MONOGRAPH

Anidulafungin Monograph - Paediatric

Scope (Staff): Medical, Pharmacy, Nursing

Scope (Area): All Clinical Areas

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this **DISCLAIMER**

QUICKLINKS					
<u>Dosage/Dosage</u> <u>Adjustments</u>	<u>Administration</u>	Compatibility	<u>Monitoring</u>		

DRUG CLASS

Echinocandin antifungal (1)

INDICATIONS AND RESTRICTIONS

IV: Restricted (red) antifungal

ChAMP approval is required prior to prescription.

Anidulafungin is indicated in the treatment of invasive candidiasis including candidaemia. (1)

CONTRAINDICATIONS

- Hypersensitivity to anidulafungin, other echinocandins or any component of the formulation. (1-5)
- Anidulafungin is contraindicated inpatients with hereditary fructose intolerance due to the fructose content of the preparation. (2-5)

PRECAUTIONS

- Clinically significant hepatic abnormalities can occur with treatment. (2, 3)
- Anidulafungin contains polysorbate 80 and increases the risk of toxicity in low birth weight infants. Micafungin is the preferred agent in this patient group.⁽³⁾

FORMULATIONS

Listed below are products available at PCH, other formulations may be available, check with pharmacy if required:

100mg powder for reconstitution

Imprest location: Formulary One

DOSAGE & DOSAGE ADJUSTMENTS

Neonates: Refer to Neonatal Medication Protocols

There is minimal information regarding the use of anidulafungin in neonates. A 3mg/kg loading dose with 1.5mg/kg/dose once daily maintenance dose has been used. (2, 6)

Children (≥4 weeks to 18 years):

Loading dose: 3mg/kg (to a maximum of 200mg) as a single dose. (1-3, 5, 7)

Maintenance dose: 1.5mg/kg/dose (to a maximum of 100mg) once daily. (1-3, 5, 7)

<u>Dosing in Overweight and Obese Children</u>: Higher doses may be required in obese patients as there is increased clearance as a function of body weight.⁽⁵⁾

Renal impairment:

- eGFR calculator
- No dosage adjustment is required in patients with renal impairment. (5, 8)

Hepatic impairment:

No dosage adjustment is required in patients with hepatic impairment. (5, 8)

RECONSTITUTION & ADMINISTRATION

- Reconstitute each 100mg vial with 30mL of water for injections to make a final concentration of 3.33mg/mL.⁽⁹⁾
- The powder is slow to dissolve and make take up to 5 minutes to dissolve. The final solution must be prepared immediately and should be clear and colourless. Further dilution is required before administration. (4, 9)
- The IV solution should be diluted to a final concentration of 0.77mg/mL and infused at a rate of 1.1mg/minute (1.4mL/minute) or slower. (2, 5, 9)
- Recommended volumes for final administration^(2, 4, 9):

Dose	Suggested Final volume	Minimum infusion time	
50mg	65mL	45 minutes	
100mg	130mL	90 minutes	
200mg	260mL	180 minutes	

COMPATIBILITY (LIST IS NOT EXHAUSTIVE)

Compatible fluids:

- Glucose 5%
- Sodium chloride 0.9%^(2, 9)

Compatible at Y-site:

Compatibilities of IV drugs must be checked when two or more drugs are given concurrently.

MONITORING

 Hepatic function must be monitored regularly. Liver function tests should be checked at baseline and monitored throughout treatment. (1-3, 5, 7)

ADVERSE EFFECTS

Common: nausea, vomiting, diarrhoea, dyspepsia, rash, fever, headache, hypokalaemia, increased liver enzymes, hypertension or hypotension, phlebitis, thrombophlebitis, insomnia, anaemia, neutropenia. (1, 5, 10)

Infrequent: hypomagnesaemia

Rare: anaphylaxis, injection site reactions, infusion related reactions (e.g. rash, urticaria, flushing, pruritis, bronchospasm, and hypotension) are more likely if anidulafungin is infused at a rate faster than 1.1mg/minute.^(1, 9)

STORAGE

• Store the vial between 2 and 8°C, do not freeze. (4, 5, 9)

INTERACTIONS

This medication may interact with other medications; consult PCH approved references (e.g. Clinical Pharmacology), a clinical pharmacist or PCH Medicines Information Service on extension 63546 for more information.

Related CAHS internal policies, procedures and guidelines

Antimicrobial Stewardship Policy

ChAMP Empiric Guidelines and Monographs

KEMH Neonatal Medication Protocols

^{**}Please note: The information contained in this guideline is to assist with the preparation and administration of **anidulafungin**. Any variations to the doses recommended should be clarified with the prescriber prior to administration**

References

- 1. Rossi S, editor. Australian Medicines Handbook. Adelaide, S. Aust.: Australian Medicines Handbook: 2021.
- 2. Clinical Pharmacology [Internet]. Elsvier BV. 2021 [cited 17/09/2021]. Available from: http://www.clinicalpharmacology-ip.com.pklibresources.health.wa.gov.au/default.aspx.
- 3. IBM Micromedex [Internet]. Truven Health Analytics. 2021 [cited 11/05/2021]. Available from: http://www-micromedexsolutions-com.pklibresources.health.wa.gov.au/micromedex2/librarian.
- 4. MIMS Australia. MIMS online [full product information]. St Leonards, N.S.W: CMP Medica Australia.; 2021. p. 1v. (various pagings).
- 5. Anidulafungin Paediatric Drug Information [Internet]. Lexicomp. 2021 [cited 05/10/2021].
- 6. Phelps S Hagemann T Lee K Thompson A. Pediatric Injectable Drugs: The Teddy Bear Book. Maryland: American Society of Health-System Pharmacists.
- 7. Royal Australian College of General Practitioners, Pharmaceutical Society of Australia, Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists. AMH: Children's Dosing Companion. Adelaide: Australian Medicines Handbook Pty Ltd; 2020.
- 8. Antibiotic Writing Group. eTG complete. West Melbourne: Therapeutic Guidelines Ltd; 2021. Available from: https://tgldcdp-tg-org-au.pklibresources.health.wa.gov.au/etgAccess.
- 9. Symons K. Ermer J. (editors). Australian injectable drugs handbook. Collingwood: The Society of Hospital Pharmacists of Australia; 2020.
- 10. McEvoy Ge, editor. AHFS Drug Information. 60th Edition ed. Maryland: American Society of Health-System Pharmacists; 2018.

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Compassion

Excellence Collaboration Accountability

Respect

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