



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 4g/Tazobactam 500mg		
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 piperacillin component		
	Corrected gestational age	Postnatal age	Dose
	< 30 weeks	≤28 days	100mg/kg/dose
		>28 days	100mg/kg/dose
	30 – 36 weeks	≤14 days	100mg/kg/dose
		>14 days	100mg/kg/dose
	> 36 weeks	≤7 days	100mg/kg/dose
		>7 days	100mg/kg/dose
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 (4g of piperacillin) with 20mL of Water for Injections or Sodium Chloride 0.9% Concentration is 4g/20mL = 200mg/mL</p> <p>Step 2: Dilution Take 5mL (1000mg) of the above solution and make up to 20mL with compatible fluid Final Concentration is 1000mg/20mL = <u>50mg/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 1gram of piperacillin contains 2.35mmol (54mg) 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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