

Equianalgesic Opioid Dosing

Have you ever wondered how different opioids compare with each other? How much is 0.4 mg of hydromorphone anyways?

An “equianalgesic dose” is defined as the dose at which two opioids (at steady-state) provide approximately the same pain relief.

The below chart provides guidelines for equianalgesic doses of commonly used opioids:

Hydrocodone	Oxycodone	PO Morphine	PO Hydromorphone	IV Morphine	IV Hydromorphone
2.5 mg	2 mg	2.5 mg	0.5 mg	1 mg	0.2 mg
5 mg	4 mg	5 mg	1 mg	2 mg	0.4 mg
6.25 mg	5 mg	6.25 mg	1.25 mg	2.5 mg	0.5 mg
7.5 mg	6 mg	7.5 mg	1.5 mg	3 mg	0.6 mg
9.4 mg	7.5 mg	9.4 mg	1.9 mg	3.75 mg	0.75 mg
10 mg	8 mg	10 mg	2 mg	4 mg	0.8 mg
12.5 mg	10 mg	12.5 mg	2.5 mg	5 mg	1 mg

When changing opioids:

- In general, if pain is controlled on a patient’s current opioid, reduce the new opioid dose by 25-50% to account for cross-tolerance and interpatient variability
- Monitor patient for effectiveness and adverse events
- Reassess after 2-3 days on new therapy

Equianalgesic conversions serve only as a general guide to estimate opioid dose equivalents. Multiple factors must be considered when changing opioids!

Questions or need help?

The Opioid Stewardship Pharmacist (OSP) is available at x4760 M-F 0730-1500