**Oxycodone** (green)

**Introduction**

**Description:** Potent, synthetic opioid analgesic; used second line.

**Preparations**

<table>
<thead>
<tr>
<th>Oral</th>
<th>Immediate release oxycodone <strong>OxyNorm®</strong> capsules <strong>Shortec®</strong> and <strong>Lynlor®</strong> also available. <strong>OxyNorm®</strong> liquid Generic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Modified release (long acting) oxycodone <strong>OxyContin®, Longtec®, Oxylan®</strong> NB: depending on brand not all strengths available</td>
</tr>
<tr>
<td></td>
<td>5mg, 10mg, 20mg</td>
</tr>
<tr>
<td></td>
<td>1mg/ml, 10mg/ml</td>
</tr>
<tr>
<td>Injection</td>
<td>Oxycodone injection <strong>OxyNorm®</strong> injection</td>
</tr>
<tr>
<td></td>
<td>10mg/ml, 20mg/2ml, 50mg/ml (non-formulary in some health boards)</td>
</tr>
</tbody>
</table>

**Indications**

- Second line oral and injectable analgesic for moderate to severe opioid responsive pain in patients unable to tolerate oral morphine, subcutaneous morphine or diamorphine due to persistent side effects (eg sedation, confusion, hallucinations, itch).

(See: [Pain management](#), [Choosing & Changing opioids](#))

**Cautions**

- Immediate release, modified release and injection preparations have similar names. Take care when prescribing, dispensing or administering oxycodone.
- Frail or elderly patients need smaller doses less frequently and slower titration.
- **Liver impairment:** reduced clearance.
  - Avoid in patients with moderate to severe liver impairment.
- **Renal impairment:** reduced excretion.
  - Titrate slowly and monitor carefully in mild to moderate renal impairment. Avoid in chronic kidney disease stages 4-5 (eGFR <30ml/min).

**Drug interactions**

No clinically significant pharmacokinetic drug interactions.

**Side effects**

- Opioid side effects similar to morphine - monitor for opioid toxicity.
- Prescribe a laxative and an antiemetic as needed (eg metoclopramide).
Dose and Administration

- Immediate release oral oxycodone:
  - Prescribe 4 hourly regularly and use 1/10th to 1/6th of the 24 hour dose as required for breakthrough pain.

  or

- Modified release (long acting) oral oxycodone:
  - Prescribe 12 hourly, with 1/10th to 1/6th of the 24 hour dose as immediate release oral oxycodone for breakthrough pain.
  - Biphasic action; a rapid release is followed by a controlled release phase. If the patient has pain when the dose of modified release (long acting) oxycodone is given, wait an hour before giving a breakthrough dose of immediate release oxycodone.

- Oxycodone injection:
  - Continuous subcutaneous infusion in a CME T34 syringe pump over 24 hours.
  - In addition, prescribe 1/10th to 1/6th of the 24 hour infusion dose subcutaneously, 1-2 hourly as required for breakthrough pain.
  - With higher subcutaneous infusion doses consideration needs to be given to the volume of breakthrough medication. Typically an upper limit of 2ml (e.g. 20mg oxycodone) is acceptable by the subcutaneous route in a single site. Consider use of the high strength oxycodone injection form if available or an alternative opioid. e.g. diamorphine
  - Diluent: water for injections.
  - Dose conversions are given below.
  - Seek specialist advice if patient needs more than three ‘as required’ doses in 24 hours for breakthrough pain without acceptable benefit’.
  - Stability and compatibility – see: Subcutaneous medication chart.

Dose Conversions

- Oxycodone is approximately twice as potent as morphine

<table>
<thead>
<tr>
<th>Oral morphine 60mg</th>
<th>≈ oral oxycodone 30mg</th>
<th>≈ subcutaneous oxycodone 15mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcutaneous morphine 30mg</td>
<td>≈ subcutaneous oxycodone 15mg</td>
<td></td>
</tr>
<tr>
<td>Subcutaneous diamorphine 20mg</td>
<td>≈ subcutaneous oxycodone 15mg</td>
<td></td>
</tr>
</tbody>
</table>

Oxycodone in Palliative Care: Dose Conversions - Version 1 June 2014

- As with all opioid conversions, these are approximate doses.
- Dose conversions should be conservative and doses rounded down.
- Monitor the patient carefully so that the dose can be adjusted if necessary.
- If the patient has opioid toxicity, reduce the dose by 1/3rd when changing opioid. (See: Choosing & Changing opioids)
References