

Federal Employee Program.
Blue Cross Blue Shield Association 750 9th St NW, Suite 900
Washington, D.C. 20001
1-800-624-5060

1-800-624-5060 Fax 1-877-378-4727

# 5.30.011

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 1 of 7

Last Review Date: September 19, 2025

## Growth Hormone – Adult Therapy

### Description

Genotropin, Humatrope, **Norditropin**, Omnitrope, Saizen, Skytrofa, Sogroya, Zomacton

Preferred product: Norditropin

#### **Background**

Growth hormone deficiency (GHD) in adulthood, associated with hypothalamic-pituitary dysfunction is now widely accepted as a distinct clinical syndrome, and is linked to a substantial number of significant co-morbidities, many of which can be ameliorated with growth hormone replacement therapy (1).

The FDA has approved growth hormone replacement for use in adult patients with growth hormone deficiency. Approved indications are for the treatment of adults with either adult onset or childhood onset GHD. With the exception of idiopathic adult onset GHD, GHD should be confirmed as due to pituitary disease from known causes, including pituitary tumor, pituitary surgical damage, hypothalamic disease, irradiation, trauma, or reconfirmed childhood GHD. Growth hormone should only be prescribed to patients with clinical features suggestive of adult GHD and biochemically proven evidence of adult GHD (1-9).

#### **Regulatory Status**

FDA-approved indications: Human growth hormone is indicated for treatment of adult patients with either childhood-onset or adult-onset GH deficiency (2-9).

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 2 of 7

The laboratory diagnosis of GHD in adults is determined by dynamic endocrine testing. Because growth hormone has a short half-life in blood, growth hormone levels frequently are undetectable in blood samples obtained at random from normal subjects. For this reason, a stimulation test is needed to confirm the diagnosis. American Association of Clinical Endocrinologists (AACE) does not recommend growth hormone stimulation testing in patients with three or more pituitary hormone deficiencies and low IGF1 (2-9).

Use of any growth hormone in adults can cause a number of potentially serious adverse effects, therefore regular and routine monitoring is required. Sometimes treatment may need to be permanently stopped. These adverse effects include the development of impaired glucose tolerance and diabetes mellitus, upper airway obstruction and sleep apnea in patients with Prader-Willi syndrome, progression or recurrence of tumors in patients with preexisting tumors, intracranial hypertension, the worsening of hypothyroidism, and the worsening of pre-existing scoliosis, and pancreatitis (1-9).

The usefulness of growth hormone treatment in adults who have completed their structural growth derives from the role of growth hormone in the following processes: increasing bone density, increasing lean tissue, decreasing adipose tissue, bolstering cardiac contractility, improving mood and motivation, and enhancing exercise capacity (2-9).

Growth hormone (GH) is used off-label for cosmetic, anti-aging and performance enhancing purposes. These indications are not approved by the FDA and are not a covered benefit under the Service Benefit Plan.

#### **Related policies**

Growth Hormone Pediatric, Serostim, Zorbtive

#### Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Adult growth hormone may be considered **medically necessary** if the conditions indicated below are met.

Adult growth hormone may be considered **investigational** for all other indications.

## **Prior-Approval Requirements**

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 3 of 7

Age 18 years of age or older\*

\*Patients with open epiphyses must meet Growth Hormone Pediatric criteria

#### **Diagnoses**

Patient must have **ONE** of the following:

- 1. Burn wounds (used for promotion of wound healing in burn patients)
- 2. Growth hormone deficiency due to at least **ONE** of the following:
  - a. Hypothalamic disease
  - b. Pituitary disease
  - c. Radiation therapy
  - d. Surgery
  - e. Trauma
  - f. Idiopathic childhood-onset or adult-onset growth hormone deficiency

#### **AND** the following:

Documentation of GH stimulation test result from **ONE** of the following:

- a. Insulin tolerance test peak GH ≤ 5 ng/ml
- b. Glucagon, peak GH ≤ 3 ng/ml
- c. Arginine/L-Dopa, peak GH ≤ 1.5 ng/ml
- d. Arginine, peak GH ≤ 0.4 ng/ml
- Documented IGF-1 level below the age and sex appropriate reference range AND panhypopituitarism (defined as a deficiency of three or more pituitary hormones such as gonadotropin [LH and/or FSH], adrenocorticotropic hormone [ACTH], thyroid-stimulation hormone [TSH], arginine vasopressin [AVP])

#### **AND ALL** of the following:

- 1. Confirmation that GH is not being used for cosmetic, anti-aging or athletic performance enhancement
- 2. Not being used in combination with another somatropin agent (such as Serostim, Zorbtive or any other GH)
- 3. **Non-preferred medications only:** Patient **MUST** have tried the preferred product (Norditropin) unless the patient has a valid medical exception (e.g., inadequate treatment response, intolerance, contraindication)

All requests are subject to approval by a secondary review by a clinical specialist for final coverage determination

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 4 of 7

## Prior - Approval Renewal Requirements

Age 18 years of age or older

\*Patients with open epiphyses must meet Growth Hormone Pediatric criteria

### **Diagnoses**

Patient must have **ONE** of the following:

- 1. Burn wounds (used for promotion of wound healing in burn patients)
- 2. Growth hormone deficiency due to at least **ONE** of the following:
  - a. Hypothalamic disease
  - b. Pituitary disease
  - c. Radiation therapy
  - d. Surgery
  - e. Trauma
  - f. Idiopathic childhood-onset or adult-onset growth hormone deficiency
  - g. Panhypopituitarism

#### AND ALL of the following:

- 1. Confirmation that GH is not being used for cosmetic, anti-aging or athletic performance enhancement
- 2. Not being used in combination with another somatropin agent (such as Serostim, Zorbtive or any other GH)
- 3. **Non-preferred medications only:** Patient **MUST** have tried the preferred product (Norditropin) unless the patient has a valid medical exception (e.g., inadequate treatment response, intolerance, contraindication)

All requests are subject to approval by a secondary review by a clinical specialist for final coverage determination

### **Policy Guidelines**

#### Pre - PA Allowance

None

### **Prior - Approval Limits**

**Duration** 12 months

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 5 of 7

### Prior - Approval Renewal Limits

Same as above

#### Rationale

#### **Summary**

Growth hormone deficiency (GHD) in adulthood, associated with hypothalamic-pituitary dysfunction is now widely accepted as a distinct clinical syndrome, and is linked to a substantial number of significant co-morbidities, many of which can be ameliorated with growth hormone replacement therapy. The FDA has approved growth hormone replacement for use in adult patients with growth hormone deficiency (1-9).

Growth hormone is used off-label for cosmetic, anti-aging and performance enhancing purposes. These indications are not approved by the FDA and are not a covered benefit under the Service Benefit Plan.

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of human growth hormone while maintaining optimal therapeutic outcomes.

#### References

- Cook DM, Yuen KC, Biller BM, Kemp SF, Vance ML. American Association of Clinical Endocrinologists medical guidelines for clinical practice for growth hormone use in growth hormone-deficient adults and transition patients - 2009 update: executive summary of recommendations. Endocr Pract 15:580-586. Accessed on 4/6/2021.
- 2. Norditropin [package insert]. Plainsboro, NJ: Novo Nordisk Inc.; March 2020.
- 3. Humatrope [package insert]. Indianapolis IN: Eli Lilly and Company Ltd.; December 2024.
- 4. Omnitrope [package insert]. Princeton, NJ: Sandoz Inc.; June 2019.
- 5. Saizen [package insert]. Rockland, MA: EMD Serono Inc.; February 2020.
- 6. Sogroya [package insert]. Plainsboro, NJ: Novo Nordisk Inc.; April 2023.
- 7. Zomacton [package insert]. Parsippany, NJ: Ferring Pharmaceuticals Inc.; April 2024.
- 8. Genotropin [package insert]. New York, NY: Pfizer Inc.; April 2019.
- 9. Skytrofa [package insert]. Princeton, NJ: Ascendis Pharma Endocrinology, Inc.; July 2025.

### **Policy History**

Date Action

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 6 of 7

April 2008 Criteria modified to include requirement of stimulation test result of peak

GH ≤ 5ng/ml.

Removed the GH stimulation test requirement for a renewal PA.

May 2008 Changed minimum age requirement to 18. Added negative GH stimulation

test requirement for PA renewals and confirmation that it is not being used

for cosmetic, anti-aging or athletic performance enhancement.

AACE does not recommend GH stimulation testing in patients with three or more pituitary hormone deficiencies or when the IGF1 is low. Patients with serum IGF-I less than 84 ug/L do not require GH stimulation testing for the

diagnosis of adult GHD.

September 2009 Revised to clarify that low IGF-1 (level < 84 ug/ml) establishes growth

hormone deficiency in combination with three pituitary hormone deficiencies (2-4). This corrects 5/13/2009 notation— AACE does not recommend GH stimulation testing in patients with three or more pituitary hormone deficiencies and low IGF1, (rather than three or more pituitary

hormone deficiencies or low IGF-1).

August 2010 Removal of Geref; discontinued by the manufacturer. Revised to add

specific Growth Hormone stimulation test and approvable levels for each based on American Association of Clinical Endocrinologists (AACE) and Endocrine Society Clinical Practice Guidelines. Inclusion statement to reflect the growth hormone review process and separate initiation of therapy and continuation of therapy criteria. Adding a continuation criterion prevents exclusion of members with previous growth hormone approval from having the new GH stimulation test requirements. This requirement would not be clinically appropriate for members who have been on continuous therapy for years. All requests that met criteria (initiation or continuation) will continue to go through the secondary review by a clinical

specialist to prevent misuse and abuse.

September 2012 Annual editorial and reference update
December 2012 Annual editorial and reference update
September 2013 Annual editorial review by PMPC
December 2014 Annual editorial and reference update

Removed: stimulation test arginine/GHRH because GHRH is no longer

manufactured and available in the US

Added: No concurrent use with another somatropin

March 2015 Annual editorial and reference update

September 2016 Annual editorial review and reference update

Policy number change from 5.08.11 to 5.30.11

December 2017 Annual editorial review and reference update

Change of the requirement from documented IGF-1 less than 84 ug/L to a

documented serum IGF-I level below the age and sex appropriate

reference range per SME

Section: Prescription Drugs Effective Date: October 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: April 8, 2008

**Subject:** Growth Hormone – Adult **Page:** 7 of 7

March 2018 Addition of Zomacton

June 2018 Annual editorial review and reference update

September 2018 Annual review and reference update

Updated regulatory status per SME

December 2019 Annual review and reference update. Addition of requirement to trial

preferred product

September 2020 Addition of Sogroya

December 2020 Annual review and reference update

March 2021 Annual editorial review

April 2021 Changed "idiopathic adult-onset GHD" to "idiopathic childhood-onset or

adult-onset GHD" per FEP.

June 2021 Annual review

December 2021 Annual editorial review

June 2022 Annual review and reference update

June 2023 Changed policy number to 5.30.011. Added caveat that patients 18 years

and older with open epiphyses must meet Growth Hormone Pediatric

criteria

September 2023 Annual review
December 2023 Annual review

June 2024 Annual review and reference update

September 2024 Annual review

February 2025 Removed Nutropin/Nutropin AQ due to being withdrawn from the market

March 2025 Annual review

September 2025 Annual review. Addition of Skytrofa to policy

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on September 19, 2025 and is effective on October 1, 2025.