Inpatient Management of Febrile Neutropenia in Adult HSCT Recipients at Stanford Health Care*

**Definitive Therapy**

<table>
<thead>
<tr>
<th>Continue IV antibiotics until resolution of neutropenia if perceived benefit is greater than risk of prolonged antimicrobial exposure**/2 OR</th>
<th>In patients with ongoing neutropenia who have resolution of signs/symptoms of infection and have completed an appropriate antibiotic course (see Table 1), consider stopping IV antibiotics or de-escalating to oral/parenteral (if indicated)</th>
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<tbody>
<tr>
<td>In patients with ongoing neutropenia but clinical improvement who remain febrile for 72 hours, may consider narrowing antibiotics to target culture results/infection site**/2</td>
<td>Do not add or modify antibiotic regimen for isolated fevers without a change in clinical status**/3</td>
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</tbody>
</table>

**RISK FACTORS**

- Indications for vancomycin to target resistant gram-positive organisms**/3:
  - Clinical instability (e.g., hypotension or shock), pending the results of cultures
  - Chest imaging findings consistent with bacterial pneumonia (de-escalate if MSAF rapid PCR negative)
  - Blood culture with gram-positive bacteria pending sensitivities
  - Clinically apparent, serious IV/catheter-related infection (e.g., shv/ipsis with infusion through line, cellulitis around entry/exit site)
  - Colonization with MRSA or penicillin-resistant pneumococci
  - Suspected meningitis
  - Skin/tissue infection (SSTI)

- Risk factors for antibiotic infections**/3
  - Intra-abdominal infections (including enterocolitis/appendicitis)
  - Intra-abdominal manipulations
  - Receipt of TPN
  - Long-term central line
  - Candida colonization
  - Prolonged exposure to broad-spectrum antibiotics (> 7 days)

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- *Febrile neutropenia defined as a temperature ≥ 38.3°C or ≥ 38°C persisting for > 1 hour AND ANC < 500 cells/mm³ or < 1000 cells/mm³ and expected to fall below 500 cells/mm³ in 48 hours

- **Requires dose-adjustment for renal insufficiency. See SHC Antimicrobial Dosing Reference Guide for recommendations

- **X Meropenem may be considered in patients with non-IgE-mediated allergy to other β-lactams

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**References:**

2. Cometta CID. 1999;31(23):1595-1596
4. Liposomal amphotericin B
5. Caspofungin
6. Mokart
7. Freifeld CID.
8. Appropriate options may include caspofungin, amphotericin, itraconazole, posaconazole, or isavuconazole. Selection should be based on radiographic imaging and made in consultation with ICU/Hematology/BMT service
9. Consult ID/Hematology/BMT service (Pager#10700)
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