

## Converting from a weak oral opioid to oral morphine:

**Multiply** total 24hr dose of weak opioid by its potency ratio to get the equivalent total 24hr dose of oral morphine.

Medicine	Potency ratio with oral morphine	information
Codeine phos. (Co-codamol) Dihydrocodeine (Co-dydramol)	0.1	These are all 1/10 <sup>th</sup> as strong as oral morphine.
Tramadol	0.15	Tramadol is slightly stronger potency to codeine, and patient should not be on both Tramadol and Codeine.

### Converting oral codeine preparations to oral morphine

- 30/500 co-codamol given as 2 tablets QDS
- = 60mg codeine x4 = 240mg in 24 hours
- From Table above, codeine potency equivalence = 0.1
- Multiply 240mg x 0.1 = 24mg
- Approximate equivalent 24hr dose oral morphine is 24mg.
- Prescribe morphine MR 10mg BD 12 hours apart.

### Converting oral tramadol to oral morphine

- Tramadol 50mg QDS = 200mg in 24 hours
- From Table above, tramadol potency equivalence = 0.15
- Multiply 200mg x 0.15 = 30mg
- Approximate equivalent 24hr dose oral morphine is 30mg.
- Prescribe morphine MR 15mg BD 12 hours apart.

**To transfer weak opioid to sub cut morphine:** Two co-codamol 30:500 is approximately equivalent to 5mg oral morphine or 2.5mg sub cut morphine. The total 24-hour sub cut morphine dose for the pump is then 10mg. The PRN dose is the associated 4hourly dose (2.5mg See table). Consider reducing this dose for lower strengths of co-codamol or codydramol 10:500.

**DO NOT PRESCRIBE MORPHINE FOR PATIENTS WITH RENAL FAILURE eGFR<30 – seek advice.**

This information is to be used as a guide only. If in doubt, ASK

## Severn Hospice Strong Opioid Conversion Table (community) source PCF 6

- **When switching opioids, a dose reduction of 25-30% is recommended.**
- **When converting high doses, it is recommended to reduce the dose by 50% initially to avoid toxicity. Discuss with specialist palliative care team.**
- Breakthrough doses (prn) should be approximately 1/6 of total daily dose.
- Renal impairment is likely to increase the risk of opioid toxicity. Discuss with specialist palliative care team.

When converting to fentanyl patch from MR morphine or MR oxycodone, apply the patch at the same time as the last dose of MR drug is given and ensure break through pain is covered as it takes longer than 12 hours for the fentanyl to reach steady state.

Morphine Sulphate Injection					Oxycodone Injection					Fentanyl Transdermal Patch Ratio 100:1	Buprenorphine Transdermal Patch	Alfentanil Injection
Oral mg			Sub cut mg		Oral mg			Sub cut mg		Patch strength mcg/hour	Patch strength mcg/hour	specialist advice only
4hr dose	12hr MR dose	24hr total dose	4hr dose	24hr total dose	4 hr dose	12hr MR dose	24hr total dose	4hr dose	24hr total dose	Stable pain only Change every 3 days	Stable pain only Approx. equivalent	24 hour total dose (mg)
		5		2.5								
		10		5							5 Butrans	
2.5	7.5	15		7.5							5 Butrans	
2.5	10	20	2.5	10							10 Butrans	
5	15	30	2.5	15	2.5	7.5	15	1.25	7.5	12mcg/hr	15 Butrans	1
10	30	60	5	30	5	15	30	2.5	15	25mcg/hr	20+5 Butrans	2
15	45	90	7.5	45	7.5	22.5	45	4	24	37.5 mcg/hr	35 Transtec	3
20	60	120	10	60	10	30	60	5	30	50mcg/hr	52.5 Transtec	4
30	90	180	15	90	15	45	90	7.5	45	75mcg/hr	70 Transtec	5

Always calculate the dose using 24hr oral morphine as standard and adjust to patient and situation.

**Always compare the 24hour doses when changing between different drugs or different formulations of the same drug**

**ALFENTANIL INJ. 500 micrograms/ml SHOULD ONLY BE CONSIDERED ON THE ADVICE OF A PALLIATIVE CARE SPECIALIST.**

Alfentanil is only given via CSCI and is the drug of choice for patients with eGFR<30. Use oxycodone sc 4 hourly dose for PRN doses, as shown on table above.

### **BRIEF SYMPTOM CONTROL INFORMATION**

For further details see *Information for Health Care Professionals & GP Hub* on Severn Hospice website at <https://www.severnhospice.org.uk/for-healthcare-professionals/gp-info-hub/>

#### **Breathlessness**

Prescribe morphine 2.5mg SC PRN up to 1-2 hourly or if already on regular opioids, give appropriate breakthrough dose (at 1/6th of the 24 hour opioid dose)

If two or more PRN doses are given with effect in 24 hours, increase the opioid already given via pump (CSCI), or consider commencing pump with morphine over 24 hours (initial dose guided by PRN use over previous 24 hours)

#### **Nausea and vomiting**

Prescribe levomepromazine 6.25mg SC PRN up to 4 hourly (max/24hours is 25mg in both pump and PRN).

If continuous nausea or frequent vomiting and two or more PRN doses are given with effect in 24 hours, consider swapping to levomepromazine 12.5mg via pump (CSCI) over 24 hours. Increase to 25mg via CSCI if PRN doses are still required. If levomepromazine is not available/not effective, consider:

2<sup>nd</sup> line Haloperidol 500micrograms SC PRN up to 4 hourly (max/24hrs 5mg in pump and PRN).

3<sup>rd</sup> line N&V metoclopramide 10mg SC PRN 2- 4 hourly. (Max/24hours 60mg in pump and PRN)

Avoid in full bowel obstruction as is a prokinetic drug.

4<sup>th</sup> line cyclizine 25mg SC PRN 4 hourly (max/24hours 100mg in pump & PRN). For Raised Intracranial Pressure +dexamethasone 6mg before 12pm daily.

#### **Agitation and restlessness**

- Consider and resolve where possible any underlying causes such as: Uncontrolled pain, Full bladder, Full rectum, Breathlessness, Anxiety and fear.
- Prescribe PRN in anticipation of the symptom developing: 1<sup>st</sup> line for agitation (anxiety): Midazolam 2.5mg or 5mg SC PRN up to 1- 2 hourly.  
2<sup>nd</sup> line Haloperidol or levomepromazine
- If two or more PRN doses of midazolam are given with effect in 24 hours, consider using midazolam 10mg via CSCI over 24 hours. If PRN doses of midazolam continue to be needed the CSCI dose of midazolam may be increased gradually up to 30mg over 24 hours, guided by the PRN use. (max dose 30mg including PRN)

#### **Pain management**

- Prescribe PRN doses in anticipation of the symptom developing: Morphine 2.5mg SC PRN up to 1- 2 hourly.
- If two or more PRN doses are given with effect in 24 hours, consider using morphine via CSCI over 24 hours, and prescribe PRN SC morphine at 1/6th of the 24 hour CSCI dose.
- Review CSCI dose if more than two PRN doses are given with effect in 24 hours.
- Consider oxycodone CSCI if a high volume of morphine is needed. (See table over leaf)

#### **Noisy respiratory secretions/Drooling**

Prescribe in anticipation of the symptom developing:

Hyoscine Butylbromide 20mg SC PRN up to hourly (max 120mg including CSCI)

2<sup>nd</sup> line Glycopyrronium 200 microgram SC PRN up to 4 hourly. (max1.2mg including CSCI).

3<sup>rd</sup> line Scopaderm® patch

### **PRESCRIBING AN OPIOID DOSE RANGE FOR SYRINGE PUMP (CSCI):**

#### **Do not prescribe a dose range greater than 30%**

e.g. For a dose range starting at 30mg, the PRN dose is approximately 1/6 of the lower dose = 5mg

The CSCI dose range may be calculated as approximately 3 PRN doses = 3x 5mg =15mg

This dose range becomes 30mg - 45mg.

The dose in the pump would increase to 45mg if s/he had needed 3 PRN doses in 24 hours.

Thereafter, if the patient continues to require break through (PRN) doses, then the dose should be reviewed by a prescriber and a new opioid dose range prescribed.

- If visiting the patient at home, use one of the blank spaces on the syringe pump form to prescribe a new dose and cross through the old dose instructions.
- From the surgery, provide a whole new page with the new dose range and the **nurse should cross through the old page to ensure there is no confusion with current dose.**

#### **SYRINGE PUMP AND THOSE WITH OPIOID PATCHES BUT PROGNOSIS TOO SHORT FOR A CHANGE IN PATCH STRENGTH TO TAKE EFFECT.**

If PRN doses are effective, continue the patch at an unchanged dose and give additional morphine (or oxycodone) via CSCI based on the total PRN doses required in the previous 24 hours.