Epoprostenol

Neonatal

FORM Vial containing 500micrograms with 50ml vial of glycine buffer diluent

INDICATION Pulmonary Hypertension

DOSE RANGE

AGE	DOSE	FREQUENCY	ROUTE
Birth – 6months	2 – 5 nanograms/kg/min increased gradually according to response to maximum of 20nanograms/kg/min	Continuous infusion	IV

PRESCRIPTION OF CONTINUOUS INFUSION

Patients < 2kg = 150microgram/kg in 50ml sodium chloride 0.9%
This gives:-

- 5nanograms/kg/min at 0.1ml/hr
- 20nanograms/kg/ming at 0.4ml/hr

Patients ≥ 2kg = 60micrograms /kg in 50ml sodium chloride 0.9%
This gives:-

- 2nanograms/kg/min at 0.1ml/hr
- 5nanograms/kg/min at 0.25ml/hr

RECONSTITUTION

1. Draw 10ml of the glycine buffer diluent provided into a syringe and add this to the vial containing the epoprostenol powder. Shake gently to dissolve.
2. Once the contents have dissolved, draw up all the solution and add to the remaining volume of the diluent.
3. Mix well. This will give a concentration of 10 micrograms/ml (= 10,000 nanograms/ml). This is known as the concentrated solution.
4. Draw up all of the concentrated solution into a syringe
5. Attach the filter provided to the end of this syringe and transfer the volume required (as below) to a new syringe
6. Draw up 0.9% sodium chloride to make this volume up to 50ml

DILUTION

For continuous Infusion

Neonates weighing less than 2kg
Using the concentrated solution:
15 x wt (kg) is the number of ml of epoprostenol to be diluted up to 50ml total with sodium chloride 0.9% (equivalent to **150micrograms/kg in 50ml**)

NOTE: Not suitable for babies less than 550g as product cannot exceed 1:6 dilution. Consult pharmacist for advice.

Neonates weighing more than or equal to 2kg
Using the concentrated solution:
6 x wt (kg) is the number of ml of epoprostenol to be diluted up to 50ml total with sodium chloride 0.9% (equivalent to **60micrograms/kg in 50ml**)

METHOD OF ADMINISTRATION	**For continuous Infusion** By continuous intravenous infusion, flow rate adjusted according to the baby's response (see prescription section for details).

COMPATIBILITY

Solution compatibility	Do not infuse with any other medicines or infusion fluids
Solution incompatibility	
IV Line compatibility	Do not infuse with any other medicines or infusion fluids
IV Line incompatibility	

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	Manufacturer advises that there is a 10% loss of potency within 12 hours of preparation. In practice this loss may be compensated for by adjustment of the infusion rate as appropriate.
STORAGE	Powder and solvent must be stored below 25^{o}C and kept in their packaging, protected from light. Reconstituted solution **must be used within 12 hours** and therefore for daily IV infusions, **syringes must be prepared TWICE daily**.
PH	10.5
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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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.