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## **Hereditary Angioedema (HAE) Therapies**

### **NOTICE**

This policy contains information which is clinical in nature. The policy is not medical advice. The information in this policy is used by Wellmark to make determinations whether medical treatment is covered under the terms of a Wellmark member's health benefit plan. Physicians and other health care providers are responsible for medical advice and treatment. If you have specific health care needs, you should consult an appropriate health care professional. If you would like to request an accessible version of this document, please contact customer service at 800-524-9242.

### **BENEFIT APPLICATION**

Benefit determinations are based on the applicable contract language in effect at the time the services were rendered. Exclusions, limitations or exceptions may apply. Benefits may vary based on contract, and individual member benefits must be verified. Wellmark determines medical necessity only if the benefit exists and no contract exclusions are applicable. This policy may not apply to FEP. Benefits are determined by the Federal Employee Program.

### **DESCRIPTION**

The intent of the hereditary angioedema (HAE) therapies drug policy is to ensure appropriate selection of patients for therapy based on product labeling, clinical guidelines and clinical studies while steering utilization to the most cost-effective medication within the therapeutic class.

There are presently six (7) HAE therapies included in this policy: Berinert (C1 inhibitor), Cinryze (C1 inhibitor), and Haegarda (C1 inhibitor) C1 esterase inhibitors, Firazyr (icatibant) selective bradykinin B2 receptor antagonists, Kalbitor (ecallantide) and Takhzyro (lanadelumab) kallikrein inhibitors, and Ruconest (conestat alfa) a recombinant C1 esterase inhibitor. All HAE therapies inhibit either the formation or the activity of bradykinin, whose overproduction in the setting of C1 esterase inhibitor (C1INH) deficiency leads to capillary leakage and fluid accumulation in body tissues resulting in HAE symptoms. HAE therapies are administered by either intravenous (Ruconest, Berinert and Cinryze) or subcutaneous (Firazyr, Haegarda Kalbitor, Takhzyro) injection.

Ruconest is the preferred product for the treatment of acute attacks of hereditary angioedema. The criteria will require the use of the health plan's preferred product Ruconest before the use of targeted product Berinert, unless there are clinical circumstances that exclude the use of the preferred product and may be based on previous use of a product.

#### FDA-Approved Indication

- Berinert: treatment of acute abdominal, facial, or laryngeal attacks of HAE in adult and pediatric patients
- Cinryze: routine prophylaxis against angioedema attacks in adults, adolescents and pediatric patients (6 years of age and older) with HAE

- Haegarda: routine prophylaxis against angioedema attacks in patients 6 years of age and older with HAE
- Firazyr: treatment of acute attacks of HAE in adults 18 years of age and older
- Kalbitor: treatment of acute attacks of HAE in patients 12 years of age and older
- Ruconest: treatment of acute attacks in adults and adolescent patients with HAE
- Takhzyro: prophylaxis to prevent attacks of HAE in patients 12 years of age and older

## POLICY

### Required Documentation

Submission of the following information is necessary to initiate the prior authorization review:

- For initial authorization, the following should be documented:
  - C4 levels and C1 inhibitor functional and antigenic protein levels
  - F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation testing, if applicable
  - Chart notes confirming family history of angioedema, if applicable
- For continuation of therapy, chart notes demonstrating a reduction in frequency of attacks

### Criteria for Initial Approval

- I. Berinert may be considered **medically necessary** for the treatment of HAE attacks when the medication will not be used with Firazyr, Kalbitor, or Ruconest and either of the following criteria is met:
  - Member must meet at least one of the following exception criteria:
    - Member is currently receiving treatment with Berinert through health insurance, excluding it is obtained as samples or via manufacturer's patient assistance programs.
    - Member has tried and experienced an inadequate response to Ruconest.
    - Member has tried and experienced an intolerable adverse event to Ruconest.
    - Member has a contraindication to Ruconest (i.e., known or suspected allergy to rabbits or rabbit-derived products).
    - Member is less than 13 years of age.
    - Berinert is being requested for treatment of laryngeal attacks.

### **AND**

- Member C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

### **OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

II. Berinert may be considered **medically necessary** for short-term preprocedural prophylaxis (i.e., prior to surgical or major dental procedures) when either of the following criteria is met:

- Member C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 30 days.**

III. Cinryze may be considered **medically necessary** for the prevention of HAE attacks when the medication will not be used in combination with Haegarda or Takhzyro and either of the following criteria is met:

- Member has C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

IV. Brand and generic Firazyf (icatibant) may be considered **medically necessary** for the treatment of acute HAE attacks when the medication will not be used in combination with Berinert, Kalbitor, or Ruconest and either of the following criteria is met:

- Member has a C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:

- Member has a C4 level below the lower limit of normal as defined by the laboratory test; and
- Member meets one of the following criteria:
  - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
  - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-converting enzyme 2, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

V. Haegarda may be considered **medically necessary** for the prevention of HAE attacks when the medication will not be used in combination with Cinryze or Takhzyro and either of the following criteria is met:

- Member has C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-converting enzyme 2, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing; or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

VI. Kalbitor may be considered **medically necessary** for the treatment of acute HAE attacks when the medication will not be used in combination with Berinert, Firazyr, and Ruconest and either of the following criteria is met:

- Member has a C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or

- Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

VII. Ruconest may be considered **medically necessary** for the treatment of acute HAE attacks when the medication will not be used in combination with Berinert, Firazyr, or Kalbitor and either of the following criteria is met:

- Member has a C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-1, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

VIII. Takhzyro may be considered **medically necessary** for the prevention of acute HAE attacks when the requested medication will not be used in combination with Cinryze or Haegarda and either of the following criteria is met:

- Member has C1 inhibitor deficiency or dysfunction as confirmed by laboratory testing and meets both of the following criteria:
  - Member has a C4 level below the lower limit of normal as defined by the laboratory performing the test; and
  - Member meets one of the following criteria:
    - C1 inhibitor (C1-INH) antigenic level below the lower limit of normal as defined by the laboratory performing the test; or
    - Normal C1-INH antigenic level and a low C1-INH functional level (functional C1-INH less than 50% or C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test)

**OR**

- Member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
  - Member has an F12, angiotensin-converting enzyme 2, plasminogen, or kininogen-1 (KNG1) gene mutation as confirmed by genetic testing; or
  - Member has a documented family history of angioedema and the angioedema was refractory to a trial of high-dose antihistamine (e.g., cetirizine) for at least one month.

**Approval will be for 6 months.**

IX. Berinert, Cinryze, Firazyr, Haegarda, Kalbitor, Ruconest, and Takhzyro are considered **not medically necessary** for patients who do not meet the criteria set forth above.

#### Continuation of Therapy

- I. Authorization of 6 months may be granted for continuation of therapy of Berinert, Kalbitor, Firazyr, and Ruconest for the treatment of acute HAE attacks when all of the following criteria are met:
  - Member meets the criteria for initial approval.
  - Member has experienced reduction in severity and/or duration of attacks when they use the requested medication to treat an acute attack.
  - For members who have had more than 12 severe attacks or more than 24 days of severe symptoms in the last 12 months, prophylaxis treatment should be considered.
- II. Authorization may be granted for continuation of therapy of Berinert for short-term preprocedural prophylaxis (i.e., prior to surgical or major dental procedures) when all initial authorization criteria are met.
- III. Authorization of 6 months may be granted for continuation of therapy of Cinryze and Haegarda when all of the following criteria are met:
  - Member meets the criteria for initial approval.
  - Member has experienced a significant reduction in frequency of attacks (e.g.  $\geq 50\%$ ) since starting treatment.
  - Member has reduced the use of medications to treat acute attacks.
- IV. Authorization of 6 months may be granted for continuation of therapy of Takhzyro when all of the following criteria are met:
  - Member meets the criteria for initial approval.
  - Member has experienced a significant reduction in frequency of attacks (e.g.  $\geq 50\%$ ) since starting treatment.
  - Member has reduced the use of medications to treat acute attacks.
  - The requested drug is being dosed every 4 weeks or dosing every 4 weeks has been considered if the member is stable on therapy
- V. Requests for the continuation of therapy of Berinert, Cinryze, Firazyr, Haegarda, Kalbitor, Ruconest, and Takhzyro are considered **not medically necessary** for patients who do not meet the criteria set forth above.

#### **PROCEDURES AND BILLING CODES**

***To report provider services, use appropriate CPT\* codes, Alpha Numeric (HCPCS level 2) codes, Revenue codes, and/or ICD diagnostic codes.***

- J0596: Injection, C-1 esterase inhibitor (human), Ruconest, 10 units
- J0597: Injection, C-1 esterase inhibitor (human), Berinert, 10 units
- J0598: Injection, C-1 esterase inhibitor (human), Cinryze, 10 units
- J1290: Injection, ecallantide, Kalbitor, 1 mg

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## POLICY HISTORY

**Policy #:** 05.01.23

**Policy Creation:** January 1, 2016

**Reviewed:** April 2020

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**Revised:** November 2020

**Current Effective Date:** November 19, 2020