



REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

ketamine (low dose)
(low dose analgesia)



Effective Date: Dec 2011	CLASSIFICATION Adjunct Analgesic	OTHER NAMES Ketalar	PAGE 1 of 2
Revised Date: Nov 2024			

ADMINISTRATION POLICY: *NOTE: Prescribing restricted to prescribers in consultation with Palliative Care*

- IV Bolus – May be administered by a nurse under direct supervision of prescriber
- IV Infusion – May be administered by a nurse
- IV Intermittent - May be administered by a nurse
- Subcutaneous – May be administered by a nurse

RECONSTITUTION/DILUTION/ADMINISTRATION:

Available as: 10 mg/mL – 20 mL multidose vial

IV Bolus: Administer undiluted over 1 to 3 minutes

IV Intermittent: Administer over 4 to 6 hours

Dose	Dose Preferred Diluent Volumes Bag size
	NaCl 0.9% or D5W
ordered	100mL

Subcutaneous: Administer undiluted

IV Infusion: Pump Library:

Ketamine LO

Drug Library	Dose Rate	Short Name	Care Unit
Yes	mg/kg/h	keta200	General & Critical Care
Drug	Diluent	Final Volume (VTBI)	Final Concentration
200 mg (20 mL of 10 mg/mL)	100 mL NS	120 mL	1.667 mg/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 0.02 mg/kg/h		Soft High Dose Limit: 1 mg/kg/h	

DOSAGE:

IV bolus/IV intermittent: 0.25 to 0.5 mg/kg (usual maximum dose: 60 mg); titrate to pain goal and tolerability; repeat daily for up to 2 to 10 days as needed

IV infusion: 0.05 to 0.25 mg/kg/hour for 2 to 5 days; titrate to pain goal and tolerability; usual dosage range: 0.02 to 1 mg/kg/hour (maximum dose: 30 mg/hour)

Subcutaneous: 0.1 to 0.6 mg/kg (usual 2.5 to 25 mg) as needed; titrate to pain goal and tolerability. In patients who need a longer duration of analgesia, follow with continuous subcutaneous infusion at 0.1 to 1.2 mg/kg/hour (maximum daily dose: 500 mg)

Maximum daily dose: IV intermittent: 0.5 mg/kg

Maximum rate: IV bolus: over 1 minute
IV/subcut infusion: 1 mg/kg/h

Maximum concentration: 10 mg/mL



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STABILITY/COMPATIBILITY: Stability of multidose vial: 28 days after first use Stability of Final Admixture: 24 hours at room temperature Compatibility: Compatible with normal saline and D5W			
PRECAUTIONS, POTENTIAL ADVERSE REACTIONS: <ul style="list-style-type: none">• Dizziness, blurred or double vision (most common)• At doses greater than 2.5 mcg/kg/minute alteration in perception (floating in space, feeling of unreality), sense of intoxication, buzzing in head, sedation/drowsiness). At even higher doses, occasionally hallucinations, confusion and bad dream may occur.• Benzodiazepines may relieve these effects. Start at low dose and increase slowly (this decreases side effects)			
ADDITIONAL NOTES AND NURSING CONSIDERATIONS: <ul style="list-style-type: none">• Monitor blood pressure and respiratory rate, SpO₂• Caution advised in patients with psychiatric illness• Subcutaneous ketamine is highly irritating and is not recommended• PO ketamine: Use parenteral formulation orally in divided doses and diluted in orange juice to mask bitter taste.<ul style="list-style-type: none">○ Initial: 0.5 mg/kg/day administered in 3 to 4 divided doses as needed; then increase dose in increments of approximately 5 mg/dose based on pain goal and tolerability; maximum daily escalation dose: 15 to 20 mg; maximum dose 800 mg/day• Topical, sublingual and intranasal ketamine have also been used• Elderly patients: Because of risk of respiratory depression may be greater, dose increments should be smaller and rate of injection slower. The risk of psychotropic side effects may also be higher in this population.			