South Australian Neonatal Medication Guidelines

Amoxicillin with clavulanic acid
amoxicillin 500mg with clavulanic acid 100mg injection
amoxicillin 1000mg with clavulanic acid 200mg injection
amoxicillin 80mg with clavulanic acid 11.4mg/mL mixture

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

Synonyms
Co-amoxiclav, amoxycillin with clavulanic acid

Dose and Indications

Infection due to susceptible organisms

Oral
Dose according to amoxicillin content
Duo® product, 12.5–22.5 mg/kg every 12 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.

Intravenous

Use as per ID/Microbiology advice
Dose according to amoxicillin content
25mg/kg/dose every 12 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.
Preparation and Administration

**Oral**

There are multiple brands available, refer to product information for reconstitution volume.

The reconstituted solution is usually stable for 7 days stored under refrigeration; however this may change according to brand available. Please consult product information.

Amoxicillin with clavulanic acid is best given with feeds to minimise gastrointestinal irritation.

**Intravenous**

There are **TWO STEPS** to this process

Note: doses are expressed as amoxicillin content

*If the amoxicillin/clavulanic acid 500mg/100mg is available (preferred):*

**STEP ONE:** Add 9.5mL of water for injection to the 500mg/100mg vial (500mg amoxicillin content) to make a total volume of 10mL. This solution contains 50mg/mL by amoxicillin content.

**STEP TWO:** Further dilute 4mL of the 50mg/mL solution with 6mL of sodium chloride 0.9% (to a final volume to 10mL). The resulting solution contains 20mg/mL by amoxicillin content.

This solution is stable for 4 hours at 25°C

*Otherwise, if the amoxicillin/clavulanic acid 1000mg/200mg is available:*

**STEP ONE:** Add 19.1mL of water for injection to the 1000mg/200mg vial (1000mg amoxicillin content) to make a total volume of 20mL. This solution contains 50mg/mL by amoxicillin content.

**STEP TWO:** Further dilute 4mL of the 50mg/mL solution with 6mL of sodium chloride 0.9% (to a final volume to 10mL). The resulting solution contains 20mg/mL by amoxicillin content.

This solution is stable for 4 hours at 25°C

<table>
<thead>
<tr>
<th>Dose</th>
<th>25mg</th>
<th>50mg</th>
<th>75mg</th>
<th>100mg</th>
<th>125mg</th>
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<tr>
<td>Volume</td>
<td>1.25mL</td>
<td>2.5mL</td>
<td>3.75mL</td>
<td>5mL</td>
<td>6.25mL</td>
<td>7.5mL</td>
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Infuse over at least 30 minutes

Discard remaining solution

**Not for intramuscular (IM) or subcutaneous (SC) use**

**Compatible Fluids**

Prepared infusions should be used immediately due to limited stability

Sodium chloride 0.9%, Hartmann's, Ringer's
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Adverse Effects

**Common**
Diarrhoea, secondary infection especially during prolonged treatment, transient increases in liver enzymes and bilirubin

**Infrequent**
Vomiting, Clostridium difficile-associated disease

**Rare**
Rash, black tongue, neurotoxicity, bleeding, blood dyscrasias, rash, cholestatic hepatitis
Anaphylactic shock is not commonly seen in neonates

Monitoring
> Hepatic/renal function and Full Blood Count if treatment lasts for >14 days

Practice Points
> Amoxicillin with clavulanic acid provides excellent anaerobic cover

References
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<td>26/07/2021</td>
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<td>Domain Custodian, Clinical Governance, Safety and Quality</td>
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