



Commercial PA Criteria
Effective: October 13, 2023

Prior Authorization: Ngenla (somatrogon-ghla)

Products Affected: Ngenla (somatrogon-ghla), subcutaneous injection

Medication Description: Ngenla, a long-acting human growth hormone analog, is indicated for the treatment of growth failure due to inadequate secretion of growth hormone in pediatric patients ≥ 3 years of age.

Ngenla is a human growth hormone analog which is comprised of the amino acid sequence of human growth hormone with an added three copies of the C-terminal peptide of human chorionic gonadotropin. The addition of the C-terminal peptides extends the half-life. Ngenla binds to the growth hormone receptor which initiates changes in growth and metabolism and has also been shown to increase insulin-like growth factor-1 (IGF-1) serum concentrations.

Covered Uses:

1. Treatment of pediatric patients aged 3 years and older who have growth failure due to an inadequate secretion of endogenous growth hormone.

Exclusion Criteria:

1. Acute critical illness after open heart surgery, abdominal surgery or multiple accidental trauma
2. Acute respiratory failure
3. Hypersensitivity to somatrogon-ghla or any of the excipients
4. Closed epiphyses
5. Active malignancy due to the risk of malignancy progression
6. Active proliferative or severe non-proliferative diabetic retinopathy
7. Prader-Willi syndrome in those who are severely obese, have a history of upper airway obstruction or sleep apnea, or have severe respiratory impairment, due to the risk of sudden death

Required Medical Information:

1. Diagnosis
2. Medical History

Prescriber Restriction: Medication must be prescribed by, or in consultation with, an endocrinologist or pediatric endocrinologist

Age Restriction: Patient must be 3 years and older

Coverage Duration: 12 months

Other Criteria:

August 2023

Initial Approval Criteria

1. **Growth Hormone Deficiency in a Pediatric Patient (≥ 3 years of age to < 18 years of age).** Initial Therapy with any Growth Hormone Agent. Approve if the patient meets one of the following (i, ii, iii, iv, **OR** v):
 - i. Patient meets BOTH of the following criteria (a **AND** b):
 - a) Patient meets at least ONE of the following criteria (1 **OR** 2):
 - (1) Patient has had two growth hormone stimulation tests performed with any of the following agents: levodopa, insulin-induced hypoglycemia, arginine, clonidine, or glucagon AND both tests show an inadequate response as defined by a peak growth hormone response which is below the normal reference range as determined by the testing laboratory; **OR**
 - (2) Patient meets BOTH of the following criteria (i **AND** ii):
 - (a) Patient has had at least one growth hormone stimulation test performed with any of the following agents: levodopa, insulin-induced hypoglycemia, arginine, clonidine, or glucagon AND the test shows an inadequate response as defined by a peak growth hormone response which is below the normal reference range as determined by the testing laboratory; **AND**
 - (b) Patient has at least one risk factor for growth hormone deficiency (*for example, the height for age curve has deviated downward across two major height percentiles [e.g., from above the 25th percentile to below the 10th percentile]; the child's growth rate is less than the expected normal growth rate based on age and gender; low insulin-like growth factor [IGF]-1 and/or IGFBP-3 levels; the child has a very low peak growth hormone level on provocative testing as defined by the prescribing physician; the child's growth velocity is less than the 10th percentile for age and gender [height velocity percentile is NOT the same as height-for-age percentile]; the patient is status post craniopharyngioma resection; the patient has optic nerve hypoplasia; the patient has a growth hormone gene deletion*); **AND**
 - b) Patient has been evaluated by an endocrinologist.
 - ii. Patient has undergone brain radiation or tumor resection AND meets BOTH of the following criteria (a **AND** b):
 - a) Patient meets at least ONE of the following criteria (1 **OR** 2):
 - (1) Patient meets BOTH of the following criteria (i **AND** ii):
 - (i) Patient has had one growth hormone stimulation test with any of the following agents: levodopa, insulin-induced hypoglycemia, arginine, clonidine, or glucagon; **AND**
 - (ii) The test shows an inadequate response as defined by a peak growth hormone response which is below the normal reference range as determined by the testing laboratory; **OR**
 - (2) Patient has a deficiency in at least one other pituitary hormone (i.e., adrenocorticotrophic hormone, thyroid-stimulating hormone, gonadotropin [luteinizing hormone and/or follicle stimulating hormone deficiency are counted as one deficiency], or prolactin); **AND**
 - b) Patient has been evaluated by an endocrinologist.
 - iii. Patient has congenital hypopituitarism AND meets BOTH of the following (a **AND** b):
 - a) Patient meets at least ONE of the following criteria (1, 2, **OR** 3):
 - (1) Patient meets BOTH of the following criteria (i **AND** ii):
 - (i) Patient has had one growth hormone stimulation test with any of the following agents: levodopa, insulin-induced hypoglycemia, arginine, clonidine, or glucagon; **AND**
 - (ii) The test shows an inadequate response as defined by a peak growth hormone response which is below the normal reference range as determined by the testing laboratory; **OR**

- (2) Patient has a deficiency in at least one other pituitary hormone (i.e., adrenocorticotrophic hormone, thyroid-stimulating hormone, gonadotropin [luteinizing hormone and/or follicle stimulating hormone deficiency are counted as one deficiency], or prolactin); **OR**
- (3) Patient has the imaging triad of ectopic posterior pituitary and pituitary hypoplasia with abnormal pituitary stalk; **AND**
 - b) Patient has been evaluated by an endocrinologist.
- iv. Patient has multiple pituitary hormone deficiencies and meets BOTH of the following (a **AND** b):

Note: Growth hormone deficiency may occur in combination with other pituitary hormone deficiencies and is referred to as hypopituitarism, panhypopituitarism, or multiple pituitary hormone deficiency.

 - a) Patient meets at least ONE of the following criteria (1 **OR** 2):
 - (1) Patient has three or more of the following pituitary hormone deficiencies: somatotropin (growth hormone), adrenocorticotrophic hormone, thyroid-stimulating hormone, gonadotropin (luteinizing hormone and/or follicle stimulating hormone deficiency are counted as one deficiency), and prolactin; **OR**
 - (2) Patient meets BOTH of the following criteria (i **AND** ii):
 - (i) Patient has had one growth hormone stimulation test with any of the following agents: levodopa, insulin-induced hypoglycemia, arginine, clonidine, or glucagon; **AND**
 - (ii) The test shows an inadequate response as defined by a peak growth hormone response which is below the normal reference range as determined by the testing laboratory; **AND**
 - b) Patient has been evaluated by an endocrinologist.
- v. Patient has had a hypophysectomy (surgical REMOVAL of pituitary gland).
- vi. In addition to the above criteria, Ngenla will be approved if the patient has had an intolerance to, or treatment failure of, Norditropin.

Renewal Criteria

- A. Patient is Currently Receiving Ngenla or is switching to Ngenla from another Growth Hormone Agent (Patient has been established on either therapy for ≥ 10 months). Approve if the patient meets one of the following (i **OR** ii):
 - i. Patient is < 12 years of age: Height has increased by ≥ 2 cm/year in the most recent year; **OR**
 - ii. Patient is ≥ 12 years of age and < 18 years of age: Patient meets both of the following (a **AND** b):
 - a. Height has increased by ≥ 2 cm/year in the most recent year; **AND**
 - b. Patient’s epiphyses are open.

References:

1. Ngenla™ subcutaneous injection [prescribing information]. New York, NY: Pfizer; June 2023
2. Ngenla. LexiComp [database online]. New York, NY: Pfizer Labs; June 2023. Accessed on October 10, 2023.
3. Ngenla. IPD Analytics. Available at: <http://secure.ipdanalytics.com>. Accessed on October 10, 2023
4. Ngenla. IBM Micromedex [database online] Pfizer Labs (per FDA), New York, NY. Available at: <https://www.micromedexsolutions.com>. Updated August 10, 2023. Accessed October 10, 2023.

Policy Revision history

Rev #	Type of Change	Summary of Change	Sections Affected	Date
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August 2023



1	New Policy	New Policy	All	10/13/2023
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