



NEONATAL Medication Monograph

FLUCLOXACILLIN





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

Unrestricted: Any prescriber may initiate treatment

Presentation	Vial: 500mg, 1000mg Oral Suspension: 250mg/5mL																										
Description	Narrow spectrum penicillin antibacterial Flucloxacillin is stable against beta-lactamase producing staphylococci																										
Indications	Treatment of infections caused by <i>Staphylococcus aureus</i>																										
Contraindications	Hypersensitivity to penicillins																										
Precautions	Caution in patients with hepatic impairment																										
Dosage	<p><u>IV, IM:</u></p> <table border="1"> <thead> <tr> <th>Postnatal age (days)</th> <th>Dose</th> <th>Dosing interval</th> </tr> </thead> <tbody> <tr> <td>0 – 7 days</td> <td>50mg/kg/dose</td> <td>12 hourly</td> </tr> <tr> <td>8 – 20 days</td> <td>50mg/kg/dose</td> <td>8 hourly</td> </tr> <tr> <td>≥ 21 days</td> <td>50mg/kg/dose</td> <td>6 hourly</td> </tr> </tbody> </table> <p>Doses up to 100mg/kg/dose in staphylococcal osteomyelitis, meningitis or cerebral abscess</p> <p><u>Oral:</u></p> <table border="1"> <thead> <tr> <th>Postnatal age (days)</th> <th>Dose</th> <th>Dosing interval</th> </tr> </thead> <tbody> <tr> <td>0 – 7 days</td> <td>25mg/kg/dose</td> <td>12 hourly</td> </tr> <tr> <td>8 – 20 days</td> <td>25mg/kg/dose</td> <td>8 hourly</td> </tr> <tr> <td>≥ 21 days</td> <td>25mg/kg/dose</td> <td>6 hourly</td> </tr> </tbody> </table>			Postnatal age (days)	Dose	Dosing interval	0 – 7 days	50mg/kg/dose	12 hourly	8 – 20 days	50mg/kg/dose	8 hourly	≥ 21 days	50mg/kg/dose	6 hourly	Postnatal age (days)	Dose	Dosing interval	0 – 7 days	25mg/kg/dose	12 hourly	8 – 20 days	25mg/kg/dose	8 hourly	≥ 21 days	25mg/kg/dose	6 hourly
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Dosage Adjustment	Dose range may be adjusted according to severity of infection																										

Adverse Reactions	Common: Diarrhoea, pain and inflammation at injection site, transient increases in liver enzymes and bilirubin
	Serious: Black tongue, electrolyte disturbances, neurotoxicity, bleeding, blood dyscrasias, hepatic reactions, including severe cholestatic hepatitis (especially in treatment >2 weeks).
Interactions	Aminoglycosides, including gentamicin, should not be mixed with flucloxacillin when both drugs are given parenterally as inactivation occurs. Ensure line is adequately flushed between antibiotics.
Compatible Fluids	Glucose 5% , Sodium Chloride 0.9%
Preparation	<p><u>IV:</u></p> <p>Step 1: Reconstitution</p> <p>500mg vial Add 4.6mL of Water for Injection to 500mg vial Concentration = 100mg/mL</p> <p>1000mg vial Add 9.3mL of Water for Injection to 1000mg vial Concentration = 100mg/mL</p> <p>Step 2: Dilution</p> <p>Take 5mL (500mg) of the above solution and make to a final volume of 10mL Concentration = 500mg/10mL = 50mg/mL</p> <p><u>IM:</u></p> <p>500mg vial Add 2.1mL of Water for Injection to 500mg vial Concentration = 200mg/mL</p> <p>1000mg vial Add 9.3mL of Water for Injection to 1000mg vial Concentration = 100mg/mL</p> <p><u>Oral:</u></p> <p>Note: check brand before reconstituting mixture as instructions may differ</p> <p>Flucil Brand® Reconstitution</p> <p>Add 58mL of Water for Irrigation to powder and Shake Well</p>

Administration	<p><u>IV Infusion (preferred):</u> Infuse over 30-60 minutes</p> <p><u>IV Injection:</u> May be given as an IV injection over 3-5 minutes however infusion is preferred due to increased risk of phlebitis and pain</p> <p><u>IM:</u> Inject slowly into a large muscle such as the gluteus or lateral thigh If administering a volume greater than 1mL , administer over 2 different sites to minimise pain</p> <p><u>Oral:</u> Give 30 minutes before feeds to improve absorption</p>
Monitoring	Electrolytes, Observe intravenous site for extravasations Liver function tests if on long term therapy (>14 days)
Storage	<p>Vial: Store at room temperature, below 25°C</p> <p>Oral Powder: Store at room temperature, below 25°C</p> <p>Once reconstituted: Refrigerate at 2 to 8°C and discard after 14 days</p>
Notes	<p>1g of flucloxacillin sodium contains 2.2mmol of sodium ions</p> <p>There have been reports of severe, delayed cholestatic jaundice in adults particularly after treatment for more than 2 weeks. While this has not been recognised with neonatal use, caution would be recommended in this population.</p>
References	<p>Society of Hospital Pharmacists of Australia. Flucloxacillin. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2020 Jan 21]. Available from: http://aidh.hcn.com.au</p> <p>Ainsworth SB. Neonatal formulary 7: drug use in pregnancy and the first year of life. Seventh ed. Chichester (West Sussex): John Wiley & Sons Inc.; 2015. p217.</p> <p>Flucloxacillin. In British national formulary for children Joint Formulary Committee (September 2018-19) <i>BNF 74: September 2018-19</i>. London: Pharmaceutical Press</p> <p>Flucloxacillin In: South Australian Neonatal Medication Guidelines 2018[cited 2020 Feb 6]</p>
Related policies	WNHS Policy: Antimicrobial Stewardship

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