

Government of Western Australia North Metropolitan Health Service Women and Newborn Health Service



NEONATAL MEDICATION GUIDELINE				
Fosfomycin				
Scope (Staff):	Nursing, Medical and Pharmacy Staff			
Scope (Area):	KEMH NICU, PCH NICU, NETS WA			
This document should be read in conjunction with the Disclaimer.				

Quick Links									
Dose	Preparation & Administration	Side Effects & <u>Interactions</u>	Monitoring						
Restrictions									
	Neonatal: Non-Formulary - IPA Required								
In order not to create unnecessary delays in treatment in uncommon circumstances, medications not listed in the formulary but used in paediatrics may be used in the neonatal setting when under the direction of both a Specialist Consultant and a Neonatologist.									
Paediatric Formulary: Highly Restricted Restricted to prescribing by or in consultation with a Clinical Microbiologist or Infectious Disease Physician PRIOR to initiation of therapy									
	SAS Category A (ite	m requires approval by TGA)							
HIGH RISK Medication									
Description									
Phosphonic acid antibacterial									
Presentation									
Vial: 2g									
Storage									
Vial: Store at room temperature, below 25°C									
Reconstituted solution: stable for 24 hours at 25°C, protected from light									

Indications

When first line treatments are ineffective or inappropriate.

Approval required from clinical microbiologist / paediatric infectious diseases physician

- Hospital-acquired lower respiratory-tract infections
- Bacterial meningitis
- Complicated urinary tract infections
- Osteomyelitis

Dose

IV:

Current Gestational Age Dose

Less than 40 weeks	100mg/kg daily in 2 divided doses
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40 to 44 weeks 200mg/kg daily in 3 divided doses

Dose Adjustment

Renal Impairment:

Consider dose adjustment as per microbiologist / paediatric infectious diseases physician

Hepatic Impairment:

Consider dose adjustment as per microbiologist / paediatric infectious diseases physician

Preparation

Intravenous Infusion

Step 1 Reconstitution: Reconstitute the 2g vial with 10mL compatible fluid. Shake well to dissolve.

Step 2 Dilution: Withdraw the contents of the vial and make up to 50mL with compatible fluid.

Final concentration = 40mg/mL

Note: Sodium chloride 0.9% is not recommended as a diluent for neonates due to the sodium load of fosfomycin

Administration

Intravenous Infusion

Infuse over at least 15 minutes.

Consider extended infusion time in patients at high risk of hypokalaemia

Compatible Fluids

Glucose 5%, Glucose 10%

Side Effects

Uncommon: Electrolyte imbalance, oedema, dyspnoea

Serious: Bone marrow disorders, eosinophilia, hepatic disorders, visual impairment, agranulocytosis, leucopenia, neutropenia, pseudomembranous enterocolitis, tachycardia, thrombocytopenia

Interactions

Nil significant interactions

Monitoring

Serum electrolytes (especially sodium, potassium and phosphate), fluid balance, renal function, liver function

Comments

Each 1g of IV fosfomycin contains 14mmol of sodium.

Sodium chloride 0.9% is not recommended as a diluent for neonates due to the sodium load of fosfomycin.

Related Policies, Procedures & Guidelines

WNHS Policy Manual:

Antimicrobial Stewardship

Y-Site IV Compatibility in Neonates

References

Society of Hospital Pharmacists of Australia. Fosfomycin. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2021 [cited 2021 May 3]. Available from: <u>http://aidh.hcn.com.au</u> British National Formulary. BNF for Children. 2018-19 ed. London, UK: BMJ Group and Pharmaceutical Press; 2018. p. 356-357

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. 27th ed. Hudson (Ohio): Lexicomp; 2020. P1078.

Infectofos® Product Information (Translation of German SmPC). Germany; July 2017

Li G, Standing JF, Bielicki J, et al. The Potential Role of Fosfomycin in Neonatal Sepsis Caused by Multidrug-Resistant Bacteria. Drugs. 2017;77(9):941-950. doi:10.1007/s40265-017-0745-x Available from: <u>https://pubmed.ncbi.nlm.nih.gov/28456943/</u>

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	Std 3: Preventing and Controlling Healthcare Associated Infection			Std 7: Blood Management				
	Std 4: Medication Safety			Std 8: Recognising and Responding to Acute Deterioration				
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