

Information for patients and carers

**Urokinase 25,000 units
(Human Urokinase 100,000-unit vial or
Taurolock™ with Urokinase 25,000
units vial)**

Information for Outpatients

Central Venous Access Team

A decorative graphic at the bottom of the page consisting of three overlapping, wavy bands of blue color, transitioning from a lighter blue at the top to a darker blue at the bottom.

What is Urokinase?

Urokinase is a natural human enzyme that acts as a thrombolytic agent, which means it can help to dissolve blood clots in your central venous catheter.

What is Taurolock™?

Taurolock solution is a combination of taurolidine and 4% citrate. Taurolidine is derived from the naturally occurring amino acid taurine, which has bactericidal and fungicidal properties. Citrate 4% acts to stop blood from clotting.

Taurolock™ solution is used to dissolve the urokinase powder so that it can be administered into your central venous catheter.

Why do I need urokinase?

Your central venous catheter is not working as it should, which could be because

- It is sluggish when blood is being aspirated from it
- It is resistant when saline or medications are being administered into it
- It is partially blocked-does not allow blood to be aspirated from it but allows saline and medications to be administered into it
- It is completely blocked-blood cannot be aspirated from it and saline/medications cannot be administered into it

We have already tried to get your central venous catheter working by using mechanical means of unblocking it which did not work.

We would now like to administer urokinase 25,000 units into your central venous catheter to improve its function.

How will it be used on me?

Urokinase is administered into your central venous catheter where it sits for 60-120 minutes. It is not intended to enter your blood circulation, but we cannot guarantee this. After 60-120 minutes, it will be withdrawn from your central venous catheter along with any residual blood clot. Your central venous catheter will then be flushed with sodium chloride 0.9% to ensure it allows blood to be aspirated from it and that medications can be administered into it.

If the urokinase cannot be withdrawn from your central venous catheter after 60 minutes, it can be left in for a further 60 minutes, after which the above steps will be repeated.

Is there anything I need to tell the person administering the urokinase to me?

- If you have ever had an allergic reaction after being given any medications
- If you are bleeding or have recently been bleeding from the stomach or intestines
- Had a surgical operation or stroke recently
- Have severe high blood pressure
- If your blood doesn't clot normally
- Have a severe infection
- Have severely impaired liver or kidneys
- Have given birth recently

What are the side effects?

Like all medications, urokinase can cause side effects for some patient and the following side effects may occur if urokinase enters your blood circulation.

Very Common (more than 1 in 10 patients receiving urokinase)

- Unusual bleeding, particularly from puncture wounds or nose bleeds
- Blood detected in the urine after a urine test
- Blood clots-small fragments of blood clot may be released that pass along the blood vessel and cause blockage elsewhere, such as the lungs, heart or limbs

Common (1-10 in 100 patients receiving urokinase)

- Bleeding in the stomach or into/around the brain or at puncture sites, in the urine, into the muscles
- Stroke
- Tearing of an artery wall
- Blockage of blood vessels due to cholesterol(fat)
- Fever, chills and /or shivering

Uncommon (1 to 10 in 1000 patients receiving urokinase)

- Kidney failure
- Bleeding into the liver

Rare (1 to 10 in 10,000 patients receiving urokinase)

- Visible blood in the urine
- Injury and swelling in an artery wall

If Taurolock™ enters your blood circulation, the taurolidine will quickly degrade into the amino acid taurine and should therefore not cause any side effects.

If 4% citrate enters your blood circulation, it may cause:

- Tingling sensation around the mouth or in the extremities (paraesthesia)
- Low blood pressure (hypotension)
- Irregular heart rhythms (cardiac arrhythmia)

If you do start to feel unwell after you have been given urokinase or Taurolock™ with urokinase, please attend your nearest emergency department.

Please provide the healthcare professional that you seek medical advice from with the following information

Drug Given:

- Human urokinase 25,000 units-12,500 units per ml (2mls)
- Taurolock with urokinase 25,000 units-12,500 units per ml (2mls)

Date and Time Given:

The side effect/side effects experienced.

Contact details

Should you require further advice or information please contact Central Venous Access Team Specialist Nurses:

Telephone: **01772 523057**

Email: CVAT@lthtr.nhs.uk

Monday-Friday 08:30-16:30

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

www.patient.co.uk

www.lancsteachinghospitals.nhs.uk/veteran-aware

www.medicines.org.uk/emc/files/pil.7565.pdf

www.sciencedirect.com/topics/medicine-and-dentistry/taurolidine

<https://taurolock.tauropharm.com/en/products/taurolock>

www.fda.gov/media/114460

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www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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Please ask a member of staff if you would like help in understanding this information.

This information can be made available in large print, audio, Braille and in other languages.

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address:

patientexperienceandinvolem@LTHTR.nhs.uk

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