

IV to PO Antibiotic Step-Down Guidelines

Candidates for Antimicrobial Step-Down therapy:

- Patient is able to tolerate PO medication **AND** has a functioning GI tract
- The infection is treatable with oral antimicrobial therapy **AND** the indications and spectrum of activity are identical or similar between alternative drugs
- No evidence of malabsorption, dysphagia, or gastrointestinal bleed
- Patient is hemodynamically stable with improving body temperature and WBC
- High risk patients who **MAY NOT** be candidates for PO step-down may be identified by:
 - Pulse >125bpm
 - RR >30bpm
 - Systolic BP < 90 mmHg
 - T < 35°C **OR** >40°C, altered mental status

Contraindications to Antimicrobial Step-Down therapy:

- Serious infections concomitant with chemotherapy induced severe neutropenia
- Infections caused by resistant organisms (i.e. MRSA, VRE) unresponsive to >1 course of antimicrobials
- Situations where oral antimicrobials may not achieve adequate drug concentrations at the site of infection (i.e. meningitis, endocarditis)
- **Oral antimicrobial therapy may be used in neutropenic patients with negative blood cultures, temperatures < 38°C, and no indication of clinical sepsis**

Table 1. IV to PO Antimicrobial Step-Down Options

| IV Antimicrobial | PO Antimicrobial |
|---|--------------------------------|
| Ampicillin/sulbactam | Amoxicillin/clavulanate |
| Azithromycin | Azithromycin |
| Cefazolin/Ceftazidime | Cephalexin/Cephadrine |
| Ciprofloxacin | Ciprofloxacin* |
| Ceftriaxone | Cefpodoxime |
| Cefuroxime | Cefuroxime axetil |
| Clindamycin | Clindamycin* |
| Doxycycline | Doxycycline |
| Fluconazole | Fluconazole* |
| Moxifloxacin | Moxifloxacin * |
| Metronidazole | Metronidazole* |
| Nafcillin | Dicloxacillin |
| Trimethoprim/sulfamethoxazole | Trimethoprim/sulfamethoxazole* |
| <i>*Oral drugs which achieve serum levels similar to the parenteral dose form</i> | |

BP= blood pressure; bpm= beats/ breaths per minute; GI= Gastrointestinal; IV= intravenous; MRSA= Methicillin-resistant *Staphylococcus aureus*; PO= by mouth; RR= Respiratory rate; T= temperature; VRE= Vancomycin-resistant enterococci; WBC= White blood cells