Algorithm for treatment of febrile neutropenia

Onset of fever (oral temperature of ≥ 38°C for ≥ 1 hour or single temperature of ≥38.3°C) and ANC ≤ 500 cells/mm³ or < 1000 cells/mm³ with predicted decline to ≤ 500 cells/mm³ Work-up: blood cultures (from all central lines and one peripheral site), O₂ assessment, urinalysis, culture, and CXR Empiric therapy:meropenem (alternatives include cefepime 1 gm q 6h & piperacillin/tazobactam 4 gm q 8 hr* (see below for pcn-allergic) Add vancomycin to initial empiric therapy if the patient has any of the following risk factors: 1. History of MRSA (colonization or infection) 2. Suspected or known catheter-related infection 3. Gram-positive coccus or gram positive bacillus bacteremia, pending final identification 4. Skin or soft tissue infection Empiric therapy for pcn-allergic: aztreonam + vancomycin* or clindamycin Reassess after 3 days of therapy Fever resolves Fever persists Etiology not identified Etiology identified Etiology not identified Continue Adjust antibiotic agent/s Obtain chest CT, repeat cultures, antibiotics until and duration for review antibiotic dose/spectrum, ANC >500 documented infection consider noninfectious causes, cells/mm3 and consider ID consult. but do not narrow resolution of fever coverage if patient still Add mold coverage if fever persists neutropenic after 4-7 days of empiric therapy.

*Consider the addition of aminoglycoside if sepsis, gram-negative bacteremia,

Modified from Freifeld, A.G., Bow, E.J., Sepkowitz, K.A, et al (2011). Clinical practice guideline for the use of antimicrobial agents in neutropenic patients with cancer: 2010 update by the Infectious Diseases Society of America. Clin Infect Dis, 52:e56-93.