

	Dicloxacillin	Oxacillin	Nafcillin	Penicillin	Amoxicillin	Ampicillin	Piperacillin	Cefadroxil	Cefazolin	Cephalexin	Cefotetan	Cefoxitin	Cefuroxime	Cefdinir	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftaroline	Aztreonam
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Cefepime																				
Ceftaroline																				
Aztreonam																				

Adapted from Zagursky et al.J Allergy Clin Immunol 2018. <https://doi.org/10.1016/j.jaip.2017.08.027>

Allergy 'cross-reactivity' is due to similarities in R1 or R2 molecular side chains, not medication class or subclass  
The risk of 'cross reactivity' is increased with increasing side chain similarity, but the level of risk for individual combinations of similarity/severity is poorly defined.  
Patients with history of any anaphylaxis are at slightly increased risk of anaphylaxis with any other medication or food exposure, regardless of structural similarity.  
Non allergic adverse reactions (intolerances, side effects, etc.) carry no specific risk of structurally related allergy 'cross reactivity'

SC 5\_2025

- Identical medication
- Identical side chain (R1 or R2)
- Identical portion of side chain (R1' or R1'')
- Similar but not identical side chain (r1 or r2)
- Similar but not identical portion of side chain (r1' or r1'')
- No R1/R2 structural similarities (blank cell)

**Beta lactam allergy fast facts:**

- \*10% of patients report a penicillin allergy, but of those, 90% tolerate penicillins.
- \*A penicillin allergy label is associated with worse health outcomes and increased cost.
- \*For truly IgE mediated penicillin allergies, including anaphylaxis, unrelated cephalosporins are recommended.
- \*Delabeling false or outdated penicillin allergies improves outcomes and lowers costs.
- \*A history of severe cutaneous adverse reactions (SCAR) including SJS, DRESS, TEN, etc. should prompt a patient specific risk assessment rather than using the recommendations for IgE mediated allergy.

J. Allergy Clin Immunol 2022. [doi.org/10.1016/j.jaci.2022.08.028](https://doi.org/10.1016/j.jaci.2022.08.028)  
[https://www.jacionline.org/article/S0091-6749\(22\)01186-1/fulltext](https://www.jacionline.org/article/S0091-6749(22)01186-1/fulltext)