

Clinical Policy: Mecasermin (Increlex)

Reference Number: CP.PHAR.150

Effective Date: 03.01.11

Last Review Date: 08.19

Line of Business: Commercial, HIM, Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Mecasermin (Increlex[®]) is a human insulin-like growth factor-1 (IGF-1).

FDA Approved Indication(s)

Increlex is indicated for the treatment of growth failure in children with severe primary IGF-1 deficiency or with growth hormone (GH) gene deletion who have developed neutralizing antibodies to GH.

Limitation(s) of use: Increlex is not a substitute to GH for approved GH indications.

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation[®] that Increlex is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Severe Primary IGF-1 Deficiency (must meet all):

1. Diagnosis of severe primary IGF-1 deficiency (IGFD) (i.e., inherited growth hormone insensitivity) and associated growth failure as evidenced by all of the following (a, b, and c):
 - a. Basal IGF-1 is ≥ 3 standard deviations (SD) below the mean;
 - b. Normal or elevated GH level;
 - c. Height is ≥ 3 SD below the mean;
2. Prescribed by or in consultation with an endocrinologist;
3. Age ≥ 2 and < 18 years;
4. Documentation of baseline height is provided at the time of request;
5. Somatropin (recombinant human GH) is not prescribed concurrently with Increlex;
6. Dose does not exceed 0.12 mg per kg twice daily.

Approval duration:

Medicaid/HIM – 12 months or up to age 18 years, whichever is shorter

Commercial – 6 months or to the member's renewal date, whichever is longer

B. Growth Hormone Insensitivity (must meet all):

1. Diagnosis of acquired GH insensitivity as evidenced by both of the following (a and b):

- a. Documentation of genetic GH deficiency due to a GH gene deletion;
- b. Documentation of presence of neutralizing GH antibodies;
2. Age ≥ 2 and < 18 years;
3. Prescribed by or in consultation with an endocrinologist;
4. Documentation of growth failure as indicated by any of the following (a, b, c, d, or e):
 - a. Height > 3 SD below the mean;
 - b. Height > 2 SD below the mean and one of the following (i or ii):
 - i. Height velocity > 1 SD below the mean over 1 year;
 - ii. Decrease in height SD > 0.5 over 1 year in children > 2 years of age;
 - c. Height > 1.5 SD below midparental height;
 - d. Height velocity > 2 SD below the mean over 1 year;
 - e. Height velocity > 1.5 SD below the mean over 2 years;
5. Documentation of baseline height is provided at the time of request;
6. Somatropin (recombinant human GH) is not prescribed concurrently with Increlex;
7. Dose does not exceed 0.12 mg per kg twice daily.

Approval duration:

Medicaid/HIM – 6 months or up to age 18 years, whichever is shorter

Commercial – 6 months or to the member's renewal date, whichever is longer

C. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. All Indications in Section I (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If member has received treatment for ≥ 1 year, height velocity is currently > 2 cm per year;
4. Somatropin (recombinant human GH) is not prescribed concurrently with Increlex;
5. If request is for a dose increase, new dose does not exceed 0.12 mg per kg twice daily.

Approval duration:

Medicaid/HIM – 12 months or up to age 18 years, whichever is shorter

Commercial – 6 months or to the member's renewal date, whichever is longer

B. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is

NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents;
- B. Severe primary IGF-1 deficiency or growth hormone insensitivity in patients with any one of the following:
 - 1. Closed epiphyses;
 - 2. Active or suspected neoplasm;
 - 3. Hypothyroidism;
 - 4. GH deficiency;
 - 5. Malnutrition;
 - 6. Chronic treatment with pharmacologic doses of anti-inflammatory steroids.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration

GH: growth hormone

IGF-1: insulin-like growth factor -1

IGFD: insulin-like growth factor deficiency

SD: standard deviation

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - Use of Increlex in the presence of active or suspected malignancy. Therapy should be discontinued if evidence of malignancy develops
 - Known hypersensitivity to mecasermin
 - Intravenous administration
 - In patients with closed epiphyses for growth promotion
- Boxed warning(s): none reported

*Appendix D: Primary IGF-1 Deficiency (i.e., Inherited Growth Hormone Insensitivity)**

- Causes:
 - GH receptor mutations (known as Laron syndrome or the classical model of GH insufficiency)
 - Post-GH receptor mechanisms
 - GH receptor signal transduction
 - IGF-I gene mutations
 - Impaired IGF-1 promoter function
 - Defective stabilization of circulating IGF-I
 - IGF-1 receptor mutations

Unlike the causes above, IGF-1 levels are normal or elevated in the case of IGF-1 receptor mutations which would render mecasermin therapy ineffective.

- Definition:
 - Height standard deviation score less than or equal to –3.0 and
 - Basal IGF-1 standard deviation score less than or equal to –3.0 and
 - Normal or elevated growth hormone (GH).

**GH production and secretion is normal or above normal; therefore, exogenous GH treatment would be ineffective.*

Appendix E: General Information

- Severe Primary IGFD includes patients with mutations in the growth hormone receptor (GHR), post-GHR signaling pathway, and IGF-1 gene defects; they are not GH deficient, and therefore, they cannot be expected to respond adequately to exogenous GH treatment.
- Increlex is not intended for use in subjects with secondary forms of IGF-1 deficiency, such as GH deficiency, malnutrition, hypothyroidism, or chronic treatment with pharmacologic doses of anti-inflammatory steroids. Thyroid and nutritional deficiencies should be corrected before initiating treatment.
- Increlex is not a substitute for GH treatment.
- Failure to increase height velocity during the first year of therapy by at least 2 cm/year suggests the need for assessment of compliance and evaluation of other causes of growth failure, such as hypothyroidism, under-nutrition, and advanced bone age.
- Clinical growth charts with 5th & 95th percentiles and 3rd & 97th percentiles are published by the Centers for Disease Control and Prevention (CDC) website:
https://www.cdc.gov/growthcharts/clinical_charts.htm.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Growth failure in children with severe primary IGFD or with GH gene deletion who have developed neutralizing antibodies to GH	Initial dose: 40 mcg/kg to 80 mcg/kg SC BID. Dose may be increased by 40 mcg/kg per dose up to 120 mcg/kg SC BID	0.12 mg/kg per dose

VI. Product Availability

Multi-dose vial: 40 mg/4 mL

VII. References

1. Increlex Prescribing Information. Basking Ridge, NJ: Ipsen Bipharmaceuticals, Inc.; January 2019. Available at: <http://www.increlex.com/pdf/patient-full-prescribing-information.pdf>. Accessed May 21, 2019.
2. Grimberg A, DiVall SA, Polychronakos C, et al. Guidelines for growth hormone and insulin-like growth factor-1 treatment in children and adolescents: growth hormone deficiency, idiopathic short stature, and primary insulin-like growth factor-1 deficiency. *Horm Res Paediatr* 2016;361-397. DOI: 10.1159/000452150.

3. Collett-Solberg PF, Misra M. The role of recombinant human insulin-like growth factor-1 in treating children with short stature. *J Clin Endocrinol Metab.* January 2008; 93(1): 10-18.
4. GH Research Society. Consensus guidelines for the diagnosis and treatment of growth hormone (GH) deficiency in childhood and adolescence: summary statement of the GH Research Society. *JCEM.* 2000; 85(11): 3990-3993.
5. Wilson TA, Rose SR, Cohen P, et al. Update of guidelines for the use of growth hormone in children: The Lawson Wilkins Pediatric Endocrinology Society Drug and Therapeutics Committee. *J Pediatr.* 2003; 143: 415-421.
6. Chernausek SD, Backeljauw PF, Frane J, et al. GH Insensitivity Syndrome Collaborative Group. Long-term treatment with recombinant insulin-like growth factor (IGF)-I in children with severe IGF-I deficiency due to growth hormone insensitivity. *J Clin Endocrinol Metab.* March 2007; 92(3): 902-10. Accessed September 19, 2016.
7. Collett-Solberg PF, Misra M. The role of recombinant human insulin-like growth factor-1 in treating children with short stature. *J Clin Endocrinol Metab.* January 2008; 93(1): 10-18.
8. Chernausek SD, Backeljauw PF, Frane J, et al. GH Insensitivity Syndrome Collaborative Group. Long-term treatment with recombinant insulin-like growth factor (IGF)-I in children with severe IGF-I deficiency due to growth hormone insensitivity. *J Clin Endocrinol Metab.* March 2007; 92(3): 902-10.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J2170	Injection, mecasermin, 1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Converted policy to new template, created individual drug policy for Increlex. Updated PI; added new reference.	12.15	12.15
Converted policy to new template. Removed age. Contraindications are limited to those found in the PI; other PI limitations, previously found in the safety appendix, are placed elsewhere in the criteria. The phrase “for 12 months” is deleted from “Increlex is contraindicated in the presence of active or suspected malignancy.” The two labeled indications are separated for clarification. Growth failure criteria is added to section I.B. per GH deficiency guidelines. Appendix B is provided for reference and outlines causes of primary IGFD. “Standard deviation score (SDS)” terminology under section I.A. is edited to align with SD language under section 1.B. Reviewed by specialist.	11.16	12.16

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Added age and max dose. Updated new criteria to be in line with new safety guidance.	08.07.17	11.17
3Q 2018 annual review: policies combined Centene Commercial and Medicaid lines of business; added HIM line of business; added contraindicated states to section III; revised positive response to therapy and increased initial approval duration from 6 months to 12 months to align with somatropin policy and added requirement for baseline height; Medicaid: removed requirements to correct nutritional or thyroid deficiencies if present; Commercial: added prescriber requirement, age requirement, and evidence for diagnosis; removed documentation of compliance with therapy for continued approval; added requirement that rhGH is not concomitantly used; references reviewed and updated.	05.15.18	08.18
3Q 2019 annual review: no significant changes; references reviewed and updated.	05.21.19	08.19

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan

retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note:

For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

For Health Insurance Marketplace members, when applicable, this policy applies only when the prescribed agent is on your health plan approved formulary. Request for non-formulary drugs must be reviewed using the formulary exception policy.

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