

		Antibiotic Allergy																				
		Amoxicillin ± clavulanate	Ampicillin ± sulbactam	Aztreonam	Cefaclor	Cefadroxil	Cefazolin	Cefdinir	Cefepime	Cefotaxime	Cefoxitin	Cefpodoxime	Ceftaroline	Ceftazidime ± avibactam	Ceftolozane/tazobactam	Ceftriaxone	Cefuroxime	Cephalexin	Nafcillin	Penicillin G	Piperacillin/tazobactam	
Antibiotic Ordered	Amoxicillin or amoxicillin/clavulanate	Black	Red	Green	Yellow	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	
	Ampicillin or ampicillin/sulbactam	Red	Black	Green	Red	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Yellow
	Aztreonam	Green	Green	Black	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green
	Cefaclor	Yellow	Red	Green	Black	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Yellow
	Cefadroxil	Red	Yellow	Green	Yellow	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow
	Cefazolin	Green	Green	Green	Green	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Cefdinir	Green	Green	Yellow	Green	Green	Green	Black	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green
	Cefepime	Green	Green	Green	Green	Green	Green	Yellow	Black	Red	Green	Red	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Green	Green
	Cefotaxime	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Black	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Green	Green
	Cefoxitin	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Black	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Green
	Cefpodoxime	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Red	Green	Black	Yellow	Yellow	Yellow	Yellow	Red	Green	Green	Green	Green	Green
	Ceftaroline	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Red	Green	Yellow	Black	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green
	Ceftazidime or ceftazidime/avibactam	Green	Green	Red	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Black	Red	Yellow	Green	Green	Green	Green	Green	Green
	Ceftolozane/tazobactam	Green	Green	Yellow	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Red	Black	Yellow	Green	Green	Green	Green	Green
	Ceftriaxone	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Red	Green	Red	Yellow	Yellow	Yellow	Yellow	Black	Yellow	Green	Green	Green	Green
	Cefuroxime	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Yellow	Yellow	Green	Green	Green	Green	Yellow	Black	Green	Green	Green	Green
	Cephalexin	Yellow	Red	Green	Red	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black	Green	Yellow	Yellow
	Nafcillin	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black	Green	Green
	Penicillin G	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Green	Black	Yellow
Piperacillin/tazobactam	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Black	
MAY USE	Expect <2% chance of cross-reactivity																					
USE WITH CAUTION	Intermediate or conflicting data—exercise clinical judgement <ul style="list-style-type: none"> • May consider utilizing agent if patient reaction is not a type-1 hypersensitivity reaction* • May consider switching agent to a “Green” agent, or other alternative agent if reaction is a type-1 hypersensitivity reaction* 																					
AVOID USE	Expect ~20% chance of cross-reactivity for rash, ~40% chance for Type 1 hypersensitivity reaction*																					

* Type 1 hypersensitivity reaction is defined as an immediate allergic reaction occurring within 15-30 minutes after receiving a dose of a beta-lactam antibiotic. Symptoms can consist of anaphylaxis (including angioedema), neurologic deficits (lightheadedness, weakness, loss of consciousness), respiratory complications (shortness of breath, wheezing, bronchospasm, stridor, hypoxia), and/or cardiovascular complications (hypotension, tachycardia).

KEY TAKEAWAYS

- Use of non-beta-lactam antibiotics is often associated with poor outcomes.
- Of patients with a documented penicillin allergy, 99% can tolerate beta-lactam antibiotics.
- Rates of anaphylaxis to cephalosporins range from <0.0001% to 0.1%.
- Cross-reactivity between penicillins and cephalosporins is due to similarities in R1 side chains, rather than a class effect.
- Reported rate of cross reactivity is <2% among beta-lactams with dissimilar side chains.
- Cefazolin has a unique side chain that does not share similarities with other beta-lactam antibiotics and therefore has no expected cross-reactivity.
- Due to dissimilar side chains, patients with a documented penicillin allergy usually tolerate ceftriaxone and cefepime.