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Antimicrobial Resistance Genes Reference Guide

Resistance genes are mutations identified through the sequencing of known resistant bacterial strains that confer resistance to corresponding antibiotic therapies

- ◆ Presence of antimicrobial resistance genes may effect microbial susceptibility to corresponding antibiotics.

Administration Mode: po = oral, IV = intravenous, IM = intramuscular, OP = ophthalmic, OT = otic.

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Antibiotic class	Antibiotic (administration)	Brand Names											
Penicillins	Penicillin G (IV/IM)	Penicillin G					◆	◆	◆	◆	◆	◆	
	Penicillin VK (po)	Pen VK					◆	◆	◆	◆	◆	◆	
	Nafcillin (IV/IM)	Nafcillin					◆	◆	◆	◆	◆	◆	
	Oxacillin (IV/IM)	Oxacillin					◆	◆	◆	◆	◆	◆	
	Cloxacillin (po)	Cloxapen					◆	◆	◆	◆	◆	◆	
	Dicloxacillin (po)	Dynapen					◆	◆	◆	◆	◆	◆	
	Ampicillin (IV/IM/po)	Ampicillin					◆	◆	◆	◆	◆	◆	
	Amoxicillin (po)	Amoxil					◆	◆	◆	◆	◆	◆	
	Amoxicillin Clavulanic acid (po)	Augmentin					◆	◆	◆	◆	◆	◆	
	Ampicillin Sulbactam (IV/IM)	Unasyn					◆	◆	◆	◆	◆	◆	
	Piperacillin Tazobactam (IV)	Zosyn					◆	◆	◆	◆	◆	◆	
Carbapenems	Doripenem (IV)	Doribax					◆	◆		◆	◆		
	Ertapenem (IV/IM)	Invanz					◆	◆		◆	◆		
	Imipenem (IV/IM)	Primaxin					◆	◆		◆	◆		
	Meropenem (IV)	Meropenem					◆	◆		◆	◆		
	Meropenem Vaborbactam (IV)	Vabomere					◆	◆		◆	◆		
Monobactam	Aztreonam (IV/IM)	Azactam					◆	◆	◆		◆	◆	
Fluoroquinolones	Ciprofloxacin (po/OT/OP/IV)	Cipro											◆
	Delafloxacin (po/IV)	Baxdela											◆
	Ofloxacin (po/OT/OP)	Ocuflox											◆
	Levofloxacin (po/OP/IV)	Levaquin											◆
	Moxifloxacin (po/OP/IV)	Avalox											◆
	Norfloxacin (po)	Noroxin											◆
	Gemifloxacin (po)	Noroxin											◆
	Gatifloxacin (OP)	Factive											◆
Parenteral Cephalosporins	Cefazolin (IV/IM)	Zymaxid					◆	◆	◆	◆	◆	◆	
	Cefotetan (IV/IM)	Ancef					◆	◆	◆	◆	◆	◆	
	Cefoxitin (IV)	Cefotan					◆	◆	◆	◆	◆	◆	
	Cefuroxime (po/IV/IM)	Mefoxin					◆	◆	◆	◆	◆	◆	
	Cefotaxime (IV/IM)	Ceftin					◆	◆	◆	◆	◆	◆	
	Ceftizoxime (IV/IM)	Claforan					◆	◆	◆	◆	◆	◆	
	Ceftriaxone (IV/IM)	Rocephin					◆	◆	◆	◆	◆	◆	
	Ceftazidime (IV/IM)	Fortaz					◆	◆	◆	◆	◆	◆	
	Cefepime (IV/IM)	Maxipime					◆	◆	◆	◆	◆	◆	
	Ceftazidime Avibactam (IV)	Avycaz					◆	◆	◆	◆	◆	◆	
	Ceftaroline (IV)	Teflaro					◆	◆	◆	◆	◆	◆	
	Ceftobiprole (IV)	Zevera					◆	◆	◆	◆	◆	◆	
	Ceftolozane Tazobactam (IV)	Zerbaxa					◆	◆	◆	◆	◆	◆	
	Cefiderocol (IV)	Fetroia					◆	◆	◆	◆	◆	◆	

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			Resistance Genes										
Oral Cephalosporins	Cefadroxil (po)	Duricef					◆	◆	◆	◆	◆	◆	
	Cephalexin (po)	Keflex					◆	◆	◆	◆	◆	◆	
	Cefaclor (po)	Cefaclor					◆	◆	◆	◆	◆	◆	
	Cefprozil (po)	Cefzil					◆	◆	◆	◆	◆	◆	
	Cefuroxime Axetil (po/IV/IM)	Ceftin					◆	◆	◆	◆	◆	◆	
	Cefixime (po)	Suprax					◆	◆	◆	◆	◆	◆	
	Ceftibuten (po)	Cedax					◆	◆	◆	◆	◆	◆	
	Cefpodoxime (po)	Vantin					◆	◆	◆	◆	◆	◆	
	Cefdinir (po)	Omnicef					◆	◆	◆	◆	◆	◆	
	Cefditoren (po)	Spectracef					◆	◆	◆	◆	◆	◆	
Lincosamide	Clindamycin (po/IV/IM)	Cleocin	◆										
Macrolides	Erythromycin (po/IV/OP)	Erythrocin	◆										
	Azithromycin (po/IV/OP)	Z-Pak	◆										
	Clarithromycin (po)	Biaxin	◆										
Tetracyclines	Doxycycline (po/IV)	Vibramycin		◆									
	Minocycline (po/IV)	Minocin		◆									
	Tetracycline (po)	Sumycin		◆									
Glycopeptides, Lipopeptide, Lipoglycopeptide	Vancomycin (po/IV/OP)	Vancomycin				◆							
DHFR inhibitor/sulfonamide combination	Trimethoprim Sulfamethoxazole (po/IV)	Bactrim			◆								

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