



NEONATAL

VECURONIUM

**WARNING:
Paralysing Agent**

This document should be read in conjunction with this [DISCLAIMER](#)

Highly Restricted: Requires Neonatologist approval before commencing




⚠ HIGH RISK Medication

Inadvertent use in patients without the availability of medical staff skilled in airway support can lead to respiratory arrest, permanent harm, or death.

Presentation	Vial: 10mg powder for reconstitution
Classification	Non-depolarising neuromuscular blocking agent producing skeletal muscle paralysis. Causes less tachycardia and hypotension than pancuronium.
Indication	<ul style="list-style-type: none"> Skeletal muscle relaxation or paralysis in mechanically ventilated infants and infants that are difficult to ventilate Moderately-severe to severe respiratory distress requiring increased ventilator settings
Dose	<p><u>Difficulty ventilating/ Respiratory distress</u></p> <p>IV:</p> <p>Intermittent dosing: 30 -150 microgram /kg /dose</p> <p>Usual dose: 100 microgram/kg</p> <p>Dose may be repeated at intervals of 1 to 2 hours as needed for paralysis.</p> <p>Continuous IV infusion:</p> <p>Infusion rate: 1 – 1.5 microgram/kg/minute</p>
Monitoring	Monitor vital signs frequently, blood pressure continuously.
Compatible Fluids	Glucose 5%, Sodium chloride 0.9%

Preparation	<p><u>IV:</u> Reconstitute the 10mg vial with 10mL of Water for Injections Concentration is 10mg/10mL = 1mg/mL</p> <p><u>IV Infusion:</u> Available from CIVAS (KEMH & PCH) If unavailable prepare as follows:</p> <p><i>Step 1: Reconstitution</i> Reconstitute the 10mg vial with 10mL of Water for Injections Concentration is 10mg/10mL = 1mg/mL</p> <p><i>Step 2: Dilution</i> Withdraw 6mg of vecuronium per kg of baby's weight (6mL/kg) and dilute to 50mL with appropriate infusion fluid. This will give the following infusion rates:</p> <ul style="list-style-type: none"> • 0.5 mL/hour = 1 microgram / kg / min • 1 mL/hour = 2 microgram / kg / min • 2 mL/hour = 4 microgram / kg / min • <p>If a different concentration is required, refer to Calculation of the Composition of Medication Infusions</p>
Administration	<p><u>IV:</u> Over 5-10 seconds Onset of action: 1-2 minutes</p> <p><u>Continuous infusion</u> - <i>as per prescribed infusion rate</i></p>
Adverse Reactions	<p>Common:, heart rate and blood pressure may decrease when used with opioids Serious: masking of convulsions</p>
Storage	<p>Store at room temperature, below 25°C</p>
Interactions	<p>Aminoglycosides; general anaesthetics, corticosteroids: potentiation of neuromuscular blockade: Adrenaline: antagonism of neuromuscular blockade:.</p>
Notes	<ul style="list-style-type: none"> • Protect from light. • Discard reconstituted vial immediately after use • Use in conjunction with lubricating eye drops during paralysis • Antidote: Neostigmine (See protocol)

References	<p>Truven Health Analytics. Vecuronium. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2019 Sep 3]. Available from: https://neofax.micromedexsolutions.com/</p> <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index: a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2401. 2,p2021-2023.</p> <p>Society of Hospital Pharmacists of Australia. Vecuronium. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2019 Sep 3]. Available from: http://aidh.hcn.com.au</p>
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