**Pharmacy Prior Authorization**
**Growth Hormone Antagonists- Clinical Guidelines**

**Somavert® (pegvisomant)**

**Indications:**
Somavert is indicated for the treatment of acromegaly in patients who have had an inadequate response to surgery or radiation therapy, or for whom these therapies are not appropriate. The goal of treatment is to normalize serum insulin-like growth factor-I (IGF-I) levels.

**Authorization Guidelines:**
**May be authorized when the following criteria are met:**
- Diagnosis of acromegaly
- 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 ≥2x 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)
- Trial and failure of, or intolerance/contraindication to Sandostatin LAR
- Patient has baseline LFT's that are <3x ULN

**Initial Approval:**
- 6 months

**Renewal:**
- Indefinite
- Clinical documentation required:
    - Response to therapy (decreased or normalized IGF-1 levels)
    - LFT's

**Additional Information:**

1. **Recommendations for initiating Somavert based on baseline LFT's:**

| Baseline LT Levels | Recommendations |
|---|---|
| Normal | ○ May treat with SOMAVERT.<br>○ Monitor LTs at monthly intervals during the first 6 months of treatment, quarterly for the next 6 months and then bi-annually for the next year. |

| Baseline LT Levels | Recommendations |
|---|---|
| Elevated, but less than or equal to 3 times ULN | May treat with SOMAVERT; however, monitor LTs monthly for at least one year after initiation of therapy and then bi-annually for the next year. |
| Greater than 3 times ULN | ○ Do not treat with SOMAVERT until a comprehensive workup establishes the cause of the patient's liver dysfunction.<br>○ Determine if cholelithiasis or choledocholithiasis is present, particularly in patients with a history of prior therapy with somatostatin analogs.<br>○ Based on the workup, consider initiation of therapy with SOMAVERT.<br>○ If the decision is to treat, LTs and clinical symptoms should be monitored very closely. |

**2. Clinical recommendations based on LFT's during treatment with Somavert:**

| LT Levels and Clinical Signs/Symptoms | Recommendations |
|---|---|
| Greater than or equal to 3 but less than 5 times ULN (without signs/symptoms of hepatitis or other liver injury, or increase in serum TBIL) | ○ May continue therapy with SOMAVERT. However, monitor LTs weekly to determine if further increases occur (see below).<br>○ Perform a comprehensive hepatic workup to discern if an alternative cause of liver dysfunction is present. |
| At least 5 times ULN, or transaminase elevations at least 3 times ULN associated with any increase in serum TBIL (with or without signs/symptoms of hepatitis or other liver injury) | ○ Discontinue SOMAVERT immediately.<br>○ Perform a comprehensive hepatic workup, including serial LTs, to determine if and when serum levels return to normal.<br>○ If LTs normalize (regardless of whether an alternative cause of the liver dysfunction is discovered), consider cautious re-initiation of therapy with SOMAVERT, with frequent LT monitoring. |
| Signs or symptoms suggestive of hepatitis or other liver injury (e.g., jaundice, bilirubinuria, fatigue, nausea, | ○ Immediately perform a comprehensive hepatic workup.<br>○ If liver injury is confirmed, the drug should be |

| LT Levels and Clinical Signs/Symptoms | Recommendations |
|---|---|
| vomiting, right upper quadrant pain, ascites, unexplained edema, easy bruisability) | discontinued. |

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

| | Females ng/mL | Males ng/mL |
|---|---|---|
| 18 years | 109-527 | 114-493 |
| 19 years | 104-484 | 105-441 |
| 20 years | 98-443 | 97-398 |
| 21-25 years | 83-344 | 84-323 |
| 26-30 years | 75-275 | 77-271 |
| 31-35 years | 71-241 | 73-244 |
| 36-40 years | 69-226 | 68-225 |
| 41-45 years | 64-210 | 62-205 |
| 46-50 years | 59-201 | 56-194 |
| 51-55 years | 56-201 | 53-191 |
| 56-60 years | 51-194 | 45-173 |
| 61-65 years | 47-191 | 41-168 |
| 66-70 years | 46-195 | 39-168 |
| 71-75 years | 42-187 | 36-166 |

| | | |
|---|---|---|
| 76-80 years | 39-184 | 35-168 |
| 80-85 years | 37-182 | 35-179 |
| 85-90 years | 35-182 | 33-179 |

**References:**

1. Somavert (pegvisomant) [package insert]. NY, NY: Pharmacia & Upjohn Co; Revised September 2014.
2. Melmed S. Treatment of acromegaly. Waltham, MA: UptoDate; Last modified May 22, 2015. http://www.uptodate.com/contents/treatment-of-acromegaly?source=search_result&search=acromegaly&selectedTitle=2%7E84. Accessed August 20, 2015.
3. Katznelson L, Laws ER, Melmed S, et al. Acromegaly: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab*, 2014;99(11):3933–3951.