrome
- Hematopoietic stem cell transplant patient within 6 months of transplant and/or receiving immunosuppressant’s
- CAR T-cells within 3 months of cellular therapy
- On high dose steroids (≥1mg/kg/day)

Diagnosis of:

- Acute lymphoblastic leukemia (ALL) in induction, re-induction or delayed intensification; High Risk (HR) ALL in consolidation; Acute myelogenous leukemia (AML)
- Patient on Phase 1 study
- Patient with solid tumor s/p surgery within 2 weeks

Presents with any of the following:

- Fever > 40°C and/or Chills
- Septic Shock
- Hypotension
- Tachypnea
- Hypoxia (O2 saturation <92% on room air)
- Altered mental status
- Severe mucositis
- Persistent vomiting or abdominal pain
- Evidence of significant local infection (e.g. tunnel infection, peri-rectal abscess, cellulitis)
- ANC >500 cells/mm³ but failed outpatient oral antibiotics for infection

Any *“High Risk”* factor indicates need for inpatient admission

“Low Risk”

***ALL* of the following factors are required for *“Low Risk”* outpatient management:**

- No “High Risk” factors
- No history of cephalosporin or penicillin allergies

Additional Criteria to meet outpatient management:

- **Access to Hospital:** resides within one hour of CHOC, access to transportation should clinical condition changes
- **Communication:** family has phone and can be reached reliably
- **Family/Caregiver Compliance:** agrees to follow-up visit and adheres to treatment plan; reliable family with history of good compliance to therapy.

If assessment meets *all* *“Low Risk”* factors above, advance to:

- Diagnostic Evaluation of *“Low Risk”* Patient
  and
- Antibiotic Management of *“Low Risk”* Patient

Approved Evidence Based Medicine Committee
Original 3/19/2014
Revised 3/20/2024; 9/19/2018

Reassess the appropriateness of Care Guidelines as condition changes and 24 hrs after admission. This guideline is a tool to aid clinical decision making. It is not a standard of care. The physician should deviate from the guideline when clinical judgment so indicates.

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“Low” Risk febrile neutropenia patients who:

- Have a history or cephalosporin or penicillin allergies
- Have any high risk factors

Are *<u>not eligible</u>* for Outpatient Management and should be admitted.

Diagnostic Evaluation of “Low Risk” Patient

- Prompt blood cultures from ***<u>all</u>*** central lines
- CBC with diff, CMP
- CXR, RP/PCR in symptomatic patients
- Consider UA/Urine culture if clean catch/midstream urine feasible and patient is symptomatic
- Obtain any other labs, cultures deemed appropriate

Do not wait for lab results to start antibiotics. Antibiotics should be administered within one hour. Antibiotic choice should be based on last documented ANC.

Antibiotic Management of “Low Risk” Patient

- **Ceftriaxone IV daily**
  - **Dosage: 100mg/kg/dose or max 2 grams**
    - ❖ Initial dose in ED or Outpatient Infusion Center (OPI)
    - ❖ Return to OPI or OPO next day for follow-up and 2nd dose
- **Duration of antibiotic**
  - Discontinued empiric antibiotics in patients with negative cultures at 48 hours who are clinically well, afebrile for at least 24 hours, and showing signs of marrow recovery.

If fever persists to 3rd day or if blood cultures is positive, patient must be admitted for inpatient antibiotics.

Recommendations

- Thoroughly assess GI track, skin, lungs, sinuses, ears, perineum/perirectal, IV access sites, and recent procedure sites (bone marrow biopsy/aspirate, lumbar puncture).
- **If Patient is in Emergency Department – Decision to designate as *“Low Risk”* <u>MUST</u> be made in consultation with Oncology.**
- ***Use clinical judgement – If ANC >500, but patient is ill appearing, use caution and admit.***

Any *“High Risk”* factor indicates need for inpatient admission

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References

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