Perioperative IV Methadone

Recommended dosing: **0.2mg/kg** (studies vary from 0.1 – 0.3 mg/kg)

Directions: Give 0.2mg/kg bolus dose at beginning of surgery.  **No other opioids are generally required during surgery.** Postoperative IV PCAs are safe, but *continuous* PCAs are discouraged.

Receptors: μ- and δ-opioid agonist, inhibits NMDA receptor, and may inhibit the reuptake of serotonin and norepinephrine

Onset of Action: ~5 minutes

Peak Effect: one hour

Duration: Longest half-life of any clinically used opioid. For doses greater than 10mg, the duration is dependent on elimination and is between **24 - 36 hours**. Therefore, Methadone is not recommended for outpatient surgery.

Indications: IV Methadone has been studied in a variety of surgical procedures. The majority of studies have involved complex spine surgery. *Please DO NOT use in patients on the Major Abdominal Pain Management Pathway (Colorectal, Open Hysterectomies, Open Surg/ONC).*

Confirmed Advantages: Shown to decrease opioid consumption for up to 3 days and improved patient satisfaction with pain management versus pure mu agonists.

Theoretical Advantages (similar to ketamine): Decreased – Opioid Induced Hyperalgesia, Allodynia, Acute Opioid Tolerance, New Chronic Opioid Use, New CPSP