**Calcitriol**

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

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**Dose and Indications**

**Hypocalcemia**

**Intravenous / Oral**

0.01 - 0.02 micrograms/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.
Preparation and Administration

**Intravenous**

<table>
<thead>
<tr>
<th>Dose</th>
<th>0.02 microgram</th>
<th>0.05 microgram</th>
<th>0.1 microgram</th>
<th>0.25 microgram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>0.02mL</td>
<td>0.05mL</td>
<td>0.1mL</td>
<td>0.25mL</td>
</tr>
</tbody>
</table>

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**

<table>
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<tr>
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<th>0.05 microgram</th>
<th>0.1 microgram</th>
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</tbody>
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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

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Contact: Health.NeoMed@sa.gov.au
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Does this policy replace another policy with a different title? N
If so, which policy (title)?

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<th>Who approved New/Revised Version</th>
<th>Reason for Change</th>
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<td>15/12/17</td>
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<td>SA Safety and Quality Strategic Governance Committee</td>
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