

LABETALOL

BRAND NAME	LABETALOL SXP, TRANDATE
DRUG CLASS	Beta-blocker, selective alpha ₁ blocker
AVAILABILITY	Labetalol SXP ampoule contains 50 mg/10 mL of labetalol hydrochloride. Also contains hydrochloric acid and sodium hydroxide. ¹ Trandate ampoule contains 100 mg/20 mL of labetalol hydrochloride. Also contains hydrochloric acid and sodium hydroxide. ² Available through the Special Access Scheme.
pH	3–4.5 ³
PREPARATION	Not required
STABILITY	Labetalol SXP ampoule store below 25 °C. Protect from light. ¹ Trandate ampoule: store below 30 °C. Protect from light. ² Infusion solutions prepared with labetalol SXP are stable for 6 hours below 25 °C or 24 hours at 2 to 8 °C. ¹
ADMINISTRATION	
IM injection	Not recommended
SC injection	Not recommended
IV injection	Inject the dose slowly over 2 minutes. Repeat after 10 to 20 minutes if required. ¹
IV infusion	Add 20 mL (100 mg) to 80 mL of a compatible fluid to make a concentration of 1 mg/mL. ^{1,2} Starting rates range from 20 mg/hour to 120 mg/hour depending on the indication. ^{1,2} May be infused undiluted in a syringe pump. Rates of 2 to 8 mg/min are used in acute management of stroke. ⁴ Adjust the rate according to the blood pressure response.
COMPATIBILITY	
Fluids	Glucose 5% ^{1,2} see SPECIAL NOTES, glucose in sodium chloride solutions ^{1,2} , Hartmann's ³ , Plasma-Lyte 148 via Y-site ⁵ , Ringer's ³ , sodium chloride 0.9% ³
Y-site	Amikacin ³ , aminophylline ³ , amiodarone ³ , ampicillin ³ , atracurium ⁶ , aztreonam ⁶ , buprenorphine ⁶ , calcium chloride ⁶ , calcium gluconate ^{3,6} , ceftazidime ³ , ceftolozane-tazobactam ³ , ciclosporin ⁶ , dexmedetomidine ³ , dobutamine ⁶ , dopamine ⁶ , ephedrine sulfate ⁶ , erythromycin ³ , esmolol ³ , ethanol ⁷ , fentanyl ³ , ganciclovir ⁶ , gentamicin ³ , glyceryl trinitrate ³ , insulin (Novorapid) ⁸ , isavuconazole ³ , lidocaine ³ , linezolid ³ , magnesium sulfate ³ , metoclopramide ⁶ , metronidazole ³ , midazolam ³ , morphine sulfate ³ , nifedipine ³ , noradrenaline (norepinephrine) ³ , pethidine ³ , potassium chloride ³ , ranitidine ³ , sodium acetate ³ , sodium nitroprusside ³ , tobramycin ³ , trimethoprim-sulfamethoxazole ³ , suxamethonium ³ , vancomycin ³ , verapamil ³
INCOMPATIBILITY	
Fluids	Sodium bicarbonate ¹⁻³
Drugs	Albumin ⁸ , aciclovir ⁸ , azathioprine ⁸ , benzylpenicillin ⁶ , cefalotin ⁶ , cefepime ⁸ , cefotaxime ⁸ , cefoxitin ⁸ , ceftaroline fosamil ³ , ceftriaxone ³ , dexamethasone ⁸ , esomeprazole ⁸ , foscarnet ⁸ , fosfomycin ⁸ , furosemide ^{1,3} , heparin sodium ¹ , hydrocortisone sodium succinate ⁸ , ibuprofen ⁸ , indometacin ⁸ , insulin (Actrapid) ⁸ , ketorolac ⁸ , micafungin ³ , piperacillin-tazobactam (EDTA-free) ⁸ , sodium bicarbonate ¹ , thiopental sodium ⁸

SPECIAL NOTES

Continuous cardiac monitoring is required during IV infusion.¹

Half life is 4 hours, duration of action is 6 hours but can be longer; monitor the patient for at least 6 hours after stopping the infusion.^{1,2}

Monitor blood pressure and heart rate every 5 to 10 minutes when giving by IV injection. Maximum effect occurs within 5 minutes.^{1,2}

Patients should remain lying down during and for up to 3 hours after IV administration. Orthostatic hypotension is likely to occur if the patient is tilted upward or allowed to stand during this period.^{1,2}

For patients at risk of cerebral oedema, avoid glucose solutions if possible. Excessive glucose can exacerbate cerebral oedema and may worsen brain injury in stroke patients.¹⁰

REFERENCES

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