

## **FLUCLOXACILLIN**

## **ChAMP Monographs**

gram-positive organisms, excluding methicillin resistant staphylococcus aureus (MRSA). It interferes with the bacterial cell wall peptidoglycan synthesis resulting in cell lysis <sup>1,3</sup> Flucloxacillin is indicated for the treatment of confirmed or suspected Staphylococcal infections (e.g. bacteraemia, osteomyelitis, pneumonia, cellulitis).  Champ INV and Oral: Category A: Unrestricted This is not a restricted agent. Follow standard ChAMP guidelines where appropriate.  125mg/5mL and 250mg/5mL oral liquid 250mg and 500mg capsules 500mg and 1g powder for injection vial  DOSAGE  The doses listed below fall within the standard range. Higher doses may be prescribed for certain situations. This should be in consultation with Infectious Diseases or Microbiology consultants.  IV: Usual dose: 25mg/kg/dose 6 hourly (maximum 12grams/day) <sup>2,3</sup> Severe infections: 50mg/kg/dose 6 hourly (maximum 2grams/day) <sup>2,3</sup> Oral: Usual dose: 12.5mg/kg/dose 6 hourly (maximum 2grams/day) <sup>2,3</sup> Severe infections: 25mg/kg/dose 6 hourly (maximum 4grams/day) <sup>2,3</sup>
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Neonates:
Please refer to neonatal clinical care drug protocols
Neonatology Clinical Care Unit - Drug Protocols - Services A — Z - Women and
Newborn Health Service
DOSAGE Dosage adjustment required in renal impairment:
ADJUSTMENT Dosage adjustment may be required in cases of impaired renal function (with
creatinine clearance of less than 10mL/min). <sup>1</sup>
http://cahs.hdwa.health.wa.gov.au/data/assets/pdf_file/0003/106986/01_Guidlines_for_calculating_CLcr.pdf
es_for_calculating_clcr.pur
CrCl >10mL/minute: normal dose
CrCl <10mL/minute: administer 50% dose 6 – 8 hourly to a maximum of 4grams in
24 hours. <sup>3,4,5</sup>
RECONSTITUTION IV:
Reconstitute 500mg vial with 4.6mL water for injection and 1gram vial with 9.3mL
water for injection to give 100mg/mL. Dilute further with a compatible fluid to a
concentration of 50mg/mL if giving by IV push. <sup>1,2,6</sup>
Oral (Flucil® brand both strongths):
Oral (Flucil® brand both strengths):  Open foil packaging and reconstitute with 58mL of water as follows: tap bottle until
all powder flows freely; add approximately half the total volume of water for
reconstitution and shake vigorously to suspend powder. Add remainder of the
water and again shake vigorously. Store reconstituted solution in the refrigerator
and discard any remaining suspension after 14 days. <sup>1</sup>
Refer to packaging for the reconstitution instructions for alternative brands and
strengths.
ADMINISTRATION IV bolus:

	Administer 50mg/mL or weaker solution over 3 – 5 minutes <sup>1,5</sup>			
	IV infusion:			
	Dilute to a suitable volume with diluent and infuse over 20 to 30 minutes. Doses greater than 50mg/kg are best infused to avoid phlebitis. 1,5			
	Continuous infusion:			
	May be given over 24 hours by continuous infusion. Contact Pharmacy for advice.			
	Oral:			
	Give on an empty stomach at least 30 minutes before food or 2 hours after food. 1,2,3			
MONITORING	Renal, hepatic and haematological function should be monitored weekly with prolonged therapy (i.e. longer than 7 days) <sup>3</sup>			
ADVERSE EFFECTS	<b>Common:</b> transient increases in liver enzymes and bilirubin, diarrhoea, nausea, pain and inflammation at injection site <sup>1,3</sup>			
	<b>Rare:</b> cholestatic hepatitis, nephrotoxicity, <i>Clostridium difficile</i> -associated disease, electrolyte disturbances, neurotoxicity (usually with high doses, e.g. drowsiness, hallucinations, coma, seizures), bleeding, blood dyscrasias (e.g. neutropenia, which is related to dose and duration of treatment, thrombocytopenia) <sup>1,3</sup>			
COMPATIBLE	Glucose 5%			
FLUIDS	Glucose/sodium chloride solutions Sodium chloride 0.9%			
	Hartmann's <sup>6</sup>			
PRECAUTIONS	Flucloxacillin is contraindicated in patients with a history of flucloxacillin or dicloxacillin associated jaundice or hepatic dysfunction. <sup>1,3</sup>			
	Flucloxacillin is contraindicated in patients with history of severe allergy to penicillins, care should also be taken with cephalosporins and carbapenems as cross reactivity may occur between penicillins, cephalosporins and carbapenems. <sup>1,3,6</sup>			
	Use with extreme caution in jaundiced neonates or premature infants as it reduces albumin bound bilirubin to 50 – 70% of the baseline concentration. <sup>1</sup>			
COMMENTS	IV aminoglycoside antibiotics are inactivated by IV cephalosporins, penicillins and teicoplanin. Administration of these agents should be separated by at least 1 hour. If this is not possible, (for example HITH patients) lines should be flushed well with sodium chloride 0.9% before and after giving each medication. 6,8			

<sup>\*\*</sup>Please note: The information contained in this guideline is to assist with the preparation and administration of **flucloxacillin**. Any variations to the doses recommended should be clarified with the prescriber prior to administration\*\*

## References:

- 1. MIMS Australia Pty Ltd. MIMS [online]. St Leonards (NSW): CMPMedica Australia Pty Ltd; accessed online 22<sup>nd</sup> June 2012.
- 2. Kemp CA, McDowell JM, editors. Paediatric Pharmacopoeia 13<sup>th</sup> edition. Melbourne: Pharmacy Department, Royal Children's Hospital; 2005. p.107.
- 3. Australian Medicines Handbook Pty Ltd. Australian Medicines Handbook [online] Adelaide (SA): Australian Medicines Handbook Pty Ltd accessed online 12<sup>th</sup> April 2013.
- Therapeutic Guidelines Ltd. eTG complete [online]. West Melbourne: Therapeutic Guidelines Ltd; accessed online 22<sup>nd</sup> June 2012.
- 5. Ashley C and Currie A, editors. The Renal Drug Handbook: Third edition. Abingdon (UK): Radcliffe Publishing Ltd; 2009. p. 310.
- 6. Burridge N, Deidun D, editors, Australian injectable drugs handbook, fifth edition [online]. Collingwood: The Society of Hospital Pharmacists of Australia; 2011. accessed online 12<sup>th</sup> April 2013.
- BNF Group, the Royal Pharmaceutical Society. BNF for Children [online] London: Pharmaceutical Press accessed online 12<sup>th</sup> April 2013.
- 8. Pharmacy Department, Royal Children's Hospital. Paediatric Injectable Guidelines, 4<sup>th</sup> edition: Pharmacy Department, Royal Children's Hospital; 2011. p.26.

## Disclaimer

The recommendations contained in this guideline provide direction for the use of **flucloxacillin** at Princess Margaret Hospital for Children in Perth, Western Australia. This guideline is intended for use at Princess Margaret Hospital for Children and is not necessarily suitable for use elsewhere. Princess Margaret Hospital (Child and Adolescent Health Service) accepts no liability for such use. The information provided is made available in good faith and is derived from sources believed to be reliable and accurate at the time of release. No assurance is given as to the accuracy of any information contained after publication on the Intranet. No part of this protocol may be reproduced, stored in a retrieval system or transmitted in any form, electronic, mechanical, photocopy or recording without prior permission of the publisher.

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