PACKAGE LEAFLET: INFORMATION FOR THE PATIENT

Clariscan 279.32 mg/mL solution for injection
Clariscan 279.32 mg/mL solution for injection in pre-filled syringe

Gadoteric acid

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or radiologist or pharmacist.
- If you get any of the side effects, talk to your doctor, radiologist or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

In this leaflet:

1. What Clariscan is and what it is used for

What Clariscan is

Clariscan contains the active substance gadoteric acid. It belongs to a group called "contrast agents" used for magnetic resonance imaging" (MRI).

What Clariscan is used for

Clariscan is used to enhance the contrast of the images obtained during MRI examinations.

In adults and in children and adolescents 0-18 years old:

- MRI of the CNS including of defects (lesions) in brain, spine, and surrounding tissues

In adults and in children and adolescents 6 months – 18 years old:

- Whole body MRI including defects (lesions)

In adults only:

- MR angiography including defects (lesions) or narrowing (stenosis) in arteries, except in coronary arteries.

This medicine is for diagnostic use only

How Clariscan works

Clariscan makes the pictures on an MRI scanner easier to see. It does this by increasing the contrast between the part of the body being looked at and the rest of the body. This allows doctors or radiologists to see different areas of the body better.

2. What you need to know before you are given Clariscan

You should not be given Clariscan:

- if you are allergic to gadoteric acid or any of the other ingredients of this medicine (listed in section 6)
- if you are allergic to medicines which contain gadolinium or other contrast agents used for MRI.

Warnings and precautions

Remove all metallic objects you may wear before the examination.

Talk to your doctor or radiologist before being given Clariscan if:

- you have previously reacted to a contrast agent during an examination
- you have asthma
- you have a history of allergy - such as a seafood allergy, hay fever, urticaria (severe itching)
- you are being treated with a beta-blocker (medicine for heart and blood pressure disorders, such as metoprolol)
- your kidneys do not work properly
- you have recently had a liver transplant – or expect to have one soon
- you have had fits (seizures or convulsions) or you are being treated for epilepsy
- you have a severe heart problem.
- you have a disease affecting your heart or your blood vessels
- you have a heart pacemaker, an iron-based (ferromagnetic) clip, an implant or an insulin pump, or any suspected metallic foreign bodies, particularly in the eye. It is a condition where MRI is not suitable.

Talk to your doctor or radiologist if any of the above apply to you before being given Clariscan.

Risk of serious side effects

As with all MRI contrast agents, there is a risk of side effects. The side effects are usually minor and temporary but cannot be predicted. However, there is a risk they could endanger your life:

- possible serious side effects may happen immediately or within one hour of being given the medicine
- side effects may happen up to 7 days after treatment. Side effects are more likely if you have ever had a reaction to an MRI contrast agent in the past (see section 4 “Possible side effects”)
- Tell your doctor or radiologist before being given Clariscan if you have had a reaction in the past. Your doctor or radiologist will only give you Clariscan if the benefits outweigh the risks. If you are given Clariscan, you will be carefully monitored by your doctor or radiologist.

Tests and checks

Your doctor or radiologist may decide to do a blood test before you are given Clariscan, especially if you are over 65 years old. This is to check how well your kidneys are working.

Children and adolescents

Use for angiography is not recommended in children less than 18 years of age.

New borns and infants

Your doctor or radiologist will carefully consider whether your baby can be given Clariscan. This is because the kidneys are immature in babies up to 4 weeks and infants up to 1 year.

Use for whole body MRI is not recommended in children less than 6 months of age.

Other medicines and Clariscan

Tell your doctor or radiologist if you are taking, have recently taken or might take any other medicines.

In particular, please inform your doctor, radiologist or pharmacist if you are taking or have recently taken medicines for heart and blood pressure disorders such as beta-blocking agents, vasoactive substances, angiotensin-converting enzyme inhibitors, angiotensin II receptor antagonists.

Clariscan with food and drink

Nausea and vomiting are known possible undesirable effects when using MRI contrast agents. The patient should therefore refrain from eating for 2 hours prior to the investigation

Pregnancy and breast-feeding

Pregnancy

You must tell your doctor or radiologist if you are pregnant, think you may be pregnant or might become pregnant. This is because Clariscan should not be given during pregnancy unless your doctor decides it is necessary.

Breast-feeding

Tell your doctor or radiologist if you are breast-feeding or about to start breast-feeding. Your doctor or radiologist will discuss with you whether you should continue breast-feeding. You may need to stop breast-feeding for 24 hours after you have been given Clariscan.

Driving and using machines

No data are available on the effects of Clariscan on the ability to drive. However, while driving or operating machines you should take into account dizziness (symptom of low blood pressure) and nausea. If you feel unwell after the examination, you should not drive or use machines.

3. How you will be given Clariscan

How Clariscan is given

Clariscan will be given to you by intravenous injection.

This will happen in a hospital, clinic or private practice.

Medical staff know the precautions that need to be taken.

They also know the possible complications that can happen.

During the examination, you will be supervised by your doctor or radiologist.

- A needle will be left in your vein.
- This will allow the doctor or radiologist inject you with emergency drugs if needed.

If you have an allergic reaction, the doctor or radiologist will stop giving you Clariscan.

How much you will be given

Your doctor or radiologist will decide how much Clariscan you will be given and supervise the injection.

People with liver or kidney problems

The use of Clariscan is not recommended in patients with severe kidney problems or patients who have recently had a liver transplant – or expect to have one soon.

However, if your doctor or radiologist decides to give you Clariscan:

- you must only be given one dose of Clariscan during an MRI and
- you must not be given a second injection for at least 7 days.

New borns, infants, children and teenagers

Clariscan will only be used in these patients after careful consideration by the doctor or radiologist. However, if your doctor or radiologist decides to give your child Clariscan:

- they must only be given one dose of Clariscan during an MRI scan and
- they must not be given a second injection for at least 7 days.

Use for whole body MRI is not recommended in children less than 6 months of age.

Use for angiography is not recommended in children less than 18 years of age.

The elderly

Your dose will not be changed if you are 65 years of age or older. However, you may have a blood test first to check how well your kidneys are working.

If too much Clariscan has been given to you

It is very unlikely that you will be given an overdose. This is because you will be given Clariscan in a medical setting by a trained person.

In a real case of overdose, Clariscan can be removed from the body by cleaning your blood ("haemodialysis").

Additional information regarding the use and handling by the medical or healthcare professional is given at the end of this leaflet.

If you have any further questions on the use of this medicine, ask your doctor or radiologist.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

After the administration, you will be kept under observation for at least half an hour.

Most side effects occur immediately or sometimes delayed. Some effects can occur up to several days after being given the Clariscan injection.

There is a small risk (rare) that you may have an allergic reaction to Clariscan. Such reactions can be severe and **result in "shock"** (case of allergic reaction that could put your life in danger).

The following symptoms may be the first signs of a shock. Inform immediately your doctor, radiologist or health professional if you feel any of them:

- swelling of the face, mouth or throat which may cause difficulties in swallowing or breathing
- swelling of hands or feet
- lightheadedness (hypotension)
- breathing difficulties
- whistling respiration
- coughing
- itching
- runny nose
- sneezing
- eye irritation
- hives
- skin rash

Uncommon side effects (may affect up to 1 in 100 people)

- hypersensitivity
- headaches
- unusual taste in the mouth

- dizziness
- somnolence
- sensation of tinglings, warmth, cold and/or pain
- low or high blood pressure
- nausea (feeling sick)
- stomach pain
- rash
- feeling hot, feeling cold
- asthenia
- injection site discomfort, injection site reaction, injection site coldness, injection site swelling, diffusion of the product outside of blood vessels that can lead to inflammation (redness and local pain).

Rare side effects (may affect up to 1 in 1,000 people)

- anxiety, faintness (dizziness and feeling of imminent loss of consciousness)
- eyelid swelling
- palpitations
- sneezing
- vomiting (being sick)
- diarrhoea
- increased saliva secretion
- hives, itching, sweating
- chest pain, chills.

Very rare side effects (may affect up to 1 in 10,000 people)

- anaphylactic or anaphylactic-like reactions
- agitation
- coma, seizures, syncope (brief loss of consciousness), disorder of smell (perception of often unpleasant odours), tremor
- conjunctivitis, red eye, blurred vision, increased tear secretion
- cardiac arrest, accelerated or slow heartbeat, irregular heartbeat, vascular dilatation, pallor
- respiratory arrest, pulmonary oedema, breathing difficulties, wheezing, stuffy nose, cough, dry throat, throat constriction with feeling of suffocation, respiratory spasms, throat swelling
- eczema, redness of the skin, swelling of the lips and localised in the mouth
- muscle cramps, muscle weakness, back pain
- malaise, chest discomfort, fever, swelling of the face, diffusion of the product outside of blood vessels that can lead to tissue dying off at the injection site, inflammation of a vein decrease in oxygen level in blood.

There have been reports of nephrogenic systemic fibrosis (which causes hardening of the skin and may affect also soft tissue and internal organs) most of which were in patients who received gadoteric acid together with other gadolinium-containing contrast agents. If, during the weeks following the MRI examination, you notice changes in the colour and/or thickness of your skin in any part of your body, inform the radiologist who performed the examination.

Reporting of side effects

If you get any side effects, talk to your doctor or radiologist

This includes any possible side effects not listed in this leaflet.

You can also report side effects directly via the national reporting system:

HPRA Pharmacovigilance
Earlsfort Terrace
IRL - Dublin 2
Tel: +353 1 6764971
Fax: +353 1 6762517
Website: www.hpra.ie
e-mail: medsafety@hpra

By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Clariscan

Keep this medicine out of the sight and reach of children.

The vials/bottles do not require any special storage conditions.

The pre-filled syringe must not be frozen.

Do not use this medicine after the expiry date which is stated on the vial or bottle or the pre-filled syringe and on the carton, after the abbreviation "Exp".

The expiry date refers to the last day of that month.

Chemical and physical in-use stability has been demonstrated for 48 hours at 30°C. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2 to 8° C, unless opening has taken place in controlled and validated aseptic conditions.

6. Contents of the pack and other information

What Clariscan contains

- The active substance is gadoteric acid. One mL of solution for injection contains 279.32 mg of gadoteric acid (as gadoterate meglumine), equivalent to 0.5 mmol of gadoteric acid.
- The other ingredients are meglumine, tetraxetan (DOTA) and water for injection.

What Clariscan looks like and contents of the pack

Clariscan is a clear, colourless to slightly yellow solution for intravenous injection.

Clariscan is available in the following containers:

Glass vials (Type 1, colourless) filled to 5, 10, 15 and 20 mL
Polymer pre-filled syringes filled to 10, 15 and 20 mL.
Glass bottles (Type 1, colourless) and polypropylene bottles filled to 50 and 100 mL.

All containers are packed in an outer box of 1 and 10 units.

Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer

GE Healthcare AS
Nycoveien 1-2
P.O. Box 4220 Nydalen
NO-0401 OSLO
NORWAY

This leaflet was last revised in February 2024

The following information is intended for medical or healthcare professionals only:

Posology

Adults

MRI of brain and spine

The recommended dose is 0.1 mmol/kg BW, i.e. 0.2 mL/kg BW. In patients with brain tumours, an additional dose of 0.2 mmol/kg BW, i.e. 0.4 mL/kg BW, may improve tumor characterisation and facilitate therapeutic decision making.

Whole body MRI (including lesions of the liver, kidneys, pancreas, pelvis, lungs, heart, breast, and musculoskeletal system)

The recommended dose is 0.1 mmol/kg BW, i.e. 0.2 mL/kg BW-to provide diagnostically adequate contrast.

For angiography: The recommended dose for intravenous injection is 0.1 mmol/kg BW, i.e. 0.2 mL/ kg BW to provide diagnostically adequate contrast.

In exceptional circumstances (e.g. failure to gain satisfactory images of an extensive vascular territory) administration of a second consecutive injection of 0.1 mmol/kg BW, i.e. 0.2 mL/kg BW may be justified. However, if the use of 2 consecutive doses of Clariscan are anticipated prior to commencing angiography, the use of 0.05 mmol/kg BW (i.e. 0.1 mL/kg) for each dose may be of benefit, depending on the imaging equipment available.

Special populations

Impaired renal function

The adult dose applies to patients with mild to moderate renal impairment (GFR $\geq$ 30 ml/min/1.73m^2).

Clariscan should only be used in patients with severe renal impairment (GFR < 30 mL/min/1.73m^2) and in patients in the perioperative liver transplantation period after careful risk/benefit assessment and if the diagnostic information is essential and not available with non-contrast enhanced MRI. If it is necessary to use Clariscan the dose should not exceed 0.1 mmol/kg body weight.

More than one dose should not be used during a scan. Because of the lack of information on repeated administration, Clariscan injections should not be repeated unless the interval between injections is at least 7 days.

Elderly (aged 65 years and above)

No dosage adjustment is considered necessary. Caution should be exercised in elderly patients.

Impaired hepatic function

The adult dose applies to these patients. Caution is recommended, especially in the case of perioperative liver transplantation period (see above impaired renal function).

Paediatric population (aged 0-18 years)

Encephalic and Spinal MRI, Whole body MRI:

The recommended and maximum dose of Clariscan is 0.1 mmol/kg body weight. More than one dose should not be used during a scan.

Use for whole body MRI is not recommended in children less than 6 months of age

Due to immature renal function in neonates up to 4 weeks of age and infants up to 1 year of age, Clariscan should only be used in these patients after careful consideration, at a dose not exceeding 0.1 mmol/kg body weight. More than one dose should not be used during a scan. Because of the lack of information on repeated administration, Clariscan injections should not be repeated unless the interval between injections is at least 7 days.

Angiography:

Clariscan is not recommended for angiography in children under 18 years of age due to insufficient data on its efficacy and safety in this indication.

Method of administration

The product is indicated for intravenous administration only.

Infusion rate: 3-5 mL/min (higher infusion rates up to 120 mL/min, i.e. 2 mL/sec, may be used for angiographic procedures). For instructions on preparation and disposal see *Precautions for use and handling* below.

Paediatric population (0-18 years). Depending on the amount of Clariscan to be given to the child, it is preferable to use Clariscan vials with a single use syringe of a volume adapted to this amount in order to have a better precision of the injected volume.

In neonates and infants, the required dose should be administered by hand.

Special warnings and precautions for use

Impaired renal function

Prior to administration of Clariscan it is recommended that all patients are screened for renal dysfunction by obtaining laboratory tests.

There have been reports of nephrogenic systemic fibrosis (NSF) associated with use of some gadolinium-containing contrast agents in patients with acute or chronic severe renal impairment (GFR< 30mL/min /1.73 m^2). Patients undergoing liver transplantation are at particular risk since the incidence of acute renal failure is high in this group. As there is a possibility that NSF may occur with Clariscan

it should therefore only be used in patients with severe renal impairment and in patients in the perioperative liver transplantation period after careful risk/benefit assessment and if the diagnostic information is essential and not available with non-contrast enhanced MRI.

As the renal clearance of Clariscan may be impaired in the elderly, it is particularly important to screen patients aged 65 years and older for renal dysfunction.

Haemodialysis shortly after Clariscan administration may be useful at removing Clariscan from the body. There is no evidence to support the initiation of haemodialysis for prevention or treatment of NSF in patients not already undergoing haemodialysis.

Pregnancy and lactation

Clariscan should not be used during pregnancy unless the clinical condition of the woman requires use of gadoteric acid.

Continuing or discontinuing breast feeding for a period of 24 hours after administration of Clariscan, should be at the discretion of the doctor or radiologist and lactating mother.
Discard any unused content.

Precautions for use and handling

For single use

The solution for injection should be inspected visually prior to use. Only clear solutions free of visible particles should be used.

Vials and bottles: - Prepare a syringe with a needle. For vials, remove the plastic disk. For polypropylene bottles remove the plastic screw cap or top plastic lid. After cleaning the stopper with a pad soaked in alcohol, puncture the stopper with the needle. Withdraw the quantity of product required for the examination and inject it intravenously.

Prefilled syringes: Inject intravenously the quantity of product required for the examination.

The remaining contrast medium in the vial/bottle, the connecting lines and all disposable components in the injector system must be discarded after the examination

The peel-off tracking label: The peel-off tracking label on the syringes/vials/bottles should be stuck onto the patient record to enable accurate recording of the gadolinium contrast agent used. The dose used should also be recorded. If electronic patient records are used, the name of the product, the batch number and the dose should be entered into the patient record.

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