

## **Antimicrobials with Restricted Status and Approval Process**

### **Purpose**

Antimicrobial restricted status improves appropriate antimicrobial use, minimizes risk of resistance development, minimizes the emergence of superbugs, supports best-practice in antimicrobial stewardship, optimizing patient safety from potential inherent toxicity of certain antimicrobials, and lowers overall cost related to procurement.

### **Restricted Status Establishment**

The restricted status can be established by any of the following or as combination of these to direct appropriate use desired by Antimicrobial Stewardship Committee:

- ❖ Criteria-driven
- ❖ Specialized Discipline-driven
- ❖ Antibiogram/susceptibility-driven
- ❖ Cost-driven

### **Process of Approval/Prescribing**

- ❖ **New Antimicrobial prescription-**  
For new antimicrobial orders with restricted status, upon POM entry, prescribers will see “RESTRICTED TO ID” to alert them of unique status of the antimicrobials ordered. Prescribers will need to 1.) order ID on consult and 2.) order culture(s), before pharmacists verify the antimicrobial orders. Cultures will need to be obtained prior to first dose of antimicrobial.
- ❖ **New Admission with Continuing Antimicrobial Prescription-**  
For new admissions with continuing antimicrobial therapy with restricted status, prescribers will need to order ID on consult. These orders will be verified and dispensed at the discretion of Pharmacists without interruption to patient care.
- ❖ Pharmacists will contact prescriber(s) when an order is received to start antimicrobials with restricted status when the required process is not followed or not readily seen in electronic prescribing system.

### **Non-formulary or High-cost Antimicrobials-**

- ❖ These orders must go through the established process for approval before pharmacists are given the approval to verify orders received.
- ❖ Pharmacists may contact MRH prescribers to change to alternative or request that patient supply own medication, if applicable.

**A list of MRH formulary antimicrobials with restricted status are included in the following table:**

<p>Ciprofloxacin Levofloxacin</p>	<p>Fluoroquinolones</p> <ul style="list-style-type: none"> <li>• Restriction at system level</li> </ul>	<p><u>Criteria-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• CAP</li> <li>• SBP Prophylaxis</li> <li>• Gram (-) infections with MIC <math>\leq</math> 0.25 when alternatives are unacceptable (except for urine isolates where there are alternatives)</li> <li>• Neutropenic fever prophylaxis</li> <li>• Community-acquired diverticulitis in combination with metronidazole when cefazolin not tolerated</li> <li>• Complicated UTI in male or with pyelonephritis when Bactrim is not an option and the organism is susceptible to fluoroquinolone</li> </ul>
<p>Linezolid</p> <ul style="list-style-type: none"> <li>• High-cost</li> </ul>	<p>Oxazolidinones</p>	<p><u>Criteria- &amp; Specialized discipline-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Restricted to ID</li> <li>• Documented or culture supporting Infection with MRSA or VRE</li> <li>• Empiric coverage for MRSA or VRE infection including patients with history of MRSA or VRE until culture results</li> <li>• Patients with allergic reaction to parenteral Vancomycin</li> <li>• Patients with hematological abnormalities precluding use</li> </ul>
<p>Daptomycin</p> <ul style="list-style-type: none"> <li>• High-cost</li> </ul>	<p>Cyclic Lipopeptides</p>	<p><u>Criteria- &amp; Specialized discipline-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Restricted to ID</li> <li>• MRSA endocarditis that failed Vancomycin</li> <li>• Systemic MRSA infection, excluding Pneumonia, that failed Vancomycin or Linezolid</li> <li>• Patients with allergic reaction to Vancomycin or Linezolid *Red-man syndrome* is not an allergic reaction but an infusion rate-induced reaction</li> <li>• Patients who are not able to tolerate Vancomycin due to current episode of AKI</li> <li>• Patients who are not able to tolerate Linezolid due to hematological abnormalities</li> </ul>

<p>Aztreonam</p> <ul style="list-style-type: none"> <li>• High-cost</li> </ul>	<p>Monobactam</p>	<p><u>Criteria-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Documented true Penicillin- and/or Cephalosporin-allergies who require gram-negative coverage</li> <li>*true allergies are IgE-mediated, ie. hives or anaphylactic reactions</li> </ul>
<p>Meropenem</p>	<p>Carbapenems</p>	<p><u>Criteria-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Positive infection caused by ESBL-producing organisms</li> <li>• Empiric coverage for those with history of ESBL infections in past</li> <li>• Patients who failed Piperacillin/tazobactam or Cefepime therapies</li> <li>• Patients with true IgE-mediated allergies to Penicillins or Cephalosporins</li> </ul>
<p>Amphotericin B</p>	<p>Antifungal</p>	<p><u>Criteria- &amp; Specialized discipline-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Restricted to ID</li> <li>• Contraindicated in patients with current episode of acute kidney injury due to extreme nephrotoxic properties</li> </ul>
<p>Voriconazole</p> <ul style="list-style-type: none"> <li>• High-cost</li> </ul>	<p>Antifungal</p>	<p><u>Criteria- &amp; Specialized discipline-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Restricted to ID</li> <li>• Patients with documented or suspected invasive aspergillosis</li> <li>• Patients with bone marrow transplant at high-risk of fungal/mold infection</li> </ul>
<p>Valganciclovir</p> <ul style="list-style-type: none"> <li>• High-cost</li> </ul>	<p>Antiviral</p>	<p><u>Criteria- &amp; Specialized discipline-driven Restriction:</u></p> <ul style="list-style-type: none"> <li>• Restricted to ID</li> <li>• CMV treatment or prophylaxis in post solid organ transplant</li> <li>• CMV treatment or prophylaxis in immunocompromised diseases of HIV and/or AIDS</li> <li>• <u>Culture-directed</u> treatment of disseminated CMV infection disregard of transplantation or immunocompromised status</li> </ul>