# The Use of Alfentanil in a Syringe Driver in Palliative Medicine

**Warning:** Alfentanil should not be confused with fentanyl. To ensure safety alfentanil will be prescribed in milligrams.

## Indications for Use

- Alfentanil may be used for patients:
  - When problems are encountered with the administration of high volumes of other drugs.
  - When the use of other opioids including morphine, oxycodone or hydromorphone is limited by side effects e.g. sedation, delirium, hallucinations.
  - With renal failure: Stage 4-5 chronic kidney disease (GFR <30ml/min) or severe acute renal impairment.

## Preparations

- **Alfentanil 1000 micrograms = Alfentanil 1 mg**
- Rapifen® 500 micrograms /ml (a 2 ml ampoule contains 1000 micrograms).
- Rapifen Intensive Care® 5 mg /ml (1 ml ampoule contains 5000 micrograms).

## Dose Conversion

Alfentanil is approximately 15 times as potent as subcutaneous (SC) morphine. 15 mg of Morphine SC is equivalent to 1 mg of Alfentanil SC.

<table>
<thead>
<tr>
<th>MORPHINE SC</th>
<th>ALFENTANIL SC MG</th>
<th>ALFENTANIL SC MICROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5 mg</td>
<td>0.5 mg</td>
<td>500 micrograms</td>
</tr>
<tr>
<td>15 mg</td>
<td>1 mg</td>
<td>1,000 micrograms</td>
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<tr>
<td>30 mg</td>
<td>2 mg</td>
<td>2,000 micrograms</td>
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<tr>
<td>75 mg</td>
<td>5 mg</td>
<td>5,000 micrograms</td>
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<tr>
<td>150 mg</td>
<td>10 mg</td>
<td>10,000 micrograms</td>
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<tr>
<td>225 mg</td>
<td>15 mg</td>
<td>15,000 micrograms</td>
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<tr>
<td>375 mg</td>
<td>25 mg</td>
<td>25,000 micrograms</td>
</tr>
<tr>
<td>450 mg</td>
<td>30 mg</td>
<td>30,000 micrograms</td>
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</tbody>
</table>

## Breakthrough Doses

The use of alfentanil for breakthrough pain may not be suitable due to the short duration of action of alfentanil or because of a complex titration process. However, the prescriber may decide to prescribe p.r.n. doses of alfentanil for breakthrough pain. Currently, an alternative opioid e.g. morphine, oxycodone or hydromorphone is used for breakthrough pain.

## Hepatic Impairment

A dose reduction of 30-50% may be necessary.

## Renal Failure

Dose reductions are not usually required.

## Diluents

Sodium Chloride 0.9% or Water for Injection may be used.

## Compatibility Information

Compatibility information is limited. Alfentanil, at higher concentrations, may be incompatible with cyclizine. Incompatibilities between alfentanil and haloperidol have been reported by staff at OLH&CS. Please report any incompatibilities to the pharmacy.

## Drug Interactions

Alfentanil can interact with other drugs. Please consult with the pharmacist. Please consult product information available from www.medicines.ie or www.imb.ie

## Issues for Discharge

- Rapifen® 500 micrograms/1 ml and Rapifen Intensive Care® 5 mg/ ml are not currently reimbursable on the medical card or Drug Payment Scheme. Therefore, the patient may have to incur the cost. Please liaise with the pharmacist or the patient’s community pharmacy.
- Rapifen Intensive Care® (5 mg/ml) is an unlicensed preparation in Ireland. It is imported by wholesalers from the UK under a special license. Therefore, the continuous supply of Rapifen Intensive Care® cannot be guaranteed.

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**Warning:** Rapifen is available in two different strengths, in very similar packaging. Please double check that you are administering the correct strength.

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