ketOROLAC

BRAND NAME	KETORAL, TORADOL, KETOROLAC JUNO
DRUG CLASS	Non-steroidal anti-inflammatory (NSAID)
AVAILABILITY	Ampoule contains 10 mg/mL or 30 mg/mL of ketorolac trometamol. Prefilled syringe contains 30 mg/mL of ketorolac trometamol. Both forms also contain ethanol, sodium chloride and sodium hydroxide or hydrochloric acid.[1] The solution is clear and slightly yellow.[1]
WARNING	Anaphylactic reactions may occur.[1] Contraindicated in people who are allergic to aspirin or NSAIDs. Use with caution in people with a history of asthma.[1] The total duration of therapy of both parenteral and oral therapy should not exceed 5 days due to increased risk of serious adverse effects.[1]
pH	6.9–7.9[2]
PREPARATION	Not required
STABILITY	Store below 30 °C (Juno store below 25 °C).[1] Protect from light.[1] Prolonged exposure to light may cause discolouration and precipitation.[2]
ADMINISTRATION	
IM injection	Inject slowly into a large muscle. Apply pressure at the injection site for 15 to 30 seconds after injecting to minimise local reactions.[1]
SUBCUT injection	Suitable in palliative care patients as an intermittent injection or as a continuous subcutaneous infusion.[3]
IV injection	Inject over at least 15 seconds.[2,4]
IV infusion	Not recommended
COMPATIBILITY	
Fluids	Glucose 5%[5], glucose 5% in sodium chloride 0.9%[5], Hartmann's[5], Ringer's[5], sodium chloride 0.9%[6]
Y-site	Dexmedetomidine[5], fentanyl[5], hydromorphone[5], morphine sulfate[5], paracetamol[5], remifentanil[5]
Syringe	Due to the alkaline pH, ketorolac has limited compatibility with other medications in a syringe driver[6]
INCOMPATIBILITY	
Fluids	No information
Drugs	Aciclovir[7], amiodarone[7], azathioprine[7], azithromycin[5], calcium chloride[7], caspofungin[7], cisatracurium[1], cyclizine[5], dobutamine[7], erythromycin[7], esmolol[7], ganciclovir[7], nicardipine[7], haloperidol lactate[5], labetalol[7], metaraminol[7], midazolam[7], mycophenolate mofetil[7], pentamidine[7], promethazine[5], protamine[7], pyridoxine[7], rocuronium[7], vancomycin[7], vecuronium[7]
SPECIAL NOTES	Switch patients to oral therapy as soon as possible. On the day the switch is made the total combined daily dose should not exceed 90 mg (60 mg for the elderly, patients with mild renal impairment and patients weighing less than 50 kg) and the oral component should not exceed 40 mg (30–40 mg for the elderly).[1]

REFERENCES

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5. McEvoy GK editor. Handbook on injectable drugs. 20th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2018.
6. Dickman A, Schneider J. The syringe driver. Continuous subcutaneous infusions in palliative care. 4th ed. Oxford, UK: Oxford University Press; 2016.
7. Ketorolac tromethamine. In: IV index [internet]. Trissel's 2 clinical pharmaceutics database (parenteral compatibility) Greenwood Village, CO: Truven Health Analytics. Accessed 05/08/2019.