South Australian Neonatal Medication Guidelines

cIPROFLOXAcin

2mg/mL injection, 50mg/mL oral mixture*, 250mg tablets

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 organisms

To be used only on Infectious Diseases Team recommendation

Intravenous/Oral

10mg/kg every 12 hours

Doses up to 20mg/kg/dose (every 12 hours) have been used for treating *Pseudomonas aeruginosa*

Length of treatment should be guided by pathology and clinical picture.

Meningococcal prophylaxis

Oral

Single dose of 30mg/kg (up to a maximum of 125mg)

cIPROFLOXAcin

2mg/mL injection, 50mg/mL oral mixture*, 250mg tablets

Preparation and Administration

Intravenous

The intravenous solution contains 2mg/mL

Dose	3mg	5mg	10mg	15mg	20mg	30mg	40mg
Volume	1.5mL	2.5mL	5mL	7.5mL	10mL	15mL	20mL

Administer over 60 minutes.

Oral Tablet

Doses should be rounded to the nearest 5mg

Add ONE 250mg tablet to 10mL of water for injection. The resultant solution contains 25mg/mL. This is equivalent to:

Dose	5mg	10mg	15mg	20mg	25mg	30mg	40mg
Volume	0.2mL	0.4mL	0.6mL	0.8mL	1mL	1.2mL	1.6mL

Discard any remaining mixture

Oral Mixture*

The oral mixture contains 50mg/mL ciprofloxacin.

Dose	5mg	10mg	15mg	20mg	25mg	30mg	40mg
Volume	0.1mL	0.2mL	0.3mL	0.4mL	0.5mL	0.6mL	0.8mL

*The 50mg/mL oral mixture is not commercially available, however, is manufactured at Women's & Children's Health Network Pharmacy

Compatible Fluids

Glucose 5%, glucose 10%, sodium chloride 0.9%

Adverse Effects

Common

Rash, vomiting, diarrhoea

Infrequent

Restlessness, tremors, interstitial nephritis, thrombophlebitis at IV infusion site occurs more frequently with administration less than 30 minutes

Rare

Hypoglycaemia, blood dyscrasias, convulsions, photosensitivity, anaphylaxis, antibiotic associated colitis, raised liver enzymes, prolonged QT interval (very rare)

Monitoring

All of the following blood tests should be monitored periodically during prolonged therapy:

- Full Blood Count
- Hepatic markers
- Renal function

Practice Points

- Iron and dairy bind to ciprofloxacin in the gastrointestinal tract, reducing its absorption and activity; oral ciprofloxacin is ideally given at least 2 hours before or after iron supplement or feeds
- Ciprofloxacin is suspected in initiating seizures in infants with a seizure tendency.
- There is some risk of haemolytic anaemia in babies with G6PD deficiency.
- Ciprofloxacin can cause prolongation of the QT interval and should be avoided in those with congenital long QT syndrome.
- Although the use of this drug was initially discouraged in children because studies had shown lasting damage to the cartilage of weight bearing joints during growth in animals, no reports of any such complication have appeared following its use in childhood.
- Ensure adequate fluid intake and urine output to prevent crystalluria.
- Consider dosage adjustment in renal impairment.
- May increase caffeine levels as ciprofloxacin inhibits its metabolism

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: 6/8/2024
ISBN number: 978-1-76083-160-8
PDS reference: CG227
Policy history: Is this a new policy (V1)? **N**
Does this policy amend or update and existing policy? **Y**
If so, which version? 1.0
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
6/8/2019	V2.0	SA Health Safety and Quality Strategic Governance Committee	Formally reviewed in line with 1-5 year scheduled timeline for review.
19/04/16	V1.0	SA Health Safety and Quality Strategic Governance Committee	Original version approved