

Mini-Review

Antimicrobials in neutropenic patients

1. Empirical antimicrobials: What to start?
2. Change of antimicrobials: When to change?
3. Duration of antimicrobials: When to stop?

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Clinical Practice Guideline for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer: 2010 Update by the Infectious Diseases Society of America

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Guideline for the Management of Fever and Neutropenia in Children With Cancer and/or Undergoing Hematopoietic Stem-Cell Transplantation

Thomas Lehrnbecher, Robert Phillips, Sarah Alexander, Frank Alvaro, Fabianne Carlesse, Brian Fisher, Hana Hakim, Maria Santolaya, Elio Castagnola, Bonnie L. Davis, L. Lee Dupuis, Faith Gibson, Andreas H. Groll, Aditya Gaur, Ajay Gupta, Rejin Kebudi, Sérgio Petrilli, William J. Steinbach, Milena Villarroel, Theoklis Zaoutis, and Lillian Sung

High Versus Low Risk Patients

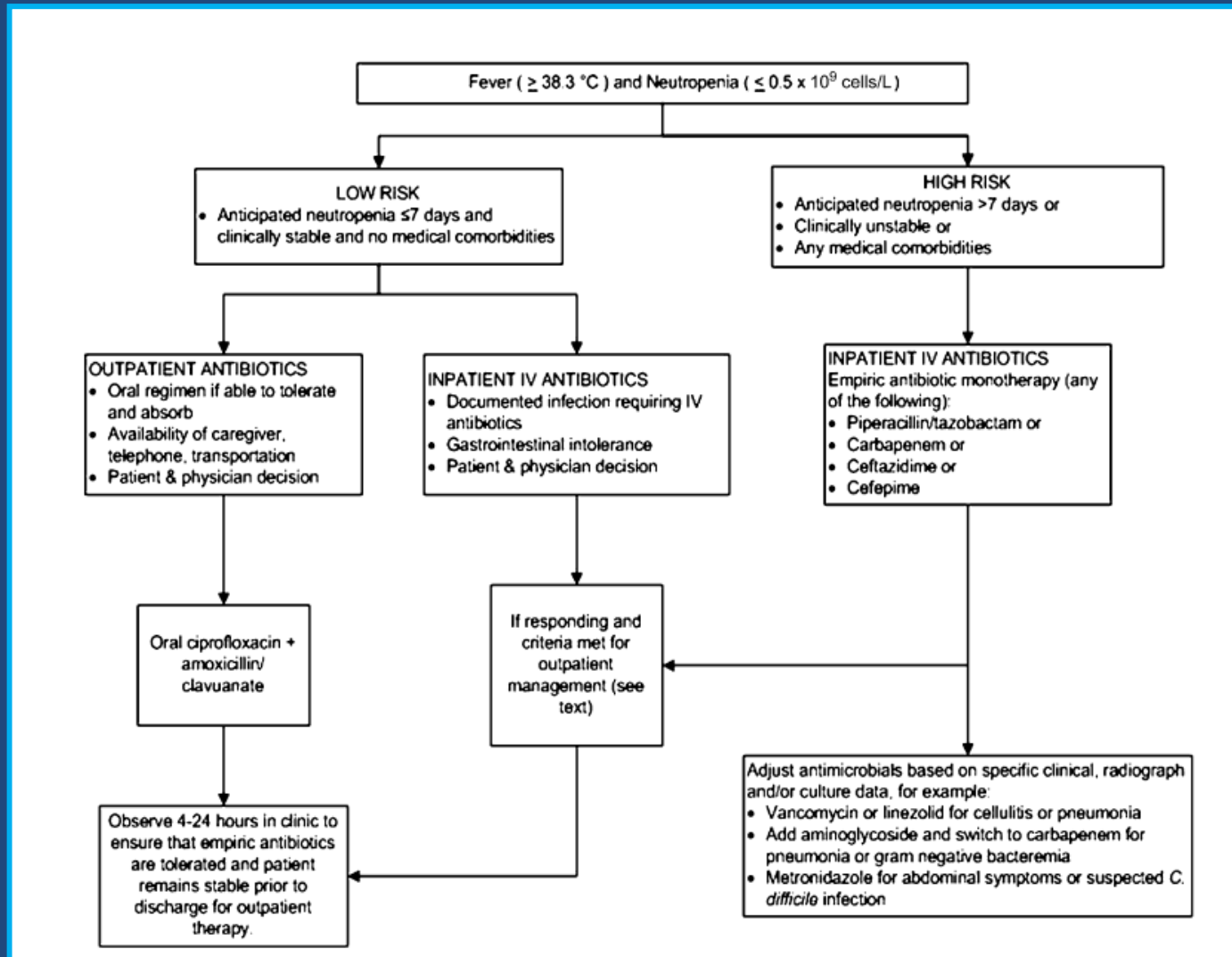
Low-risk

- ANC more than 100/mm³
- Normal chest radiograph
- Expected resolution of neutropenia less than 7-10 days
- Non toxic appearance
- No comorbidities
- Malignancy in remission

High-risk

- ANC less than 100/mm³
- Abnormal chest radiograph
- Expected resolution of neutropenia more than 7-10 days
- Toxic appearance
- Presence of comorbidities
- Not in remission

1. Empirical antimicrobials: What to start?



1. Antibiotic coverage

- Goal of empiric therapy: coverage for virulent organisms while minimizing exposure to unnecessary antibiotics

All patients:

- Gram-negative organisms

High-risk FN:

- *Streptococcus Viridans*
- *Pseudomonas aeruginosa*