# West of Scotland NEONATAL Parenteral Drug Monographs

# Rocuronium

**FORM** Vial containing 50mg in 5ml

INDICATION Muscle Relaxation (ONLY USE WHEN VECURONIUM NOT AVAILABLE)

**DOSE RANGE** 

#### **SLOW IV INJECTION**

AGE	DOSE	FREQUENCY	ROUTE
Neonate	600micrograms/kg	Initial dose then further doses or continuous infusion (see below)	IV
Neonate	100-150micrograms/kg	Every 2 to 4 hours as necessary	IV

#### **CONTINUOUS INFUSION**

AGE	DOSE	FREQUENCY	ROUTE
0 – 6 months	Starting dose 300micrograms/kg/hour  Dose can be increased by 100micrograms/kg/hour increments if necessary for adequate clinical effect to a maximum of 600micrograms/kg/hour	Continuous Infusion (see below)	IV

NB. Daily Rocuronium 'holidays' should be considered.

To achieve a holiday, stop the infusion until evidence of reversal of neuromuscular blockade is observed (e.g. spontaneous breathing or any other movement), then restart without increasing original dose

Aim to use the lowest possible dose & regular Rocuronium holidays to obtain a desired level of blockade while limiting risk of adverse effects or prolonged blockade.

PRESCRIPTION OF CONTINUOUS INFUSION

50mg/kg in 50ml infusion fluid

This gives:-

- 300microgram/kg/hour at 0.3ml/hr
- 600microgram/kg/hour 0.6ml/hr

**RECONSTITUTION** 

Already in solution

**DILUTION** 

For Slow IV injection

Rocuronium 10mg/ml inj.	1ml	
Glucose 5%	Up to 10ml total	

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

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### For continuous Infusion

### Using 50mg in 5ml injection

5 x wt (kg) is the number of ml of 50mg in 5ml to be diluted up to 50ml

total with infusion fluid (equivalent to 50mg/kg in 50ml)

# METHOD OF ADMINISTRATION

#### Slow IV injection

Bolus doses can be given as a separate bolus (pg 1) or given from the continuous infusion syringe (above) e.g. 0.6ml (600micrograms/kg) over

5 minutes.

(PRM use 600 microgram/kg and Hands Free bolus to give this IV bolus

at 10 ml/hr over 3 minutes 36 seconds)

## For continuous infusion

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

#### **COMPATIBILITY**

Solution compatibility	Glucose 5%, Sodium Chloride 0.9%	
Solution incompatibility	No info	
IV Line compatibility	Amiodarone, Aprotinin, Milrinone, Morphine,	
IV Line incompatibility	Furosemide, Insulin, Vancomycin	

# 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**

- Onset of action is usually within 2minutes with intermediate duration of action.
- Onset of action is shortened and duration is prolonged as the dose increases.
- Prolonged neuromuscular blockade may be reversed by use of sugammadex (seek advice).
- Neonates have an increased sensitivity to non-depolarising muscle relaxants-care is required

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LICENSED STATUS Unlicensed

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.

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