

Calcitriol

1 microgram/mL injection (SAS) 1 microgram/mL oral solution (SAS)

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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

Explanation of the aboriginal artwork:

The aboriginal artwork used symbolises the connection to country and the circle shape shows the strong relationships amongst families and the aboriginal culture. The horse shoe shape design shown in front of the generic statement symbolises a woman and those enclosing a smaller horse shoe shape depicts a pregnant women. The smaller horse shoe shape in this instance represents the unborn child. The artwork shown before the specific statements within the document symbolises a footprint and demonstrates the need to move forward together in unison.

Synonyms

1,25-dihydroxycolecalciferol

Dose and Indications

Hypocalcemia

Intravenous / Oral

0.01 - 0.02micrograms/kg/dose every EIGHT hours

Switch to oral as soon as patient is tolerating oral feeds

Adjust dose to maintain serum calcium in the lower normal range.



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Preparation and Administration

Intravenous

Dose	0.02 microgram	0.05 microgram	0.1 microgram	0.25 microgram
Volume	0.02mL	0.05mL	0.1mL	0.25mL

Push undiluted over at least 15 seconds

Discard remaining solution

PLEASE NOTE: Babies will often initially require a dose less than 0.1mL. Please ensure you double check your dose calculation.

Oral solution

Dose	0.02 microgram	0.05 microgram	0.1 microgram	0.25 microgram
Volume	0.02mL	0.05mL	0.1mL	0.25mL

Compatible Fluids

Glucose 5%, Sodium chloride 0.9%

Adverse Effects

Common

Adverse effects are associated with hypercalcemia

Symptoms of hypercalcemia include: anorexia, lethargy, nausea and vomiting, diarrhoea, constipation, weight loss, polyuria, polydipsia, sweating, headache, thirst, hypertension

Renal and cardiovascular damage may occur due to ectopic calcification

Monitoring

- > Serum calcium and phosphate levels
- > Liver function tests



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Practice Points

- > Calcitriol adsorbs to PVC. If being given, PVC lines can be used however calcium and phosphate levels should be monitored and dose adjusted accordingly.
- > Consider the vitamin D content of feeds and other medications when administering calcitriol
- > The intravenous preparation may be given orally and is more cost effective when giving a single dose.
- > This is a SAS product. A SAS form must have been completed prior to use.

Document Ownership & History

Developed by: SA Maternal, Neonatal & Gynaecology Community of Practice
Contact: Health.NeoMed@sa.gov.au
Endorsed by: SA Safety and Quality Strategic Governance Committee
Next review due: 15/12/2022
ISBN number: 978-1-74243-916-7
PDS reference: CG281
Policy history: Is this a new policy (V1)? **Y**
 Does this policy amend or update an existing policy? **N**
 If so, which version?
 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
15/12/17	V1.0	SA Safety and Quality Strategic Governance Committee	Original

