

# cefaZOLin

Indication	<ul style="list-style-type: none"> <li>Treatment of susceptible gram-positive and gram-negative infections<sup>1</sup></li> </ul>			
<b>INTRAVENOUS</b>	<b>Presentation</b>	<ul style="list-style-type: none"> <li>Vial: 500 mg   1 g</li> <li>25 mg/kg (frequency according to current gestational age and days of life)</li> </ul>		
	<b>Dosage<sup>2</sup></b>	Current gestational age (weeks)	Days of life	Frequency
		29+6 or less	0–28	every 12 hours
			29 or more	every 8 hours
		30+0–36+6	0–14	every 12 hours
			15 or more	every 8 hours
37+0–44+6		0–7	every 12 hours	
	8 or more	every 8 hours		
45+0 or more	0 or more	every 6 hours		
<b>Dosage (severe infection)</b>	<ul style="list-style-type: none"> <li>If aged 8 days or more, AND weight more than 2 kg, then dose may be increased to 50 mg/kg every 8 hours<sup>3</sup></li> </ul>			
<b>Preparation</b>	<ul style="list-style-type: none"> <li>500 mg vial<sup>4</sup> <ul style="list-style-type: none"> <li>Add 4.8 mL of water for injection</li> <li>Concentration now equal to 100 mg/mL</li> </ul> </li> </ul>			
	<ul style="list-style-type: none"> <li>1 g vial<sup>4</sup> <ul style="list-style-type: none"> <li>Add 5 mL of water for injection to vial</li> <li>Withdraw entire contents and make up to 10 mL total volume with water for injection</li> <li>Concentration now equal to 100 mg/mL</li> </ul> </li> </ul>			
<b>Administration</b>	<ul style="list-style-type: none"> <li>Draw up prescribed dose</li> <li>IV injection over 3–5 minutes<sup>2,4</sup></li> </ul>			



<b>IM</b>	<b>Presentation</b>	<ul style="list-style-type: none"> <li>Vial: 500 mg   1 g</li> <li>25 mg/kg (frequency according to gestational age and days of life)</li> </ul>		
	<b>Dosage<sup>2</sup></b>	Current gest age (weeks)	Days of life	Frequency
		29+6 or less	0–28	every 12 hours
			29 or more	every 8 hours
		30+0–36+6	0–14	every 12 hours
			15 or more	every 8 hours
37+0–44+6		0–7	every 12 hours	
	8 or more	every 8 hours		
45+0 or more	0 or more	every 6 hours		
<b>Preparation</b>	<ul style="list-style-type: none"> <li>500 mg vial<sup>4</sup> <ul style="list-style-type: none"> <li>Add 2 mL of water for injection (or lidocaine (lignocaine) 1%)</li> <li>Shake well and warm in hands to aid dissolution</li> <li>Concentration now equal to 225 mg/mL</li> </ul> </li> </ul>			
	<ul style="list-style-type: none"> <li>1 g vial<sup>4</sup> <ul style="list-style-type: none"> <li>Add 2.5 mL of water for injection (or lidocaine (lignocaine) 1%)</li> <li>Shake well and warm in hands to aid dissolution</li> <li>Concentration now equal to 330 mg/mL</li> </ul> </li> </ul>			
<b>Administration</b>	<ul style="list-style-type: none"> <li>Draw up prescribed dose</li> <li>Intramuscular injection into thickest part of the vastus lateralis in the anterolateral thigh (maximum 0.5 mL per site)</li> </ul>			



<b>Special considerations</b>	<ul style="list-style-type: none"> <li>• If renal impairment, low urinary output or prolonged use, may need dosage adjustment<sup>5</sup></li> <li>• If co-prescribed, give antibiotic with shortest duration of administration first (so antibiotic cover commences asap) <ul style="list-style-type: none"> <li>◦ Do not mix in the same injection or infusion solution; flush before and after</li> </ul> </li> <li>• Route of administration <ul style="list-style-type: none"> <li>◦ Not for intraventricular use</li> <li>◦ IM route only if IV route not available</li> <li>◦ UAC route: consult with neonatologist/paediatrician prior to use and refer to Queensland Clinical Guideline: <i>Neonatal medicines</i><sup>6</sup></li> </ul> </li> <li>• Current gestational age is the same as <i>postmenstrual age</i> (PMA)</li> </ul>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• Nil required</li> </ul>
<b>Compatibility</b>	<ul style="list-style-type: none"> <li>• Fluids <ul style="list-style-type: none"> <li>◦ 5% glucose<sup>4</sup>, 10% glucose<sup>4</sup>, 0.9% sodium chloride<sup>4</sup></li> </ul> </li> <li>• Y-site <ul style="list-style-type: none"> <li>◦ Aciclovir<sup>4</sup>, atracurium<sup>4</sup>, aztreonam<sup>4</sup>, calcium gluconate<sup>4</sup>, ciclosporin<sup>4</sup>, clindamycin<sup>4</sup>, dexamethasone<sup>4</sup>, dexmedetomidine<sup>4</sup>, digoxin<sup>4</sup>, esmolol<sup>4</sup>, fentanyl<sup>4</sup>, filgrastim<sup>4</sup>, fluconazole<sup>4</sup>, fosfarnet<sup>4</sup>, furosemide<sup>4</sup>, glyceryl trinitrate<sup>4</sup>, granisetron<sup>4</sup>, heparin sodium<sup>4</sup>, hydrocortisone sodium succinate<sup>4</sup>, indomethacin<sup>4</sup>, lidocaine<sup>4</sup>, linezolid<sup>4</sup>, methylprednisolone sodium succinate<sup>4</sup>, metoclopramide<sup>4</sup>, midazolam<sup>4</sup>, morphine sulfate<sup>4</sup>, nicardipine<sup>4</sup>, noradrenaline (norepinephrine)<sup>4</sup>, potassium chloride<sup>4</sup>, ranitidine<sup>4</sup>, sodium bicarbonate<sup>4</sup>, sodium nitroprusside<sup>4</sup>, suxamethonium<sup>4</sup>, vecuronium<sup>4</sup></li> </ul> </li> </ul>
<b>Incompatibility</b>	<ul style="list-style-type: none"> <li>• PN and fat emulsion: co-infusion with cefaZOLin not recommended (evidence limited). If unavoidable, seek pharmacist advice first, filter infusion and flush before and after</li> <li>• Fluids <ul style="list-style-type: none"> <li>◦ No information<sup>4</sup></li> </ul> </li> <li>• Drugs <ul style="list-style-type: none"> <li>◦ Aminoglycosides (amikacin, gentamicin, tobramycin)<sup>4</sup>, azathioprine<sup>4</sup>, calcium chloride<sup>4</sup>, caspofungin<sup>4</sup>, cefotaxime<sup>4</sup>, dobutamine<sup>4</sup>, dopamine<sup>4</sup>, erythromycin<sup>4</sup>, ganciclovir<sup>4</sup>, haloperidol lactate<sup>4</sup>, hydralazine<sup>4</sup>, isavuconazole<sup>4</sup>, mycophenolate mofetil<sup>4</sup>, protamine<sup>4</sup>, pyridoxine<sup>4</sup>, rocuronium<sup>4</sup></li> </ul> </li> </ul>
<b>Interactions</b>	<ul style="list-style-type: none"> <li>• IV aminoglycosides are inactivated by IV cephalosporins, penicillins and teicoplanin<sup>7</sup></li> <li>• Co-administration with aminoglycosides may produce additional nephrotoxic effects<sup>8</sup></li> <li>• False positive direct and indirect Coombs tests have occurred in neonates receiving cefazolin or whose mother received cefazolin prior to birth<sup>8</sup></li> </ul>
<b>Stability</b>	<ul style="list-style-type: none"> <li>• Vial: store below 25 °C. Protect from light<sup>1</sup></li> </ul>
<b>Side effects</b>	<ul style="list-style-type: none"> <li>• Hypersensitivity reactions: rare in neonates. May present as erythema and rash (maculopapular rash, red purple plaques or urticarial type plaques<sup>9-12</sup>)</li> <li>• Blood pathology: eosinophilia<sup>2</sup>, leucopenia<sup>8</sup></li> <li>• Digestive: diarrhoea<sup>8</sup>, colitis<sup>8</sup></li> <li>• Muscular-skeletal: pain at the site of IM injection<sup>8</sup>, phlebitis<sup>8</sup></li> </ul>
<b>Actions</b>	<ul style="list-style-type: none"> <li>• Bactericidal via inhibition of cell wall synthesis<sup>8</sup></li> </ul>
<b>Abbreviations</b>	IM: intramuscular, IV: intravenous; UAC: umbilical arterial catheter;
<b>Keywords</b>	Antibiotic, cephalosporin, infection, cephalazolin, cefazolin

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
NMedQ20.053-V1-R25	30/10/2020	30/10/2025	Endorsed by Queensland Neonatal Services Advisory Group (QNSAG)
NMedQ20.053-V1-R25	13/08/2021	30/10/2025	<ul style="list-style-type: none"> <li>• Amended gestational age to current gestational age</li> <li>• Added severe infection dosing regimen</li> <li>• Amended instructions for co-prescription with aminoglycosides to clarify order of administration</li> <li>• Deleted UAC icon and amended instructions for use</li> </ul>

## QR code

