

Antibiotic Utilization Highlights

Methicillin-Resistant Staphylococcus aureus (MRSA)

HA-MRSA	CA-MRSA
Vancomycin ¹	Sulfamethoxazole/Trimethoprim
Daptomycin ²	Doxycycline
Linezolid ³	Minocycline
Tedizolid	Clindamycin
Ceftaroline	Linezolid
Telavancin	Tedizolid
Dalbavancin	Moxifloxacin ⁴
Oritavancin	Delafloxacin ⁶
Tigecycline ²	
Teicoplanin	
Quinupristin/Dalfopristin	
Chloramphenicol	
Rifampin ⁵	
Delafloxacin ⁶	

Gram Negative Rods *Serratia, Pseudomonas, Acinetobacter, Citrobacter, E. coli*

Agent	Pseudomonas Coverage
Ticarcillin/Clavulanate	✓
Piperacillin/Tazobactam	✓
Ceftriaxone	
Ceftazidime	✓
Ceftazidime/Avibactam ⁷	✓ (Possibly also MDR)
Cefepime	✓
Ceftolozane/Tazobactam ⁷	✓ (Possibly also MDR)
Carbapenems	✓ (Except ertapenem)
Aztreonam	✓
Ciprofloxacin	✓
Delafloxacin ^{6,8}	✓
Levofloxacin	✓
Aminoglycosides	✓
Colistin	✓
Tigecycline	

¹ PO form only for *C. diff*

² Not for pneumo

³ 1:1 IV/PO conversion

⁴ Technically, but probably not

⁵ Not monotherapy

⁶ Indicated for ABSSSI only

⁷ Only in select serious cases, only labeled for complicated UTI

⁸ Only P & E (and *Enterobacter cloacae* and *Klebsiella pneumoniae*)

⁹ QT prolongation

¹⁰ *E. faecium* only

Enterococcus

Non-VRE	VRE
Penicillin	Linezolid ³
Quinupristin/Dalfopristin ¹⁰	Tedizolid
Ampicillin/Sulbactam	Daptomycin ²
Piperacillin/Tazobactam	Oritavancin
Vancomycin	Tigecycline ²
	Quinupristin/Dalfopristin ¹⁰
	Teicoplanin
	Telavancin

Atypicals (Chlamydia, Mycoplasma, Legionella)

Agent	Notes
Macrolides ⁹	
Moxifloxacin	CI in pregnancy
Mino/Doxycycline	CI in pregnancy

Anaerobes

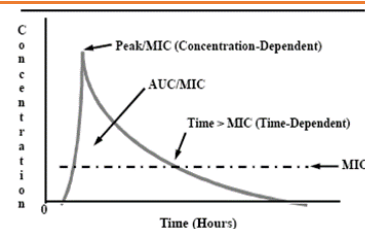
Agent	Notes
Metronidazole ³	Also used in <i>C. diff</i> , STIs, GI parasites
Clindamycin	No gm(-) coverage, highest assoc. w/ <i>C. diff</i>
Carbapenems	
Moxifloxacin ^{3,9}	Not for UTIs
Tigecycline	
Piperacillin/Tazobactam	
Ticarcillin/Clavulanate	
Ampicillin/Sulbactam	
Amoxicillin/Clavulanate	

Hydrophilic

Lipophilic

NOT Renally-Adjusted

Beta-lactams	Macrolides	Agents	
Aminoglycosides	Fluoroquinolones	Ceftriaxone	Erythromycin
Daptomycin	Tetracyclines	Nafcillin/Oxacillin	Azithromycin
Vancomycin	Linezolid	Rifampin	Clindamycin
		Doxycycline	Moxifloxacin



Time-Dependent

Concentration-Dependent

Beta-lactams (PCNs, Cephs, Carbapenem, Aztreonam)	Fluoroquinolones (Ciprofloxacin, Moxifloxacin)
Vancomycin	Aminoglycosides (Gentamicin, Amikacin)

Renal Adjustments:

Time-Dependent – Lower dose; Same dosing interval

Concentration-Dependent – Same dose; Extended dosing interval

Distribution of Select Agents

Blood	Bone	Lung	CSF	Urine
Beta-lactams	Tetracyclines	Macrolides	Bactrim	Beta-lactams
Aminoglycosides	Fluoroquinolones	Fluoroquinolones	Fluoroquinolones	Fluoroquinolones (not Moxi)
Daptomycin	Rifampin	Linezolid	Metronidazole	Aminoglycosides
Vancomycin	Macrolides	Beta-lactams	Beta-lactams	Daptomycin