South Australian Neonatal Medication Guidelines

cefTAZIDIME

1gram, 2gram injection © Department of Health and Wellbeing, Government of South Australia. All rights reserved.

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

1g = 1000mg

2q = 2000mq

Consult Infectious Diseases prior to use Infection due to susceptible organisms

Intravenous, Intramuscular

50 mg/kg/dose

Corrected Gestational Age (weeks) (Gestational age + Postnatal age)	Postnatal age (days)	Frequency (hours)	
<30	≤ 28	every 12 hours	
-50	> 28	every 8 hours	
30 to 36	≤ 14	every 12 hours	
30 to 30	> 14	every 8 hours	
≥37	≤ 7	every 12 hours	
201	> 7	every 8 hours	

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



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Preparation and Administration

Intravenous

Vial Strength (mg)	Volume of Water for Injection to add (mL)	Final Concentration of cefTAZIDIME (mg/mL)
1000mg	9.1mL	100mg/mL
2000mg	8.2mL	200mg/mL

Shake the vial to dissolve the powder and wait until solution becomes clear (1 to 2 minutes)

The powder in the vial is under reduced pressure. However, as the product dissolves carbon dioxide is released and positive pressure develops. Pressure may need to be vented from the vial before withdrawing dose.

Dilution for 2g vial after reconstitution:

Add 5mL of 200mg/mL cefTAZIDIME to 5mL of water for injection. The final concentration of cefTAZIDIME is 100mg/mL

Dose table for 100mg/mL solution:

Dose	25mg	50mg	75mg	100mg	125mg	150mg
Volume	0.25mL	0.5mL	0.75mL	1.0mL	1.25mL	1.5mL

Administer as an intravenous push over at least 3 minutes

Intramuscular (only for 1g vial)

Vial Strength	Volume of Water for Injection to	Final Concentration of cefTAZIDIME
(mg)	add (mL)	(mg/mL)
1000mg	3mL	260mg/mL

Shake vigorously to dissolve.

For intramuscular use, cefTAZIDIME powder can be reconstituted with 1% lidocaine (lignocaine) hydrochloride.

Intramuscular injections are painful and not recommended.

Dose table for 260mg/mL solution:

Dose	25mg	50mg	75mg	100mg	125mg	150mg
Volume	0.1mL	0.2mL	0.3mL	0.4mL	0.5mL	0.6mL

Administer as an intramuscular injection



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Compatible Fluids

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

Adverse Effects

Common

Diarrhoea, vomiting, pain and inflammation at injection site, rash, *Clostridium difficile*-associated disease, superinfection

Infrequent

Neurotoxicity (seizures, encephalopathy) particularly with high doses and/or renal impairment, blood dyscrasias, (neutropenia related to dose and treatment duration, thrombocytopenia)

Anaphylactic shock is not commonly seen in neonates

Practice Points

- > Third generation cephalosporins should be used judiciously to minimise the emergence of resistant strains.
- > CefTAZIDIME should not be mixed with vancomycin in the same giving set or at Y-site
- > IV cephalosporins can inactivate IV aminoglycoside antibiotics (e.g., gentamicin).

 Preferably separate doses by 1 hour. If it is not possible to separate doses, flush the line well with sodium chloride 0.9%, before and after giving each medication

Document Ownership & History

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Endorsed by: Domain Custodian, Clinical Governance, Safety and Quality

Next review due: 17/05/2028

ISBN number: 978-1-76083-574-3

CGSQ reference: NMG044

Policy history: Is this a new policy (V1)? N

Does this policy amend or update and existing policy? Y

If so, which version? V 3.0

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		
17/05/2023	V4	Domain Custodian, Clinical	Formally reviewed in line with 5 year		
17703/2023 V4		Governance, Safety and Quality	scheduled timeline for review		
11/08/2017 V3	SA Health Safety and Quality Strategic	Addition of 2g vial dilution directions			
	Governance Committee	Addition of 29 vial dilution directions			
12/08/2014 V2		SA Health Safety and Quality Strategic	Review		
12/00/2014 V2	٧Z	Governance Committee	Keview		
11/2012	\/1	SA Maternal & Neonatal Clinical	Original SA Maternal & Neonatal		
11/2012 V1		Network	Clinical Network approved version.		