KETAMINE

BRAND NAME  KETALAR, KETAMINE BAXTER, INTERPHARMA

DRUG CLASS  Anaesthetic

AVAILABILITY  Ketalar vial and Baxter ampoule contain 200 mg/2 mL of ketamine as ketamine hydrochloride. Ketalar brand also contains benzethonium chloride (phemerol).1 Interpharma ampoule contains 100 mg/10 mL or 250 mg/5 mL of ketamine as ketamine hydrochloride. The 100 mg/10 mL ampoule also contains sodium chloride.1

Controlled drug: use must be recorded.

pH  3.5–5.5

PREPARATION  The 200 mg/2 mL ampoule or vial must be diluted for IV use1

STABILITY  Vial: store below 30 °C. Protect from light.1 Diluted solution: when diluted with an equal volume of a compatible fluid stable for 24 hours at 2 to 8 °C.1

ADMINISTRATION

IM injection  Suitable1

SUBCUT injection  Suitable as an intermittent subcutaneous injection or as a continuous subcutaneous infusion.2 Low dose infusions are used in conjunction with other analgesics for neuropathic pain, severe acute pain and refractory migraine. Seek specialist advice.

IV injection  Dilute the 200 mg/2 mL vial or ampoule with 2 mL of water for injections or sodium chloride 0.9% to make a concentration of 50 mg/mL.1 Inject over at least 1 minute.1 The 100 mg/10 mL or 250 mg/5 mL ampoule can be injected undiluted.1

IV infusion  Dilute 100 mg to 50 mL or 100 mL of sodium chloride 0.9% or glucose 5% to make a concentration of 2 mg/mL or 1 mg/mL respectively.3 Some centres use more concentrated solutions up to 10 mg/mL. Low dose infusions are given in conjunction with other analgesics for neuropathic pain, severe acute pain and refractory migraine. Seek specialist advice.

IV use for infants and children  Dilute with an equal volume of compatible fluid and inject over at least 1 minute,1,4 or dilute to 1–2 mg/mL and give as a continuous infusion.4,5

COMPATIBILITY

Fluids  Glucose 5%,1 Plasma-Lyte 148 via Y-site6, sodium chloride 0.9%

Y-site  Ceftazidime3

Syringe  Information on compatibility with other medicines in a syringe driver is available7

INCOMPATIBILITY

Fluids  No information

Drugs  Aciclovir8, ampicillin8, barbiturates1, furosemide8, heparin sodium8, meropenem8, phenobarbital1, potassium phosphates8, quinine1, sodium bicarbonate8

SPECIAL NOTES  Respiratory depression can occur with rapid administration and high doses.1 Monitor cardiac and respiratory function when used at anaesthetic doses.1 When used at analgesic doses monitor heart rate, blood pressure, respiratory rate and sedation score. A transient rise in blood pressure of 20–25% can occur a few minutes after IV injection.1 Some patients may have involuntary movements of the arms and legs during IV infusion for anaesthesia.1 Emergent reactions may occur during recovery and sometimes up to 24 hours later. These include vivid dreams, hallucinations, delirium and irrational behaviour.1 Reactions are less common with lower doses used for analgesia. Management may include dose reduction, cessation or administration of a benzodiazepine. Check your local guidelines or seek specialist advice.

There is high potential for abuse and illicit use.

REFERENCES