		Type: Drug Guideline	Document reference: 2919	Manual Classification: Waikato DHB Drug Guidelines
Title: Fluconazole for neonates			Effective date: 23 March 2022	
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			Document expiry date: 23 March 2025	

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BRIEF ADMINISTRATION GUIDE

For detailed information refer to [The Australasian Neonatal Medicines Formulary fluconazole guideline](#)

Indications:

- Treatment of systemic infection caused by Candida species

Route: Intravenous or oral

- Injection supplied as fluconazole 2 mg/mL, 50 mL vial
- Oral supplied as fluconazole 10 mg/mL powder for reconstitution, 35mL
 - The oral liquid is an unapproved medicine, available under Section 29
 - The oral liquid requires Special Authority approval before use (form [SA1359](#))
 - pH of fluconazole is 4-8

Dose: Initial loading dose of 25 mg/kg, followed by maintenance of 12mg/kg daily (start maintenance 24 hours after the loading dose)
Note: increase dose interval to 48 hourly in renal impairment (creatinine >115 micromol/L), increase dose with ECMO

Note: Fluconazole is an enzyme inhibitor therefore may increase the concentrations of other medications metabolised by CYP enzymes e.g. phenytoin, midazolam please check for interactions with other medications using NZ formulary for children:
<https://www.nzfchildren.org.nz/interactions/stockkeys/of/10144461000116105>

Preparation and administration

Compatible fluids: sodium chloride 0.9%, glucose 5%

Intravenous

- Draw up the prescribed dose and administer undiluted via a Guardrails profiled syringe driver
- Administer dose over two hours (can be given over at least 30 minutes if required)

Oral


- Draw up appropriate volume of the oral liquid in an oral syringe
- Consider administration with feeds to reduce gastric irritation

Monitoring

- Renal function prior to starting therapy
- Liver function and renal function at regular intervals
- Full blood count and electrolytes periodically

Storage and Stability

- Discard any remaining contents from the injection vial
- Store oral solution at room temperature and discard 14 days after reconstitution

 Waikato District Health Board	Document reference: 2919	Effective date: 23 Mar 2022	Expiry date: 23 Mar 2025	Page: 2 of 2
	Title: Fluconazole for neonates	Type: Drug Guideline	Version: 1	Authorising initials:

Competency for Administration

This procedure is carried out by, or under, the direct supervision of a registered nurse/registered midwife who holds current Waikato DHB Generic Medicine Management and IV certification plus Guardrails competency (if administering IV) as well as Neonatal specific competency NCV/NAC (if administering via CVAD).

Guardrails

Fluconazole will be Guardrail profiled on the CC pump for NICU. Following are the guardrail limits:

Guardrails Drug Name	Fluconazole (load)*	Fluconazole (maint)*
Concentration (mg/ml)		
Minimum	2	2
Maximum	2	2
Dose rate (mg/kg/hr)		
Default	12.5	6
Soft minimum	12	5.9
Soft maximum	50	24
Hard max	51	24.5

Associated Documents

- Waikato DHB NICU guideline #1659 [Antibiotic usage in Newborn Unit](#)
- Waikato DHB NICU guideline #6449 Candida Infection and anti-fungal treatment in the newborn unit
- Pharmac Application for Subsidy by Special Authority; form SA1359 for Fluconazole oral liquid <https://schedule.pharmac.govt.nz/2021/12/01/SA1359.pdf>

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- Australian Injectable Drugs Handbook 8th edition. Society of Hospital Pharmacists of Australia. 2020.

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