

## Print Order Set

Report ID	Report Name	Print
304774602	PRL SmartSet Preview	<a href="#">Print</a>

### Graded Challenge [3040007202]

This order set is designed to be utilized in accordance with the Penicillin Allergy Guidance Document published on the Antimicrobial Stewardship website.

Indications for graded challenge:

- History of IgE-mediated reaction with no previous tolerance to beta-lactam agents, and reaction occurred more than 10 years ago
- History of IgE-mediated reaction and previously tolerated beta-lactam agent, but a different beta-lactam is now required for treatment

**NOT intended for use in patients who are pregnant or have a history of life-threatening immunotoxicity reactions (e.g., vasculitis, TEN, SJS, DRESS, AGEP, or severe cytopenias).**

**Patients on beta-blockers (eg, metoprolol, carvedilol, propranolol, atenolol, labetalol, etc.) may have a diminished response to epinephrine if needed for the management of a severe allergic reaction. If a patient is on a beta blocker, schedule the graded challenge for the following morning and reschedule the next dose of the beta blocker to occur following the graded challenge. A pharmacist consult order is available in this order set to assist with beta blocker timing if applicable.**

[Penicillin Allergy Guidance](#)

**URL:** <https://www.nebraskamed.com/sites/default/files/documents/for-providers/asp/penicillin-allergy-guidance.pdf>

### General

#### Nursing Assessment/Interventions

Continuous telemetry

Routine, Continuous

Telemetry indication? Drug monitoring  
Discontinue 60 minutes after last dose if patient does not have another indication for telemetry monitoring

Vital signs

Routine, Every 4 hours, Monitor prior to each dose and every 30 minutes x 2 (for 60 minutes) after final dose

Include breathing sounds for bronchospasms and stridor

Pulse oximetry

Routine, Continuous, Pulse oximetry every 30 minutes during infusion and one hour post-infusion

Routine, Once For 1 Occurrences

Medication information included? Yes

If patient has a beta blocker ordered (eg, metoprolol, carvedilol, propranolol, atenolol, labetalol, etc.), confirm patient did not take beta blocker prior to graded challenge that day. If beta blocker was taken, please notify ordering provider

If patient has a beta blocker ordered (eg, metoprolol, carvedilol, propranolol, atenolol, labetalol, etc.), confirm patient did not take beta blocker prior to graded challenge that day. If beta blocker was taken, please notify ordering provider

Ensure patient took scheduled respiratory medications prior to procedure

Routine, Once For 1 Occurrences

Medication information included? Yes

Ensure patient took scheduled respiratory medications prior to procedure

- Confirm patient has functioning IV line placed
- Notify physician if any signs or symptoms of allergic reaction: hypotension, tachycardia, chest tightness, respiratory distress, wheezing, stridor, nausea, vomiting, abdominal pain, diarrhea, itching, rash, hives, facial edema, sneezing, rhinorrhea, or watery eyes
- For mild reaction (patchy macular and/or papular rash, hives or itching), administer diphenhydramine PO or IV as directed by prescriber.
- For severe reaction (hypotension, tachycardia, wheezing, chest tightness, respiratory distress, angioedema, and/or emesis and diarrhea), immediately administer Epinephrine IM and diphenhydramine IV then notify MD.
- Update allergy section within electronic medical record. If patient tolerated graded challenge, document the agent and date tolerated within the comments section of the penicillin allergy. If patient failed graded challenge, add antibiotic allergy and reaction.

## Consults

### Consults

- Inpatient consult to pharmacist-other
- Inpatient consult to case management

## Medications

### Antibiotic Administration

- Ceftriaxone - 1000 mg
  - cefTRIAxone (ROCEPHIN) in sodium chloride 0.9 % 10 mL IV syringe
  - cefTRIAxone (ROCEPHIN) in sodium chloride 0.9 % 10 mL IV syringe
  - cefTRIAxone (ROCEPHIN) IV
- Ceftriaxone - 2000 mg
  - cefTRIAxone (ROCEPHIN) in sodium chloride 0.9 % 10 mL IV syringe

Routine, Once For 1 Occurrences  
Medication information included?  
Confirm patient has functioning IV line placed  
Routine, Continuous  
Notify physician if any signs or symptoms of allergic reaction: hypotension, tachycardia, chest tightness, respiratory distress, wheezing, stridor, nausea, vomiting, abdominal pain, diarrhea, itching, rash, hives, facial edema, sneezing, rhinorrhea, or watery eyes  
Routine, Once For 1 Occurrences  
For mild reaction (patchy macular and/or papular rash, hives or itching), administer diphenhydramine PO or IV as directed by prescriber.  
Routine, Continuous  
For severe reaction (hypotension, tachycardia, wheezing, chest tightness, respiratory distress, angioedema, and/or emesis and diarrhea), immediately administer Epinephrine IM and diphenhydramine IV then notify MD.  
Routine, Once For 1 Occurrences  
Medication information included? Yes  
Update allergy section within electronic medical record. If patient tolerated graded challenge, document the agent and date tolerated within the comments section of the penicillin allergy. If patient failed graded challenge, add antibiotic allergy and reaction.

Routine, Once

Case Management reason for consult: Directed referral

### "Followed by" Linked Panel

10 mg, Intravenous, for 5 Minutes, Once, Starting H, For 1 Doses  
Administer as a slow IV push at bedside.  
[cefTRIAxone]Suspected Pathogen:  
100 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes  
Administer as a slow IV push at bedside.  
[cefTRIAxone]Suspected Pathogen:  
1,000 mg, Intravenous, Every 24 hours, Starting H+60 Minutes  
Suspected Pathogen:

### "Followed by" Linked Panel

20 mg, Intravenous, for 5 Minutes, Once, Starting H, For 1 Doses  
Administer as a slow IV push at bedside.  
[cefTRIAxone]Suspected Pathogen:

<input type="checkbox"/> cefTRIAxone (ROCEPHIN) in sodium chloride 0.9 % 10 mL IV syringe	200 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes, For 1 Doses Administer as a slow IV push at bedside. [cefTRIAxone]Suspected Pathogen:
<input type="checkbox"/> cefTRIAxone (ROCEPHIN) IV	2,000 mg, Intravenous, Every 24 hours, Starting H+60 Minutes Suspected Pathogen:
<input type="checkbox"/> Cefepime - 1000 mg	<b>"Followed by" Linked Panel</b>
<input type="checkbox"/> ceFEPime (MAXIPIME) in sodium chloride 0.9 % 50 mL IV syringe	10 mg, Intravenous, for 5 Minutes, Once, Starting H, For 1 Doses Administer as a slow IV push at bedside [ceFEPime]Suspected Pathogen:
<input type="checkbox"/> ceFEPime (MAXIPIME) in sodium chloride 0.9 % 50 mL IV syringe	100 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes, For 1 Doses Administer as a slow IV push at bedside [ceFEPime]Suspected Pathogen:
<input type="checkbox"/> cefepime (MAXIPIME) IV	1,000 mg, Intravenous, Every 6 hours, Starting H+60 Minutes Suspected Pathogen:
<input type="checkbox"/> Cefepime - 2000 mg	<b>"Followed by" Linked Panel</b>
<input type="checkbox"/> ceFEPime (MAXIPIME) in sodium chloride 0.9 % 50 mL IV syringe	20 mg, Intravenous, for 5 Minutes, Once, Starting H, For 1 Doses Administer as a slow IV push at bedside [ceFEPime]Suspected Pathogen:
<input type="checkbox"/> ceFEPime (MAXIPIME) in sodium chloride 0.9 % 50 mL IV syringe	200 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes, For 1 Doses Administer as a slow IV push at bedside [ceFEPime]Suspected Pathogen:
<input type="checkbox"/> cefepime (MAXIPIME) IV	2,000 mg, Intravenous, Every 8 hours, Starting H+60 Minutes Suspected Pathogen:
<input type="checkbox"/> Meropenem - 500 mg	<b>"Followed by" Linked Panel</b>
<input type="checkbox"/> meropenem (MERREM) in sodium chloride 0.9 % 50 mL IV syringe	5 mg, Intravenous, for 5 Minutes, Once, Starting H Administer as a slow IV push at bedside
<input type="checkbox"/> meropenem (MERREM) in sodium chloride 0.9 % 50 mL IV syringe	50 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes Administer as a slow IV push at bedside
<input type="checkbox"/> meropenem (MERREM) IV	500 mg, Intravenous, Every 6 hours, Starting H+60 Minutes Suspected Pathogen:
<input type="checkbox"/> Meropenem - 2000 mg	<b>"Followed by" Linked Panel</b>
<input type="checkbox"/> meropenem (MERREM) in sodium chloride 0.9 % 50 mL IV syringe	20 mg, Intravenous, for 5 Minutes, Once, Starting H Administer as a slow IV push at bedside
<input type="checkbox"/> meropenem (MERREM) in sodium chloride 0.9 % 50 mL IV syringe	200 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes Administer as a slow IV push at bedside
<input type="checkbox"/> meropenem (MERREM) IV	2,000 mg, Intravenous, Every 8 hours, Starting H+60 Minutes Suspected Pathogen:
<input type="checkbox"/> Ertapenem - 1000 mg	<b>"Followed by" Linked Panel</b>
<input type="checkbox"/> ertapenem (INVanz) in sodium chloride 0.9 % 50 mL IV syringe	10 mg, Intravenous, for 5 Minutes, Once, Starting H Administer as a slow IV push at bedside

- |   |   |
|---|---|
| <input type="checkbox"/> ertapenem (INVanz) in sodium chloride 0.9 % 50 mL IV syringe                 | 100 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes<br>Administer as a slow IV push at bedside  |
| <input type="checkbox"/> ertapenem (INVANZ) IV  | 1,000 mg, Intravenous, Every 24 hours, Starting H+60 Minutes<br>Suspected Pathogen:   |
| <input type="checkbox"/> Ceftolozane/Tazobactam - 1500 mg   | <b>"Followed by" Linked Panel</b>   |
| <input type="checkbox"/> ceftolozane-tazobactam (ZERBAXA) in sodium chloride 0.9 % 50 mL IV syringe   | 15 mg, Intravenous, for 5 Minutes, Once, Starting H<br>Administer as a slow IV push at bedside<br>[ceftolozane-tazobactam]Suspected Pathogen:             |
| <input type="checkbox"/> ceftolozane-tazobactam (ZERBAXA) in sodium chloride 0.9 % 50 mL IV syringe   | 150 mg, Intravenous, for 5 Minutes, Once, Starting H+30 Minutes<br>Administer as a slow IV push at bedside<br>[ceftolozane-tazobactam]Suspected Pathogen: |
| <input type="checkbox"/> ceftolozane-tazobactam (ZERBAXA) 1,500 mg in sodium chloride 0.9 % 100 mL IV | 1,500 mg, Intravenous, Every 8 hours, Starting H+60 Minutes<br>[ceftolozane-tazobactam]Suspected Pathogen:  |

### Medications for Allergic Reaction

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Mild Allergic Reaction                               |   |
| <input checked="" type="checkbox"/> 0.9% NaCl continuous infusion                        | Intravenous, Continuous PRN, Allergic Reaction  |
| <input checked="" type="checkbox"/> albuterol (PROVENTIL HFA;VENTOLIN HFA) inhaler       | 2 puff, Inhalation, Every 20 minutes PRN,<br>Wheezing, Shortness of Breath<br>Management:                           |
| <input checked="" type="checkbox"/> diphenhydrAMINE (SOMINEX) tablet                     | 50 mg, Oral, Every 2 hours PRN, Mild allergic reaction<br>Daily maximum of 400mg                                    |
| <input checked="" type="checkbox"/> Severe Allergic Reaction                             |   |
| <input checked="" type="checkbox"/> diphenhydrAMINE (BENADRYL) injection                 | 50 mg, Intravenous, Every 2 hours PRN, Allergies,<br>Mild or Severe allergic reaction<br>Daily maximum of 400mg     |
| <input checked="" type="checkbox"/> EPINEPHRINE INJECTABLE ALLERGY ORDERABLE             | 0.3 mg, Intramuscular, Every 10 minutes PRN,<br>Severe allergic reaction, For 2 Doses<br>Maximum number of doses: 2 |
| <input checked="" type="checkbox"/> hydrocortisone sod succ (PF) (Solu-CORTEF) injection | 100 mg, Intravenous, Once PRN, Severe allergic reaction, For 1 Doses<br>Severe allergic reaction                    |
| <input checked="" type="checkbox"/> ranitidine (ZANTAC) IV                               | 50 mg, Intravenous, Once PRN, Severe allergic reaction, For 1 Doses<br>Please contact pharmacy for dose if needed.  |

Patient/Family Signature(Date & Time) \_\_\_\_\_