

## Dopamine

**FORM** Ampoule contains 200mg in 5ml  
**NB. Caution as higher strength is available**

**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 Dopamine gradually rather than stop abruptly.

**PRESCRIPTION OF CONTINUOUS INFUSION**

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

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

**DILUTION**

**SINGLE STRENGTH**

**Using 200mg/5ml injection**

0.75 x wt (kg) is the number of ml of 200mg/5ml to be diluted up to 50ml total with infusion fluid (equivalent to **30mg/kg in 50ml**)

**DOUBLE STRENGTH**

**Using 200mg/5ml injection**

1.5 x wt (kg) is the number of ml of 200mg/5ml to be diluted up to 50ml total with infusion fluid (equivalent to **60mg/kg in 50ml**)

**QUADRUPLE STRENGTH**

**Using 200mg/5ml injection**

3 x wt (kg) is the number of ml of 200mg/5ml 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 DOPAMINE AS IT IS A POTENT DRUG AND MAY CAUSE SERIOUS PROBLEMS.**

# West of Scotland NEONATAL Parenteral Drug Monographs

## COMPATIBILITY

<b>Solution compatibility</b>	Sodium chloride 0.45%, Sodium chloride 0.9%, Glucose 5%, Glucose 10%, TPN (Used in practice – no published data)
<b>Solution incompatibility</b>	No information
<b>IV Line compatibility</b>	Adrenaline, Amiodarone, Atracurium, Caffeine Citrate, Clonidine, Dobutamine, Fentanyl, Fluconazole, Glycerol Trinitrate, Heparin, Labetalol, Meropenem, Metronidazole, Midazolam, Milrinone, Morphine, Naloxone, Noradrenaline, Potassium Chloride, Sodium Nitroprusside, Vecuronium. Used in practice (no published data) – Calcium Gluconate, Dinoprostone, Hydralazine, Isoprenaline. Compatible in Glucose 5% only – Gentamicin.
<b>IV Line incompatibility</b>	Aciclovir, Furosemide, Insulin, 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)

## FURTHER INFORMATION

- Monitor heart rate and rhythm, arterial blood pressure, peripheral perfusion, urinary output, renal and hepatic function.
- Correct hypovolaemia prior to dopamine therapy.
- The dose of dopamine 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.
- Only clear solutions should be used. Discard discoloured solutions.
- Peripheral Infusions of Inotropic doses should be avoided as vasoconstriction and gangrene of the fingers or toes may occur.

## STORAGE

The injection solution may be stored at room temperature. Once diluted the infusion solution is stable for 24 hours at room temperature.

## PH

3.0-5.0

## LICENSED STATUS

Not licensed for use in children under 12 years.

## LINKS

[BNF for Children](#) / [Electronic Medicines Compendium](#):

## APPLICABLE POLICIES

[West of Scotland Neonatal Guidelines](#):

Consult local policy if applicable

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### **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.