

DEXMEDETOMIDINE

BRAND NAME	PRECEDEX, PRECEDEX READY TO USE, DEXMEDETOMIDINE EVER PHARMA, MYLAN, SANDOZ
DRUG CLASS	Alpha ₂ agonist
AVAILABILITY	Precedex, Mylan and Sandoz concentrate vials contains 200 microgram/2 mL of dexmedetomidine as dexmedetomidine hydrochloride. ¹ Dexmedetomidine Ever Pharma concentrate ampoule or vial contains 200 microgram/2 mL and vials contain 400 microgram/4 mL or 1 mg/10 mL of dexmedetomidine. ¹ Precedex Ready to Use vial or bottle contains 80 microgram/20 mL, 200 microgram/50 mL or 400 microgram/100 mL of dexmedetomidine as dexmedetomidine hydrochloride. ¹ All solutions also contains sodium chloride. The solutions are clear and colourless. ¹
WARNING	Use only where cardiac monitoring and cardiorespiratory resuscitation equipment are available ¹
pH	Concentrate: 4.5–7 ¹ Ready to use: 4.5–8 ¹
PREPARATION	Concentrated solutions must be diluted before use. ¹
STABILITY	Ampoule, vial and bottle: store below 25 °C. ¹ Infusion solution: stable for 24 hours at 2 to 8 °C. ^{1,2}
ADMINISTRATION	
IM injection	Not recommended
SUBCUT injection	Not recommended
IV injection	Not recommended
IV infusion	Dilute the 2 mL ampoule or vial with 48 mL of sodium chloride 0.9%, the 4 mL vial with 96 mL of sodium chloride 0.9% or the 10 mL vial with 240 mL of sodium chloride 0.9% to make a concentration of 4 microgram/mL. Shake gently to mix well. Precedex Ready to Use solutions do not require further dilution. Loading doses are infused at 0.5–1 microgram/kg over 10 to 20 minutes. Maintenance infusions are started at 0.4–0.6 microgram/kg/hour and desired clinical effect is usually achieved with rates of 0.2–1 microgram/kg/hour. ¹ Local practice may be different.³ Check and follow your local guidelines. Use an infusion pump. ¹
COMPATIBILITY	
Fluids	Glucose 5% ¹ , Hartmann's ¹ , mannitol 20% ¹ , sodium chloride 0.9% ¹
Y-site	Giving other drugs via Y-site may change the infusion rate of dexmedetomidine. Alfentanil ² , amikacin ² , aminophylline ² , amiodarone ² , ampicillin ² , azithromycin ² , aztreonam ² , calcium gluconate ² , cefazolin ² , cefepime ² , cefotaxime ² , cefoxitin ² , ceftazidime ² , ceftolozane-tazobactam ² , ceftriaxone ² , ciprofloxacin ² , cisatracurium ² , clindamycin ² , dexamethasone ² , digoxin ² , droperidol ² , ephedrine sulfate ² , erythromycin ² , esmolol ² , fentanyl ² , fluconazole ² , furosemide ² , gentamicin ² , glyceryl trinitrate ² , glycopyrronium ¹ , granisetron ² , heparin sodium ² , hydromorphone ² , isavuconazole ² , ketorolac ² , labetalol ² , lidocaine ² , linezolid ² , magnesium sulfate ² , methylprednisolone sodium succinate ² , metoclopramide ² , metronidazole ² , midazolam ² , milrinone ² , morphine sulfate ² , noradrenaline (norepinephrine) ² , pethidine ² , phenylephrine ¹ , piperacillin-tazobactam (EDTA-free) ² , potassium chloride ² , promethazine ² , ranitidine ² , remifentanyl ² , rocuronium ² , sodium bicarbonate ² , sodium nitroprusside ² , thiopental sodium ¹ , tobramycin ² , trimethoprim-sulfamethoxazole ² , vancomycin ² , vecuronium ¹ , verapamil ²
INCOMPATIBILITY	No information
SPECIAL NOTES	Continuous cardiac monitoring is recommended. ¹
REFERENCES	

1. Product information. Available from www.tga.gov.au. Accessed 29/10/2019.

2. McEvoy GK editor. Handbook on injectable drugs. 20th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2018.

3. O'Brien DW, Cotta MO, Choo L, Fowler S, Downey M, Tan I, Roberts J. Dexmedetomidine prescribing in Australian intensive care units. J Pharm Pract Res 2019;49:477-81.