

## Policy: Antimicrobial Therapy Restrictions

<b>ORGANIZATIONAL: Affects two or more departments.</b>							
<b>Folder</b>	Organizational Choices: Medication			<b>Sub-Folder</b> (If Applicable)	<b>Medication Management</b>		
<b>Original Effective Date</b>	1/2/2014	<b>Scope</b>	<i>What departments does this policy apply to? State "All" as is may apply to the entire organization</i> <b>All</b>				
<b>Approval Pending</b> <small>(Approver/Date)</small>	Pharmacy and Therapeutics Committee 3/9/2020    MDPRC 4/16/2020    MEC 4/28/2020						
<b>Last Reviewed/ Revised Date</b>	5/6/2020	<b>OSHA Category</b> (If Applicable)	Not Applicable	<b>Standard</b> (If Applicable)	<b>MM.09.01.01</b>	<b>Number of pages</b>	3

### PURPOSE:

This policy identifies the antimicrobial agents that are restricted for use at Southeast Hospital, as well as the procedure for obtaining approval for usage.

### GUIDELINES:

#### TABLE 1A

Antimicrobial agents specified in the chart below will be considered restricted for use. Approval for use of the specified agents must be obtained from the Antimicrobial Stewardship Pharmacist, unless ordered by an Infectious Disease Provider.

#### TABLE 2A

Carbapenems specified in the chart below will be restricted for use by Infectious Disease Providers and providers performing abdominal surgeries or treating abdominal infection. Patients admitted to the emergency department or directly admitted to the floor are allowed to be initiated on a carbapenem for a duration of 24 hours. An ID consult or consultation with the Antimicrobial Stewardship Pharmacist will be required to continue carbapenem treatment beyond 24 hours.

### PROCEDURE:

To prevent a delay in therapy, orders may be processed by pharmacists and approved by the Antimicrobial Stewardship Pharmacist the following day for appropriateness (for example, on evenings and weekends).

<b>Table 1A: Restricted Antimicrobial Agents</b>			
Drug/Indication	Admin Route	Usual Dose	Dose adjustment based on CrCl (ml/min)
Daptomycin (Cubicin) <ul style="list-style-type: none"> <li>Not indicated for PNA</li> <li>Dose based on adjusted body weight if &gt;30% IBW</li> <li>Higher mg/kg doses may be indicated depending of infection</li> </ul>	IV	6 mg/kg q24	≥30: q24h <30: q48h  Labs: Check baseline CPK and weekly thereafter
Linezolid (Zyvox) <ul style="list-style-type: none"> <li>Treatment of MDR gram positive infections</li> </ul>	IV/PO	600mg q12h	No renal adjustment necessary
Tigecycline (Tygacil) <ul style="list-style-type: none"> <li>Treatment of MDR gram-negative infections</li> </ul>	IV	Loading dose: 100mg x1 Maintenance: 50mg q12h	No renal adjustment necessary
Ceftaroline (Teflaro) <ul style="list-style-type: none"> <li>Higher doses up to 600mg q8h may be indicated in serious infections</li> </ul>	IV	600mg q12h	31-50: 400mg q12h 15-30: 200mg q12h <15 or HD: 200mg q12h
Ceftolozane/tazobactam (Zerbaxa) <ul style="list-style-type: none"> <li>Treatment of MDR infections</li> </ul>	IV	1.5g q8	30-50: 750mg q8 15-29: 375mg q8 <15: not studied HD: 750mg x 1, then 150mg q8
Ceftazidime/avibactam (Avycaz) <ul style="list-style-type: none"> <li>Treatment of MDR infections</li> </ul>	IV	2.5g q8	31-50: 1.25g q8 16-30: 0.94g q12 6-15: 0.94g q24 <5: 0.94g q48 HD: dose based on patient's estimated renal function as above
Fidaxomicin (Dificid) <ul style="list-style-type: none"> <li><i>Clostridium difficile</i> infections</li> <li>GI physicians do not require approval for use</li> </ul>	PO	200mg q12	No renal adjustment necessary

<b>Table 2A: Restricted Carbapenem Agents</b>			
Drug/Indication	Admin Route	Usual Dose	Dose adjustment based on CrCl (ml/min)
Ertapenem	IV	1 g IV daily	≤ 30: 500 mg IV daily
Meropenem	IV	1-2g IV every 8 hours	≥ 50: No adjustment 26-50: q12h 10-25: 10-25 half the recommended dose q12h <10: half the recommended dose q24h

**REFERENCES:**

1. Ertapenem. Lexi-Drugs. Lexicomp. Wolters Kluwer Clinical Drug Information, Inc. Riverwoods, IL. Available at <http://online.lexi.com/lco/action/home>. Accessed on March 4, 2020.
2. Meropenem. Lexi-Drugs. Lexicomp. Wolters Kluwer Clinical Drug Information, Inc. Riverwoods, IL. Available at <http://online.lexi.com/lco/action/home>. Accessed on March 4, 2020.
3. Pakyz AL, Oinonen M, Polk RE. Relationship of carbapenem restriction in 22 university teaching hospitals to carbapenem use and carbapenem-resistant *Pseudomonas aeruginosa*. *Antimicrob Agents Chemother*. 2009;53(5):1983-6.
4. Vardakas KZ, Trigkidis KK, Boukouvala E, Falagas ME. Clostridium difficile infection following systemic antibiotic administration in randomized controlled trials: a systematic review and meta-analysis. *Int J Antimicrob Agents*. 2016;48(1):1-10.