

ENHANCED SPECIALTY GUIDELINE MANAGEMENT

CINRYZE (C1 esterase inhibitor [human])

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-Approved Indications

Routine prophylaxis against angioedema attacks in adolescent and adult patients with hereditary angioedema (HAE)

All other indications are considered experimental/investigational and are not a covered benefit.

II. REQUIRED DOCUMENTATION

The following information is necessary to initiate the prior authorization review: C4 levels and C1 inhibitor functional and antigenic protein levels.

III. CRITERIA FOR INITIAL APPROVAL

Authorization of 12 months may be granted for prevention of hereditary angioedema attacks when both of the following criteria are met:

1. Member has C1 inhibitor deficiency as confirmed by laboratory testing OR member has normal C1 inhibitor as confirmed by laboratory testing and meets one of the following criteria:
 - a. Member has an F12 gene mutation as confirmed by genetic testing or
 - b. Member has a family history of angioedema and the angioedema was refractory to a trial of antihistamine (e.g., cetirizine) for at least one month.
2. Member has experienced an inadequate response or intolerance to danazol or has a clinical reason to avoid danazol such as one of the following:
 - a. Undiagnosed abnormal genital bleeding
 - b. Markedly impaired hepatic, renal, or cardiac function
 - c. Pregnancy (member is currently pregnant or may become pregnant)
 - d. Breast feeding
 - e. Porphyria
 - f. Androgen-dependent tumor
 - g. Active thrombosis or history of thromboembolic disease
 - h. Prepubertal child

IV. CONTINUATION OF THERAPY

Authorization of 12 months may be granted for continuation of therapy when all of the following criteria are met:

1. Member meets the criteria for initial approval.
2. Member has experienced reduction in frequency, severity and duration of attacks since starting treatment.

V. REFERENCES

1. Cinryze [package insert]. Lexington, MA: ViroPharma Biologics; December 2016.
2. Craig T, Pursun EA, Bork K, et al. WAO guideline for the management of hereditary angioedema. *WAO Journal*. 2012; 5:182-199.
3. Danazol [package insert]. North Wales, PA: Teva Pharmaceuticals USA, Inc.; April 2016.
4. Cicardi M, Bork K, Caballero T, et al. Hereditary Angioedema International Working Group. Evidence-based recommendations for the therapeutic management of angioedema owing to hereditary C1 inhibitor deficiency: consensus report of an International Working Group. *Allergy*. 2012;67:147-157.
5. Bowen T, Cicardi M, Farkas H, et al. 2010 International consensus algorithm for the diagnosis, therapy, and management of hereditary angioedema. *Allergy Asthma Clin Immunol*. 2010;6(1):24.
6. Zuraw BL, Banerji A, Bernstein JA, et al. US Hereditary Angioedema Association Medical Advisory Board 2013 recommendations for the management of hereditary angioedema due to C1 inhibitor deficiency. *J Allergy Clin Immunol: In Practice*. 2013; 1(5): 458-467.
7. Zuraw BL, Bork K, Binkley KE, et al. Hereditary angioedema with normal C1 inhibitor function: consensus of an international expert panel. *Allergy Asthma Proc*. 2012; 33(6):S145-S156.
8. Lang DM, Aberer W, Bernstein JA, et al. International consensus on hereditary and acquired angioedema. *Ann Allergy Asthma Immunol*. 2012; 109:395-202.
9. 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: 602-616.
10. Bowen T. Hereditary angioedema: beyond international consensus – circa December 2010 – The Canadian Society of Allergy and Clinical Immunology Dr. David McCourtie Lecture. *Allergy Asthma Clin Immunol*. 2011;7(1):1.
11. Bernstein J. Update on angioedema: Evaluation, diagnosis, and treatment. *Allergy and Asthma Proceedings*. 2011;32(6):408-412.
12. Longhurst H, Cicardi M. Hereditary angio-edema. *Lancet*. 2012;379:474-481.
13. Farkas H, Martinez-Saguer I, Bork K, et al. International consensus on the diagnosis and management of pediatric patients with hereditary angioedema with C1 inhibitor deficiency. *Allergy*. 2017;72(2):300-313.