

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



# ADULT MEDICATION GUIDELINE Amphotericin B

This document should be read in conjunction with the Disclaimer.					
Scope (Area):	Obstetrics and Gynaecology				
Scope (Staff):	All WNHS Staff				

Quick Links									
Dose	Administration	Monitoring	Pregnancy and Breastfeeding						
Restrictions									
Formulary: Highly Restricted - conventional colloidal (IV), liposomal									
Formulary: Restricted - oral liquid suspension									
Formulary: Unrestricted - lozenge									
SAS Category A conventional colloidal and oral liquid suspension (items requires approval by TGA)									
HIGH RISK Medication									
Amphotericin B is a highly specialised medication.									
Amphotericin B can be associated with serious adverse effects including									
nephrotoxicity, infusion related reactions and significant electrolyte disturbances.									
There are THREE formulation of amphotericin B and they are <b>NOT</b> interchangeable.									
Medication Class									
Antifungal antimicrobial									
Presentation									
Lozenge: 10 mg									
Vial (liposomal): 50 mg vial									
Vial (conventional colloidal, SAS): 50 mg vial – liaise with pharmacy to organise stock									

# Storage

Vial (liposomal), Lozenge: Store at room temperature, below 25°C.

Vial (conventional colloidal): Store at 2 to 8 °C. Protect from light.

## Dose

Severe systemic fungal infections - use liposomal amphotericin B (AmBisome®)

## Route: IV

3-5 mg/kg once daily

Oral candidiasis – use oral lozenge

## Route: Oral

One lozenge (10 mg) 4 times daily for 7 to 14 days

# Administration

## <u>Oral</u>

Use after food or drink. To be sucked slowly then swallowed.

Refer to the Australian Injectable Drugs Handbook

## IV Infusion (liposomal)

## Step 1 Reconstitution:

Reconstitute 50 mg vial with 12 mL of water for injections.

Final concentration is 4 mg/mL.

Shake the vial vigorously for at least 30 seconds to disperse completely.

Solution is translucent and yellow.

Do not use if there is precipitate or particles.

# Step 2 Dilution:

Dilute the dose with glucose 5% to make a final concentration between 0.2 - 2 mg/mL.

Use the 5 micrometre filter supplied to add the dose to glucose 5%.

## Step 3 Administration:

Infuse over 30 to 60 minutes.

Flush IV lines with glucose 5% before and after the infusion or use a separate line.

# IV Infusion (conventional colloidal)

Contact pharmacy for advice or refer to the Australian Injectable Drugs Handbook.

# Monitoring

## **Renal impairment**

- Despite the liposomal formulation of amphotericin B being less renally toxic than the conventional formulation of amphotericin B, it can still cause adverse effects.
- Correlation exists between the dose of liposomal amphotericin B and the incidence of renal toxicity.
- Monitor serum electrolytes (e.g. potassium, magnesium), renal function and blood counts at least twice weekly whilst receiving therapy.
- Monitor for signs of hypokalaemia muscle weakness, cramping, ECG changes, drowsiness.
- Concurrent nephrotoxic medications may result in an additive effect and increase the risk for renal impairment.

## Diabetes

- Each vial of liposomal amphotericin 50 mg contains approximately 900 mg of sucrose.
- Careful monitoring of blood glucose levels during treatment is strongly recommended.

# Request full blood count daily during treatment

Monitor liver function tests twice a week during treatment.

# Pregnancy

1<sup>st</sup> Trimester: Considered safe to use.

2<sup>nd</sup> Trimester: Considered safe to use.

3<sup>rd</sup> Trimester: Considered safe to use.

# Breastfeeding

Considered safe to use.

# Comments

Check drug interactions.

Incompatible with sodium chloride.

# Related Policies, Procedures & Guidelines

# HDWA Mandatory Policies:

WA Adult Medicines Formulary

## WNHS Clinical Practice Guidelines:

Antimicrobial Stewardship

High Risk Medicines

WNHS Pharmaceutical and Medicines Management Guidelines:

**Medication Administration** 

# References

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Society of Hospital Pharmacists of Australia. Amphotericin. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2024 [cited 2024 Nov 06]. Available from: http://aidh.hcn.com.au

The Royal Women's Hospital. Amphotericin B. In: Pregnancy and Breastfeeding Medicines Guide [Internet]. Parkville (Victoria): The Royal Women's Hospital; 2024 [cited 2024 Nov 06]. Available from: <u>https://thewomenspbmg.org.au/</u>

SCGOPHCG IV Liposomal Amphotericin B (AmBisome)

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