South Australian Neonatal Medication Guidelines

# metroNIDAZOLE

## 5mg/mL injection, 40mg/mL oral suspension



**Note:**

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

SA Health does not accept responsibility for the quality or accuracy of material on websites linked from this site and does not sponsor, approve or endorse materials on such links.

Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

## Dose and Indications

### Infection due to susceptible anaerobic organisms

**Infectious Disease consultation is usually required prior to commencing therapy as metronidazole should be reserved for directed therapy only**

**Intravenous Infusion, Oral**

Loading dose 15mg/kg

Followed by maintenance dose 7.5mg/kg given one dosing interval after initial dose, at frequency dosing interval indicated below:

| **Corrected Age (weeks)**<br>[Gestational Age PLUS Postnatal Age] | **Frequency** |
|---|---|
| <27 | Every 24 hours |
| 27 to 33 | Every 12 hours |
| 34 to 40 | Every 8 hours |
| ≥ 41 | Every 6 hours |

Length of treatment should be guided by pathology and clinical picture; however in proven sepsis treatment should continue for a minimum of 7 days.

# metroNIDAZOLE

5mg/mL injection, 40mg/mL oral suspension

## Preparation and Administration

### Intravenous Infusion

The intravenous injection contains 5mg/mL metronidazole

| Dose | 5mg | 10mg | 15mg | 20mg | 25mg | 30mg | 35mg | 40mg |
|---|---|---|---|---|---|---|---|---|
| Volume | 1mL | 2mL | 3mL | 4mL | 5mL | 6mL | 7mL | 8mL |

Administer as an intravenous infusion over at least 30 minutes.

Intravenous doses may be given undiluted

### Oral

The oral suspension contains 40mg/mL metronidazole

| Dose | 8mg | 12mg | 16mg | 20mg | 24mg | 28mg | 32mg | 36mg | 40mg |
|---|---|---|---|---|---|---|---|---|---|
| Volume | 0.2mL | 0.3mL | 0.4mL | 0.5mL | 0.6mL | 0.7mL | 0.8mL | 0.9mL | 1mL |

Give oral suspension at least an hour before or two hours after feeds to maximise absorption.

## Compatible Fluids

Glucose 5%, sodium chloride 0.9%

## Adverse Effects

### Common

Vomiting, diarrhoea, thrombophlebitis (IV)

### Infrequent

Glossitis, stomatitis, black tongue

### Rare

Pancreatitis, hepatitis, optic neuritis, thrombocytopenia, Clostridium difficile-associated disease, hypersensitivity reactions (eg rash, itch, flushing, fever), anaphylactic shock, angioedema, Stevens-Johnson syndrome, leucopenia, peripheral neuropathy, seizures, dark urine (due to drug metabolites)

### Prolonged treatment

Leucopenia is reversible and usually only occurs after prolonged treatment; peripheral neuropathy (usually reversible) and/or CNS toxicity (eg seizures, encephalopathy, cerebellar toxicity) are more likely

## Monitoring

- Consider periodic white cell count monitoring with prolonged treatment (>10 days)

## Practice Points

- The intravenous infusion should be protected from light. Short term exposure to normal room light does not adversely affect stability, however direct sunlight should be avoided
- The intravenous infusion must not be stored in the fridge as it may crystallise out of solution. Store at room temperature
- Consider the necessity for intravenous administration as adequate levels can be achieved using oral formulations due to high bioavailability.

## References

- Dannelley J, Martin E, Chaaban H, Miller J, Review of Metronidazole Dosing in Preterm Neonates', Am J Perinatol 2017;34:833-838

## Document Ownership & History

**Developed by:** SA Maternal, Neonatal & Gynaecology Community of Practice
**Contact:** Health.NeoMed@sa.gov.au
**Endorsed by:** Commissioning and Performance, SA Health
**Next review due**: 28/03/2027
**ISBN number:** 978-1-76083-483-8
**CGSQ reference:** NMG020
**Policy history:** Is this a new policy (V1)? **N**
Does this policy amend or update and existing policy? **Y**
If so, which version? **V 2.0**
Does this policy replace another policy with a different title? **N**
If so, which policy (title)?

| Approval Date | Version | Who approved New/Revised Version | Reason for Change |
|---|---|---|---|
| 28/3/2022 | V3.0 | Domain Custodian, Clinical Governance, Safety and Quality | Formal Review |
| 9/11/2017 | V2.0 | SA Health Safety and Quality Strategic Governance Committee | Complete review |
| 11/2012 | V1.0 | SA Maternal & Neonatal Clinical Network | Original SA Maternal & Neonatal Clinical Network approved version. |