



NEONATAL Medication Monograph

PIPERACILLIN TAZOBACTAM





This document should be read in conjunction with this [DISCLAIMER](#)

Restricted: Requires Neonatologist or Microbiologist review within 24 hours of initiation

Presentation	Vial: each vial contains Piperacillin 4 g/Tazobactam 500 mg		
Description	Combination of penicillin (piperacillin) and a beta lactamase inhibitor (tazobactam)		
Indications	<ul style="list-style-type: none"> Intra-abdominal infection Hospital-acquired pneumonia <p>Note: Not suitable for treatment of CNS infections due to limited penetration</p>		
Contraindications	Contraindicated in patients with severe hypersensitivity to penicillins, carbapenems and cephalosporin antibiotics		
Precautions	Consider dose reduction or alternative therapy in severe renal impairment		
Dosage	Dose expressed as <i>piperacillin component</i>		
	Corrected gestational age	Postnatal age	Frequency
	< 30 weeks	≤28 days	12 hourly
		>28 days	8 hourly
	30 – 36 weeks	≤14 days	12 hourly
		>14 days	8 hourly
	> 36 weeks	≤7 days	12 hourly
		>7 days	8 hourly
Dosage Adjustment	Dosage adjustment may be required in cases of renal impairment		

Adverse Reactions	Common: thrombophlebitis, vomiting, diarrhoea
	Serious: hypersensitivity reactions, eosinophilia, hyperbilirubinemia, elevated LFTs, elevated serum creatinine, hypotension
Interactions	Incompatible with albumin and blood products
Compatible Fluids	Glucose 5%, Sodium Chloride 0.9%
Preparation	<p>IV Infusion: Available from CIVAS (KEMH & PCH) If unavailable, prepare a solution using the below details Concentration is expressed as piperacillin content</p> <p>Step 1: Reconstitution Reconstitute 1 vial (4 g of piperacillin) with 17 mL of Water for Injections or Sodium Chloride 0.9% Concentration is 4 g/20 mL = 200 mg/mL</p> <p>Step 2: Dilution Take 5 mL (1000 mg) of the above solution and make up to 20mL with compatible fluid Final Concentration is 1000 mg/20 mL = <u>50 mg/mL</u></p>
Administration	<p>IV Infusion Infuse over at least 30 minutes</p>
Monitoring	Complete blood count, renal and hepatic function during prolonged treatment (> 10 days)
Storage	Store at room temperature, below 25°C
Notes	<ul style="list-style-type: none"> • IV Aminoglycosides are inactivated by IV Penicillins and Cephalosporins. Ensure lines are adequately flushed between antibiotics. • Each 1 gram of piperacillin contains 2.35 mmol (54 mg) of sodium
Related policies	WNHS Policy: Antimicrobial Stewardship

References	<p>Truven Health Analytics. Piperacillin Tazobactam. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2020 July 10] Available from: https://neofax.micromedexsolutions.com/</p> <p>Paediatric Formulary Committee. BNF for Children: 2019. Pharmaceutical Press; 2019.</p> <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index: a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2019, p1476</p> <p>Society of Hospital Pharmacists of Australia. Piperacillin Tazobactam. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2020 [cited 2020 July 10]. Available from: http://aidh.hcn.com.au</p> <p>Australian Medicines Handbook. Piperacillin Tazobactam. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2020 [cited 2020 July 10]. Available from: https://amhonline.amh.net.au/</p>
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