C1 ESTERASE INHIBITOR

Generic	Brand	HICL	GCN	Exception/Other
C1 ESTERASE INHIBITOR	BERINERT, CINRYZE HAEGARDA	18568		
C1 ESTERASE INHIBITOR, RECOMBINANT	RUCONEST	37766		

This drug requires a written request for prior authorization.

****Please use the criteria for the specific drug requested****

GUIDELINES FOR USE

INITIAL CRITERIA (NOTE: FOR RENEWAL CRITERIA SEE BELOW)

BERINERT

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet **ALL** of the following criteria?
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for acute attacks of hereditary angioedema

   If yes, **approve Berinert for 12 months (up to 12 fills) by NDC 63833-0825-02.**
   If no, do not approve.
   INITIAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Berinert)** requires a diagnosis of hereditary angioedema. In addition, all of the following criteria must be met:
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for acute attacks of hereditary angioedema

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C1 ESTERASE INHIBITOR

INITIAL CRITERIA (CONTINUED)

CINRYZE

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet **ALL** of the following criteria?
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for routine prophylaxis against angioedema attacks
   - The patient is 6 years of age or older

   If yes, **approve Cinryze for 12 months (up to 12 fills) by NDC 42227-0081-05 with a quantity limit of #40 vials per 28 days.**
   If no, do not approve.
   INITIAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Cinryze)** requires a diagnosis of hereditary angioedema. In addition, all of the following criteria must be met:
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for routine prophylaxis against angioedema attacks
   - The patient is 6 years of age or older

HAEGARDA

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet **ALL** of the following criteria?
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for routine prophylaxis against angioedema attacks

   If yes, **approve Haegarda for 12 months (up to 12 fills) by GPID for all strengths as follows:**
   - **Haegarda 2000 Units (GPID 39478)**
   - **Haegarda 3000 Units (GPID 43356)**

   If no, do not approve.
   INITIAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Haegarda)** requires a diagnosis of hereditary angioedema. In addition, all of the following criteria must be met:
   - Diagnosis is confirmed via complement testing
   - The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
   - The medication is being used for routine prophylaxis against angioedema attacks

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C1 ESTERASE INHIBITOR

INITIAL CRITERIA (CONTINUED)

RUCONEST

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet **ALL** of the following criteria?

- Diagnosis is confirmed via complement testing
- The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
- The medication is being used for acute attacks of hereditary angioedema

If yes, **approve Ruconest for 12 months (up to 12 fills) by GPID (30182) with a quantity limit of #8 vials per fill.**
If no, do not approve.
INITIAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Ruconest)** requires a diagnosis of hereditary angioedema. In addition, all of the following criteria must be met:

- Diagnosis is confirmed via complement testing
- The medication is prescribed by or given in consultation with an allergist/immunologist or hematologist
- The medication is being used for acute attacks of hereditary angioedema

RENEWAL CRITERIA

CINRYZE

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet the following criterion?

- Physician attestation of improvement (i.e., reductions in attack frequency or attack severity) compared to baseline in HAE attacks with routine prophylaxis

If yes, **approve Cinryze for 12 months by NDC 42227-0081-05 with a quantity limit of #40 vials per 28 days.**
If no, do not approve.
RENEWAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Cinryze)** requires a diagnosis of hereditary angioedema (HAE) for renewal. The following criterion must also be met:

- Physician attestation of improvement (i.e., reductions in attack frequency or attack severity) compared to baseline in HAE attacks with routine prophylaxis

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C1 ESTERASE INHIBITOR

RENEWAL CRITERIA (CONTINUED)

HAEGARDA

1. Does the patient have a diagnosis of hereditary angioedema (HAE) and meet the following criterion?

- Physician attestation of improvement (i.e., reductions in attack frequency or attack severity) compared to baseline in HAE attacks with routine prophylaxis

If yes, **approve Haegarda for 12 months by GPID for all strengths as follows:**
- **Haegarda 2000 Units (GPID 39478)**
- **Haegarda 3000 Units (GPID 43356)**

If no, do not approve.

RENEWAL DENIAL TEXT: The guideline named **C1 ESTERASE INHIBITOR (Haegarda)** requires a diagnosis of hereditary angioedema (HAE) for renewal. The following criterion must also be met:
- Physician attestation of improvement (i.e., reductions in attack frequency or attack severity) compared to baseline in HAE attacks with routine prophylaxis

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RATIONALE

To ensure the appropriate use of Berinert, Cinryze, Haegarda and Ruconest in patients with hereditary angioedema (HAE).

FDA APPROVED INDICATIONS

Berinert:
- Is a plasma-derived C1 esterase inhibitor (human) indicated for the treatment of acute abdominal, facial, or laryngeal attacks of hereditary angioedema in adult and pediatric patients.
- The safety and efficacy of Berinert for prophylactic therapy have not been established.

Cinryze:
- Is a C1 esterase inhibitor indicated for routine prophylaxis against angioedema attacks in adults, adolescents and pediatric patients (6 years of age and older) with hereditary angioedema (HAE).

Haegarda:
- Is a plasma-derived concentrate of C1 Esterase Inhibitor (Human) (C1-INH) indicated for routine prophylaxis to prevent Hereditary Angioedema (HAE) attacks in adolescent and adult patients.

Ruconest:
- Is a C1 esterase inhibitor (recombinant) indicated for the treatment of acute attacks in adult and adolescent patients with hereditary angioedema (HAE).
- Limitation of use: Effectiveness was not established in HAE patients with laryngeal attacks.

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C1 ESTERASE INHIBITOR

FDA APPROVED INDICATIONS (CONTINUED)

DOSAGE AND ADMINISTRATION

Berinert

Berinert is for intravenous use after reconstitution only. The dose is 20 International Units (IU) per kg body weight by intravenous injection given at a rate of approximately 4mL/min. Doses lower than 20 IU/kg body weight should not be administered. Each Berinert vial contains 500 IU of C1 esterase inhibitor as a lyophilized concentrate for reconstitution with 10 mL of Sterile Water for Injection. Use a silicone-free syringe for reconstitution and administration. Administer at room temperature within 8 hours after reconstitution**.** Appropriately trained patients may self-administer Berinert upon recognition of an HAE attack.

Cinryze

Cinryze is for intravenous use after reconstitution only.

Adults and adolescents (12 years old and above): A dose of 1,000 Units with an infusion rate of 1mL/min for 10 minutes can be administered as an intravenous infusion every 3 or 4 days. For patients who have not responded adequately to 1,000 units of Cinryze every 3 or 4 days, doses up to 2,500 units (not to exceed 100 units/kg) every 3 or 4 days may be considered based on individual patient response.

Children (6 to 11 years old): A dose of 500 Units with an infusion rate of 1mL/min for 5 minutes can be administered as an intravenous infusion every 3 or 4 days. The dose may be adjusted according to individual response, up to 1,000 U every 3 to 4 days.

Reconstitute each Cinryze vial with one vial of Sterile Water for Injection, USP (5 mL each) using aseptic sterile technique. Reconstitute as many vials as needed to obtain the required dose. Administer at room temperature within 3 hours of reconstitution. Appropriately trained patients may self-administer Cinryze.

Haegarda

Haegarda is for subcutaneous use after reconstitution only. Haegarda is intended for self-administration after reconstitution at a dose of 60 International Units (IU) per kg body weight by subcutaneous (S.C.) injection twice weekly (every 3 or 4 days). The patient or caregiver should be trained on how to administer Haegarda. Reconstitute Haegarda prior to use using Sterile Water for Injection, USP. Use a silicone-free syringe for reconstitution and administration. Administer at room temperature within 8 hours after reconstitution.

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C1 ESTERASE INHIBITOR

FDA APPROVED INDICATIONS (CONTINUED)

DOSAGE AND ADMINISTRATION

Ruconest

Ruconest is for intravenous use after reconstitution only. The dose is 50 U/kg administered as an intravenous injection for patients less than 84 kg, or 4200 U for patients who weigh 84 kg or more. Each vial (2100 U) should be reconstituted by adding 14mL of Sterile Water for injection to obtain a solution of 150 U/mL. The reconstituted product should be used immediately, or within 8 hours stored at 36°F to 46°F. After reconstitution the dose can be administered as a slow intravenous injection over approximately 5 minutes. If appropriately trained, patients may self-administer the dose as needed upon recognition of an HAE attack. No more than two doses should be administered within a 24- hour period, and no more than 4200 U per dose should be administered.

REFERENCES

- Cinryze [Prescribing Information]. Lexington, MA: Shire Viropharma Inc. June 2018.
- Berinert [Prescribing Information]. Kankakee, IL: CSL Behring LLC. September 2017.
- Haegarda [Prescribing Information]. Marburg, German: CSL Behring LLC. October 2017.
- Ruconest [Prescribing Information]. Raleigh, NC: Salix Pharmaceuticals; March 2018.

Library	Commercial	NSA
Yes	Yes	No

Part D Effective: N/A
Commercial Effective: 10/01/18
Created: 04/09
Client Approval: 09/18
P&T Approval: 07/18