

APPENDIX C: EQUIANALGESIC DOSE RATIOS (EDRS)

- EDRs should only be used as an approximate guide.
- In general, EDRs are derived from single-dose studies comparing IM and PO opioids in patients with postoperative and cancer pain. They may not apply to repeated dosing in chronic non-cancer pain.
- A large inter-patient variability exists within the ratios and confidence intervals are wide. A single ratio may not be applicable to all patients. Some patients may need lower or higher doses than expected.
- The EDR may change according to the direction of the conversion. This is unlikely to have a major impact at low opioid doses, but may be clinically significant at high doses.
- Use caution in patients with renal and hepatic impairment and be conservative.
- Discrepancies exist most commonly with methadone, fentanyl, and oxycodone. Refer to the previous sections for additional information.
- A number of methods for converting among opioids using EDRs are available. Titration should not be based solely on EDRs.
- Consider analgesic efficacy and adverse effects of previous regimen. If the previous regimen provided good analgesia but intolerable adverse effects, decrease the initial estimate. If the previous regimen provided poor analgesia, but was tolerated, increase the estimate.
- An alternative is to convert only part of the previous dose at a time.
- Monitor the patient daily as needed to prevent underdosing or overdosing.
- There is incomplete cross-tolerance among opioids. Patients who have been on chronic, high dose opioid therapy may be particularly sensitive to a new opioid. Some experts recommend decreasing the initial dose estimate by 1/3 to 1/2 in opioid-tolerant patients.

APPENDIX C: EQUIANALGESIC DOSE RATIOS (EDRS)

- The following table is adapted from the American Pain Society and is based on data available from clinical studies, clinical experience, and several assumptions. It factors in the consideration of incomplete cross-tolerance to avoid the need for further adjustment.

Equianalgesic Dose Chart

OPIOID	EQUIANALGESIC DOSE (ED) – PO (MG)*
Morphine	30
Fentanyl	See Part II, Section 6
Hydrocodone	30
Hydromorphone	7.5
Levorphanol	1 (for chronic opioid users)
Meperidine	300
Methadone	2-4 (for chronic opioid users)
Oxycodone	20
Codeine	200

** All conversions must be adjusted for standard dosing intervals.*