

Severn Hospice Opioid Conversion Table (community) – For Use in Adult Palliative Care Patients

- This table is to be used as a guide only. Individual patients may metabolise different drugs at different rates. If in doubt, seek advice from Severn Hospice
- Always calculate the dose using **oral morphine** as standard and adjust to patient and situation
- **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 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.

Morphine					Diamorphine		Oxycodone					Fentanyl	Buprenorphine	Alfentanil
Oral mg			Sub cut mg		Sub cut mg		Oral mg			Sub cut mg		Transdermal mcg/hour (100:1)	Transdermal Patch mcg/hour	Sub cut Specialist use only
4hr dose	12hr MR dose	24hr total dose	4hr dose	24hr total dose	4 hr dose	24 hr dose	4 hr dose	12hr MR dose	24hr total dose	4hr dose	24hr total dose	Patch strength Stable pain only PCF6 pg 417 Change every 3 days	Patch strength Stable pain only PCF6 pg 407 Approx. equivalent	24 hour total dose (mg)
		5		2.5										Hospice &
		10		5									5 Butrans	2* care
		15		7.5									5 Butrans	ONLY can
		20		10									10 Butrans	Start this
5	15	30	2.5	15	1.25	10	2.5	7.5	15	1.25	7.5	12mcg/hr	15 Butrans	1
10	30	60	5	30	2.5	20	5	15	30	2.5	15	25mcg/hr	20+5 Butrans	2
15	45	90	7.5	45	5	30	7.5	25	50	3.75	25	37.5 mcg/hr	35 Transtec	3
20	60	120	10	60	7.5	40	10	30	60	5	30	50mcg/hr	52.5 Transtec	4
30	90	180	15	90	10	60	15	45	90	7.5	45	75mcg/hr	70 Transtec	6

The table is a guide to dose conversions. sources used : PCF6, www.wmcares.org.uk , Scottish palliative care guidelines

Opioid CONVERSION EXAMPLES over leaf

co-codamol is 1/10 strength of oral morphine

co-dydramol 1/10 strength of oral morphine

oral Tramadol is 1.5/10 strength of oral morphine

when changing between different opioid drugs always compare the 24hour doses and the same formulation

when changing between different formulations of the same drug always compare the 24hour doses

TD Fentanyl is approx. 100 to 150 times more potent than oral morphine. we use a 100:1 conversion rate PCF6^{pg417}

TD Buprenorphine 5 mcg/hr (Butrans® 5) is approx. equivalent to oral morphine 12mg/24 hours^{pcf6 pg 407}

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 th as strong as oral morphine See conversion examples below
Tramadol	0.15	Tramadol is only slightly stronger potency to codeine, and patient should not be on both Tramadol and Codeine.

Converting po codeine or dihydrocodeine to po morphine

- 30/500 co-codamol or co-dydramol given as 2 tablets QDS = 60mg codeine x4 = 240mg in 24 hours
- From Table above, co-codamol and co-dydramol potency equivalence = 0.1
- Multiply 240mg x 0.1= 24mg
- Therefore, the 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 x0.15 = 30mg
- Therefore, the approximate equivalent 24hr dose oral morphine is 30mg.
- Prescribe morphine MR 15mg BD 12 hours apart.

Converting from oral morphine to another strong oral opioid e.g. oxycodone:

Divide the total 24 hr dose of oral (po) morphine by the potency ratio for the oral opioid which you are converting to.

Medicine	Potency ratio with oral morphine	information
Oxycodone	2	Safer in Renal dysfunction (BNF safe up to eGFR 10, but practically recommend eGFR >30)

Converting from po morphine m/r 30mg bd to po oxycodone:

- Total daily dose of morphine is 60mg.
- From Table above, oxycodone potency equivalence = 2.
- Divide 60mg/2 = 30mg.
- Therefore, the approximate equivalent 24hr dose oral oxycodone is 30mg.
- Prescribe oxycodone MR 15mg BD 12 hours apart.

QUICK CONVERSION METHOD for SWITCHING from ORAL MORPHINE to TD FENTANYL PATCHES

- Consider **all** opioids the patient is receiving & calculate the equivalent 24hour total ORAL morphine dose
- **It is advised to REDUCE the total oral morphine dose calculated by at least 25%**
- Divide this oral morphine dose by 2.4 to give the approximate Fentanyl patch strength in mcg/hour.
- Eg for oral morphine 60mg in 24 hours this conversion would be
- 60/2.4 = 25 Use a fentanyl 25mcg/hr patch