

Assess your patients' β -lactam allergy

A conversation guide for assessing β -Lactam allergies

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

How did the patient react to the β -lactam?

A

Was it a serious, delayed, non-anaphylactic reaction? (non-IgE mediated)

Examples include:

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

i

Patients with family members that have a penicillin allergy have **no increased risk of an allergy.**

Yes



Avoid All β -Lactams

- Give alternate antibiotic and consult infectious disease physician or an allergist if a β -lactam is needed.

↓ No

B

Was it an anaphylactic type reaction?

Examples include:

- Anaphylaxis
- Angioedema
- Wheezing
- Laryngeal edema
- Hypotension
- Hives/urticaria

Yes



Avoid all β -lactams in same group

See cross reactivity list below

↓ No

C

Was it a mild non-anaphylactic reaction?

Examples include:

- Rash (not hives)
Nonpruritic, nonurticarial rashes occur in up to 10% of patients receiving β lactams. These rashes are usually not an allergic reaction.

Yes



Avoid that specific antibiotic

↓ No

D

Did the patient have a non allergic adverse reaction?

Examples include:

- An unknown remote reaction - No hospitalization
- A non allergic intolerance
 - Yeast infection
 - Upset stomach
 - Nausea
 - Diarrhea

Yes



Use any β -lactam

β -lactam cross reactivity list

Shared β -lactams side chains determine cross reaction risk

Cefazolin is structurally different therefore does not cross-react with other β lactams.

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

Avoid all β -Lactams if the patient had a serious, delayed, non-anaphylactic reaction

Non-IgE- mediated / non-anaphylactic 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