## **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.

	Dose Equal to 10mg IM of morphine sulfate	
Generic	Oral	Injection (IM/IV/SC) <sup>1</sup>
morphine <sup>2</sup>	60mg (30mg)	10mg
codeine	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	75mg
methadone	20mg	10mg
oxycodone	30mg	N/A
oxymorphone <sup>5</sup>	10mg	1mg

## NOTES

<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>b</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.

<sup>5</sup>The 10mg conversion value of oxymorphone applies to oral and rectal dosing. (Rev. 5/2012)