

**NEBRIS STERI-NEB
300 mg/5 ml
NEBULISER SOLUTION**
Tobramycin



PE2569

**PACKAGE LEAFLET:
INFORMATION FOR THE USER**

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, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any of the side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

WHAT IS IN THIS LEAFLET:

1. What Nebris Nebuliser Solution is and what it is used for
2. What you need to know before you use Nebris Nebuliser Solution
3. How to use Nebris Nebuliser Solution
4. Possible side effects
5. How to store Nebris Nebuliser Solution
6. Contents of the pack and other information

1 WHAT NEBRIS NEBULISER SOLUTION IS AND WHAT IT IS USED FOR

NebriS Steri-Neb Nebuliser Solution contains the active substance called tobramycin. This is an aminoglycoside antibiotic.

NebriS is used in patients aged six years and older.

NebriS is used for treating chest infection in Cystic Fibrosis (CF) caused by a common bacterium, *Pseudomonas aeruginosa*. It kills the bacterium and helps improve your breathing. As tobramycin is inhaled, rather than taken as a pill, more of the antibiotic gets into your lungs.

What is Pseudomonas aeruginosa?

It is a very common bacteria that infects nearly everyone with cystic fibrosis at some time during their lives. Some people do not get this infection until later on in their lives, while others get it very young.

This is one of the most damaging bacteria for people with cystic fibrosis. If the infection is not properly controlled, it will continue to damage your lungs causing further problems to your breathing.

NebriS kills the bacteria that cause infections in the lungs. The infection can be controlled successfully if the problem is tackled early.

You must talk to a doctor if you do not feel better or if you feel worse after a few days.

2 WHAT YOU NEED TO KNOW BEFORE YOU USE NEBRIS NEBULISER SOLUTION

Do NOT use NebriS Nebuliser Solution

- if you are allergic to tobramycin or any of the other ingredients of this medicine (listed in section 6) or to any other aminoglycoside antibiotic.

Warnings and precautions

Talk to your doctor, pharmacist or nurse before using NebriS Steri-Neb Nebuliser Solution.

Inhaling medicines including tobramycin might cause chest tightness. Your doctor will supervise your first dose of NebriS Nebuliser Solution and check your lung function before and after dosing. Your doctor may ask you to use a bronchodilator (e.g., salbutamol), if you are not already doing so, before taking NebriS Nebuliser Solution.

Tell your doctor before you start to take this medicine:

- if you have hearing problems, if you have experienced ringing in your ears, or if you have experienced dizziness, your doctor may test your hearing and balance before starting tobramycin or at any time during tobramycin treatment;
- if you are coughing up blood, your doctor may ask you to stop using tobramycin until there is little or no blood in your sputum;
- if you have had kidney problems, your doctor may check that your kidneys are working properly;
- if you have suffered from muscle weakness – symptom mostly related

- to conditions such as myasthenia or Parkinson's disease;
- if your chest feels tight;
- if you are resistant to antibiotics, you should speak to your doctor.

If you are taking NebriS, strains of *Pseudomonas* can become resistant to the treatment over time. This can mean the medicine may not work as well as it should over time. Talk to your doctor if you are concerned about this.

Children and adolescents

Do not give this medicine to children less than 6 years old as no clinical studies have been done in this population.

Other medicines and NebriS Steri-Neb Nebuliser Solution

Tell your doctor or pharmacist if you are taking, have recently used or might use any other medicines.

You should not use NebriS Nebuliser Solution if you are taking any of the following:

- Diuretics (water tablets) containing furosemide;
- Urea or mannitol, which are used in hospital to treat serious conditions;
- Drugs that may harm your kidneys or hearing could be made worse by NebriS Nebuliser Solution.

You may be receiving injections of tobramycin or other aminoglycosides as well as using inhaled tobramycin. Such injections, which may increase the very low levels of aminoglycosides caused by inhaled tobramycin, are not recommended when the following medicines are also being taken:

- Amphotericin B, cefalotin, ciclosporin, tacrolimus, polymixins: these medicines may harm your kidneys
- Platinum compounds (e.g., carboplatin and cisplatin) : these medicines may harm your kidneys or hearing
- Anticholinesterases (e.g., neostigmine and pyridostigmine), botulinum toxin: these medicines may cause muscle weakness to appear or become worse.

Pregnancy, breast feeding and fertility

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

Pregnancy

If you want to become pregnant or are pregnant, you should talk to your doctor about the possibility of this medicine causing harm.

The possible side effects of inhaling tobramycin in pregnant women are not known. However, higher blood levels of tobramycin and similar medicines, which can occur when they are given by injection, can harm an unborn baby (e.g., by causing deafness).

Breastfeeding

If you are breast feeding your baby, you should talk to your doctor before using tobramycin.

Driving and using machines

Tobramycin should not affect your ability to drive and use machines.

3 HOW TO USE NEBRIS NEBULISER SOLUTION

If you are taking several different treatments for CF, you should take them in the following order:

- bronchodilator (e.g., salbutamol)
- chest physiotherapy
- other inhaled medicines
- and then NebriS Nebuliser Solution

If you are not sure, check the order with your doctor.

Always use this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure. The usual dose is the same for all persons aged six years and older.

The recommended dose is one ampoule twice daily for 28 days.

Inhale the contents of one ampoule in the morning and one in the evening. There should be a 12-hour gap between the doses.

You then have 28 days without taking your medicine before starting another 28-day treatment course.

It is important that you keep using the product twice each day during your 28 days on treatment and that you keep to the 28-day on/28-day off cycle.

NebriS Nebuliser Solution should be used with a clean, dry PARI LC PLUS reusable nebuliser and a suitable compressor. Ask your doctor or physiotherapist for advice on which compressor to use. Your doctor or

physiotherapist can advise you on the proper use of medicine and the equipment you need. You may need different nebulisers for other inhaled medicines such as dornase alfa, which can be used to improve sputum clearance in CF.

Before you start to use NebriS Nebuliser Solution, make sure you have the following pieces of equipment:

- NebriS Steri-Neb
- PARI LC PLUS reusable nebuliser
- Suitable compressor
- Tubing to connect the nebuliser and compressor
- Clean paper or cloth towels
- Nose clips (if required)

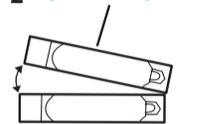
You should check that your nebuliser and compressor are working properly according to the manufacturer's instructions before you start to use your medicine.

Preparing your medicine for inhalation

1. Wash your hands thoroughly with soap and water.
2. Each foil pouch contains 4 ampoules (Steri-Neb). Cut or tear open the pouch, remove an ampoule and put the foil pouch in the refrigerator.
3. Lay out the pieces of your PARI LC PLUS nebuliser on a clean, dry paper or cloth towel.



2 pair of ampoules

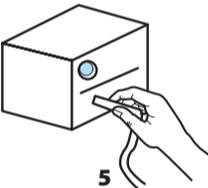


You should have the following pieces:

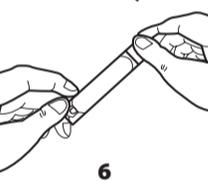
- a. Nebuliser top
- b. Nebuliser bottom
- c. Inspiratory valve cap
- d. Mouthpiece with valve
- e. Tubing



4. Remove the nebuliser top from the nebuliser bottom by twisting the top anticlockwise and then lifting it. Place the top on the towel and stand the nebuliser bottom upright on the towel.



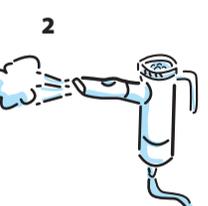
5. Connect one end of the tubing to the compressor air outlet. Make sure that the tubing fits snugly and plug the compressor into the electrical outlet.



6. Open the ampoule by holding the bottom tab with one hand and twisting off the top with your other hand. Be careful not to squeeze the ampoule until you are ready to empty it into the nebuliser bottom.



7. When you are ready, squeeze all of the contents of the ampoule into the nebuliser bottom.
8. Replace the nebuliser top. Turn the top clockwise until it is securely fastened to the nebuliser bottom.
9. Attach the mouthpiece to the nebuliser outlet. Firmly push the inspiratory valve cap in place on the nebuliser top. The inspiratory valve cap must fit snugly (check with your PARI LC PLUS nebuliser leaflet).
10. Connect the free end of the tubing to the air intake on the bottom of the nebuliser, making sure you keep the nebuliser upright. Press the tubing on the air intake firmly.



Taking your medicine

1. Turn on the compressor.
2. Make sure there is a steady mist coming from the mouthpiece. If there is no mist, check all of the tubing connections and that the compressor is working correctly.
3. Sit or stand in an upright position so that you can

- breathe normally.
- Place the mouthpiece between your teeth and on top of your tongue. Breathe through your mouth (you may find that nose clips help). Try not to block the airflow with your tongue.
 - Continue until all of the Nebris Nebuliser Solution is gone and there is no longer any mist being produced.
 - Please remember to clean and disinfect your nebuliser after treatment. You should never use a dirty or clogged nebuliser. You should not share your nebuliser with other people.

It should take about 15 minutes to take all of the medicine. You may hear a spluttering sound when the nebuliser cup is empty. If you are interrupted or need to cough or rest during treatment, turn off the compressor to save your medicine. When you are ready to restart your treatment, turn the compressor on again.

If you use more Nebris Nebuliser Solution than you should

If you inhale too much tobramycin you may get a very hoarse voice. Make sure you tell your doctor as soon as possible. If you accidentally swallow Nebris Nebuliser Solution, don't worry, but tell your doctor as soon as possible.

If you forget to use Nebris Nebuliser Solution

Do not take a double dose to make up for a forgotten dose.

You must not take two doses within six hours. Take the dose immediately if there are at least six hours to your next dose or miss out this dose if your next dose is due in less than six hours.

If you stop using Nebris Nebuliser Solution

You should not stop using Nebris Nebuliser Solution until you have completed the course of treatment or told to do so by your doctor.

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

4 POSSIBLE SIDE EFFECTS

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

Some side effects can be serious

- Chest tightness with difficulty breathing (rare)
- Allergic reactions including hives and itching (very rare)

If any of these serious side effects happen to you, stop taking Nebris Nebuliser Solution and tell your doctor immediately.

The following side effects have been reported at the approximate frequencies shown:

Uncommon (may affect up to 1 in 100 people):

- Voice alteration (hoarseness)
- Increased cough
- Shortness of breath
- Sore throat

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

- Chest pain
- General pain
- Laryngitis (voice alterations with sore throat and difficulty swallowing)
- Ringing in the ears
- Mouth ulceration
- Rash
- Weakness
- Fever
- Headache
- Feeling sick (nausea)
- Being sick (vomiting)
- Loss of appetite
- Dizziness
- Increased sputum quantity
- Coughing up blood
- Loss of voice
- Nose bleeds
- Runny nose
- Taste disturbances
- Patients who have received Nebris Nebuliser Solution at the same time as, or following repeated doses of injected tobramycin or related drugs, may develop hearing loss

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

- Abdominal pain
- Ear pain
- Diarrhoea
- Back pain
- Fungal infections (e.g., thrush)
- Swelling of the lymph glands
- Sleepiness
- Hyperventilating
- Sinusitis

People with cystic fibrosis experience many symptoms of the disease. These may still occur while taking Nebris Nebuliser Solution but should not be

any more frequent or seem worse than before. Patients have commonly reported symptoms such as sputum discolouration, chest infection, muscle pain, nasal polyps and ear infections.

Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. Reports may be made by following the links to the online reporting option accessible from the IMB homepage, or by completing the downloadable report form also accessible from the IMB website, which may be completed manually and submitted to the IMB via freepost, to the following address:

FREEPOST
Pharmacovigilance Section
Irish Medicines Board
Kevin O'Malley House
Earlsfort Centre
Earlsfort Terrace
Dublin 2
Tel: +353 1 6764971
Fax: +353 1 6762517
Website: www.imb.ie
e-mail: imbpharmacovigilance@imb.ie

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

5 HOW TO STORE NEBRIS NEBULISER SOLUTION

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

Do not use this medicine after the expiry date that is stated on the outer packaging, pouch and ampoule after EXP. The expiry date refers to the last day of that month.

You should keep your ampoules in a refrigerator (2 – 8°C). Do not freeze. You can store the foil pouches (opened or unopened) at room temperature (do not store above 25°C) for up to 28 days. You should store the ampoules in the original packaging as tobramycin is sensitive to light. **Never store an opened ampoule. Once opened, the ampoule should be used immediately.**

Do not use this medicine if you notice any visible signs of deterioration (cloudiness or bits in the solution). Tobramycin solution may be slightly yellow and some variability in colour may be observed, this does not indicate loss of activity providing the solution has been stored as recommended.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help to protect the environment.

6 FURTHER INFORMATION

What Nebris Nebuliser Solution contains

- The active substance is tobramycin. Each 5 ml single-dose ampoule contains 300 mg of tobramycin.
- The other ingredients are: sodium chloride, sodium citrate, water for injections, sulphuric acid (for pH-adjustment), sodium hydroxide (for pH-adjustment).

What Nebris Nebuliser Solution looks like and contents of the pack

Nebris Nebuliser Solution is 'A clear to slightly yellow solution'.

Nebris Nebuliser Solution is supplied in 5 ml single-dose ampoules called Steri-Nebs. Four ampoules are packed and sealed in a foil pouch.

Each carton comprises 14 (56 ampoules), 28 (112 ampoules) or 42 (168 ampoules) foil pouches, which is enough to last one, two or three cycles of treatment, respectively.

Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer

Marketing Authorisation Holder:
Teva Pharma B.V.
Computerweg 10
3542DR Utrecht
The Netherlands

Manufacturer:

Norton Healthcare Limited T/A Ivax Pharmaceuticals UK,
Preston Brook,
Runcorn, Cheshire, WA7 3FA,
United Kingdom

This medicinal product is authorised in the Member States of the EEA under the following names:

Czech Republic	Nebris
Bulgaria	Nebris
Denmark	Nebris Steri-Neb

Ireland	Nebris Steri-Neb 300 mg/5 ml Nebuliser Solution
Italy	Cibriss
Netherlands	Nebris Steri-Neb
Spain	Nebris 300 mg/5 mL Steri-Neb solución para inhalador

This leaflet was last revised in 09/2013.