



NEONATAL Medication Monograph

DOPamine

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 DOBUTamine

Presentation	Ampoule: 200mg/5mL
Description	Inotropic agent that increases cardiac output and renal perfusion
Indications	<ul style="list-style-type: none"> • Severe Shock • Hypotension
Contraindications	Phaeochromocytoma
Precautions	<p>Vials contain sodium metabisulfite which may cause allergic reactions in susceptible patients</p> <p>Hypovolaemia should be corrected before treatment</p>
Dosage	<p>Continuous IV Infusion</p> <p>2-20 microgram/ kg/ minute</p> <p>Begin at 2-5microgram/ kg/ minute then titrate dose according to response</p> <p>Maximum: 20microgram/ kg/ minute</p>
Dosage Adjustment	Adjust dose according to response
Adverse Reactions	<p>Common: bradycardia/tachycardia, arrhythmias, hypertension , vasoconstriction , diuresis</p> <p>Serious: tissue ischaemia , hypotension if patient is hypovolemic</p>
Interactions	Incompatible with acyclovir, sodium bicarbonate, indomethacin

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>Dopamine</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	Dopamine	24 hours at room temperature	24 hours at room temperature	No Information
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Preparation	<p><u>IV Infusion:</u> Available from CIVAS (KEMH/PCH) If unavailable prepare the below solution:</p> <p><i>Dilution</i> Dilute 30mg (0.75mL) of dopamine per kg of baby's weight and dilute to 50mL with a compatible fluid</p> <p><u>Concentration:</u> 0.5mL/hour = 5 microgram/ kg/ minute 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 (≈ 0.59mL) to 50mL with a compatible fluid</p>								
Administration	Administer via continuous infusion via a syringe pump								
Monitoring	Continuous cardiac monitoring, blood pressure, urine output								
Storage	Ampoule: Store at room temperature, below 25°C								
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>								

References	<p>Truven Health Analytics. Dopamine. 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. Dopamine. 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>
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