

## 1. OPIATE POTENCY RATIOS

To convert to morphine: multiply the total daily oral dose in mgs of the opioid by the figure given, to give the total oral daily dose of morphine in mgs.

To convert from morphine to another opioid: divide the total daily oral dose in mgs of morphine by the figure given, to give the total oral daily dose of other opioid in mgs.

Diamorphine	1.5	
Buprenorphine	60	(Temgesic)
Codeine	0.08	
Dextramorphamide	2	(Palfium)
Dihydrocodeine	0.1	
Dipipanone	0.5	(Diconal - includes cyclizine)
Fentanyl - see next section		
Hydromorphone	7.5	
13 mg, + 2.6 mg		
Methadone	3-4	
Oxycodone	1	
Pethidine	0.125	
Phenazocine	5	(Narphen)
Tramadol	0.25	

Considerable inter-patient variation will occur, and appropriate care should always be taken when converting doses from one opioid to another.

### Single doses:

Because some opioids have a significantly shorter or longer half-life than morphine, the conversion factor for a single dose is different from that of a total daily dose.  
To find the equivalent peak effect from a single dose, use

Dextramorphamide	3	(Palfium)
Methadone	1.5	

## ORAL MORPHINE : DIAMORPHINE

MST 8D	ORAMORPH (breakthrough)	24H S/C DM	S/C DM (breakthrough)
10-20 mg	2.5-5 mg	10-15mg	2.5 mg
30 mg	10mg	20mg	2.5-5 mg
40-50 mg	15mg	30mg	5mg
60-70 mg	20mg	45mg	7.5mg
80/80/100mg	30mg	60mg	10mg
130mg	40mg	90mg	15mg
160mg	50mg	110mg	20mg
200mg	60-70mg	140mg	25mg
300mg	100mg	200mg	30mg
400mg	130mg	250mg	40mg
500mg	160mg	300mg	50mg
1g	300mg	600mg	100mg

(These are approximate conversions)

The correct way to convert oral morphine to s/c diamorphine is to divide the 24 hour dose by one third

The breakthrough dose of oramorph is one third of the 12 hourly morphine dose (MST)

The breakthrough dose of diamorphine is one sixth of the 24 hourly dose

## 2. FENTANYL DOSE CONVERSION

Fentanyl transdermal system (Duragesic)

Oral morphine 24hr	* Oral morphine 4hr	* Dia-morph 24hr s/c	(Patch) Fentanyl µg/hr	Fentanyl µg/24hr
Naive	-	-	25	600
<135	<20	<40	25	600
135-225	30	60	50	1200
225-315	45	90	75	1800
315-405	60	120	100	2400
405-495	75	150	125	3000
495-585	90	180	150	3600
585-675	105	210	175	4200
675-765	120	240	200	4800
765-855	135	270	225	
855-945	150	300	250	
945-1035	165	330	275	
1035-1125	180	360	300	

\* = Mid-range figures

As a quick aide-memoir:

Divide the strength of the fentanyl patch (in µg /hr) by 5 to give the dose in mgs of diamorphine s/c for breakthrough pain.

## Opioid Conversion Chart

(Approximate guidelines only. Each individual patient should be titrated to optimum pain control.)

4 hourly Dosing Schedule			12 hourly Dosing Schedule			24 hourly Dosing Schedule		Other
4th oxycodone	4th morphine	4th hydro-morphone	12 hourly oxycodone	12 hourly morphine	12 hourly hydromorphone	24 hourly morphine	24 hourly dose diamorphine	Three days fentanyl
OxyNorm Capsules (mg)	Savrodel (Solutions or Tablets) (mg)	Palfione Capsules* (mg)	OxyContin Tablets (mg)	MST Continus Tablets or Suspensions (mg)	Palfione SR Capsules** (mg)	MAL Capsules (mg)	Diamorphine 24 hourly S.C. (mg)	Fentanyl Patch*** (µg/hr)
-	3.3 (solution)	-	-	10	-	-	6.6	25
-	5	-	-	15	2	30	10	25
-	6.6 (solution)	-	-	20	-	-	13.3	25
5	10	1.3	10	30	4	60	20	25
5	15	-	20	45	6	90	30	25
10	20	2.8	30	60	8	120	40	25
10	25	-	30	75	10	150	50	50
15	30	3.9	40	90	12	180	60	50
20	30-35	-	50	100	14	200	67	50
25	30	5.5	70	150	20	300	100	75
30-35	60-70	7.5-8.1	100	200	25	400	133	100
40	100	15	150	300	40	600	200	150
50-70	150-170	18.2-21.2	200	400	60	900	285	200
75	180-190	20.8-22.1	250	500	80	1200	353	250
100-170	300-340	44.2-48.6	300	1000	134	2000	660	500

This table assumes the following conversion ratios:

Oral morphine - oral oxycodone - 2 to 1.<sup>1</sup>

Oral morphine - oral hydromorphone - 7.5 to 1.<sup>2</sup>

Oral morphine - S.C. diamorphine - 3 to 1.<sup>4,5</sup>

\* Doses adjusted to be multiples of 1.3mg and/or 2.6mg capsules to fit the Palfione capsule range strengths.

\*\* Doses adjusted to be multiples of 7mg, 4mg, 10mg, 16mg or 24mg capsules to fit the Palfione SR capsule range strengths.