

## PAIN MANAGEMENT PRINCIPLES

1. Use a multi-drug approach. Combine opioids with non-opioids and adjuvants.
2. Base administration schedule on the analgesic's duration of effect. Best to use sustained release opioids for scheduled dosing and always use immediate release opioids for rescue dosing.
3. Opioids should be limited to the agonist drugs. See Equianalgesic Chart.
4. Avoid meperidine (Demerol) and the mixed agonist-antagonist opioids (e.g. Stadol, Nubain, Talwin).
5. **Breakthrough Dosing:** Scheduled dosing will maintain even serum drug levels and provide consistent relief. All patients on long acting opioids or continuous parenteral infusions must have an order for breakthrough pain medication. Frequent breakthrough dosing requires a change in the scheduled long acting drug dose. Oral breakthrough dose is  $\approx$  10%-20% of the oral 24 hour baseline dose. Peak effect of immediate-release opioid is  $\approx$  one hour; it is safe to repeat dose every one hour if patient is not sedated. IV/SubQ breakthrough dose is  $\approx$  50 to 100% of the hourly IV rate. Peak effect of IV/SubQ opioids (except fentanyl) is  $\approx$  15 minutes; it is safe to repeat dose every 15 minutes if patient not sedated.
6. Non-invasive routes preferred. For severe pain and escalating, it may be necessary to provide intravenous analgesics until the pain is managed. If oral, rectal, or transdermal dosing is no longer practical or appropriate, continuous subcutaneous or intravenous infusions are indicated.
7. When changing drug or route of administration, use equianalgesic doses. Changing from oral to parenteral of the same drug, see drug chart on other side. If changing from one drug to another, the new drug may be more effective, because of differences in potency or drug availability. Start at 2/3 to 3/4 of the amount calculated using the equianalgesic tables. Make sure break-through medication is available and titrate dose according to response.
8. Manage opioid side effects aggressively. Patients never become tolerant to the constipating effects of opioids. Start laxative/softener combination with opioids.
9. **Mild Pain** (rating 1-3) Start with simple analgesics; APAP/NSAIDS with adjuvant analgesics as appropriate.
10. **Moderate to Severe Pain** (rating 4-10) When pain does not respond to mild analgesics and adjuvants, consider adding a pure opioid. Combinations of opioids and non-opioids limit flexibility of dosing.
11. **Titration:** Increase by 25 to 50% for moderate pain; increase by 50 to 100% for severe pain. Or calculate the average dose of breakthrough medication taken per day and add to the long acting medication dose (except when breakthrough is taken for incident pain).
12. Remember always educate your patients about pain medications.

Pain Sources	Pain Character	Drug Class/Examples
Myofascial Somatic Pain	Constant and well localized.	- Acetaminophen/NSAIDS - Opioids
Visceral Pain	Injury to sympathetically innervated organs. Pain is vague in quality. Deep, dull, aching. Referred pain.	- Opioids - Corticosteroids - NSAIDS
Bone Pain	Axial skeleton with thoracic and lumbar spine most common.	- Radiation Therapy, Radionuclides - NSAIDs: Celecoxib (Celebrex), Ibuprofen, (Motrin), Naproxen (Aleve), Ketorolac (Toradol), and many others - Corticosteroids/Bisphosphonates - Opioids
Neuropathic Pain Nerve Damage Dysesthesia	Injury to some element of the nervous system (plexus or spinal root). Dysesthesia, burning, tingling, numbing, shooting electrical pain. May require higher doses of opioids.	- Tricyclic Antidepressants: Nortriptyline (Pamelor), Desipramine (Norpramin) - Atypical Antidepressants: Duloxetine (Cymbalta), Venlafaxine (Effexor) - Anticonvulsants: Gabapentin (Neurontin), Carbamazepine (Tegretol), Clonazepam, (Klonopin), Pregabalin (Lyrica) - Corticosteroids - Topical Anesthetic, Lidocaine Patch 5% (Lidoderm) - Opioids



## CANCER PAIN MANAGEMENT REFERENCE CARD

The Southern California Cancer Pain Initiative  
 c/o City of Hope • 1500 E. Duarte Road  
 Duarte, California 91010  
 626 256-4673 Ext. 63202  
 Fax: 626 301-8941  
 Email: [sccpi@coh.org](mailto:sccpi@coh.org)  
 Website: <http://sccpi.coh.org>



EQUIANALGESIC TABLE			
DRUG	DOSAGE FORM/STRENGTHS	APPROXIMATE EQUIVALENCE	
		IM/SC/IV	ORAL
<b>Morphine</b>	<b>Immediate Release Tablets</b> Morphine Sulfate Immediate Release - 15, 30 mg <b>Sustained Release Tablets</b> MS Contin - 15, 30, 60, 100, 200 mg - 8 or 12 hrs Oramorph SR - 15, 30, 60, 100 mg - 8 or 12 hrs Avinza - 30, 60, 90, 120 mg - 24 hrs Kadian - 20, 30, 50, 60, 100, 200 mg - 24 hrs Generic <b>Oral Liquid</b> Morphine Sulfate Immediate Release Solution - 2 mg/ml, 4 mg/ml Morphine Sulfate Immediate Release Concentrate – (Roxanol) - 20 mg/ml <b>Suppository</b> Rectal Morphine Sulfate (RMS) - 5, 10, 20, 30 mg	10 mg	30 mg
<b>Hydromorphone</b>	<b>Tablets</b> <b>Hydromorphone</b> (Dilaudid) - 2, 4, 8 mg <b>Liquid</b> <b>Hydromorphone</b> (Dilaudid) - 5 mg/5ml <b>Injection</b> Dilaudid HP – 1, 2, 10 mg/ml <b>Suppository</b> <b>Hydromorphone</b> (Dilaudid) - 3 mg	1.5 mg	7.5 mg
<b>Oxycodone</b>	<b>Immediate Release Tablets</b> Oxy IR - 5 mg Roxicodone - 5 mg, 15 mg, 30 mg Oxycodone/Acetaminophen* Percocet - 5/325, 7.5/325, 7.5/500, 10/325 mg Roxicet - 5/325, 5/500 mg <b>Sustained Release Tablets</b> Oxycontin - 10, 20, 40, 80 mg <b>Liquid</b> Roxicodone - 1 mg/ml, 20 mg/ml OxyFAST - 20 mg/ml *Do not exceed 4000 mg Acetaminophen /24 hrs	-- --	20-30 mg
<b>Fentanyl Transdermal</b>	<b>Skin Patch</b> Duragesic - 12, 12.5, 25, 50, 75, 100 mcg/hr	100 mcg patch q 2-3 days = 66 mg IV Morphine q 24 hrs <b>OR</b> 2.7 mg IV Morphine q 1 hr	100 mcg patch q 2-3 days = 200 mg Oral Morphine q 24 hrs <b>OR</b> 33 mg Oral Morphine q 4 hrs
<b>Fentanyl Transmucosal - Buccal</b>	<b>Oral Lozenge</b> Actiq - 200, 400, 600, 800, 1200, 1600 mcg Fentora – 100, 200, 400, 600, 800 mcg	-- --	See package inserts for conversion
<b>Hydrocodone</b>	<b>Hydrocodone/Acetaminophen Tablets*</b> Vicodin - 5/500 mg Vicodin ES - 7.5/750 mg Lorcet or Vicodin HP - 10 mg/650 mg Lortab - 2.5/500 mg, 5/500 mg, 7.5/500 mg, 10/500 mg Norco - 5/325 mg, 7.5/325 mg, 10/325 mg <b>Hydrocodone/Ibuprofen</b> Vicoprofen - 7.5/200 mg *Do not exceed 4000 mg Acetaminophen /24 hrs	-- --	Hydrocodone 2 tabs of 5 mg/500 mg≈ 9 mg Oral Morphine
<b>Methadone</b>	Equivalency ratios comparing morphine (or other opioids) to methadone are dose-dependent ranging from 1:1 at low doses of oral morphine to 20:1 (morphine: methadone) in excess of 300 mg per day. Because of its long half-life, high potency, and inter-individual variations in pharmacokinetics, start methadone at a lower dose and titrate upwards carefully with provision of adequate breakthrough pain medications during titration period. Warning: cross tolerance does not develop.		
<b>SIDE EFFECT</b>	<b>OPIOID SIDE EFFECT MANAGEMENT</b>		
Constipation	Start with combined senna as stimulant and docusate (Colace) as softener. May increase to 4 tabs bid. If no BM in 2 days add a laxative (Dulcolax, Lactulose, Miralax, or Milk of Magnesia). Also increase fluids, activity.		
Nausea/ Vomiting	Rule out reversible causes, e.g. constipation. Prochlorperazine (Compazine) 10 mg po q 6 hr PRN or 25 mg suppository PR q 6 hr PRN. May add Lorazepam (Ativan) 0.5mg q 6 hr po/sl, PRN or Metoclopramide (Reglan) (also helpful for early satiety and constipation) 10 mg po qid. Scopolamine TD (Transderm-Scop) patch 1.5 mg q 3 days is effective for movement related nausea q 72 hrs. Haloperidol (Haldol) 1-4 mg PO or IV/SQ every 6 hours.		
Respiratory depression	Rare – closely monitor opiate naïve patients.		