

# OPIOID EQUIANALGESIC DOSES

All equivalencies should be considered approximations only and can be affected by interpatient variability, type of pain (ie, acute vs. chronic), chronic administration, tolerance, etc. Patients should be monitored for efficacy and adverse reactions and the dose adjusted accordingly.

Generic	Dose Equal to 10mg IM of morphine sulfate	
	Oral	Injection (IM/IV/SC) <sup>1</sup>
morphine <sup>2</sup>	30mg (60mg)	10mg
codeine	180–200mg	130mg
fentanyl <sup>3</sup>	N/A	0.1mg (100mcg)
hydrocodone <sup>4</sup>	30mg	N/A
hydromorphone	7.5mg	1.5mg
levorphanol	4mg	2mg
meperidine	300mg	100mg
methadone	10–20 mg	5–10mg
oxycodone IR	20–30mg	N/A
oxycodone CR	40mg	N/A
oxymorphone	10mg	N/A

## NOTES

**Key:** CR = controlled-release; IR = immediate-release

<sup>1</sup>Although controlled studies are not available, in clinical practice it is customary to consider the doses of opioids given IM, IV, or SC to be equivalent. There may be some differences in pharmacokinetic parameters such as  $C_{max}$  and  $T_{max}$ .

<sup>2</sup>The conversion ratio of 10mg parenteral morphine = 30mg oral morphine is based on clinical experience in patients with chronic pain. The conversion ratio of 10mg parenteral morphine = 60mg oral morphine is based on a potency study in acute pain.

<sup>3</sup>See literature for conversion of fentanyl transdermal patch, buccal tablets, buccal soluble film, sublingual tablets, units for transmucosal administration, and nasal spray.

<sup>4</sup>Hydrocodone not available as a single entity product.

## REFERENCE

Feldman MD, Christensen JF, Satterfield JM. *Behavioral Medicine: A Guide For Clinical Practice, Fourth Edition*. New York, NY: McGraw-Hill Education; 2014.