

Vecuronium

FORM Vial containing 10mg powder for reconstitution

INDICATION Muscle relaxation

DOSE RANGE

AGE	DOSE	FREQUENCY	ROUTE
Birth - 1 month	80-100microgram/kg	Initial dose then further IV boluses or continuous infusion (see below)	IV
	30-50microgram/kg	Further doses if necessary according to patient response	IV
1- 6months	80-100microgram/kg	Initial dose then further IV boluses or continuous infusion(see below)	IV
	20-30microgram/kg	Further doses if necessary according to patient response	IV
Birth – 6 months	60 -100microgram/kg/hour	Continuous Infusion	IV

PRESCRIPTION OF CONTINUOUS INFUSION

SINGLE STRENGTH = 10mg/kg in 50ml infusion fluid

This gives:-

- 60 microgram/kg/hour at 0.3ml/hr
- 100 microgram/kg/hour at 0.5ml/hour

DOUBLE STRENGTH = 20mg/kg in 50ml infusion fluid

This gives:-

- 60 microgram/kg/hour at 0.15ml/hr
- 100 microgram/kg/hour at 0.25ml/hour

RECONSTITUTION

Reconstitute with 5ml sterile water. This gives a 2mg/ml solution

DILUTION

For continuous Infusion

SINGLE STRENGTH

Using Vecuronium 2mg/ml solution

5 x wt (kg) is the number of ml of Vecuronium 2mg/ml solution to be diluted up to 50ml total with a compatible infusion fluid (equivalent to **10mg/kg in 50ml**)

DOUBLE STRENGTH

Using Vecuronium 2mg/ml solution

10 x wt (kg) is the number of ml of Vecuronium 2mg/ml solution to be diluted up to 50ml total with a compatible infusion fluid (equivalent to **20mg/kg in 50ml**)

For Slow IV Injection

Vecuronium 10mg in 5ml	5ml
Water for Injection	Up to 10ml total

Gives a 1mg in 1ml solution. Use the required volume.

- 0.1ml = 100micrograms

West of Scotland NEONATAL Parenteral Drug Monographs

METHOD OF ADMINISTRATION	<u>For continuous infusion</u> By continuous intravenous infusion, flow rate adjusted according to the baby's response (see prescription section for details). <u>For slow IV injection</u> By slow IV injection over 5 minutes. <u>For slow IV injection from the continuous infusion</u> As above for slow IV injection OR given from the continuous infusion syringe (see above) as: 0.5ml over 5 minutes (100micrograms/kg) – SINGLE STRENGTH or 0.25ml over 5 minutes (100micrograms/kg) – DOUBLE STRENGTH <u>Hands free bolus from infusion</u> SINGLE strength infusion: 0.5ml at rate of 10ml/hr over 3 minutes = 100mcg/kg DOUBLE strength infusion - hands free bolus not possible
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COMPATIBILITY

Solution compatibility	Sodium chloride 0.45%, Sodium chloride 0.9%, Glucose 5%, Glucose 10%.
Solution incompatibility	No information
IV Line compatibility	Adrenaline, Amiodarone, Clonidine, Dopamine, Dobutamine, Fentanyl, Fluconazole, Gentamicin, Heparin, Insulin, Isoprenaline, Labetalol, Midazolam, Milrinone, Morphine, NorAdrenaline, Sodium Nitroprusside, Vancomycin (in Glucose only)
IV Line incompatibility	Aciclovir, Alkaline solutions, Amphotericin, Ampicillin, Furosemide, Sodium bicarbonate Thiopental.

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

- Neonates have an increased sensitivity to non-depolarising muscle relaxants-care is required
- Aminoglycoside antibiotics, metronidazole and calcium antagonists may prolong the effect of vecuronium
- Babies on vecuronium infusion should also be prescribed Hylo-Night to both eyes for the duration of the infusion

PH

4 (reconstituted 2mg/ml solution)

LICENSED STATUS

Licensed product. Use for assisted ventilation in intensive care is off-label

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.