

Keep attacks grounded



with plasma-free
RUCONEST[®]
C1 esterase inhibitor (recombinant)

A Patient's Guide

INDICATION (USES)

What is RUCONEST?

RUCONEST is an injectable medicine that is used to treat acute angioedema attacks in adult and adolescent patients with Hereditary Angioedema (HAE).

IMPORTANT SAFETY INFORMATION

Who should not use RUCONEST?

You should not use RUCONEST if you have a known or suspected allergy (hypersensitivity) to rabbits or rabbit-derived products.

You should not use RUCONEST if you have experienced life-threatening immediate hypersensitivity reactions, including anaphylaxis, to RUCONEST or to any other C1 esterase inhibitor product.

RUCONEST is not indicated for use in children under the age of 13 years.

Please see additional Important Safety Information throughout and accompanying full Prescribing Information, including Patient Product Information.

What is HAE?

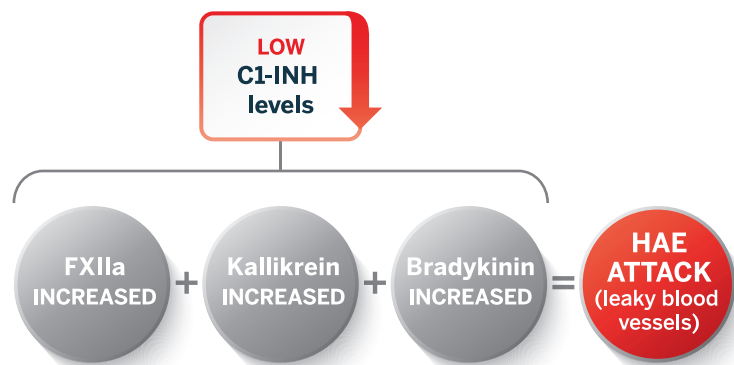
The cause of HAE

Hereditary angioedema, or HAE, is linked to the blood protein C1 esterase inhibitor, or C1-INH.

- ▶ People who have HAE do not have enough C1-INH
- ▶ You can also have HAE if your C1-INH does not work well

The good news is that there are treatments that can help people with HAE.

What happens in the body to cause HAE attacks?



When working C1-INH levels are too low, blood factor 12a (FXIIa) increases. This activates the enzyme kallikrein and increases the peptide bradykinin. The result is an HAE attack.

Treat at the earliest signs and symptoms

Learn to recognize triggers that lead to attacks

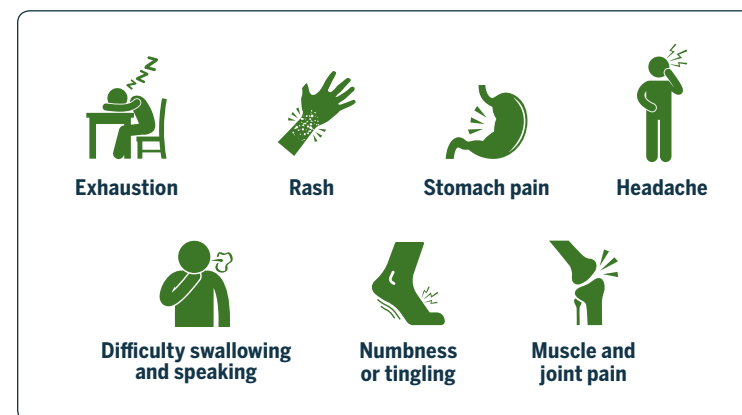
These may include:

- ▶ Anxiety
- ▶ Stress
- ▶ Minor injuries
- ▶ Medicines
- ▶ Infections
- ▶ Dental work
- ▶ Changes in hormones, like those that happen when women are pregnant or have their period

Still, many attacks occur without a clear trigger.

For best results, treat at the first sign of symptoms

Learn to recognize the signs that an HAE attack may be coming. Signs vary from person to person but may include:



HAE is not an allergic reaction

- ▶ If you have HAE, you may have attacks of swelling
- ▶ An attack can lead to swelling in almost any part of your body

HAE attacks of swelling can:



Last for up to 3 days



Be extremely painful



Constrict airways



Happen at any moment and can get worse with time



Be life-threatening



Quickly progress to other parts of the body

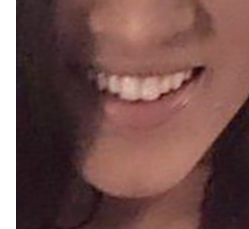
These products are not indicated to treat HAE:

- ▶ Prednisone
- ▶ Epinephrine
- ▶ Antihistamines

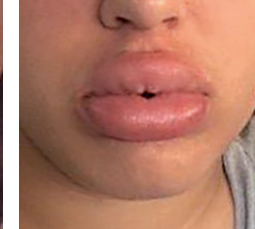
Swelling can start in one area and spread to other areas
In some cases, this can become life-threatening

HAE attacks can vary each time

Without swelling



During swelling



Facial swelling during an HAE attack

Without swelling

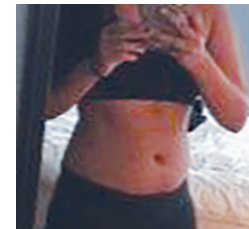


During swelling

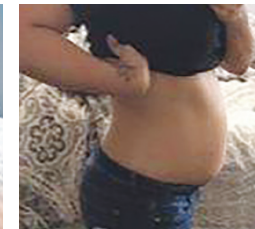


Hand swelling during an HAE attack

Without swelling



During swelling



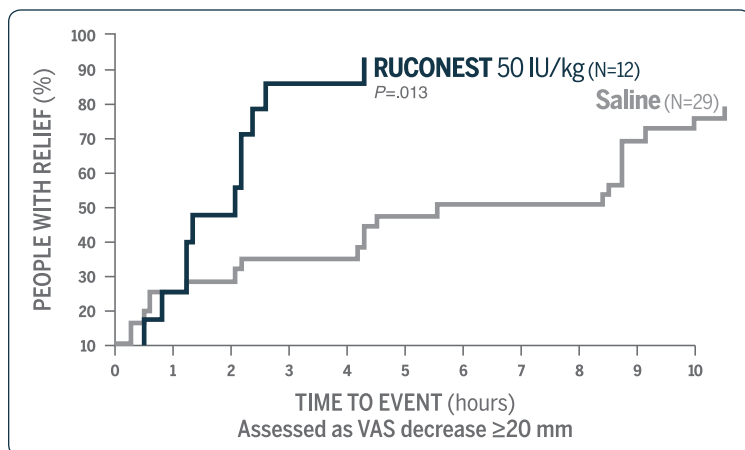
Abdominal swelling during an HAE attack

- ▶ Symptoms vary among individuals and attacks

Rapid symptom relief in studies

- ▶ In Study 1, people taking RUCONEST started to see symptom relief in 90 minutes vs 152 minutes for placebo
- ▶ In an extension of the same study, people started to see symptom relief in 75 minutes with RUCONEST

Start to symptom relief in Studies 2 and 3



VAS, visual analog scale.

RUCONEST brings C1-INH in the blood within the normal range for 94% of people

IMPORTANT SAFETY INFORMATION

What should I tell my healthcare provider before using RUCONEST?

Tell your healthcare provider and pharmacist about all of the medicines you take, including all prescription and non-prescription medicines such as over-the-counter medicines, supplements, or herbal remedies.

Rapid symptom relief you can see

This person experienced a moderate to severe attack before treatment



Time of taking RUCONEST



1 hour after RUCONEST



4 hours after RUCONEST



24 hours after RUCONEST

- ▶ Actual symptom relief from a RUCONEST study. Results may vary

RUCONEST rapidly treated this attack with just 1 dose

IMPORTANT SAFETY INFORMATION

How is RUCONEST given?

RUCONEST will be dissolved in sterile water and slowly injected into your vein (intravenous injection). Most of the time a single dose of RUCONEST is enough to treat an attack, but a second dose may be needed.

Symptom relief with just 1 dose of RUCONEST

~9 of 10 people



achieved symptom relief with just one 50 IU/kg dose of RUCONEST

- ▶ **89%** of people needed just one 50 IU/kg dose of RUCONEST per attack in a clinical study
- ▶ **97%** of attacks needed just one 50 IU/kg dose in an extension of the clinical study

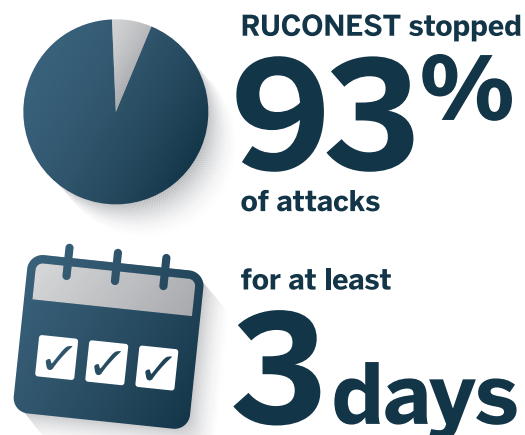
IMPORTANT SAFETY INFORMATION

What are the possible side effects of RUCONEST?

Allergic reactions may occur with RUCONEST. Call your healthcare provider or the emergency department immediately if you have any of the following symptoms after receiving RUCONEST: wheezing, difficulty breathing, chest tightness, turning blue (look at lips and gums), fast heartbeat, swelling, faintness, rash or hives.

In clinical studies, the most severe side effect reported was a severe allergic reaction in a subject who was allergic to rabbits.

RUCONEST offered relief that lasts



- ▶ As shown in a review of studies that included 68 people (280 attacks)

RUCONEST has a favorable tolerability profile

- ▶ In clinical trials, the most common adverse reactions reported (>2%) were headache, nausea, and diarrhea

RUCONEST is a pregnancy category B medicine

- ▶ RUCONEST has not been studied in pregnant women; therefore, it should only be used during pregnancy if clearly needed. Notify your physician if you are breastfeeding or plan to breastfeed

Recombinant technology provides a reliable supply

RUCONEST does not depend on human plasma donations to treat HAE

HUMAN PLASMA DONATIONS FOR 1 PERSON FOR 1 YEAR^a



1.2

TONS

or

1400 DONATIONS
Haegarda^{®b} 2x a week



UP TO
0.6

TONS

or

712 DONATIONS
Cinryze^{®c} 2x a week



Varies

or

470 DONATIONS
Berinert^{®d} if 2x a week



RUCONEST 50 IU/kg
NO DONATIONS

Information is presented only to show how various products are sourced; it is not intended to suggest comparative safety or efficacy. Haegarda and Cinryze are used regularly to prevent attacks from happening. Trademarks are the property of their respective owners.

^aPlasma yield ranges from 20%-50% (assumed 50%). ^bHaegarda[®] 60 IU/kg. ^cCinryze[®] 1000-2500 U.

^dBerinert[®] 20 IU/kg.

IMPORTANT SAFETY INFORMATION

What should I tell my healthcare provider before using RUCONEST?

Tell your healthcare provider about all of your medical conditions, including if you:

- have an allergy to rabbits. Rabbit allergy testing is not required unless you get a runny nose, itchy nose, sneezing, coughing, wheezing, difficulty breathing or watery eyes when you are near rabbits.

RUCONEST is a plasma-free recombinant medicine

Recombinant medicines have been used to help people with many diseases

Some examples include:

- ▶ **Arthritis**
 - Humira[®]
 - Simponi[®]
- ▶ **Asthma**
 - Xolair[®]
 - Nucala[®]
- ▶ **Diabetes**
 - Humulin[®] N
 - Humalog[®]
- ▶ **Hemophilia**
 - Alprolix[®]
 - Eloctate[®]
- ▶ **Cancer**
 - Herceptin[®]
 - Neulasta[®]
- ▶ **Blood Disorders**
 - Aranesp[®]
 - Epogen[®]

RECOMBINANT TECHNOLOGY
HAS BEEN USED FOR

35 YEARS

IMPORTANT SAFETY INFORMATION

- are pregnant or planning to become pregnant. It is not known if RUCONEST can harm your unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if RUCONEST passes to your milk or if it can harm your baby.

Benefits of recombinant RUCONEST

SUPPLY



Reliable supply that does not depend on plasma supply

PURITY



More than 99.998% free of host-related impurities

SAFETY



Recombinant design eliminates risk of human blood-borne viruses

STABILITY



4-year shelf life when stored at **room temperature** (36°F-77°F)

IMPORTANT SAFETY INFORMATION

What are the possible side effects of RUCONEST?

Other side effects patients experienced during clinical studies include:

• headache • nausea • diarrhea

These are not all the possible side effects of RUCONEST.

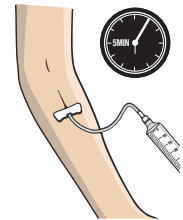
If any of the side effects get serious, or if you notice any side effects not listed here, please inform your healthcare provider or pharmacist.

You can also report side effects to the FDA at 1-800-FDA-1088 or visit www.fda.gov/medwatch.

RUCONEST can be self-administered

After training, most people are able to give themselves RUCONEST

It takes
JUST 5 MINUTES
to inject a dose of RUCONEST



- ▶ You should take RUCONEST at the first sign of symptoms
- ▶ Your RUCONEST dose is based on body weight and prescribed to you by your healthcare provider
- ▶ A dose of RUCONEST takes about 5 minutes to prepare and 5 minutes to inject

See the RUCONEST
self-administration video at
www.RUCONEST.com



RUCONEST SOLUTIONS: Support you can count on

RUCONEST SOLUTIONS provides nursing support



RUCONEST can be self-administered.
Dedicated nurses provide training in
your own home as often as you need it^a



Training on appropriate vein care
that can help support long-term
self-administration of RUCONEST



Developing your individualized
Emergency Care Plan



Coordinating **on-demand home infusion
services** by a specialty pharmacy nurse if
you're not able to self-administer RUCONEST

RUCONEST SOLUTIONS: Support you can count on

RUCONEST SOLUTIONS provides financial support



A personal case manager to help you
with **insurance coverage and access**
to RUCONEST



Coordination of **financial support**



Ongoing support to answer your
questions and be certain you have
the medicine you need



Ask your doctor about
starter vials of RUCONEST

To contact RUCONEST SOLUTIONS,
call 1-855-613-4423, or visit www.RUCONEST.com

^aAvailability subject to your geographic location.

Keep HAE attacks grounded with plasma-free RUCONEST



- R**apid onset of symptom relief
- U**nique recombinant design with a reliable supply
- C**ategory B pregnancy rating
- O**n-demand therapy for attacks
- N**o risk of viruses from human blood
- E**ffective with just 1 dose
- S**ustained efficacy for at least 3 days
- T**olerability that is well established

To get more information, visit www.RUCONEST.com

Healthcare Provider's Name

Phone Number

IMPORTANT SAFETY INFORMATION

For product information, adverse event reports, and product complaint reports, please contact Pharming Healthcare toll-free:

(844) 474-2764 Main corporate number

(800) 930-5221 Adverse event reporting, product complaints, medical information questions

Please see additional Important Safety Information throughout and accompanying full Prescribing Information, including Patient Product Information.

