



NEONATAL Medication Monograph

DOBUTamine

This document should be read in conjunction with this [DISCLAIMER](#)

Restricted: Requires Neonatologist review within 24 hours of initiation





⚠ HIGH RISK Medication

⚠ Ensure correct medication is selected, may be confused with Dopamine

Presentation	Ampoule: 250mg/20mL
Description	Sympathomimetic/Inotropic agent; vasodilator, used to increase cardiac output with myocardial dysfunction and unchanged or increased systemic vascular resistance
Indications	Cardiovascular shock Management of hypotension and hypoperfusion
Contraindications	Idiopathic hypertrophic sub-aortic stenosis Phaechromocytoma
Precautions	Vials contain sodium metabisulfite which may cause allergic reactions in susceptible patients Hypovolaemia and atrial fibrillation should be corrected before treatment
Dosage	Continuous IV Infusion: Initially 5 microgram/ kg/ minute then titrate according to response Maximum 20 microgram/kg/ minute
Dosage Adjustment	Adjust dose according to response
Adverse Reactions	Common: arrhythmias, hypertension, cutaneous vasodilation, tachycardia at high doses, tachycardia
	Serious: tissue ischaemia, hypotension if patient is hypovolemic
Interactions	Incompatible with acyclovir, benzylpenicillin, cefotaxime, sodium bicarbonate, indomethacin, piperacillin/tazobactam

Compatible Fluids	<p>Glucose 5%, Glucose 10%, Sodium Chloride 0.9%</p> <p><u>Compatibility with Heparin</u></p> <table border="1"> <thead> <tr> <th></th> <th>Sodium Chloride 0.9% with Heparin</th> <th>Glucose 5% with Heparin</th> <th>Glucose 10% with Heparin</th> </tr> </thead> <tbody> <tr> <td>Dobutamine</td> <td>24 hours at room temperature</td> <td>24 hours at room temperature</td> <td>No information</td> </tr> </tbody> </table>		Sodium Chloride 0.9% with Heparin	Glucose 5% with Heparin	Glucose 10% with Heparin	Dobutamine	24 hours at room temperature	24 hours at room temperature	No information
	Sodium Chloride 0.9% with Heparin	Glucose 5% with Heparin	Glucose 10% with Heparin						
Dobutamine	24 hours at room temperature	24 hours at room temperature	No information						
Preparation	<p><u>IV Infusion:</u> Available from CIVAS (KEMH/PCH)</p> <p>If unavailable prepare the below solution:</p> <p><i>Dilution</i></p> <p>Dilute 30mg (2.4mL) of dobutamine per kg of baby's weight and dilute to 50mL with a compatible fluid</p> <p><u>Concentration:</u></p> <p>0.5mL/hour = 5 microgram/ kg/ minute</p> <p>1mL/hour = 10 microgram/ kg/ minute</p> <p>E.g To prepare an infusion for a 780g infant Weight = 0.78kg Dose in Infusion = 30mg x 0.78kg = 23.4mg Dilute 23.4mg (≈ 1.8mL) to 50mL with a compatible fluid</p>								
Administration	Administer via continuous infusion via a syringe pump								
Monitoring	Continuous heart rate and blood pressure, urine output								
Storage	<p>Ampoule: Store at room temperature, below 25°C</p> <p>Diluted Solution: use immediately after preparation</p>								
Notes	Solutions of dobutamine may be pink and the colour will increase with time. There is no significant loss of potency over 24 hours. Discard solutions that are hazy or contain particles.								

References	<p>Plover C, Porrello E. Paediatric injectable guidelines 2019 ed. Flemington (Victoria): The Royal Children's Hospital Melbourne; 2019.</p> <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index : a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2019</p> <p>Truven Health Analytics. Dobutamine. In: Micromedex [Internet]. Greenwood Village (CO): Truven Health Analytics; 2020 [cited 2020 Jan 20]. Available from: http://www.micromedexsolutions.com/</p> <p>Society of Hospital Pharmacists of Australia. Dobutamine. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2020 Jan 20]. Available from: http://aidh.hcn.com.au</p>
-------------------	---

Keywords:	Dobutamine, cardiac shock, hypotension		
Publishing:	<input checked="" type="checkbox"/> Intranet	<input checked="" type="checkbox"/> Internet	
Document owner:	Head of Department - Neonatology		
Author / Reviewer:	KEMH & PCH Pharmacy / Neonatology Directorate		
Date first issued:	March 2008	Version:	3.0
Last reviewed:	January 2020	Next review date:	January 2023
Endorsed by:	Neonatal Directorate Management Group	Date:	January 2020
Standards Applicable:	NSQHS Standards: 1  Governance, 3  Infection Control, 4  Medication Safety, 8  Acute Deterioration		

Printed or personally saved electronic copies of this document are considered uncontrolled.

Access the current version from the WNHS website.

For any enquiries relating to this guideline, please email KEMH.PharmacyAdmin@health.wa.gov.au

© Department of Health Western Australia 2019