OCTREOTIDE This drug must be guardrailed

<table>
<tr><td>Trade Name</td><td>Octreotide MaxRx Injection (Max Pharma)</td></tr>
<tr><td>Class</td><td>Synthetic somatostatin analogue</td></tr>
<tr><td>Mechanism of Action</td><td>Uncertain. Proposed that it causes mild vasoconstriction of splanchnic vessels leading to reduction in gastric, pancreatic and intestinal secretions, resulting in reduced chyle flow.</td></tr>
<tr><td>Indications</td><td>Indication 1: Refractory chylothorax not responding to conservative management.

Indication 2: Persistent hyperinsulinaemic hypoglycaemia – resistant or unresponsive to other measures such as diazoxide or glucagon</td></tr>
<tr><td>Contraindications</td><td>Hypersensitivity to octreotide or to any component of the formulation.</td></tr>
<tr><td>Supplied As</td><td>0.5mg/mL ampoule – first choice for continuous infusion

Also supplied as 0.05mg/mL ampoule or 0.1mg/mL ampoule which may be preferred for use for subcutaneous injections</td></tr>
<tr><td>Dilution</td><td>Indication 1:

<table>
<tr><th>Drug</th><th>0.9% Saline</th><th>Total Volume</th><th>Concentration</th></tr>
<tr><td>0.5mg (1mL)</td><td>49mL</td><td>50mL</td><td>10 microgram/mL</td></tr>
</table>

If need to restrict fluids
<table>
<tr><th>Drug</th><th>0.9% Saline</th><th>Total Volume</th><th>Concentration</th></tr>
<tr><td>0.5mg (1mL)</td><td>19mL</td><td>20mL</td><td>25 microgram/mL</td></tr>
</table>

Print off separate octreotide infusion sheet for charting and dosing rates
Can also dilute with 5% dextrose but saline preferred

Indication 2:
Use undiluted after bringing to room temperature</td></tr>
<tr><td>Dosage

Must chart guardrail and use Alaris pump</td><td>Indication 1: Start at 3 microgram/kg/hour and increase daily as necessary to a max. of 10 microgram/kg/hour. Taper dose over 2-4 days

Indication 2: Start at 2 microgram/kg/dose and increase as needed up to 10 microgram/kg/dose. Maximum dose 40 microgram/kg/day</td></tr>
</table>

Guardrails	Min Conc: 10 microgram/mL Max Conc: 25 microgram/mL Soft Min: 1 microgram/kg/hr Hard Max: 12 microgram/kg/hr Soft Max: 10 microgram/kg/hr Default: 3 microgram/kg/hr
Interval	**Indication 1:** Continuous IV infusion **Indication 2:** 6-8 hourly
Administration	**Indication 1:** IV infusion **Indication 2:** Subcutaneous injection – rotate site of injection
Compatible With	**Solutions:** sodium chloride 0.9%, glucose 5% (there is no data on compatibility with other concentrations of these fluids or any other solutions. **Terminal Y-site:** aciclovir, adrenaline, amikacin, aminophylline, amiodarone, amphotericin B, azithromycin, calcium chloride, calcium gluconate, cefazolin, cefotaxime, cefotetan, ceftazidime, cefuroxime, ciprofloxacin, clindamycin, dexamethasone, dexmedetomidine, digoxin, dobutamine, dopamine, erythromycin fentayl, fluconazole, furosemide, ganciclovir, gentamicin, heparin, hydrocortisone, imipenem, lidocaine, magnesium sulphate, meropenem, methylprednisolone, metronidazole,midazolam, milrinone, morphine,naloxone, noradrenaline, ondansetron, pancuronium, phenobarbital,piperacillin, potassium chloride, potassium phosphate, ranitidine, sodium bicarbonate, sodium phosphate, ticarcillin, tobramycin, TPN, vancomycin, vasopressin, voriconazole, zidovudine.
Incompatible With	Diazepam, lipid, phenytoin
Interactions	Limited data suggest that octreotide might inhibit cytochrome P450. Drugs mainly metabolized by CYP3A4 and which have a low therapeutic index should be used with caution.
Monitoring	Monitor blood glucose closely, Vitamin B12 levels may become decreased in some patients.
Stability	Single use only. Unopened ampoules are stable at room temp for up to 2 wks. Stable in Sodium Chloride 0.9% (preferred) or Dextrose 5% for 24 hours at room temperature or at 2-8°C.
Storage	Refrigerate. Protect from light.
Adverse Reactions	Hyperglycemia, diarrhoea, vomiting, abdominal distension, steatorrhea, increased risk of developing gallstones (15 – 30%) with prolonged treatment, local injection site reactions.
Metabolism	Extensive hepatic metabolism, 30% excreted unchanged in urine.
Comments	Octreotide MaxRx Injection may be given either by subcutaneous injection or IV infusion

References	1. Neofax 2007, 20th Edition + Neofax in www.micromedexsolutions.com 2. Pediatric Dosage Handbook (Lexi-Comp), 2003 3. Notes on Injectable Drugs 5th Edition + www.noids.nz 4. Sandostatin Data Sheet 5. BNF for Children 2006 6. Trissel IV compatibilities in www.micromedexsolutions.com
Updated By	A Lynn, B Robertshawe, F Robertson June 2009, September 2009 A Lynn, B Robertshawe August 2010 (increase conc. allowed) A Lynn, B Robertshawe Dec 2012 (re-order profile) A Lynn B Robertshawe Oct 2021 (update Iv compatibilities)