PHARMACY PRIOR AUTHORIZATION
Clinical Guideline – SOMATOSTATIN ANALOGS

Sandostatin LAR® (octreotide)  Somatuline Depot® (lanreotide)
Signifor® (pasireotide)  octreotide
Signifor LAR® (pasireotide)

FDA Approved Indications:
Acromegaly:
- **Octreotide** Injection is indicated to reduce blood levels of growth hormone and IGF-I (somatomedin C) in acromegaly patients who have had inadequate response to or cannot be treated with surgical resection, pituitary irradiation, and bromocriptine mesylate at maximally tolerated doses. In patients with acromegaly, octreotide reduces growth hormone to within normal ranges in 50% of patients and reduces IGF-I (somatomedin C) to within normal ranges in 50% to 60% of patients. Since the effects of pituitary irradiation may not become maximal for several years, adjunctive therapy with octreotide to reduce blood levels of growth hormone and IGF-I (somatomedin C) offers potential benefit before the effects of irradiation are manifested. Improvement in clinical signs and symptoms or reduction in tumor size or rate of growth were not shown in clinical trials performed with octreotide; these trials were not optimally designed to detect such effects. Sandostatin LAR Depot is indicated in patients in whom initial treatment with Sandostatin Injection has been shown to be effective and tolerated.
- **Somatuline Depot** Injection is indicated for the long-term treatment of acromegalic patients who have had an inadequate response to surgery and/or radiotherapy, or for whom surgery and/or radiotherapy is not an option.
- **Signifor LAR** is indicated for the treatment of patients with acromegaly who have had an inadequate response to surgery and/or for whom surgery is not an option.

Carcinoid Tumors:
- **Octreotide** Injection is indicated for the symptomatic treatment of patients with metastatic carcinoid tumors where it suppresses or inhibits the severe diarrhea and flushing episodes associated with the disease. Octreotide studies were not designed to show an effect on the size, rate of growth or development of metastases. Sandostatin LAR Depot is indicated in patients in whom initial treatment with Sandostatin Injection has been shown to be effective and tolerated.

Vasoactive Intestinal Peptide Tumors (VIPomas):
- **Octreotide** Injection is indicated for the treatment of the profuse watery diarrhea associated with VIP-secreting tumors. Octreotide studies were not designed to show an effect on the size, rate of growth or development of metastases. Sandostatin LAR Depot is indicated in patients in whom initial treatment with Sandostatin Injection has been shown to be effective and tolerated.

Cushing’s Disease:
- **Signifor** (but NOT Signifor LAR) is indicated for the treatment of adult patients with Cushing’s disease for whom pituitary surgery is not an option or has not been curative.
Authorization Guidelines:

General Criteria for ALL Indications:

- **Sandostatin LAR:**
  - Baseline A1c or fasting glucose, TSH, and EKG
  - Positive response to octreotide immediate release injection for at least 2 weeks

- **Somatuline Depot:**
  - Baseline A1c or fasting glucose
  - Trial and failure of Sandostatin LAR, or intolerance to octreotide or Sandostatin LAR

- **Signifor and Signifor LAR:**
  - Baseline A1c, fasting plasma glucose, EKG, potassium, magnesium, TSH, and LFT’s
  - Trial and failure of Sandostatin LAR, or intolerance to octreotide or Sandostatin LAR

Additional criteria for use in Acromegaly (octreotide, Sandostatin LAR, Somatuline Depot, Signifor LAR):

- Patient meets general criteria above for requested medication
- Patient is 18 years of age or older
- Prescribed by, or in consultation with an endocrinologist
- Patient has persistent disease following pituitary surgery, or surgical resection is not an option as evidenced by one of the following:
  - Majority of tumor cannot be resected
  - Patient is a poor surgical candidate based on comorbidities
  - Patient prefers medical treatment over surgery, or refuses surgery
- Baseline IGF-1 is \( \geq 2 \times \text{ULN} \) for age OR IGF-1 remains elevated despite a 6 month trial of maximally tolerated dose of cabergoline (unless patient cannot tolerate cabergoline or has a contraindication)

Additional criteria for use for Carcinoid tumor or VIPomas (octreotide, Sandostatin LAR, Somatuline Depot):

- Patient meets general criteria above for requested medication
- Patient is 18 years of age or older
- Prescribed by, or in consultation with oncologist or endocrinologist

Criteria for use for Cushing’s Syndrome (Signifor):

- Patient must be 18 years of age or older
- Patient has persistent disease after pituitary surgery, or surgery is not an option
- Trial and failure of, or intolerance/contraindication to cabergoline
- Baseline A1c, fasting plasma glucose, EKG, potassium, magnesium, TSH and LFT’s
- NOTE: Patient does not need a trial of octreotide for approval

Additional criteria for off-label use† for Hepatorenal syndrome (octreotide):

- Patient must be 18 years of age or older
- Prescribed by hepatologist or nephrologist
- Must be used in combination with midodrine and albumin

Additional criteria for off-label use‡ for Gastroenteropancreatic neuroendocrine tumor (GEP-NET) (octreotide, Sandostatin LAR, Somatuline Depot):

- Patient meets general criteria above for requested medication
• Patient must be 18 years of age or older
• Prescribed by or in consultation with oncologist or endocrinologist
• Patient has persistent disease after surgical resection, or is not a candidate for surgery

Octreotide may be reviewed for medical necessity and may be approved for treatment of the following off-label\(^1\) indications:
• Chemotherapy induced diarrhea in pediatrics, when prescribed by or in consultation with oncologist
• Dumping Syndrome in adults ≥18 years of age
• Enterocutaneous fistula in adults ≥18 years of age
• Hyperthyroidism due to thyrotropinoma in adults ≥18 years of age
• Short bowel syndrome (associated diarrhea) in adults ≥18 years of age
• Portal hypertension and/or upper GI bleed related to variceal bleeding in patients with esophageal varices in adults ≥18 years of age

\(^1\)Off-label indications included based on peer-reviewed clinical studies

**Initial Approval:**
• 6 months

**Renewal:**
• Acromegaly and Cushing’s: Indefinite
• Carcinoid and VIPomas: Indefinite
• All other indications: 6 months
• Clinical documentation required:
  o Response to therapy and A1c or fasting glucose
  o For Acromegaly: Decreased or normalized IGF-1 levels
  o For Carcinoid and VIPomas: Symptom improvement
  o For Cushing’s: Decreased or normalized cortisol levels
  o For Signifor: LFT’s

**Additional Information:**

**Normal IGF-1 Levels (by age and gender):**

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<thead>
<tr>
<th></th>
<th>Females ng/mL</th>
<th>Males ng/mL</th>
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<tbody>
<tr>
<td>18 years</td>
<td>109-527</td>
<td>114-493</td>
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<td>19 years</td>
<td>104-484</td>
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<td>31-35 years</td>
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<td>73-244</td>
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<td>36-40 years</td>
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<tr>
<td>41-45 years</td>
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<td>Age Group</td>
<td>Lower Limit</td>
<td>Upper Limit</td>
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<td>------------</td>
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<tr>
<td>46-50 years</td>
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<td>85-90 years</td>
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References:
2. Sandostatin (octreotide acetate) [package insert]. West Hartford, CT: Novartis Pharmaceuticals Corporation; Revised March 2012.