Line of Business: Medicaid  
P & T Approval Date: February 19, 2020  
Effective Date: April 1, 2020

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the IEHP Pharmacy and Therapeutics Subcommittee.

Drugs Requiring Prior Authorization Review: Genotropin, Humatrope, Norditropin, Nutropin, Omnitrope vial, Saizen, Serostim, Zorbtive (Somatropin)

CRITERIA:

OMNITROPE vial (SOMATROPIN)

Covered Uses:  
*Child Growth Hormone Deficiency (GHD)  
(*Subject to review by Clinical Pharmacist)

Exclusion Criteria:  
CCS Eligible

Required Medical Information:  
Must meet all of the following requirements:  
a. Two provocative stimulation tests of growth hormone release with peak growth hormone level of less than 10 ng/mL.  
b. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.

Age Restrictions:  
Must be less than 18 years old

Prescriber Restrictions:  
Endocrinologist, Pediatrician

Other Criteria:  
N/A
**Covered Uses:**
*Child Idiopathic Short Stature who pass GH stimulation tests
(*Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**
N/A

**Required Medical Information:**
Must meet all of the following requirements:
a. Less than 2.25 SD below the mean in height or greater than 2 SD below the midparental height percentile.
b. Must meet “1” of the following requirements:
   i. Growth velocity less than the 25th percentile for bone age.
   ii. Bone age greater than 2 standard deviation below the mean for age.
   iii. Low serum insulin-like growth factor 1 (IGF-1) and/or insulin-like growth factor binding protein 3 (IGFBP3).

**Age Restrictions:**
N/A

**Prescriber Restrictions:**
Endocrinologist, Pediatrician

**Other Criteria:**
N/A

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**Covered Uses:**
*Turner Syndrome
(*Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**
N/A

**Required Medical Information:**
Must meet the following requirement:
a. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.

**Age Restrictions:**
Must be less than 18 years old

**Prescriber Restrictions:**
Endocrinologist, Pediatrician

**Other Criteria:**
N/A
Covered Uses: *Prader-Willi Syndrome
(*Subject to review by Clinical Pharmacist)

Exclusion Criteria: N/A

Required Medical Information: Must meet the following requirement:
  a. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.

Age Restrictions: Must be less than 18 years old

Prescriber Restrictions: Endocrinologist, Pediatrician

Other Criteria: N/A

Covered Uses: *Small for Gestational Age (SGA) Children
(*Subject to review by Clinical Pharmacist)

Exclusion Criteria: N/A

Required Medical Information: Must meet all of the following requirements:
  a. Birth weight below the 10th percentile for gestational age.
  b. Height greater than 2 standard deviation below the mean or less than 3% for age and gender by age 2.

Age Restrictions: Must be less than 18 years old

Prescriber Restrictions: Endocrinologist, Pediatrician

Other Criteria: N/A

Covered Uses: *Adult Growth Hormone Deficiency (GHD)
(*Subject to review by Clinical Pharmacist)

Exclusion Criteria: N/A

Required Medical Information: Must meet all of the following requirements:
  a. Two provocative stimulation tests of growth hormone release with peak growth hormone level of less than 5 ng/mL;
  b. Documented GHD associated with pituitary disease, irradiation, surgery, or trauma.
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c. Failure or clinically significant adverse effects to the formulary alternative: Omnitrope vial.

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iii. Low serum insulin-like growth factor 1 (IGF-1) and/or insulin-like growth factor binding protein 3 (IGFBP3).
c. Failure or clinically significant adverse effects to the formulary alternative: Omnitrope vial.

**Age Restrictions:**

N/A

**Prescriber Restrictions:**

Endocrinologist, Pediatrician

**Other Criteria:**

N/A

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**Covered Uses:**

*Turner Syndrome  
(*Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**

N/A

**Required Medical Information:**

Must meet the following requirement:  
a. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.  
b. Failure or clinically significant adverse effects to the formulary alternative: Omnitrope vial.

**Age Restrictions:**

Must be less than 18 years old

**Prescriber Restrictions:**

Endocrinologist, Pediatrician

**Other Criteria:**

N/A

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**Covered Uses:**

*Prader-Willi Syndrome  
(*Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**

N/A

**Required Medical Information:**

Must meet the following requirement:  
a. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.  
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# NUTROPIN (SOMATROPIN)

## Covered Uses:
*Child Growth Hormone Deficiency (GHD)
(*Subject to review by Clinical Pharmacist)

## Exclusion Criteria:
CCS Eligible

## Required Medical Information:
Must meet all of the following requirements:

a. Two provocative stimulation tests of growth hormone release with peak growth hormone level of less than 10 ng/mL.

b. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.

c. Failure or clinically significant adverse effects to the formulary alternative: Omnitrope vial.

## Age Restrictions:
Must be less than 18 years old

## Prescriber Restrictions:
Endocrinologist, Pediatrician

## Other Criteria:
N/A

## Covered Uses:
*Child Idiopathic Short Stature who pass GH stimulation tests
(*Subject to review by Clinical Pharmacist)

## Exclusion Criteria:
N/A

## Required Medical Information:
Must meet all of the following requirements:

a. Less than 2.25 SD below the mean in height or greater than 2 SD below the midparental height percentile.

b. Must meet “1” of the following requirements:
   i. Growth velocity less than the 25th percentile for bone age.
   ii. Bone age greater than 2 standard deviation below the mean for age.
   iii. Low serum insulin-like growth factor 1 (IGF-1) and/or insulin-like growth factor binding protein 3 (IGFBP3).

c. Failure or clinically significant adverse effects to the formulary alternative: Omnitrope vial.

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a. Two provocative stimulation tests of growth hormone release with peak growth hormone level of less than 5 ng/mL;  
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<tr>
<th><strong>Covered Uses:</strong></th>
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(**Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**

CCS Eligible

**Required Medical Information:**

Must meet all of the following requirements:

a. Height greater than 2 standard deviation below the mean or less than 3% for age and gender.

b. Prior to renal transplantation.

**Age Restrictions:**

Must be less than 18 years old

**Prescriber Restrictions:**

Endocrinologist, Nephrologist or Pediatrician

**Other Criteria:**

N/A

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**SEROSTIM (SOMATROPIN)**

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**Covered Uses:**

*AIDS-associated wasting

(**Subject to review by Clinical Pharmacist)

**Exclusion Criteria:**

N/A

**Required Medical Information:**

Must meet all of the following requirements:

a. Involuntary weight loss greater than 10% of normal baseline body weight or body mass index (BMI) less than 20 kg/m² without a concurrent condition other than HIV infection that may have contributed to the condition.

b. Currently receiving antiviral agents.

c. Failure or intolerance to appetite stimulants.

d. Failure or contraindication to anabolic steroid treatment.

**Age Restrictions:**

N/A

**Prescriber Restrictions:**

Endocrinologist, HIV Specialist

**Other Criteria:**

N/A
Section I: Monitoring

a. Should be performed by a pediatric endocrinologist in partnership with the pediatrician or primary care physician and should be conducted on a 3 to 6 months basis (90 to 180 days);
b. Increase in height and change in height velocity should be assessed;
c. Monitoring of serum IGF-I (preferred for GHD) and IGFBP-3 levels (for short stature in children younger than 3 years);
d. Monitoring T₄ and TSH to detect hypothyroidism (can appear during GH therapy).

Section II: Therapy End Point

a. Pediatric:
   i. Treatment to continue until final height or epiphyseal closure has been documented;
   ii. Bone age greater than 15 years for girls and greater than 16 years for boys.
   iii. Growth rate less than 2.5cm / year.
   iv. Achievement of mid-parental adult height.
   v. Further treatment is generally futile if no increase in growth rate or serum IGF over baseline within the first 6 months to 1 year (180 days to 365 days) in a compliant patient receiving an appropriate dose of GH.

b. Adult:
   i. IGF-I level above normal.
   ii. Decrease in LDL, increase in HDL, and a change in body composition.
   iii. Decrease in body fat and an increase in bone density.
   iv. If a patient shows no improvement when maximum dose is achieved, treatment should be discontinued.

References:
