## Increlex

### Description

Increlex (mecasermin)

#### Background

The active ingredient of Increlex is identical to the natural hormone, insulin-like growth factor-1 (IGF-1), which the body produces in response to stimulation by growth hormone. Without adequate IGF-1, children cannot achieve height within the normal range. Insulin-like growth factor-1 is a key hormonal mediator on statural growth (1).

If insulin-like growth factor-1 deficiency (IGFD) is determined to be primary and severe, treatment with Increlex may help improve the child’s growth. Severe Primary IGFD is defined by height standard deviation score ≤ -3.0 and basal IGF-1 standard deviation score ≤ -3.0 and normal or elevated growth hormone (GH). Severe Primary IGFD includes classical and other forms of growth hormone insensitivity. Patients with Primary IGFD may have mutations in the GH receptor (GHR), post-GHR signaling pathway including the IGF-1 gene. They are not GH deficient, and therefore, they cannot be expected to respond adequately to exogenous GH treatment (1).

#### Regulatory Status

FDA-approved indication: 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 (1).

**Limitations of use:**

Increlex is not a substitute for GH for approved GH indications (1).
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 Increlex treatment. Increlex is not a substitute for GH treatment. Thus, Increlex treatment should be monitored by physicians who are experienced in the diagnosis and management of patients with growth disorders (1).

Increlex is contraindicated in patients with active or suspected neoplasia. Therapy should be discontinued if evidence of malignancy develops. Increlex is contraindicated in patients with closed epiphyses. Intravenous administration of Increlex is contraindicated (1).

Safety and effectiveness in pediatric patients below the age of 2 years of age have not been established (1).

**Related policies**

**Policy**

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

Increlex may be considered **medically necessary** in the treatment of patients 2 years of age and older for severe primary insulin-like growth factor deficiency, or growth hormone gene deletion who have developed neutralizing antibodies to GH, with open epiphyses, no evidence of active neoplasm, and not for intravenous administration.

Increlex may be considered **investigational** for patients less than 2 years old and all other indications.

**Prior-Approval Requirements**

**Age**

2 years of age or older

**Diagnoses**

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

1. Severe primary insulin-like growth factor-1 (IGF-1) deficiency
   a. Height standard deviation score ≤ -3.0
   b. Basal IGF-1 standard deviation score ≤ -3.0
c. Normal or elevated growth hormone (GH)

2. Growth Hormone (GH) gene deletion
   a. Developed neutralizing antibodies to growth hormone (GH)

AND ALL of the following:
1. Open epiphyses
2. NO evidence of active tumor or neoplasm
3. NOT for intravenous administration

Prior – Approval **Renewal Requirements**
Same as above

**Policy Guidelines**

**Pre - PA Allowance**
None

**Prior - Approval Limits**

**Duration** 12 months

**Prior - Approval Renewal Limits**

**Duration** 12 months

**Rationale**

**Summary**
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. Increlex is not a substitute for GH for approved GH indications. Increlex is contraindicated in patients with active or suspected neoplasia. Therapy should be discontinued if evidence of malignancy develops. Increlex is contraindicated in patients with closed epiphyses. Intravenous administration of Increlex is contraindicated. Safety and effectiveness in pediatric patients below the age of 2 years of age have not been established (1).

Prior approval is required to ensure the safe, clinically appropriate and cost effective use of Increlex while maintaining optimal therapeutic outcomes.
Section: Prescription Drugs  Effective Date: January 1, 2018
Subsection: Endocrine and Metabolic Drugs  Original Policy Date: December 7, 2011
Subject: Increlex  Page: 4 of 4

References

Policy History

<table>
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<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>December 2011</td>
<td>New policy based on sole product rhIGF-1 product commercially available, Another product branded as Iplex was discontinued in July 2009 and no claims were submitted in 2009</td>
</tr>
<tr>
<td>December 2012</td>
<td>Annual policy review-no change in policy statement and editorial updates</td>
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<tr>
<td>June 2014</td>
<td>Annual editorial review and reference update</td>
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<tr>
<td>September 2015</td>
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<tr>
<td>September 2016</td>
<td>Annual editorial review and reference update</td>
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<tr>
<td>December 2017</td>
<td>Policy number change from 5.08.13 to 5.30.07</td>
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<td></td>
<td>Annual editorial review and reference update</td>
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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on December 8, 2017 and is effective on January 1, 2018.