
Reconstitution and Administration of Cinryze® (Human C1-esterase inhibitor) Instructions for Healthcare Professionals

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Please refer to the Cinryze Summary of Product Characteristics for full product information.

Adverse events should be reported to the Pharmacovigilance Unit at the Health Products Regulatory Authority (HPRA) at: www.hpra.ie/ Alternatively adverse events should be reported to Takeda Products Ireland Ltd. On 1800 937 970 (freephone from Ireland only) or +44 (0)3333 000181 or emailed to: ae.gbr-irl@takeda.com

Therapeutic Indications

Treatment and pre-procedure prevention of angioedema attacks in adults, adolescents and children (2 years old and above) with hereditary angioedema (HAE).

Routine prevention of angioedema attacks in adults, adolescents and children (6 years old and above) with severe and recurrent attacks of hereditary angioedema (HAE), who are intolerant to or insufficiently protected by oral prevention treatments, or patients who are inadequately managed with repeated acute treatment.

Dosing for children (2 – 11 years)

The recommended dose of Cinryze is as follows:

	2 to 11 years 10-25 kg	2 to 11 years >25 kg
Treatment of swelling attacks	A dose of 500 IU (one vial) of Cinryze should be injected at the first sign of a swelling attack. A second injection of 500 IU may be given if the patient's symptoms do not improve after 60 minutes.	A dose of 1000 IU (two vials) of Cinryze should be injected at the first sign of a swelling attack. A second injection of 1000 IU may be given if the patient's symptoms do not improve after 60 minutes.
Prevention of swelling attacks before surgery	A dose of 500 IU (one vial) of Cinryze should be injected up to 24 hours before a medical, dental, or surgical procedure.	A dose of 1000 IU (two vials) of Cinryze should be injected up to 24 hours before a medical, dental, or surgical procedure.

Cinryze is not for use in children below 6 years of age for routine prevention of angioedema attacks.

	6 to 11 years
Routine prevention of swelling attacks	A dose of 500 IU (one vial) of Cinryze should be injected every 3 or 4 days for routine prevention of swelling attacks. The dosing interval may be adjusted depending upon the patient's response to Cinryze.

Dosing for adults and adolescents (12 years and above)

	Adults and adolescents (12 years and above)
Treatment of swelling attacks	A dose of 1000 IU (two vials) of Cinryze should be injected at the first sign of an angioedema attack. A second injection of 1000 IU may be given if symptoms do not improve after 60 minutes. For patients experiencing laryngeal attacks or if initiation of treatment is delayed, the second 1000 IU dose may be given earlier than 60 minutes after the first dose, depending on clinical response.
Pre-procedure prevention of swelling attacks	A dose of 1000 IU (two vials) of Cinryze should be injected up to 24 hours before a medical, dental, or surgical procedure.
Routine prevention of swelling attacks	A dose of 1000 IU (two vials) of Cinryze should be injected every 3 or 4 days for routine prevention of swelling attacks.

The prescribing physician is responsible for determining if a patient is appropriate for home- or self-administration of Cinryze and for providing the necessary training to the patient or caregiver. Ongoing review of administration technique is required to ensure safe and proper use.

Instructions for use

The following procedures are provided as general guidelines for the reconstitution and administration of Cinryze (Human C1-esterase inhibitor).

- Cinryze powder vials and water for injection vials must be stored below 25°C. Do not freeze. Store in the original package in order to protect from light.
- Reconstitution, product administration and handling of the administration set must be done with caution.
- Use only the transfer device provided with Cinryze.
- Any unused product or waste material should be disposed of in accordance with local requirements.

Preparation and handling

Supplies needed



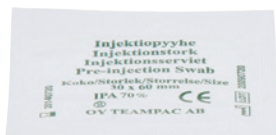
1 or 2 Vials of Cinryze
(500 IU each)



1 or 2 Vials of water for injection,
(solvent, 5 ml each)



1 or 2 Transfer devices



2 Disinfection swabs (not included in the pack)



Mat

Cinryze is intended for intravenous injection after reconstitution with water for injection.

Each vial of Cinryze is for single use only.

Reconstitution

For a dose of 500 IU:

One (1) powder vial, 1 solvent vial, 1 filter transfer device, 1 disposable 10 ml syringe, 1 venipuncture set and 1 protective mat are needed. Store the remaining vial and administration equipments for the next dose.

For a dose of 1000 IU:

Two (2) powder vials, 2 solvent vials, 2 filter transfer devices, 1 disposable 10 ml syringe, 1 venipuncture set and 1 protective mat are needed.

Each powder vial should be reconstituted with 5 ml water for injection. One vial of reconstituted Cinryze corresponds to a dose of 500 IU.

Two vials of reconstituted Cinryze correspond to a dose of 1000 IU.

1. Work on the mat provided and wash your hands before performing the following procedures.
2. Aseptic technique should be used during the reconstitution procedure.
3. Ensure the powder vial and the solvent vial have reached room temperature (15°C – 25°C) before use.
4. Release the powder vial label by peeling down the purple strip, indicated by the arrow. The peel-off stickers containing the batch number are marked by a black triangle on the top left corner. Your patient should keep the batch number for their records.



5. Remove plastic caps from the powder and solvent vials.



6. Cleanse stoppers with a disinfection swab and allow them to dry prior to use.



7. Remove protective covering from the top of the transfer device package. Do not remove the device from the package.



8. **Note: the transfer device must be attached to the solvent vial before being attached to the powder vial, so that the vacuum in the powder vial is not lost.**

Place the solvent vial on a flat surface and insert the blue end of the transfer device pushing down until the spike penetrates through the centre of the solvent vial stopper and the device snaps into place. The transfer device must be vertical prior to penetrating the stopper closure.



9. Remove the plastic package from the transfer device and discard it. Take care not to touch the exposed end of the transfer device.



10. Place the powder vial on a flat surface. Invert the transfer device and the solvent vial containing water for injection and insert the clear end of the transfer device (which must be completely upright) into the powder vial, pushing down until the spike penetrates the rubber stopper and the transfer device snaps into place.

The water for injection will automatically flow into the vial of Cinryze because of the vacuum in the powder vial. **If this does not happen, do not use the product.**

11. Gently swirl the powder vial until all powder is dissolved. Do not shake the powder vial. Make sure all the powder is completely dissolved by checking through the visible area of the vial.

12. Disconnect the solvent vial by turning it anti-clockwise. Do not remove the clear end of the transfer device from the powder vial.

Look at the final solution before using it to make sure that Cinryze is completely dissolved. Once dissolved, the solution in the vial of Cinryze should be colourless to slightly blue and clear. Do not use the product if the solution is cloudy or discoloured or contains any particles.

ONE vial of reconstituted Cinryze contains 500 IU of Human C1-esterase inhibitor in 5 ml, resulting in a concentration of 100 IU/ml.



If you are preparing a dose of 1000 IU, use the second transfer device to reconstitute the second powder vial by repeating Steps 4 – 12. Do not re-use the first transfer device.

If you are preparing a dose of 500 IU, continue to administration process.

Administration process

Supplies needed



1 Disposable 10 ml syringe



1 or 2 Vials of reconstituted Cinryze



1 Venipuncture set
(butterfly needle with tubing)



Tourniquet
(not included in the pack)



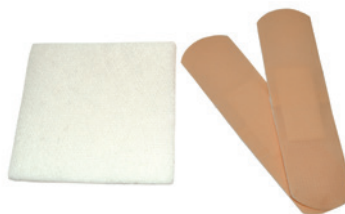
Disinfection swabs
(not included in the pack)



Sharps container
(not included in the pack)



Medical tape
(not included in the pack)



Plasters and dry swabs
(not included in the pack)



Watch
(not included in the pack)

1. Aseptic technique should be used during the administration procedure.
2. After reconstitution, the Cinryze solutions are colourless to slightly blue and clear. Do not use the product if the solutions are turbid or discoloured.

3. Use the sterile, disposable 10 ml syringe supplied in the administration set. Draw back the plunger to allow approximately 5 ml of air into the syringe.



4. Attach the syringe onto the top of the clear end of the transfer device by turning it clockwise.



5. Invert the vial gently and inject air into the solution and then slowly withdraw the reconstituted Cinryze solution into the syringe.



6. Detach the syringe from the vial by turning it anti-clockwise and releasing it from the clear end of the transfer device.

If you are preparing a dose of 1000 IU, repeat steps 3 to 6 with a second vial of reconstituted Cinryze using the same syringe.

If you are preparing a dose of 500 IU, continue to Step 7.

7. Remove any air bubbles by gently tapping the syringe with your fingers and slowly pushing the air out of the syringe.
8. Inspect the reconstituted Cinryze solution for particulate matter prior to administration; do not use if particles are observed.
9. Attach the venipuncture set to the syringe containing Cinryze solution and inject the solution intravenously into the patient. Administer Cinryze by intravenous injection at a rate of 1 ml per minute (1000 IU over 10 minutes or, 500 IU over 5 minutes).

Note: the reconstituted Cinryze solution should be used immediately.

If venous access cannot be obtained the patient should be instructed to immediately contact the prescribing physician.

10. Any unused product or waste material should be disposed of in accordance with local requirements.



Important information

Please refer to the Cinryze Summary of Product Characteristics for full product information. There are limited data on the use of this medicinal product in home- or self-administration.

It is the responsibility of the prescribing physician to determine which patients may be suitable for home- or self-administration of Cinryze.

It is the responsibility of the prescribing physician to provide appropriate training to the non-healthcare professional who will administer the treatment at home, such as the patient for self-administration or a family member.

Patient/caregiver training must include:

- Precaution for storage
- Doses and indications of treatment
- Preparation of one dose of Cinryze (500 IU) by reconstituting one vial
- Preparation of one dose of Cinryze (1000 IU) by reconstituting two vials
- Method of reconstitution of each vial
- Technique of intravenous injection
- Method and rate of administration of one dose of Cinryze (500 IU)
- Method and rate of administration of one dose of Cinryze (1000 IU)
- Instruction to seek emergency treatment by health care professionals in case of failure to gain venous access or in case of lack of efficacy
- Instruction in handling possible adverse reactions
- Information on the need to keep a diary to document each treatment received at home and to bring it at each visit. The information collected should include:
 - Date and time of treatment
 - Batch number and dose received
 - Indication for treatment (acute attack or prophylaxis)
 - Response to treatment
 - Any adverse reactions

Regular review of administration technique by the prescribing physician is required to ensure safe and proper use.

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk of the medicinal product.

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