



# REGIONAL PEDIATRIC PARENTERAL DRUG MONOGRAPH

GENERIC NAME

**piperacillin-tazobactam**

**Effective Date:** May14-2014

**Revised Date:** Jan 2023

CLASSIFICATION  
**Antibacterial**

OTHER NAMES  
**Tazocin**

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**ADMINISTRATION POLICY:**

IV Infusion – May be administered by a nurse **MINI-BAG PLUS COMPATIBLE**

IM Injection – Not recommended

**RECONSTITUTION/DILUTION/ADMINISTRATION:**

Available As	Combination Description	Diluent volume	Final Volume	Final Concentration	Preferred Diluent Volumes Bag Size	Alternate Bag Size
2.25 gram vial	Piperacillin 2 gram and Tazobactam 0.25 gram	8.4 mL	10 mL	225 mg/mL (equivalent to piperacillin 200 mg/mL tazobactam 25 mg/mL)	50 to 100 mL	25 mL
3.375 gram vial	Piperacillin 3 gram and Tazobactam 0.375 gram	12.6 mL	15 mL		50 to 100 mL	N/A
4.5 gram vial	Piperacillin 4 gram and Tazobactam 0.5 gram	16.9 mL	20 mL		50 to 100 mL	N/A

*To maximize speed of reconstitution, loosen powder in the vial by lightly tapping the vial prior to reconstitution or docking with MINI-BAG PLUS bag*

**IV Intermittent:** **MINI-BAG PLUS COMPATIBLE** Administer over at least 30 minutes

**DOSAGE:** *All Dosages Expressed as Piperacillin Component*

**Infant, Child:** 200 to 300 mg/kg/24 hours divided every 6 to 8 hours (may be divided every 4 hours)

**Cystic Fibrosis:** 300 to 500 mg/kg/24 hours divided every 4 to 8 hours

**Febrile Neutropenia:** 240 to 300 mg/kg/24 hours divided every 6 to 8 hours

**Renal Impairment:** Dosage adjustment required

**Hepatic impairment:** No dosage adjustment required

**Maximum daily dose:** 18 grams

**Maximum concentration:** 90 mg/mL

**STABILITY/COMPATIBILITY:**

**Stability of reconstituted vial:** 24 hours at room temperature

**Stability of Final Admixture:** 24 hours at room temperature

**Compatibility:** Compatible with normal saline, D5W  
*Incompatible with Lactated Ringer*



# REGIONAL PEDIATRIC PARENTERAL DRUG MONOGRAPH

GENERIC NAME

**piperacillin-tazobactam**

**Effective Date:** May14-2014

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CLASSIFICATION  
**Antibacterial**

OTHER NAMES  
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## POTENTIAL HAZARDS:

- Hypersensitivity: increased incidence in patients with cystic fibrosis, rash, urticaria, fever
- CV: hypertension, edema
- GI: nausea, vomiting, diarrhea
- Metab: decrease serum potassium (particularly in patients with hepatic disease or with concurrent cytotoxic drugs)
- Neuro: headache or dizziness, agitation, insomnia, seizures
- Renal: increase in serum creatinine or BUN
- Local: thrombophlebitis, pain at injection site
- Other: superinfection, serum-sickness reaction

## REQUIRED MONITORING

- Presence of nausea, vomiting and headache                      action: decrease infusion rate
- Thrombophlebitis (common)    action: dilute to at least 60 mg/mL, normal saline preferred
- For therapy greater than 10 days in duration, check CBC and platelet count at least once weekly

## CAUTION

- Patients allergic to cephalosporin antibiotics may also be allergic to penicillin
- Use of high doses in patients with pre-existing seizure disorder
- Renal impairment: decreased platelet aggregation and prolonged bleeding time

## CONTRAINDICATIONS

- Hypersensitivity to penicillin or other beta-lactam antibiotics

## ADDITIONAL NOTES:

- If administering aminoglycoside antibiotics (i.e. gentamicin, tobramycin) concurrently, flush IV tubing and catheter with at least 1.5 times the catheter volume “dead space” with normal saline between medications to prevent inactivation and possible precipitation.
- Tazobactam inhibits the enzyme B-lactamase. This extends and enhances the spectrum of activity of piperacillin.
- Piperacillin has a very short half-life (0.5 to 2 hours). Some sources report better outcomes when piperacillin-tazobactam is infused over 3 to 4 hours.