

HYDRomorphone

SYNONYM	Hydromorphone hydrochloride
BRAND NAME	DILAUDID, DILAUDID-HP, HYDROMORPHONE JUNO, JUNO-HP AND JUNO-XHP, MEDSURGE HYDROMORPHONE AND MEDSURGE HYDROMORPHONE HP
DRUG CLASS	Strong opioid analgesic
AVAILABILITY	<p>Dilaudid, Hydromorphone Juno and Medsurge Hydromorphone ampoules contain 2 mg/mL of hydromorphone hydrochloride.¹</p> <p>Dilaudid-HP ampoule contains 10 mg/mL or 50 mg/mL of hydromorphone hydrochloride.¹</p> <p>Hydromorphone Juno-HP ampoule contains 10 mg/mL of hydromorphone hydrochloride.¹</p> <p>Hydromorphone Juno-XHP ampoule contains 50 mg/mL of hydromorphone hydrochloride.¹</p> <p>Medsurge Hydromorphone-HP ampoule contains 10 mg/mL of hydromorphone hydrochloride.¹</p> <p>All brands also contain sodium citrate dihydrate, citric acid, sodium chloride. Dilaudid, Dilaudid-HP and Medsurge brand ampoules also contain hydrochloric acid or sodium hydroxide.¹</p> <p>The solution is clear and colourless to pale yellow.¹</p> <p>Controlled drug: use must be recorded.</p>
WARNING	<p>The HP and XHP formulations are concentrated solutions intended for use in opioid-tolerant patients.¹ Check product selection carefully.</p> <p>May cause respiratory depression when given in high or repeated doses or to patients who are elderly or have compromised respiratory function. Monitor at-risk patients closely.¹ See SPECIAL NOTES</p>
pH	4–5.5 ²
PREPARATION	The 50 mg/mL ampoules must be diluted before use. ¹
STABILITY	<p>Ampoule: store all Juno ampoules below 25 °C. Store Dilaudid, Dilaudid-HP and all Medsurge ampoules below 30 °C. Protect from light.¹ Do not refrigerate.²</p> <p>Infusion solution: stable for 24 hours at 25 °C. Protect from light.^{1,2} Longer stability information is available.^{2,3}</p>
ADMINISTRATION	
IM injection	Suitable. ¹ Subcutaneous injection is preferred. ⁴
SUBCUT injection	Suitable for injection or as a continuous subcutaneous infusion for opioid-tolerant patients with severe pain. ¹
IV injection	Inject the dose over 2 to 3 minutes. If necessary, dilute the 2 mg/mL or 10 mg/mL ampoule to 10 mL with sodium chloride 0.9% to give small doses. ¹
IV infusion	<p>Suitable for patient-controlled analgesia. A background infusion of 0.1 mg/hour can be used with bolus doses of 0.2 mg.¹ Check your local guidelines.</p> <p>Continuous IV infusion at a rate of up to 0.3 mg/hour has been used in a small number of patients.¹</p>
Other	Suitable for intrathecal infusion. ⁵ Seek specialist advice.

COMPATIBILITY

- Fluids** Glucose 5%², glucose 5% in sodium chloride 0.9%², Hartmann's², Plasma-Lyte 148 via Y-site⁶, Ringer's², sodium chloride 0.45%², sodium chloride 0.9%²
- Y-site** Aciclovir², amifostine², amikacin², atropine², aztreonam², bivalirudin², caspofungin², cefotaxime², cefoxitin², ceftaroline fosamil², ceftazidime², ceftolozane-tazobactam², cisatracurium², clindamycin², dexamethasone², dexmedetomidine², erythromycin², filgrastim², foscarnet², gentamicin², granisetron², hyoscine hydrobromide², isavuconazole², ketorolac², linezolid², metoclopramide², metronidazole², micafungin², midazolam², nicardipine², palonosetron², paracetamol², piperacillin-tazobactam (EDTA-free)², posaconazole¹, remifentanyl², tacrolimus², tobramycin², trimethoprim-sulfamethoxazole², vancomycin²
- Syringe** Information on compatibility with other medicines in a syringe driver is available^{3,7}

INCOMPATIBILITY

- Fluids** No information
- Drugs** Sodium bicarbonate¹, thiopental sodium⁸

SPECIAL NOTES

Patients with compromised respiratory function include those with obstructive sleep apnoea and those concurrently taking medicines that can cause CNS or respiratory depression.

Hydromorphone is a highly potent opioid; 1 mg of IV hydromorphone is equivalent to 5 mg of IV morphine. It is associated with significant harm, especially in opioid naive patients and inappropriately high doses have been fatal.⁴

Monitor sedation score and respiratory rate.⁴

REFERENCES

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