Oxycodone (Green)*

**Introduction**

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

### Preparations

<table>
<thead>
<tr>
<th>Route</th>
<th>Preparation</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Immediate release oxycodone Shortec® capsules other brands also available</td>
<td>5mg, 10mg, 20mg</td>
</tr>
<tr>
<td></td>
<td>Shortec®, OxyNorm® and generic liquid and concentrate</td>
<td>1mg/ml, 10mg/ml</td>
</tr>
<tr>
<td></td>
<td>Modified release (long acting) oxycodone - 12 hourly preparation (twice daily)</td>
<td>5mg, 10mg, 15mg, 20mg, 30mg, 40mg, 60mg, 80mg, 120mg (refer to local guidance for preferred brand - not all strengths may be stocked)</td>
</tr>
<tr>
<td></td>
<td>Longtec® and other brands available</td>
<td>10mg, 20mg, 40mg, 80mg (non-formulary, risk of wrong preparation being prescribed)</td>
</tr>
<tr>
<td></td>
<td>Note: depending on brand not all strengths available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 hourly preparation (once daily) Onexila XL</td>
<td></td>
</tr>
<tr>
<td>Injection</td>
<td>Oxycodone injection</td>
<td>10mg/ml, 20mg/2ml, *50mg/ml (*non-formulary in some NHS boards)</td>
</tr>
<tr>
<td></td>
<td>Shortec®, OxyNorm® and generic injection available</td>
<td></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 (for example sedation, confusion, hallucinations, itch).
- Refer to Pain Management and Choosing and Changing Opioids guidelines.

### 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 softener +/- stimulant laxative and an anti-emetic as needed (for example metoclopramide).

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

or

- Modified release (long acting) oral oxycodone.
  - Prescribe 12 or 24 hourly depending on preparation, with 1/6th to 1/10th 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 1/6th to 1/10th of the 24 hour infusion dose subcutaneously, 1 to 2 hourly as required for breakthrough pain. If 3 or more doses have been given within 4 hours with little or no benefit seek urgent advice or review. If more than 6 doses are required in 24 hours seek advice or review.
  - With higher subcutaneous infusion doses, consideration needs to be given to the volume of breakthrough medication. Typically an upper limit of 2ml (for example 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, for example diamorphine for doses greater than 20mg.
- Diluent: water for injections
- Dose conversions are given below. Seek advice if patient needs more than three ‘as required’ doses in 24 hours for breakthrough pain without acceptable benefit.

- Stability and compatibility – refer to syringe pump subcutaneous infusion tables.

## Dose conversions

**Oxycodone is approximately twice as potent as morphine.**

<table>
<thead>
<tr>
<th>Oxycodone dose conversions</th>
<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></td>
<td></td>
<td>≈ subcutaneous oxycodone 15mg</td>
</tr>
<tr>
<td>Subcutaneous diamorphine 20mg</td>
<td></td>
<td></td>
<td>≈ subcutaneous oxycodone 15mg</td>
</tr>
</tbody>
</table>

- As with all opioid conversions, these are approximate (≈) doses. Opioid conversions and ratios may vary depending on the resource used. These conversions are a consensus of use in practice in Scotland and based on manufacturers’ conversion factor.
- 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 (refer to Choosing and Changing Opioids guideline).