



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 $100\text{microgram}/20\text{mL} = \underline{5\text{microgram/mL}}$</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>

Keywords:	Hypoglycaemia, chylothorax		
Publishing:	<input checked="" type="checkbox"/> Intranet	<input checked="" type="checkbox"/> Internet	
Document owner:	Head of Department - Neonatology		
Author / Reviewer:	KEMH & PCH Pharmacy / Neonatology Directorate		
Date first issued:	October 2008	Version:	3.0
Last reviewed:	April 2020	Next review date:	April 2023
Endorsed by:	Neonatal Directorate Management Group	Date:	April 2020
Standards Applicable:	NSQHS Standards: 1  , 4  , 8  Acute Deterioration		

Printed or personally saved electronic copies of this document are considered uncontrolled.

Access the current version from the WNHS website.

For any enquiries relating to this guideline, please email KEMH.PharmacyAdmin@health.wa.gov.au

© Department of Health Western Australia 2020