Alert	The Antimicrobial Stewardship Team recommends this drug is listed under the following category: Restricted.
Indication	Treatment of systemic infection and meningitis caused by susceptible *Candida* species. Prophylaxis from *Candida* infection.
Action	Triazole antifungal which selectively inhibits fungal cytochrome P-450 sterol C-14 alpha demethylation.
Drug Type	Antifungal.
Trade Name	IV: Aspen Fluconazole, Diflucan, Fluconazole Alphapharm, , Fluconazole Claris, Fluconazole Hexal, Fluconazole Sandoz, Fluconazole Solution (Baxter). ORAL: Diflucan
Presentation	IV: 2 mg/mL injection ORAL: 50 mg/ 5 mL powder for reconstitution
Dosage / Interval	**TREATMENT** Loading dose: 25 mg/kg Maintenance dose: 12 mg/kg DAILY to start 24 hours after loading dose. The regimen without a loading dose may take up to 5 days to reach steady state. Steady state can be reached in 2 days if a loading dose is used. **PROPHYLAXIS*** 6 mg/kg TWICE per week *Fluconazole prophylaxis may be considered in high risk infants following completion of treatment for *Candida* sepsis but still carrying risk of recurrence – e.g., presence of indwelling catheters and ongoing skin thrush.
Route	IV, Oral
Preparation/Dilution	IV: Administer 2 mg/mL injection –no dilution necessary. Oral: Powder normally reconstituted by Pharmacy. If supplied as dry powder reconstitute using water for injection with the volume specified on the bottle.
Administration	IV: Infusion over 30 minutes via a syringe pump. Oral: Can be given with feeds. Shake reconstituted bottle well before drawing up dose.
Monitoring	Measure serum creatinine prior to starting therapy. Monitor liver function, renal function and full blood count.
Contraindications	Cardiac rhythm problems – may increase QT interval. Hypersensitivity to fluconazole or other constituents. Concurrent therapy with other drugs known to prolong the QT interval and those drugs which are metabolised via the enzyme CYP3A4 e.g., cisapride, erythromycin.
Precautions	Consider extending dose interval to 48 hourly if creatinine > 115 micromol/L. Use with caution in hepatic impairment. May precipitate or worsen hyperbilirubinaemia, use with caution. May increase QT interval.
Drug Interactions	Erythromycin: Concurrent use increases the risk of cardiotoxicity (prolonged QT interval, torsades des pointes) therefore avoid combination. Barbiturates, caffeine, benzodiazepines and phenytoin: Serum concentrations increased by fluconazole, consider dose reduction and therapeutic drug monitoring where available. Hydrochlorothiazide: Increases fluconazole serum concentration, consider dose reduction of fluconazole. Zidovudine: Concentrations are increased by fluconazole; monitor for adverse reactions (anaemia,

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	neutropenia) and extend dose interval. Cisapride: May precipitate arrhythmias, therefore contraindicated.
Adverse Reactions	Rare: Rash, elevated LFTs, leucopenia including neutropenia, agranulocytosis and thrombocytopenia.
Compatibility	Fluids: Glucose 5%, glucose 10%, sodium chloride 0.9% Y-Site: Amino acid solutions, aciclovir, amifostine, amikacin, aminophylline, amiodarone, anidulafungin, aztreonam, benztropine, bivalirudin, calcium folinate, cefoxitin, ceftaroline fosamil, cephazolin, chlorpromazine, cisatracurium, dexamethasone, dexmedetomidine, dobutamine, dopamine, droperidol, filgrastim, foscarnet, ganciclovir, gentamicin, glyceryl trinitrate, granisetron, heparin sodium, linezolid, metoclopramide, metronidazole, midazolam, morphine sulfate, pancuronium, pethidine, piperacillin-tazobactam (EDTA-free), promethazine, ranitidine, remifentanil, ticarcillin-clavulanate, tacrolimus, tigecycline, tobramycin, vancomycin, vecuronium, zidovudine.
Incompatibility	Y-site: Ampicillin, calcium gluconate, cefotaxime, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, digoxin, frusemide, imipenem-cilastatin, pentamidine.
Stability	Vials: Discard remaining contents after use. Oral suspension: Discard 14 days after reconstitution.
Storage	Vial and powder for reconstitution: Store below 25°C Reconstituted suspension: Store between 5–30°C
Special Comments	IV and oral doses are equivalent.
Evidence summary	Treatment dose: 12 mg/kg 24 hourly supported by pharmacokinetic data and Monte Carlo simulations (1,2; Grade B). Loading dose: 25 mg/kg loading dose is shown in Monte Carlo simulations to achieve target AUC by day 2 (2; Grade B). Post-treatment prophylaxis – expert opinion by Infectious Disease members of the Neomed Group.
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