

Did you know?

For: Health care professionals

Cefazolin can be safely given to patients with any β -lactam allergy.

- ⓘ The only time cefazolin **cannot** be safely given to a patient is if:
1. the patient is allergic to cefazolin specifically or
 2. the patient has had a severe non-IgE mediated reaction* to a β -lactam antibiotic

Why is cefazolin the preferred antibiotic for surgical prophylaxis?

- Fewer surgical site infections

Cefazolin is **more effective** than comparators such as clindamycin or vancomycin

- Shorter infusion time allows optimal concentrations at the time of incision

Vancomycin is more difficult to time appropriately as it requires a longer infusion time (**starting minimum 1 hour and up to 3 hours pre-incision**)

- Lower *Clostridioides difficile* risk

cefazolin has a lower risk of *C. difficile* than alternative antibiotics

- Adverse effects are 3X higher using non-cefazolin prophylaxis

Patients given β -lactam prophylaxis have **46% lower risk** of adverse effects compared to patients given alternative prophylaxis

 Odds of SSIs reduced by **50%** 

Infusion Time

Cefazolin

ⓘ Flexible start

15 - 60 min

vs

Vancomycin

ⓘ Must start

1-3 hours

Expected number of *C. difficile* cases in 32 patients

CEFAZOLIN

1



vs

CLINDAMYCIN

4



Risk of adverse effects in β -lactams

21% β -lactam Prophylaxis
e.g. Cefazolin

vs

67% Non β -lactam prophylaxis
e.g. Vancomycin or Clindamycin

- unnecessarily broad spectrum
- increased hospital length of stay
- increased re-admission

β -lactam antibiotics include penicillins (*piptazo, cloxacillin, ampicillin*), cephalosporins, and carbapenems

β -lactam cross reactivity groups

β -lactams in the same boxes below share similar side chains and cross-react
Cefazolin does not share similar side chain with other β -lactam and does not cross react

Cefazolin	• Ertapenem • Imipenem • Meropenem	• Amoxicillin • Ampicillin • Cephalexin • Cefadroxil • Cefprozil	• Penicillin • Cefoxitin • Cloxacillin • Piperacillin-tazobactam
• Cefuroxime • Cefoxitin	• Cefotaxime • Ceftriaxone • Cefepime		
• Aztreonam • Ceftazidime			

Avoid all beta lactam if the patient had a serious, non-IgE mediated reaction.

These reactions include:

- Toxic epidermal necrolysis (TEN)
- Acute interstitial nephritis (AIN)
- Stevens-Johnson syndrome (SJS)
- Drug rash with eosinophilia + systemic symptoms (DRESS)
- Drug induced cytopenias
- Drug-induced hepatitis
- Hemolytic anemia
- Serum sickness



MORE TOOLS

