



NEONATAL Medication Monograph

OCTREOTIDE

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

Highly Restricted: Requires Neonatologist or Endocrinologist approval before commencing




⚠ There are different strengths and formulations used for different indications and given by different routes. Check product selection carefully.

⚠ Short Acting Formulations Only to be used in Infants

Presentation	Ampoule: 100microgram/mL – Short Acting
Description	Somatostatin analogue - Inhibit release of growth hormone and of various peptides of the gastroenteropancreatic endocrine system (including insulin)
Indications	<ul style="list-style-type: none"> • Refractory hyperinsulinaemic hypoglycaemia • Chylothorax • Short Bowel Syndrome
Contraindications	Hypersensitivity to Octreotide
Precautions	Fat malabsorption – monitor for pancreatitis May affect glucose regulation in patients with Type 1 Diabetes
Dosage	<p><u>Refractory hyperinsulinaemic hypoglycaemia:</u></p> <p>Subcut/IV injection: 1 to 5 microgram/ kg/ dose every 6 hours Titrate according to response Maximum: 10 microgram /kg / dose every 6 hours</p> <p><u>Chylothorax:</u></p> <p>Continuous IV infusion: Initially, 1microgram/ kg/ hour. Titrate dose upwards according to response Maximum dose: 10microgram/ kg/ hour.</p>
Dosage Adjustment	Titrate according to response in line with above maximum doses

Adverse Reactions	Local reaction at injection site. GI side effects – vomiting, diarrhoea, and abdominal discomfort.
Compatible Fluids	Sodium Chloride 0.9%, Glucose 5% <i>NB: Sodium chloride 0.9% is the preferred infusion fluid for most indications as octreotide inhibits the release of insulin and affects blood glucose regulation</i>
Preparation	<p><u>Subcut injection:</u></p> <p>Use the concentration with the smallest volume to deliver dose to reduce injection site pain.</p> <p><u>IV Injection:</u></p> <p>Inject undiluted over 3 mins in emergency situations.</p> <p><i>For Intermittent doses:</i></p> <p>Dilute 1mL (100 microgram) of octreotide to a final volume of 20mL with Sodium Chloride 0.9%</p> <p>Concentration is 100microgram/20mL = <u>5microgram/mL</u></p> <p><u>IV Infusion:</u></p> <p>Dilute 50 microgram (0.5mL) of octreotide per kilogram of baby's weight and dilute to 50mL with Sodium Chloride 0.9%</p> <p>Concentration = 1mL/hr = 1microgram/kg/hour</p>
Administration	<p><u>Subcut:</u></p> <p>As per neonatal guidelines</p> <p><u>IV Injection:</u></p> <p>Inject undiluted over 3 mins in emergency situations. For all other doses, administer over 15 to 30 minutes</p> <p><u>IV Infusion:</u></p> <p>Give continuously via a syringe pump</p>
Monitoring	Blood glucose, thyroid function, liver function, urea and electrolytes, signs and symptoms of necrotising enterocolitis
Storage	Refrigerate between 2-8°C. Protect from light. Infusion solution is stable for 24 hours at room temperature (25°C) in sodium chloride 0.9%

Notes	Chyle production should decrease significantly within 24 hours.
Related clinical guidelines	Hypoglycaemia
References	<p>Truven Health Analytics. Octreotide. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2020 [cited 2020 Apr 06]. Available from: https://neofax.micromedexsolutions.com/</p> <p>Australian Medicines Handbook. Octreotide. In: Australian Medicines Handbook Children's Dosing Companion [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2020 [cited 2020 Apr 06]. Available from: https://childrens.amh.net.au/</p> <p>Society of Hospital Pharmacists of Australia. Octreotide In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2020 [cited 2020 Apr 06]. Available from: http://aidh.hcn.com.au</p> <p>Octreotide. In British national formulary for children Joint Formulary Committee (Aprtember 2018-19) BNF 74: Aprtember 2018-19. London: Pharmaceutical Press</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; 2017. 1456 p.</p>

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