**Name of medicine**  
octreotide and lanreotide (somatostatin analogues)

**Indication**  
for the treatment of neuroendocrine tumours

**Version:** 1.0  
**Approval date:** November 2013  
**Review date:** November 2016

The Shared Care Agreement (SCA) is intended to facilitate the accessibility and safe prescribing of complex treatments across the secondary/primary care interface. It does not contain all of the relevant product information, which should be sought using the current British National Formulary and manufacturer’s Summary of Product Characteristics. The SCA must be used in conjunction with the NHS Lothian Policy and Procedures for the Shared Care of Medicines, available at: [http://intranet.lothian.scot.nhs.uk/NHSLothian/NHSLothian/BoardCommittees/AreaDrugTherapeutics/Pages/ADTCRelatedDocuments.aspx](http://intranet.lothian.scot.nhs.uk/NHSLothian/NHSLothian/BoardCommittees/AreaDrugTherapeutics/Pages/ADTCRelatedDocuments.aspx)

### Roles and Responsibilities

Listed below are specific responsibilities that are additional to those included in the NHS Lothian Policy and Procedures for Shared Care. Please refer to the policy for core roles and responsibilities that apply to all Shared Care Agreements.

**Consultant**
- Assessment of the need for somatostatin analogue therapy
- Recommending treatment with somatostatin analogues
- Liaising with the GP to share care and assure appropriate administration of the drug
- Arrange administration of first dose of somatostatin analogue in secondary care
- Reviewing the patient

**General Practitioner**
- Prescribing the somatostatin analogue
- Administering the somatostatin analogue (in conjunction with the practice nurse where appropriate)
- Liaising with the hospital consultant regarding any complication of therapy

**Patient, Relatives, Carers**
- Report any adverse effects to GP or hospital consultant

### Support and Advice for the GP

For information on your patients’ clinical management contact the referring Consultant’s secretary:  
Dr Strachan 0131 537 2810, Dr Wall 0131 537 3916 or go via the WGH switchboard - 0131 537 1000  
Pharmacy Dispensary, Edinburgh Cancer Centre, WGH 0131 537 3096

### Key information on the medicine


**Background to disease and use of drug for the given indication**

Secretion from many endocrine tumours is inhibited by natural somatostatin. Octreotide and lanreotide are analogues of somatostatin effective in reducing peptide hormone secretion from gastroenteropancreatic and carcinoid tumours.

**Indication**

Treatment is indicated for the management of symptoms associated with gastro-enteropancreatic neuroendocrine tumours. In addition there is increasing evidence that the use of somatostatin analogues affect the natural history of this condition.

**Dosage and Administration: Short-acting octreotide**

Short-acting octreotide is available as ampoules for subcutaneous injection. Administration produces rapid symptom response in the majority of patients. The initial dose is 50 micrograms 1-2 times daily by subcutaneous injection gradually increasing to 200 micrograms 3 times daily. This is rarely used in the long-term as the majority of patients are rapidly converted to long-acting analogues. Subcutaneous octreotide is prescribed and supplied by the hospital. Although in the past most patients were commenced on octreotide prior to the commencement of long acting somatostatin analogues, the majority of patients are now commenced directly on the long acting analogues.
Key information on the medicine (Continued)

**LJF 1st choice: Long-acting octreotide**
Sandostatin LAR® 10mg, 20mg and 30mg is provided as a powder for reconstitution. The usual starting dose is 20mg every 28 days, which may be adjusted according to response. It is administered by deep intramuscular depot injection, sites should be alternated between right and left gluteal muscle.
The costs are 10mg-£427.13, 20mg-£705.50 and 30mg- £903.13 (all ex VAT).

**LJF 2nd Choice: Long-acting lanreotide**
Somatuline® Autogel® 60mg, 90mg or 120mg is available as a pre-filled syringe. The usual starting dose is 60mg every 28 days, which may be adjusted according to response. It is administered by deep subcutaneous depot injection into the superior external quadrant of the buttock.
The costs are 60mg-£551, 90mg-£736 and 120mg £937 (all ex VAT)

At the start of therapy patients will receive depot injections every 28 days, but the frequency and dose can be altered in response to degree of symptomatic control.

**Storage and administration information**
- Follow specific manufacturer’s instructions
- Both preparations can be obtained from the wholesaler by a community pharmacist
- Store between 2 and 8°C protected from light
- Bring to room temperature prior to administration

**Monitoring**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse &amp; blood pressure (check for bradycardia)</td>
<td>2 weeks after 1st dose and prior to administration of injections</td>
<td>Discuss with Consultant if symptomatic</td>
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<tr>
<td>Full blood count (if macrocytosis identified check for vitamin B12 deficiency)</td>
<td>3 months after the start of treatment then annually.</td>
<td>Supplementation with B12 / folate if deficiency identified.</td>
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**Cautions, contraindications**
- Pregnancy and breast feeding
- Depressed vitamin B₁₂ levels and abnormal Schilling’s tests have been observed in some patients receiving octreotide therapy. Monitoring of vitamin B₁₂ levels is recommended during therapy with Sandostatin LAR® in patients who have a history of vitamin B₁₂ deprivation

**Drug interactions**
- Somatostatin analogues may reduce the intestinal absorption of ciclosporin and delay the absorption of cimetidine
- Uncommon cases of bradycardia have been reported. Dose adjustments of drugs such as beta-blockers, calcium channel blockers, or agents to control fluid and electrolyte balance, may be necessary

**Adverse effects**

**Very common (>1/10)**
- Somatostatin analogues can inhibit the secretion of insulin and glucagon therefore impaired glucose tolerance is a common consequence of treatment and diabetic patients may require a dose adjustment of their diabetic medication. There is a small risk of significant transient hypoglycaemia following the first injection
- Diarrhoea, abdominal pain, nausea, constipation, flatulence
- Injection site reactions – pain, swelling, rash
- Headache

**Common (> 1/100, < 1/10)**
- Slight decrease in thyroid function – usually asymptomatic
- Dyspepsia, vomiting, abdominal bloating, loose stools, discolouration of faeces
- Steatorrhoea (may be overcome by the use of pancreatic enzyme supplements)
- Gallstones
- Pruritus, rash, alopecia
- Bradycardia
- Elevated transaminase levels

Please refer to Summary of Product Characteristics (SPC) for full detail of prescribing information: [www.medicines.org.uk](http://www.medicines.org.uk)

Approved for use by the Cancer Therapeutics Advisory Committee 25 March 2013 and the General Practice Prescribing Committee 4 June 2013