

Low-Risk Fever and Neutropenia Evaluation

Associated Power Plans: EDP Fever & Suspected Neutropenia ED & Hem/Onc Clinic Standing Orders, EDP Fever and Neutropenia, Fever and Neutropenia, Low-Risk Fever and Neutropenia



Children's Mercy
KANSAS CITY

Evidence Based Practice

Standard Procedures

- Triage level ESI 1 or 2
- Rapid rooming
- CBC with differential
- Blood cultures from all CVL lumens prior to antibiotic administration
- [If patient is ill-appearing or with signs of shock, administer IV broad-spectrum antibiotics STAT](#)
- Evaluate for possible focus of infection

Included Diagnosis (must meet one):

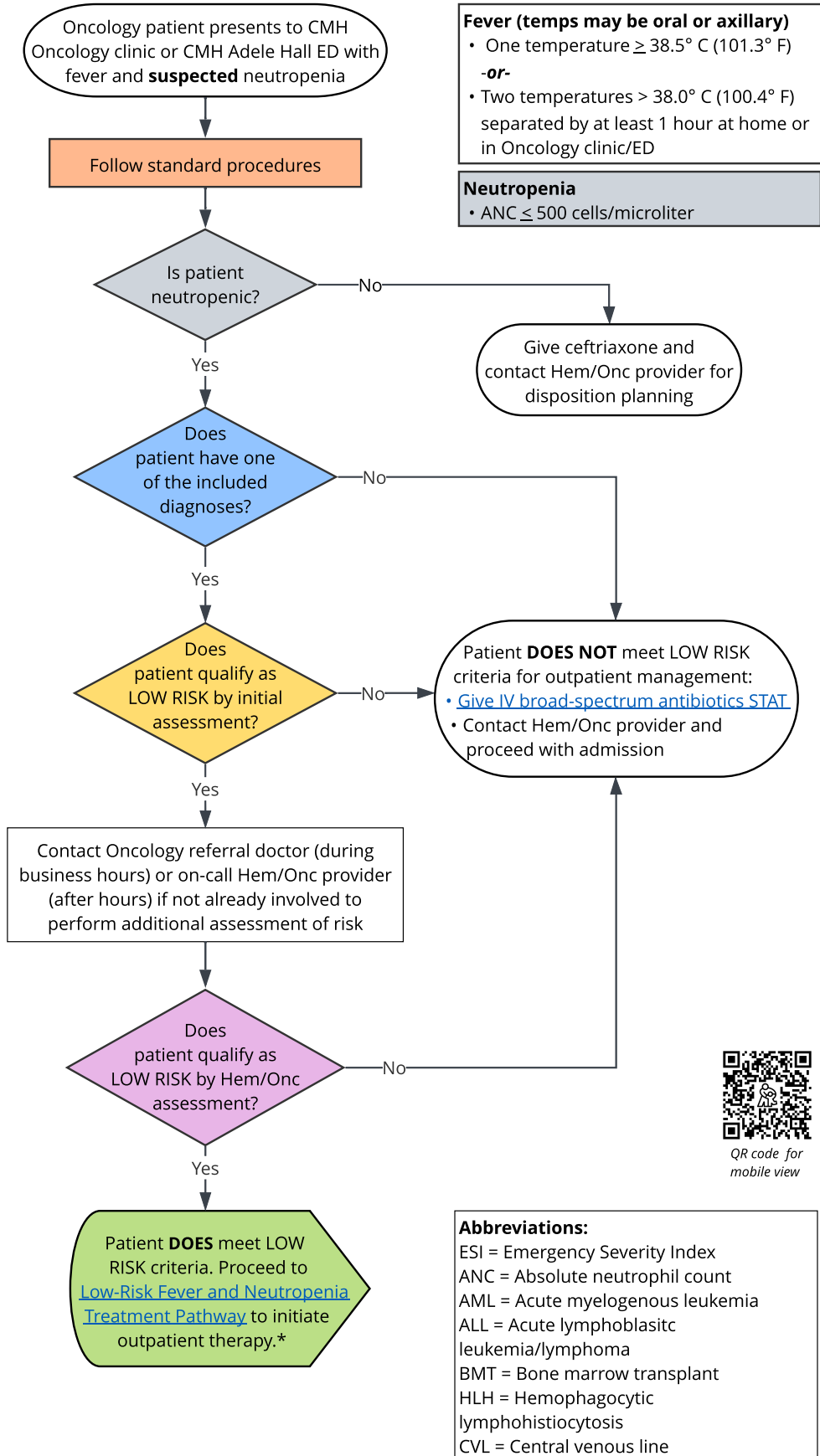
- Acute lymphoblastic leukemia or lymphoma in maintenance phase of therapy
- Solid tumor/brain tumor
- Hodgkin's lymphoma
- Langerhans cell histiocytosis

Initial LOW RISK Exclusion Criteria:
To be assessed by ED or Hem/Onc provider; if any are true, then patient DOES NOT qualify as LOW RISK
[Link to Provider Assessment Checklist](#)

- Age \leq 12 months
- Not tolerating oral intake, including meds
- H&P not reassuring
- Vital signs abnormal for age (except mild tachycardia with fever)
- Signs of serious infection
- Does not live (or is not able to stay) within 60 min of CMH AH campus
- Not able to receive phone follow-up
- Not able to return for follow-up within 72 hours
- Critical note in Cerner stating patient is NOT eligible for outpatient fever/neutropenia management
- Mucositis
- > 1 fluid bolus given
- Trisomy 21
- Any surgery in the preceding 2 weeks (excluding CVL placement)
- VP shunt/Ommaya reservoir placed within preceding 6 weeks OR meningeal signs

Additional LOW RISK Exclusion Criteria:
To be assessed by Hem/Onc provider; if any are true, then patient DOES NOT qualify as LOW RISK
[Link to Provider Assessment Checklist](#)

- Infant ALL (diagnosed in first year of life)
- AML
- History of allogeneic BMT
- History of autologous BMT within 100 days
- Burkitt lymphoma/leukemia
- HLH
- Severe aplastic anemia
- Primary immunodeficiency
- Received > 15 days of glucocorticoids in the last 30 days
- Currently using broad-spectrum antimicrobials (excluding TMP-SMX for PJP prophylaxis)
- Other concerns from primary oncology team for reliability or safety



Fever (temps may be oral or axillary)

- One temperature \geq 38.5° C (101.3° F)
- or-
- Two temperatures > 38.0° C (100.4° F) separated by at least 1 hour at home or in Oncology clinic/ED

Neutropenia

- ANC \leq 500 cells/microliter



Abbreviations:

ESI = Emergency Severity Index
 ANC = Absolute neutrophil count
 AML = Acute myelogenous leukemia
 ALL = Acute lymphoblastic leukemia/lymphoma
 BMT = Bone marrow transplant
 HLH = Hemophagocytic lymphohistiocytosis
 CVL = Central venous line

***If the examining provider, on-call Hem/Onc provider, or the family is uncomfortable with the appropriateness or safety of outpatient management of low-risk fever/neutropenia, the patient should be admitted**

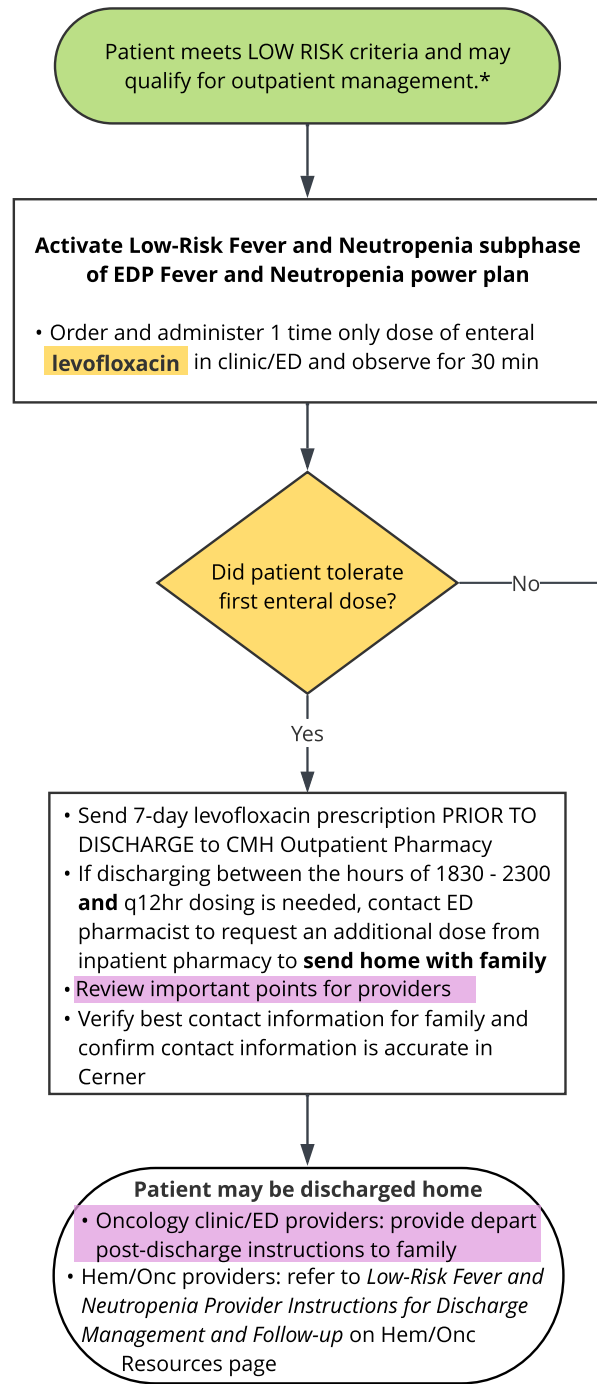


Levofloxacin Dosing:

- For children ≥ 5 years:
10 mg/kg/dose PO daily (max dose 750 mg/day)
- For children ≥ 12 months but < 5 years:
10 mg/kg/dose PO BID (max 750 mg/day)
 - Liquid levofloxacin should be given 1 hour before or 2 hours after solid food
 - Levofloxacin tablets may be given without regard to meals
 - NG or G-tube feeds should be held for 1 hour before and 1 hour after each dose

Important Points for Providers:

- Provide post-discharge patient instructions for "Low-Risk Fever and Neutropenia Management" found in depart.
- Reinforce absolute importance of picking up the levofloxacin prescription **and** being available for phone follow-up. *Failure to follow these instructions will result in patient being ineligible for future outpatient management of low-risk fever and neutropenia.*



Patient **DOES NOT** meet LOW RISK criteria for outpatient management:

- Give IV broad-spectrum antibiotics STAT
- Contact Hem/Onc provider and proceed with admission



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***If the examining provider, on-call Hem/Onc provider, or the family is uncomfortable with the appropriateness or safety of outpatient management of low-risk fever/neutropenia, the patient should be admitted** If the rounding inpatient team the next day judges that the patient meets the above criteria, the patient may be discharged with a prescription for levofloxacin and follow-up as above.

Each primary oncology team **MUST** place a Critical Note in Cerner for any patient that they feel would **NOT** be eligible for outpatient management of low-risk fever and neutropenia despite meeting the Diagnosis and Clinical criteria. Ideally, each primary oncology team will place a Critical Note in Cerner for every patient stating definitively whether or not they would be eligible for outpatient management of low-risk fever and neutropenia