

APPENDIX J

Equianalgesic Conversion Table

Opioid Analgesic ^{NB} (Common brand names in parentheses)	Equianalgesic Dose (mg) ¹	
	PO/PR	IM/IV
Morphine (MS Contin, Roxanol)	*30-60	10
Codeine ^{#‡} (Tylenol #3 = 30 mg codeine)	200	130
Fentanyl (Sublimaze)	N/A	0.1 (100mcg)
Fentanyl, transdermal patch ^Δ (Duragesic)	ΔΔ	N/A
Hydrocodone [‡] (Lortab; Lorcet; Vicodin)	20	N/A
Hydromorphone (Dilaudid)	7.5-8	1.5
Methadone [∘] (Dolophine)	∂∂	∂∂∂
Meperidine [§] (Demerol)	300	75
Oxycodone (Percocet; Tylox; Oxycontin)	20	N/A

¹Adapted from: American Pain Society (1999). *Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain.*

Duration of action for oral morphine and oxycodone is about 4 hours, so prescribe initially as q4h, **not PRN**, plus breakthrough q1h PRN

^{NB}**Calculate equianalgesic dose, reduce by 25%, then titrate to effect.**

--For ↑age or ↓renal function, reduce calculated dose by 50%, then titrate to effect. *See below for methadone conversion.*

--With continuous, around-the-clock, or long-acting opioid, order PRN **rescue (breakthrough) dose** of 15 – 25% of total 24h dose.

Manage acute pain with short-acting agents. Titration: increase dose 25-50% for mild to moderate pain; 50-100% for severe pain.

***Morphine PO:IV** = 60:10 for opioid naïve patient, 30:10 for others

‡ Dosage of combination products that include acetaminophen or an NSAID are limited by the toxicity and maximum dose of the non-opioid.

Analgesia does not increase with codeine doses greater than 200mg PO (ceiling dose).

§ Meperidine is not recommended for persistent or severe pain due to short-acting analgesic effect and rapid accumulation of neurotoxic metabolites; oral meperidine is poorly absorbed.

Δ 8-12 hours may be needed to achieve analgesia after the initial fentanyl patch is applied: provide short-acting analgesics in the interim; residual effect is expected for 14 - 24 hours after patch is removed.

ΔΔ **Fentanyl patch should be used with great caution in opioid naïve patients.** 25 mcg patch (≈ morphine 50 mg PO/24h) ≈ 8mg PO q4h or 0.7 mg/h IV. Oral morphine 100 mg/24h = 50 mcg/hr patch.

∘Methadone is appropriate for chronic stable pain in non-opioid naïve patients. Convert and titrate slowly (over 3-6 days) due to long biphasic half-life; beware cumulative effect in first 3-10 days. **Pain Service or Palliative Care Service consultation is recommended.**

∂∂Morphine:methadone ratio changes as morphine dose increases.

Calculate equianalgesic dose, then reduce by 25-50%. Table shows PO morphine:PO methadone (one of several conversion methods)

< 90 mg MS 4:1

91-300 mg MS 8:1

301-600 mg MS 12:1

∂∂∂Oral methadone:IV/IM methadone = 2:1.