South Australian Neonatal Medication Guidelines

# Omeprazole

## 40mg injection, 2mg/mL oral mixture*, 10mg dispersible tablet



**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.

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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

### Gastro-oesophageal reflux disease, oesophagitis or peptic ulceration

#### Intravenous

0.5mg/kg once a day

May be increased to 1.5mg/kg once a day if acid production persists.

#### Oral

0.5 to 1.5mg/kg once a day

Doses up to 3mg/kg have been used.

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## Preparation and Administration

### Intravenous

There are **TWO STEPS** to this process.

**STEP ONE**: Add 10mL of sodium chloride 0.9% to the 40mg omeprazole vial and shake gently to dissolve (total of 10mL). The resulting solution contains 4mg/mL omeprazole.

**STEP TWO**: Further dilute 1mL of the 4mg/mL omeprazole solution with 9mL of compatible fluid (total of 10mL). The resulting solution contains 0.4mg/mL omeprazole.

| Dose | 0.5mg | 1mg | 1.5mg | 2mg | 2.5mg | 3mg |
|---|---|---|---|---|---|---|
| Volume | 1.25mL | 2.5mL | 3.75mL | 5mL | 6.25mL | 7.5mL |

Infuse over 20 to 30 minutes.

### Oral Dispersible Tablet

Doses should be rounded to the nearest 5mg.

Patients with no feeding tube should receive the tablet dispersed in water as this is the most economical and convenient method, and is readily available in the community post discharge.

Place the required dose, either half or a whole 10mg tablet in the barrel of a syringe and disperse in 2-3mL of water. DO NOT CRUSH.

Once dispersed, the dose must be given to the patient within 30 minutes.

### Oral Mixture

The oral mixture contains 2mg/mL omeprazole.

| Dose | 1mg | 2mg | 3mg | 4mg | 5mg | 6mg |
|---|---|---|---|---|---|---|
| Volume | 0.5mL | 1mL | 1.5mL | 2mL | 2.5mL | 3mL |

*The 2mg/mL oral mixture is not commercially available however is manufactured at Women's & Children's Health Network Pharmacy and on request at a compounding community pharmacy.

Omeprazole oral mixture 2mg/mL must be used when a narrow bore feeding tube (TPT, NGT) is in place.

Omeprazole mixture is stored in the refrigerator.

## Compatible Fluids

Glucose 5%, sodium chloride 0.9%, sodium chloride/glucose combinations

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## Adverse Effects

**Common**

Vomiting, diarrhoea, abdominal pain, constipation, flatulence

**Infrequent**

Rash

**Rare**

Thrombocytopenia, leucopenia, interstitial nephritis, peripheral oedema, raised liver enzymes, hepatitis, jaundice, skin reactions (including Stevens-Johnson syndrome, toxic epidermal necrolysis, photosensitivity), hypomagnesaemia, hypersensitivity reactions

## Monitoring

- Observe for symptomatic improvement within 3 days.
- Intraesophageal pH monitoring might be required to assess efficacy.
- Periodic full blood count and liver function tests with long term therapy.

## Practice Points

- Oral doses up to 3mg/kg have been used in resistant situations, but progressive drug accumulation may occur at doses greater than 1.4mg/kg.

## Document Ownership & History

**Developed by:** SA Maternal, Neonatal & Gynaecology Community of Practice
**Contact:** Health.NeoMed@sa.gov.au
**Endorsed by:** SA Health Safety and Quality Strategic Governance Committee
**Next review due**: 24 August 2023
**ISBN number:** 978-1-74243-419-3
**PDS reference:** CG302
**Policy history:** Is this a new policy (V1)? **N**
Does this policy amend or update and existing policy? **Y**
If so, which version? V1
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 |
|---|---|---|---|
| 24/08/18 | V2 | SA Health Safety and Quality Strategic Governance Committee | Formally reviewed in line with 5 year scheduled timeline for review. |
| 2013 approval only | V1 | SA Maternal & Neonatal Clinical Network | Original SA Maternal & Neonatal Clinical Network approved version. |