

Opioid–lidocaine–ketamine CRI

Drug (concentration)	ml (mg) to add to 1 liter of fluid (LRS or Plasmalyte)	Individual dose rate	Dosing rate 1-8 ml/kg/hr	IV Bolus dose
Morphine (15 mg/ml)	4 ml (60 mg)	1 mcg/kg/min		0.5 mg/kg
Lidocaine (20 mg/ml)	15 ml (300 mg)	5 mcg/kg/min		1-2 mg/kg
Ketamine (100 mg/ml)	0.6 ml (60 mg)	1 mcg/kg/min		0.5 mg/kg

Opioid alternatives

Drug (concentration)	ml (mg) to add to 1 liter of fluid	Individual dose rate	Dosing rate 1-8 ml/kg/hr	Bolus dose
Hydromorphone (2 mg/ml)	3 ml (6 mg)	0.1 mcg/kg/min		0.05-0.1 mg/kg
Fentanyl (50 mcg/ml)	12 ml (0.6 mg)	0.01 mcg/kg/minute		5-10mcg/kg

*Modified from page 285, Table 64 in “Small Animal Anesthesia and Pain Management by Jeff Ko, 2013”