

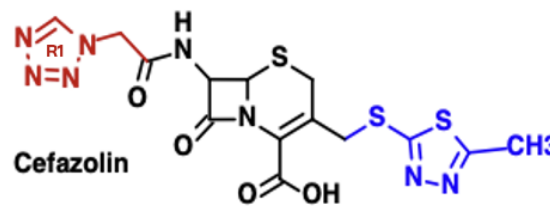
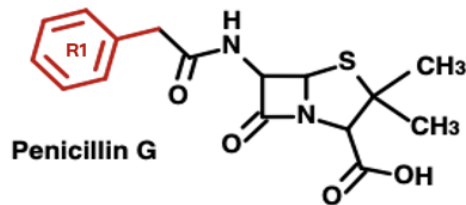
PENICILLIN ALLERGY

CEFAZOLIN

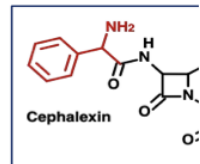
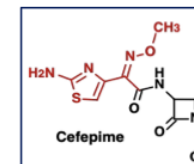
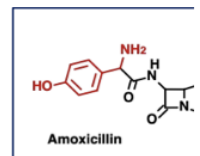
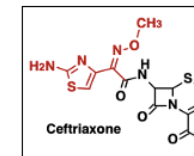
“For those rare patients with a history of anaphylaxis to penicillin, a non-cross-reactive cephalosporin (eg, **cefazolin**) can be administered routinely without prior testing.”

—*Drug Allergy: A 2022 practice parameter update*

- Allergic reactions to cephalosporins are more so directed at the **R-side chain** than the beta-lactam ring
- Most compelling evidence of cross-reactivity is for **identical** side chains sharing an **R1 group**.



Cefazolin: unique R1 side chain
A non-cross-reactive cephalosporin



“Cross-reactivity between penicillin and cephalosporin occur in about 2% of cases, less than the 8% reported previously.”

—*JAMA 2019*

“Our study demonstrated a 0.8% rate of cross-reactivity between penicillin and **cefazolin** [...], as well as the tolerability of these cephalosporins in all subjects with IgE-mediated hypersensitivity to penicillins displaying negative cephalosporin skin test results.

—*Journal of Allergy Clinical Immunology Practice 2020*

“Our observed low rate [0.1-0.7%] of dual allergy [**cefazolin** and natural penicillins] should increase practitioner confidence in using **cefazolin** in patients allergic to penicillins, particularly when data suggest **cefazolin** is the optimal antibiotic, such as perioperative prophylaxis.”

—*JAMA Surgery 2021*

“**Cefazolin** can be recommended for antimicrobial prophylaxis in most patients with a history of penicillin allergy, including those with a history of an anaphylactic reaction to penicillin.”

—*American Journal of Obstetrics & Gynecology 2024*

Avoid cefazolin use in patients with a documented cefazolin allergy or those with a history of a severe, life-threatening delayed hypersensitivity reaction; DRESS: drug reaction with eosinophilia and systemic symptoms, AGEP: acute generalized exanthematus pustulosis, SJS: Stevens-Johnson syndrome, TEN: toxic epidermal necrolysis, serum sickness, drug fever, drug induced liver injury, acute interstitial nephritis, or hemolytic anemia.