Package leaflet:
Information for the patient

NOVARTIS | Reimagining Medicine

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Voretigene neparvovec 5 x 10^{12} vector genomes/mL concentrate and solvent for solution for injection

Read all of this leaflet carefully before you are given 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 nurse.
- If you get any side effects, talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet:

1. What Voretigene neparvovec is and what it is used for

Voretigene neparvovec is a gene therapy product that contains the active substance voretigene neparvovec.

Voretigene neparvovec is used for the treatment of adults and children with vision loss due to inherited retinal dystrophy caused by mutations in the RPE65 gene. These mutations prevent the body from producing a protein needed for vision and so lead to loss of sight and eventual blindness.

The active substance in Voretigene neparvovec, is a modified virus that contains a working copy of the RPE65 gene. After injection it delivers this gene into the cells of the retina, the layer at the back of the eye that detects light. This enables the retina to produce the proteins needed for vision. The virus used to deliver the gene does not cause disease in humans.

Voretigene neparvovec will be given to you only if genetic testing shows that your vision loss is caused by mutations in the *RPE65* gene. Your doctor will assess if you have sufficient retinal cells to benefit from Voretigene neparvovec treatment.

2. What you need to know before you are given Voretigene neparvovec

You will not be given Voretigene neparvovec

- if you are allergic to voretigene neparvovec or any of the other ingredients of this medicine (listed in section 6). Tell your doctor if you have allergies to any other medicines or any substances such as foods, preservatives or dyes.
- if you have an eye infection
- if you have eye inflammation

If any of the above applies to you, or if you are unsure of any of the above, please talk to your doctor before you receive Voretigene neparvovec.

Warnings and precautions

Before receiving treatment with Voretigene neparvovec:

- Tell your doctor if you have signs of an eye infection or eye inflammation, for example if you have eye redness, sensitivity to light, eye swelling or eye pain.
- Tell your doctor if you have an active infection of any sort. Your doctor may delay your treatment until your infection is gone because this medicine may make it more difficult for you to fight an infection. See also section 3.

After receiving Voretigene neparvovec:

- Get immediate care from your doctor if your eye or eyes become red, painful, sensitive to light, you see flashes or floaters in your vision, or if you notice any worsening or blurred vision.
- You should avoid air travel or other travel to high elevations until advised by your doctor. During treatment with this medicine, the doctor inserts an air bubble in the eye, which is slowly absorbed by your body. Until the bubble is fully absorbed, air travel or other travel to high elevations may make the bubble expand and lead to eye damage, including vision loss. Please talk to your doctor before travelling.
- You should avoid swimming because of an increased risk of infection in the eye. Please talk to your doctor before going to swim after receiving treatment with Voretigene neparvovec.
- You should avoid strenuous physical activity because of an increased risk of injury to the eye. Please talk to your doctor before beginning to engage in strenuous physical activity after receiving Voretigene neparvovec.
- Some people develop cataracts. A cataract is clouding of the natural lens inside the eye that can make it harder to see clearly. The development or worsening of cataracts is a known complication of the eye surgery that will be required before you receive Voretigene neparvovec. There is an additional risk of cataract if the lens inside the eye is damaged by the needle used to inject the medicine into the back of the eye.
- You may have temporary visual disturbances, such as light sensitivity and blurred vision. Tell your doctor about any visual disturbances that you experience. Your doctor may be able to help reduce any discomfort caused by these temporary disturbances.
- Some medicine may be present in your tears. You and your caregiver should place any used dressings and waste material with tears and nasal secretions in sealed bags before disposing of them. You should follow these precautions for 14 days.
- You and your caregiver, especially if pregnant, breast-feeding or with a suppressed immune system, should wear gloves during dressing changes and when disposing of the dressings and other waste material. Follow these precautions for 14 days after the treatment.
- You will not be able to donate blood, organs, tissues and cells for transplantation after you have been treated with Voretigene neparvovec.
- You should rest laying on your back as much as possible for 24 hours after discharge.

Children and adolescents

Voretigene neparvovec has not been studied in children under four years of age. Treatment is not recommended for children younger than 12 months of age,

Other medicines and Voretigene neparvovec

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

Pregnancy and breast-feeding and fertility

If you are pregnant or breast-feeding, think you might be pregnant, or are planning to have a baby, ask your doctor or nurse for advice before being treated with Voretigene neparvovec.

The effects of this medicine on pregnancy and the unborn child are not known. As a precaution, you should not receive Voretigene neparvovec while you are pregnant.

Voretigene neparvovec has not been studied in breast-feeding women. It is not known whether it passes into breast milk. Ask your doctor whether you should stop breast-feeding after receiving Voretigene neparvovec.

There is no information on the effect of Voretigene neparvovec on male or female fertility.

Driving and using machines

You may have temporary visual disturbances after receiving Voretigene neparvovec. Do not drive or use machines until your vision has recovered. Talk to your doctor before resuming these activities.

Important information about some of the ingredients of Voretigene neparvovec

Voretigene neparvovec contains less than 1 mmol sodium (23 mg) per dose, i.e. essentially ‘sodium-free’.

3. How Voretigene neparvovec is given to you

Voretigene neparvovec will be given to you in an operating room by surgeons experienced in performing eye surgery.

Voretigene neparvovec is given under anaesthesia. Your doctor will talk to you about the anaesthesia and how it will be given to you.

Your doctor will carry out eye surgery to remove the clear gel inside the eye, and then inject Voretigene neparvovec directly under your retina, the thin light-sensing layer at the back of that eye. This will be repeated on your other eye at least 6 days afterwards. You will need to stay for post-operative observation for a few hours after each procedure to monitor your recovery and watch for any side effects from the surgery or the anaesthesia.

Before Voretigene neparvovec treatment is started, your doctor may prescribe a medicine that will suppress your immune system (the body's natural defences) so that it will not try to fight the Voretigene neparvovec when it is given. It is important that you take this medicine according to the instructions given. Do not stop taking the medicine without first talking to your doctor.

If you are given more Voretigene neparvovec than you should be

As this medicine is given to you by a doctor, it is unlikely that you will be given too much. If it does occur, your doctor will treat the symptoms as necessary. Tell your doctor or nurse if you have any visual problems.

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

How long to use it

You will only receive Voretigene neparvovec once in each eye.

4. Possible side effects

As with all medicines, patients treated with Voretigene neparvovec may experience side effects, although not everybody gets them. The side effects associated with the administration of Voretigene neparvovec are either due to the medicine itself, the injection procedure, or the use of corticosteroids and mostly affect the eye.

Some side effects could be serious

Seek immediate medical help if you experience any of the following, which may be symptoms of inflammation, infection or an allergic reaction of the eye:

- your eye or eyes become red, painful, sensitive to light
- you see flashes or floaters in your vision
- you notice any worsening or blurred vision

If you experience any serious side effects, **tell your doctor immediately**.

Other possible side effects

Other side effects which may occur following Voretigene neparvovec treatment are described below:
If these side effects become severe, please tell your doctor.

Very common: may affect more than 1 in 10 people

- Redness of the eye
- Cataract (clouding of the lens)
- Increased pressure in the eye

Common: may affect up to 1 in 10 people

- Deposits under the retina
- Break in the retina (retinal tear)
- Abnormalities in the back of the eye
- Thinning of the surface of the eye (dellen)
- Eye pain
- Eye swelling
- Eye irritation
- Eye inflammation
- Foreign body sensation in the eye
- Detachment of the retina
- Nausea (feeling sick), vomiting, abdominal (belly) pain, lip pain
- Change of the electrical activity of the heart
- Headache, dizziness
- Rash, facial swelling
- Anxiety
- Problems associated with the placement of a breathing tube in the windpipe
- Breakdown of the surgical wound

Not known *(frequency cannot be estimated from the available data)*

- Thinning of the retina (chorioretinal atrophy)
- Clouding in the gel-like substance inside the eye (vitreous opacities)

Damage to the tissues of the eye may be accompanied by bleeding and swelling and an increased risk of infection. There is reduced vision in the days after surgery that usually improves; tell your doctor if vision does not return.

Reporting of side effects

If you get any side effects, talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. By reporting side effects, you can help provide more information on the safety of this medicine.

5. How Voretigene neparvovec is stored

Voretigene neparvovec will be stored by the healthcare professionals at your healthcare facility.
Concentrate and solvent must be stored and transported frozen at ≤-65 ºC. Once thawed, the medicine should not be re-frozen and may be left at room temperature (below 25 °C) for up to 4 hours.
Do not use this medicine after the expiry date which is stated on the label and carton after EXP.

6. Contents of the pack and other information

What Voretigene neparvovec contains

- The active substance is voretigene neparvovec. Each mL of concentrate contains 5×10^{12} vector genomes (vg). The concentrate (0.5 mL extractable volume in a single-dose 2 mL vial) requires a 1:10 dilution prior to administration.
- Each dose of diluted solution contains 1.5×10^{11} vector genomes of voretigene neparvovec in a deliverable volume of 0.3 mL.
- The other ingredients of the concentrate are sodium chloride (see end of section 2), sodium dihydrogen phosphate monohydrate (for pH adjustment), disodium hydrogen phosphate dihydrate (for pH adjustment), poloxamer 188 and water for injections.
- The solvent contains sodium chloride (see end of section 2), sodium dihydrogen phosphate monohydrate (for pH adjustment), disodium hydrogen phosphate dihydrate (for pH adjustment), poloxamer 188 and water for injections.

What Voretigene neparvovec looks like and contents of the pack

Voretigene neparvovec is a clear, colourless concentrate for solution for subretinal injection, supplied in a clear plastic vial. The solvent is a clear, colourless liquid supplied in a clear plastic vial.

Each foil pouch includes a carton containing 1 vial of concentrate and 2 vials of solvent.

Product Registrant

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Manufacturer

Nova Laboratories Ltd
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Other sources of information

This leaflet is available as an audio file and in a large print from the web site: www.medhub.novartis.com.sg/ermp/luxturna.

References: Singapore Voretigene neparvovec Prescribing Information. Oct 2021.SIN

Notes

Notes

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LUXTURNA®
voretigene neparvovec
for subretinal injection

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