Cinryze® (C1 Esterase Inhibitor, Human)
(Intravenous)

Document Number: IC-0168

Last Review Date: 10/01/2026
Date of Origin: 08/27/2013
Dates Reviewed: 06/2014, 09/2014, 03/2015, 06/2015, 09/2015, 12/2015, 03/2016, 06/2016, 09/2016, 12/2016, 03/2017, 06/2017, 09/2017, 12/2017, 03/2018, 06/2018, 07/2018, 10/2018, 10/2019, 03/2020, 10/2020, 10/2021, 10/2022, 10/2023, 08/2024, 08/2025, 10/2026

I. Length of Authorization

- Initial: Prior authorization validity will be provided initially for 12 months (365 days).
- Renewal: Prior authorization validity may be renewed every 12 months (365 days) thereafter.

II. Dosing Limits

Max Units (per dose and over time) [HCPCS Unit]:

- 2,000 billable units per 30 days

III. Initial Approval Criteria [1,15-17,23-25]

Prior authorization validity is provided in the following conditions:

- Member is at least 6 years of age; **AND**

Universal Criteria

- Must be prescribed by, or in consultation with, a specialist in allergy, immunology, hematology, pulmonology, or medical genetics; **AND**
- Will not be used in combination with another therapy indicated for the prophylaxis of hereditary angioedema (HAE) attacks; ***NOTE:*** *Requests for combination therapy with another agent is allowable when Cinryze is requested as short-term prophylaxis ONLY*; **AND**
- Provider will confirm member has been counseled to avoid possible medication triggers for HAE attacks (e.g. estrogen-containing medications, ACE inhibitors, etc.); **AND**

Prophylaxis Against Hereditary Angioedema (HAE) Attacks † ‡ Φ

- Member has a history of ANY of the following:
  - Recurrent swelling of mucous membranes, skin surface, or subcutaneous tissue
  - Recurrent abdominal attacks with any of the following: severe abdominal pain, nausea, vomiting, or diarrhea
  - Episodes of upper airway (e.g., mouth, tongue, larynx, etc.) edema

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- Prodromal signs and symptoms (e.g., anxiety, nausea, paresthesia, fatigue, etc.) preceding angioedema attacks
- Positive family history of HAE; **AND**

- Other causes of angioedema have been ruled out (e.g., drug-induced angioedema, mast cell-mediated angioedema, acquired angioedema due to C1-INH deficiency, etc.); **AND**
- Member will be receiving therapy as one of the following HAE prophylaxis methods:
  - Short-term prophylactic treatment will be used prior to a procedure (i.e., dental or medical procedure); **OR**
  - Long-term prophylactic treatment will be used based on the provider's assessment of the member's disease activity, quality of life, availability of health care resources, and/or failure to achieve adequate control by appropriate acute HAE attack therapy; **AND**
- Diagnosis of HAE has been confirmed as one of the following:
  - Member has HAE due to C1 inhibitor deficiency (HAE-C1-INH) Type 1 or 2; **AND**
    - Member has a current or historical C1-INH antigenic level below the lower limit of normal as defined by the laboratory performing the test; **OR**
    - Member has a current or historical C1-INH functional level below the lower limit of normal as defined by the laboratory performing the test; **OR**
    - Genetic testing confirms pathogenic mutation(s) in *SERPING1*; **OR**
  - Member has HAE with normal C1INH (HAE-nC1-INH); **AND**
    - Member has a current or historical normal C1-INH level (e.g., C1-INH antigenic level, C1-INH functional level) as defined by the laboratory performing the test; **AND**
      - Member has a confirmed presence of known HAE-causing mutation(s) in the gene(s) for factor XII (*F12),* angiopoietin-1 *(ANGPT1),* plasminogen *(PLG),* kininogen-1 *(KNG1),* myoferlin *(MYOF)*, and/or heparan sulfate-glucosamine 3-O-sulfotransferase 6 (*HS3ST6)*; **OR**
      - Member has recurrent angioedema attacks without hives that are refractory to a 4-week trial of high-dose antihistamines (i.e. second-generation H1 antagonist at four times the standard dose); **AND**
    - Member must have demonstrated ONE of the following:
      - Prior beneficial response to a therapy indicated for the treatment of acute HAE attacks; **OR**
      - Inadequate response or intolerance to an adequate trial of another prophylactic HAE therapy such as an antifibrinolytic agent (e.g., tranexamic acid [TXA] or aminocaproic acid), a 17α-alkylated androgen (e.g., danazol), and/or progestin therapy (specific to females)

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria [1,23-25]

Prior authorization validity can be renewed based upon the following criteria:

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- Member continues to meet the universal and other indication-specific relevant criteria identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe hypersensitivity reactions, serious thromboembolic events (arterial and venous), etc.; **AND**
    - The member has experienced clinical benefit from therapy (e.g., reduced attack severity and/or frequency, shortened attack duration, etc.); **OR**
    - Member requires dose titration due to an inadequate response to therapy (> 1.0 HAE attack/month, regardless of severity/duration)

V. Dosage/Administration [1]

Indication	Dose
Prophylaxis against Hereditary Angioedema (HAE) attacks	**Adults and adolescents (at least 12 years of age)** Administer 1,000 IU* by intravenous injection every 3 to 4 days – *For those who have not responded adequately to initial dosing, doses up to 2,000 IU (not exceeding 80 IU/kg) every 3 or 4 days may be considered based on individual response.* **Pediatrics (6 to 11 years of age)** Administer 500 IU* by intravenous injection every 3 to 4 days – *The dose may be adjusted according to individual response, up to 1,000 IU every 3 to 4 days.* ** One International Unit (IU) corresponds to the amount of C1 esterase inhibitor present in 1 mL of normal plasma as defined by the WHO international reference standard. Previously, the potency values were expressed in Units (U) and were relative to an in-house reference standard. A conversion factor of 0.83 can be used to recalculate the potency from U to IU, i.e., 100 U = 83 IU.* ***Note:** Cinryze may be self-administered after being instructed by a healthcare provider.*

VI. Billing Code/Availability Information

HCPCS Code:

- J0598 – Injection, c-1 esterase inhibitor (human), cinryze, 10 units; 1 billable unit = 10 international units

NDC(s):

- Cinryze 500 international units (IU) single-dose vial: 42227-0081-xx
- Cinryze 500 IU single-dose carton kit (containing a single-dose vial of Cinryze and a 5 mL vial of Sterile Water for Injection): 42227-0083-xx

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VII. References

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Appendix A – Non-Quantitative Treatment Limitations (NQTL) Factor Checklist

Non-quantitative treatment limitations (NQTLs) refer to the methods, guidelines, standards of evidence, or other conditions that can restrict how long or to what extent benefits are provided under a health plan. These may include things like utilization review or prior authorization. The utilization management NQTL applies comparably, and not more stringently, to mental health/substance use disorder (MH/SUD) Medical Benefit Prescription Drugs and medical/surgical (M/S) Medical Benefit Prescription Drugs. The table below lists the factors that were considered in designing and applying prior authorization to this drug/drug group, and a summary of the conclusions that Prime's assessment led to for each.

Factor	Conclusion
Indication	Yes: Consider for PA
Safety and efficacy	No: PA not a priority
Potential for misuse/abuse	No: PA not a priority
Cost of drug	Yes: Consider for PA

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description

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D84.1	Defects in the complement system

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	Wellpoint Federal
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	Wellpoint Federal
15	KY, OH	CGS Administrators, LLC

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