

## **Clinical Policy: Ecallantide (Kalbitor)**

Reference Number: CP.PHAR.177

Effective Date: 03.01.16

Last Review Date: 02.23

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**

Ecallantide (Kalbitor<sup>®</sup>) is a plasma kallikrein inhibitor.

### **FDA Approved Indication(s)**

Kalbitor is indicated for treatment of acute attacks of hereditary angioedema (HAE) in patients 12 years of age and older.

### **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<sup>®</sup> that Kalbitor is **medically necessary** when the following criteria are met:

#### **I. Initial Approval Criteria**

##### **A. Hereditary Angioedema** (must meet all):

1. Diagnosis of HAE confirmed by a history of recurrent angioedema and one of the following (a or b):
  - a. Low C4 level and low C1-INH antigenic or functional level (*see Appendix D*);
  - b. Normal C4 level and normal C1-INH levels, and at least one of the following (i or ii):
    - i. Presence of a mutation associated with the disease (*see Appendix D*);
    - ii. Family history of angioedema and documented failure of high-dose antihistamine therapy (i.e., cetirizine 40 mg/day or equivalent) for at least 1 month or an interval expected to be associated with 3 or more attacks of angioedema, whichever is longer;
2. Prescribed by or in consultation with a hematologist, allergist, or immunologist;
3. Age  $\geq$  12 years;
4. Prescribed for treatment of acute HAE attacks;
5. For members age  $\geq$  18 years: Failure of icatibant (generic Firazyr<sup>®</sup>), unless contraindicated or clinically significant adverse effects are experienced;
6. Member is not using Kalbitor in combination with another FDA-approved product for treatment of acute HAE attacks (e.g., Berinert<sup>®</sup>, Ruconest<sup>®</sup>, Firazyr);
7. Kalbitor will be administered by a healthcare professional with appropriate medical support to manage anaphylaxis at one of the following (a or b):
  - a. Infused in physician's office or controlled medical setting;
  - b. Home infusion by a Kalbitor-trained registered nurse (RN);

8. Request does not exceed 4 doses per month;
9. Dose does not exceed 30 mg (1 carton [3 vials]) per dose, with up to 2 doses administered in a 24-hour period.

**Approval duration: up to 4 doses per month**

**Medicaid/HIM** – 6 months

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

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

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. Hereditary Angioedema (must meet all):**

1. Member meets one of the following (a or b):
  - a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
  - b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (*refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B*);
2. Member is responding positively to therapy;
3. Member is not using Kalbitor in combination with another FDA-approved product for treatment of acute HAE attacks (e.g., Berinert, Ruconest, Firazyr);
4. Documentation or claims history supports that Kalbitor has been administered by a healthcare professional in a physician’s office or controlled medical setting or home infusion by a Kalbitor-trained RN;
5. Request does not exceed 4 doses per month;
6. If request is for a dose increase, new dose does not exceed 30 mg (1 carton [3 vials]) per dose, with up to 2 doses administered in a 24-hour period.

**Approval duration: up to 4 doses per month**

**Medicaid/HIM** – 12 months

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

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

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 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.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

CI-INH: C1 esterase inhibitor	HAE-nl-C1INH: hereditary angioedema with normal C1 inhibitor
C4: complement component 4	RN: registered nurse
FDA: Food and Drug Administration	
HAE: hereditary angioedema	

*Appendix B: Therapeutic Alternatives*

*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.*

<b>Drug Name</b>	<b>Dosing Regimen</b>	<b>Dose Limit/ Maximum Dose</b>
cetirizine	40 mg/day ( <i>off-label</i> ) Typical dosing range (mg/day): 10 mg/day <i>US HAEA Medical Advisory Board 2020 Guidelines for the Management of Hereditary Angioedema</i>	40 mg/day ( <i>off-label</i> )
icatibant (Firazyr <sup>®</sup> )	Treatment of acute HAE attacks: 30 mg SC in the abdominal area; if response is inadequate or symptoms recur, additional injections of 30 mg may be administered at intervals of at least 6 hours.	90 mg/24 hours

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
	Do not administer more than 3 injections in 24 hours.	

*Therapeutic alternatives are listed as Brand name<sup>®</sup> (generic) when the drug is available by brand name only and generic (Brand name<sup>®</sup>) when the drug is available by both brand and generic.*

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s): known clinical hypersensitivity to Kalbitor
- Boxed warning(s): Due to the risk for anaphylaxis, Kalbitor should only be administered by a healthcare professional with appropriate medical support to manage anaphylaxis and hereditary angioedema. Healthcare professionals should be aware of the similarity of symptoms between hypersensitivity reactions and hereditary angioedema and patients should be monitored closely. Do not administer Kalbitor to patients with known clinical hypersensitivity to Kalbitor.

*Appendix D: General Information*

- Diagnosis of HAE:
  - There are two classifications of HAE: HAE with C1-INH deficiency (HAE-C1INH, further broken down into Type 1 and Type II) and HAE with normal C1-INH (also known as HAE-nl-C1INH). HAE-nl-C1INH was previously referred to as type III HAE, but this term is obsolete and should not be used.
  - In both Type 1 (~85% of cases) and Type II (~15% of cases), C4 levels are low. C1-INH antigenic levels are low in Type I while C1-INH functional levels are low in Type II. Diagnosis of Type I and II can be confirmed with laboratory tests. Reference ranges for C4 and C1-INH levels can vary across laboratories (see below for examples); low values confirming diagnosis are those which are below the lower end of normal.

Laboratory	Mayo Clinic	Quest Diagnostics	LabCorp
<b>Test &amp; Reference Range</b>			
C4	14-40 mg/dL	13-57 mg/dL (age- and gender-specific ranges)	10-38 mg/dL (age- and gender-specific ranges)
C1-INH, antigenic	19-37 mg/dL	21-39 mg/dL	21-39 mg/dL
C1-INH, functional	Normal: > 67% Equivocal: 41-67% Abnormal: < 41%	Normal: ≥ 68% Equivocal: 41-67% Abnormal: ≤ 40%	Normal: > 67% Equivocal: 41-67% Abnormal: < 41%

- HAE-nl-C1INH, on the other hand, presents with normal C4 and C1-INH levels. Some patients have a known associated mutation, while others have no identified genetic indicators. HAE-nl-C1INH is very rare, and there are no laboratory tests to confirm the diagnosis; mutations in 6 genes causing HAE-nl-C1INH have been identified:

Identified Genes Associated with Mutations in HAE-nl-C1INH
<i>F12</i>

Identified Genes Associated with Mutations in HAE-nI-C1INH
<i>ANGPT1</i>
<i>PLG</i>
<i>KN1</i>
<i>MYOF</i>
<i>HS3ST6</i>

## V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Treatment of acute HAE attacks	30 mg (3 mL) administered SC in three 10 mg (1 mL) injections; if attack persists, an additional dose of 30 mg may be administered within a 24 hour period	60 mg/24 hours

\*Kalbitor should only be administered by a healthcare professional

## VI. Product Availability

Vial with solution for injection: 10 mg/mL

## VII. References

1. Kalbitor Prescribing Information. Burlington, MA: Dyax Corporation; November 2021. Available at: [www.kalbitor.com](http://www.kalbitor.com). Accessed November 3, 2022.
2. Cicardi M, Bork K, Caballero T, et al. Evidence-based recommendations for the therapeutic management of angioedema owing to hereditary C1 inhibitor deficiency: consensus report of an International Working Group. *Allergy*. 2012; 67(2): 147-157.
3. Cicardi M, Aberer W, Banerji A, et al. Classification, diagnosis, and approach to treatment for angioedema: consensus report from the Hereditary Angioedema International Working Group. *Allergy*. 2014; 69(5): 602-616.
4. Zuraw BL, Bernstein JA, Lang DM, et al. A focused parameter update: hereditary angioedema, acquired C1 inhibitor deficiency, and angiotensin-converting enzyme inhibitor-associated angioedema. *J Allergy Clin Immunol*. 2013; 131(6): 1491-1493.
5. Maurer M, Magerl M, Betschel S, et al. The international WAO/EAACI guideline for the management of hereditary angioedema-The 2021 revision and update. *Allergy*. 2022;77(7):1961-1990.
6. Busse PJ, Christiansen SC, Reidl MA, et al. US HAEA Medical Advisory Board 2020 Guidelines for the Management of Hereditary Angioedema. *J Allergy Clin Immunol*. 2021; 9(1): 132-150.e3.
7. Mayo Clinic Laboratories [internet database]. Rochester, Minnesota: Mayo Foundation for Medical Education and Research. Updated periodically. Accessed November 3, 2022.
8. Quest Diagnostics ® [internet database]. Updated periodically. Accessed November 3, 2022.
9. LabCorp [internet database]. Burlington, North Carolina: Laboratory Corporation of America. Updated periodically. Accessed November 3, 2022.

## 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
J1290	Injection, ecallantide, 1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
1Q18 annual review: Policies combined for Medicaid and commercial business; No significant changes from previously approved corporate policy; Medicaid: added specialist requirement, removed “Other types of angioedema have been ruled out” from part of diagnosis due to its subjective nature, while specialist has been added; Added age limit; References reviewed and updated.	11.15.17	02.18
1Q 2019 annual review: added quantity limit of 4 doses per month for treatment of acute attacks; added requirement that member is not using requested product in combination with other approved treatments for the treatment of acute HAE attacks; references reviewed and updated.	10.30.18	02.19
1Q 2020 annual review: HAE lab reference range updated; initial auth duration revised to 6 months for alignment; added HIM line of business; references reviewed and updated.	11.04.19	02.20
1Q 2021 annual review: no significant changes; references to HIM.PHAR.21 revised to HIM.PA.154; references reviewed and updated.	10.08.20	02.21
Per June SDC and prior clinical guidance, added redirection to generic Firazyr.	06.02.21	08.21
Per health plan request, added criteria that Kalbitor be administered by a qualified professional equipped to manage possible anaphylaxis as advised in the boxed warning.	08.15.21	11.21
1Q 2022 annual review: updated diagnosis criteria to include a recurrent history of angioedema and either an associated mutation or family history of angioedema with failure of high-dose antihistamines for HAE-nl-C1INH; clarified the number of doses for treatment of acute attacks and short-term prophylaxis within criteria; references reviewed and updated.	11.06.21	02.22
Template changes applied to other diagnoses/indications and continued therapy section.	10.03.22	
1Q 2023 annual review: no significant changes; updated Appendix D lab reference range and mutations associated with HAE; references reviewed and updated.	11.03.22	02.23

**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.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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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.

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