

cefOTAXIME

Indication	<ul style="list-style-type: none"> • Treatment of susceptible gram-positive and gram-negative organisms (e.g. respiratory, urinary, intra-abdominal, skin, bone, and joint infections)¹ • Neonatal meningitis¹ • Congenital gonococcal conjunctivitis²
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INTRAVENOUS	Presentation	<ul style="list-style-type: none"> • Vial 500 mg 1 g 2 g 		
	Dosage	<ul style="list-style-type: none"> • 50 mg/kg (frequency according to current gestation and day of life)¹ 		
		Current gestational age (weeks)	Day of life (days)	Frequency
		31+6 or less	0–7	every 12 hours
			8 or more	every 8 hours
	32+0 or more	0–7	every 12 hours	
		8 or more	every 6 hours	
Preparation	<ul style="list-style-type: none"> • 500 mg vial <ul style="list-style-type: none"> ○ Add 4.8 mL of water for injection ○ Draw up solution and make up to 10 mL total volume with water for injection³ ○ <i>Concentration now equal to 50 mg/mL</i> 			
	<ul style="list-style-type: none"> • 1 g vial <ul style="list-style-type: none"> ○ Add 9.6 mL of water for injection³ ○ Draw up 5 mL of solution and make up to 10 mL total volume with water for injection ○ <i>Concentration now equal to 50 mg/mL</i> 			
	<ul style="list-style-type: none"> • 2 g vial <ul style="list-style-type: none"> ○ Add 9 mL of water for injection³ ○ Draw up 2.5 mL of solution and make up to 10 mL total volume with water for injection ○ <i>Concentration now equal to 50 mg/mL</i> 			
Administration	<ul style="list-style-type: none"> • IV injection <ul style="list-style-type: none"> ○ Draw up the prescribed dose ○ IV injection over 3–5 minutes³ • IV infusion <ul style="list-style-type: none"> ○ Prime the infusion line and reduce total syringe volume to the prescribed dose ○ IV infusion via syringe driver pump over 10–30 minutes ○ On completion, disconnect syringe and infusion line ○ Flush access port at same rate as infusion 			



IM	Presentation	<ul style="list-style-type: none"> Vial 500 mg 1 g 2 g 		
	Dosage (standard)	<ul style="list-style-type: none"> 50 mg/kg (frequency according to gestation and day of life) 		
		Current gestational age (weeks)	Day of life (days)	Frequency
		31+6 or less	0–7	every 12 hours
			8 or more	every 8 hours
32+0 or more	0–7	every 12 hours		
	8 or more	every 6 hours		
Dosage (congenital conjunctivitis only)	<ul style="list-style-type: none"> 100 mg/kg once² 			
Preparation	<ul style="list-style-type: none"> 500 mg vial <ul style="list-style-type: none"> Add 1.8 mL of water for injection³ (or 1% lidocaine (lignocaine)) Concentration now equal to 250 mg/mL³ 			
	<ul style="list-style-type: none"> 1 g vial <ul style="list-style-type: none"> Add 3.6 mL of water for injection³ (or 1% lidocaine (lignocaine)) Concentration now equal to 250 mg/mL³ 			
	<ul style="list-style-type: none"> 2 g vial <ul style="list-style-type: none"> Add 7 mL of water for injection³ (or 1% lidocaine (lignocaine)) Concentration now equal to 250 mg/mL³ 			
Administration	<ul style="list-style-type: none"> Draw up prescribed dose Intramuscular injection into thickest part of the vastus lateralis in the anterolateral thigh (maximum 0.5 mL per site)⁴ If lidocaine (lignocaine) used, administer immediately 			



Special considerations	<ul style="list-style-type: none"> If renal impairment, may need dosage adjustment⁵ If longer duration, consider oral and topical antifungal prophylaxis If co-prescribed with aminoglycoside, give the antibiotic with shortest duration of administration first (so antibiotic cover commences asap) <ul style="list-style-type: none"> Do not mix in the same injection or infusion solution; flush before and after IM route only if IV route not available UAC route: consult with neonatologist/paediatrician prior to use and refer to Queensland Clinical Guideline: Neonatal medicines⁶ Current gestational age is the same as <i>postmenstrual age</i> (PMA)
Monitoring	<ul style="list-style-type: none"> FBC periodically¹
Compatibility	<ul style="list-style-type: none"> Fluids³ <ul style="list-style-type: none"> 5% glucose, 10% glucose, 0.9% sodium chloride% Y-site <ul style="list-style-type: none"> Aciclovir³, dexamethasone⁷, dopamine⁷, furosemide (frusemide)⁷, heparin⁷, insulin (regular)⁷, 0.5% lignocaine⁷, magnesium sulphate³, midazolam³, morphine³, octreotide⁷, propofol⁷, ranitidine⁷, voriconazole⁷
Incompatibility	<ul style="list-style-type: none"> PN and fat emulsion: co-infusion with cefOTAXIME not recommended (evidence limited). If unavoidable, seek pharmacist advice first, filter infusion and flush before and after Fluids <ul style="list-style-type: none"> Alkaline solutions (e.g. containing sodium bicarbonate)³ Known <ul style="list-style-type: none"> Aminoglycoside³, amiodarone³, azathioprine³, azithromycin³, caspofungin³, dobutamine³, filgrastim³, fluconazole³, hydralazine³, methylprednisolone³, phenobarbital (phenobarbitone)³, sodium bicarbonate³, vecuronium³
Interactions	<ul style="list-style-type: none"> IV aminoglycosides are inactivated by IV cephalosporins, penicillins and teicoplanin⁸
Stability	<ul style="list-style-type: none"> Vial <ul style="list-style-type: none"> Store below 25 °C. Protect from light Reconstituted solution <ul style="list-style-type: none"> Stable for 24 hours at 2–8 °C³. Protect from light³ The solution is clear to pale yellow. Discard if darker than pale yellow³

Side effects	<ul style="list-style-type: none"> • Hypersensitivity reactions: rare in neonates. May present as erythema and rash (maculopapular rash, red purple plaques or urticarial type plaques^{5,9-12}) • Blood pathology: leucopenia, granulocytopenia⁵ • Digestive: nausea, diarrhoea, colitis⁵ • Other: candidiasis in babies less than 1000 g more common than with other antibiotics¹
Actions	<ul style="list-style-type: none"> • Broad spectrum third generation cephalosporin antibiotic
Abbreviations	IM: intramuscular IV: intravenous, PN: parenteral nutrition, UAC: umbilical arterial catheter
Keywords	Cefotaxime sodium, cephalosporin, gram-negative, gram-positive, infections, meningitis

The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

References

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Document history

ID number	Effective	Review	Summary of updates
NMedQ19.011-V1-R24	26/06/2019	26/06/2024	Endorsed by Queensland Neonatal Services Advisory Group (QNSAG)
NMedQ19.011-V2-R24	13/08/2021	26/06/2024	<ul style="list-style-type: none"> • Amended FROM gestational age TO current gestational age • Removed UAC icon and amended instructions for administration via UAC • Amended instructions for co-prescription with aminoglycosides to clarify order of administration • Added QR code

QR code

