Dobutamine

Neonatal

FORM Ampoule containing 250mg in 20ml

INDICATION Treatment of hypotension

DOSE RANGE

AGE	DOSE	FREQUENCY	ROUTE
Birth to 6 months	*Start at 4microgram/kg/minute increasing in 2 - 4 microgram/kg/minute increments to a maximum of 20 microgram/kg/minute	Continuous infusion	IV

*Dose adjusted according to patient's response. Higher starting doses and/or increments may be required on advice of a Consultant and should be documented fully in the case record.
It is advisable to reduce the dosage of Dobutamine gradually rather than stop abruptly.

PRESCRIPTION OF CONTINUOUS INFUSION

Single Strength	**30mg/kg in 50ml**	**1ml/hr** = 10microgram/kg/min
Double Strength	**60mg/kg in 50ml**	**0.5ml/hr** = 10microgram/kg/min
Quadruple Strength	**120mg/kg in 50ml**	**0.25ml/hr** = 10microgram/kg/min

RECONSTITUTION Already in solution. **MUST be diluted prior to use**

DILUTION

SINGLE STRENGTH
Using 250mg/20ml injection
2.4 x wt (kg) is the number of ml of 250mg/20ml to be diluted up to 50ml total with infusion fluid (equivalent to **30mg/kg in 50ml**)

DOUBLE STRENGTH
Using 250mg/20ml injection
4.8 x wt (kg) is the number of ml of 250mg / 20ml to be diluted up to 50ml total with infusion fluid (equivalent to **60mg/kg in 50ml**)

QUADRUPLE STRENGTH
Using 250mg/20ml injection
9.6 x wt (kg) is the number of ml of 250mg / 20ml to be diluted up to 50ml total with infusion fluid (equivalent to **120mg/kg in 50ml**)

METHOD OF ADMINISTRATION

By continuous intravenous infusion, flow rate adjusted according to the baby's response (see prescription section for details).

Low doses ***may be administered peripherally*** via a large vein with careful observation of the infusion site. If the concentration of solution is more than 1.6mg/ml (i.e. 80mg in 50ml) it should be administered centrally. Monitor for signs of peripheral ischaemia.

WARNING:- DO NOT FLUSH THROUGH A LINE CONTAINING DOBUTAMINE AS IT IS A POTENT DRUG AND MAY CAUSE SERIOUS PROBLEMS.

COMPATIBILITY

Solution compatibility	Sodium chloride 0.45%, Sodium chloride 0.9%, Glucose 5%, Glucose 10%, TPN (Used in practice – no published data)
Solution incompatibility	No information
IV Line compatibility	Adrenaline, Amiodarone, Atracurium, Caffeine Citrate, Clonidine, Dopamine, Fentanyl, Glyceryl Trinitrate, Insulin, Isoprenaline, Midazolam, Milrinone, Morphine, Naloxone, Noradrenaline, Potassium Chloride, Sodium Nitroprusside, Vecuronium Used in practice (no published data) – Dinoprostone Compatible in Sodium Chloride 0.9% only – Heparin, Hydralazine
IV Line incompatibility	Aciclovir, Aminophylline, Furosemide, Sodium bicarbonate.

THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED

CAUTIONS, CONTRA-INDICATIONS AND SIDE EFFECTS

See Summary of Product Characteristics and most recent edition of BNF for Children (links below)

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FURTHER INFORMATION

- Monitor heart rate and rhythm, arterial blood pressure, peripheral perfusion, urinary output, renal and hepatic function.
- Correct hypovolaemia prior to Dobutamine therapy.
- The dose of dobutamine should be reduced, or the drug discontinued temporarily, if urinary flow begins to decrease in the absence of hypotension, if an undue increase in diastolic blood pressure occurs (unless such an effect is desired), or if an arrhythmia is precipitated.
- Avoid extravasation as this may cause necrosis and sloughing of the surrounding tissue.
- Dobutamine solution may appear pink. This is due to oxidation of the drug and does not affect potency.
- Peripheral Infusions of Inotropic doses should be avoided as vasoconstriction and gangrene of the fingers or toes may occur.

PH 2.5 – 5.5

LICENSED STATUS Not licensed for use in children

LINKS BNF for Children / Electronic Medicines Compendium:

APPLICABLE POLICIES West of Scotland Neonatal Guidelines:

Consult local policy if applicable

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Updated by	Peter Mulholland	Review Date	May 2020

Administer reconstituted solutions immediately.
All vials, ampoules and infusion bags are for single use only unless otherwise stated.
Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.
This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.