

Clinical Policy Title:	icatibant
Policy Number:	RxA.136
Drug(s) Applied:	Firazyr®
Original Policy Date:	02/07/2020
Last Review Date:	03/09/2021
Line of Business Policy Applies to:	All lines of business

Background

Icatibant (Firazyr®) is a bradykinin B2 receptor antagonist. It is indicated for treatment of acute attacks of hereditary angioedema (HAE) in adults 18 years of age and older.

Dosing Information

Drug Name	Indication	Dosing Regimen	Maximum Dose
icatibant (Firazyr®)	Treatment of acute HAE attacks	<p>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.</p> <p>Do not administer more than 3 injections within 24-hour period.</p> <p>Patients may self-administer upon recognition of an HAE attack.</p>	90 mg/24 hours

Dosage Forms

- Injection: 10 mg per mL

Clinical Policy

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

I. Initial Approval Criteria

A. Hereditary Angioedema (must meet all):

1. Documented diagnosis of type I or II HAE confirmed by one of the following (a or b):
 - a. Low C4 level, low C1-INH antigenic or functional levels (*see Appendix D*), and history of recurrent angioedema;

This clinical policy has been developed to authorize, modify, or determine coverage for individuals with similar conditions. Specific care and treatment may vary depending on individual need and benefits covered by the plan. This policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. This document may contain prescription brand name drugs that are trademarks of pharmaceutical manufacturers that are not affiliated with RxAdvance.

- b. Normal C4 level, normal C1-INH antigenic and functional levels, and both of the following (i and ii):
 - i. History of recurrent angioedema;
 - ii. Family history of angioedema OR demonstration of mutation associated with disease;
2. Prescribed by or in consultation with an hematologist, allergist, pulmonologist or immunologist;
3. Age ≥ 18 years;
4. Prescribed for treatment of acute HAE attacks;
5. Member has had at least 1 severe attack within the past 6 months;
6. Member is not using icatibant in combination with another FDA-approved product for treatment of acute HAE attacks (e.g., Berinert®, Ruconest®, Kalbitor®); and
7. Dose does not exceed 30 mg (1 syringe) per dose, with up to 3 doses administered within a 24-hour period.

Approval duration

Commercial: 12 months

Medicaid: 12 months

II. Continued Therapy Approval

B. Hereditary Angioedema (must meet all):

1. Currently receiving medication that has been authorized by RxAdvance or member has previously met initial approval criteria listed in this policy;
2. Member is experiencing improvement in symptoms of acute HAE attacks;
3. Member is not using icatibant in combination with another FDA-approved product for treatment of acute HAE attacks (e.g., Berinert®, Ruconest®, Kalbitor®);
4. If request is for a dose increase, new dose does not exceed 30 mg (1 syringe) per dose, with up to 3 doses administered within a 24-hour period.

Approval duration

Commercial: 12 months

Medicaid: 12 months

III. Appendices

APPENDIX A: Abbreviation/Acronym Key

C4: complement 4

C1-INH: C1 esterase inhibitor

FDA: Food and Drug Administration

HAE: hereditary angioedema

SC: subcutaneous

APPENDIX B: Therapeutic Alternatives

Not applicable.

APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
 - None reported.
- Boxed Warning(s):
 - None reported.

APPENDIX D: General Information

- Diagnosis of HAE:

- There are two classifications of HAE: HAE with C1-INH deficiency (further broken down into Type 1 and Type II) and HAE of unknown origin (also known as Type III).
- 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 Test & Reference Range	Mayo Clinic	Quest Diagnostics	LabCorp
C4	14-40 mg/dL	16-47 mg/dL	9-36 mg/dL
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%

- Type III, on the other hand, presents with normal C4 and C1-INH levels. Some patients have an associated mutation in the FXII gene, while others have no identified genetic indicators. Type III is very rare (number of cases unknown), and there are no laboratory tests to confirm the diagnosis. Instead, the diagnosis is clinical and supported by recurrent episodes of angioedema with a strong family history of angioedema.

References

1. Firazyr® Prescribing Information. Lexington, MA: Shire Orphan Therapies, Inc.; August 2020. Available at: www.firazyr.com. Accessed January 25, 2021.
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. Craig T, Pursun E, Bork K, et al. WAO guideline for the management of hereditary angioedema. *WAO Journal*. 2012; 5: 182-199.
5. Zuraw BL, Banerji A, Bernstein JA, et al. US Hereditary Association Medical Advisory Board 2013 recommendations for the management of hereditary angioedema due to C1 inhibitor deficiency. *J Allergy Clin Immunol*. 2013; 1(5): 458-467.
6. 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.
7. Maurer M, Magerl M, Ansotegui I, et al. The international WAO/EAACI guideline for the management of hereditary angioedema – the 2017 revision and update. *Allergy*. 2018; 73(8):1575-1596.
8. Icatibant. Micromedex Solutions. Truven Health Analytics, Inc. Ann Arbor, MI; 2020, April 21. Accessed with subscription at: <http://www.micromedexsolutions.com>. Accessed January 25, 2021.
9. Zuraw, B. Hereditary angioedema: Pathogenesis and diagnosis. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, Ma, 2020. Accessed with subscription at: <http://uptodate.com>. Accessed January 25, 2021.

10. Busse PJ, Christiansen SC, Riedl MA, et al. US HAEA Medical Advisory Board 2020 Guidelines for the Management of Hereditary Angioedema. J Allergy Clin Immunol Pract. 2021 Jan;9(1):132-150.e3. doi: 10.1016/j.jaip.2020.08.046. Epub 2020 Sep 6. PMID: 32898710. Accessed January 25, 2020.

Review/Revision History	Review/Revision Date	P&T Approval Date
Policy established.	01/2020	02/07/2020
Policy reviewed & updated.	04/28/2020	05/20/2020
Policy was reviewed. <ol style="list-style-type: none"> 1. Policy title table was updated. 2. Dosage form section was updated. 3. Initial approval criteria I.A.1 was updated based on updated guidelines. 4. Approval duration for commercial plans was updated for initial and continued approval criteria. 5. Continued therapy criteria II.A.1 was rephrased to "Currently receiving medication that has been authorized by RxAdvance..." 6. Appendix A updated to add C4. 7. References reviewed and updated. 	01/25/2021	03/09/2021