

Package leaflet: Information for the user

Multiferon 3 million IU, solution for injection in pre-filled syringe

Interferon alpha (HuIFN-alpha-Le)

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.

What is in this leaflet:

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

1. What Multiferon is and what it is used for

Multiferon contains interferon alpha. It is a substance produced by the body to strengthen the body's immunological defence and it has the ability to attack certain cancer cells and viruses.

Multiferon is used to treat malignant melanoma and in cases of resistance to interferons produced biosynthetically.

2. What you need to know before you use Multiferon

Do not use Multiferon if you:

- are allergic to interferon alpha or any of the other ingredients of this medicine (listed in section 6).
- have *severe* heart disease
- have *severely* impaired renal or hepatic function (including that caused by metastases)
- have chronic inflammation of the liver (hepatitis) with cirrhosis
- have chronic inflammation of the liver (hepatitis) and are being treated or were recently treated with immunosuppressants (medicines used in association with transplants to inhibit the activity of the immune system)
- have or have had any autoimmune disease (allergic reaction to the body's own substances) such as rheumatoid arthritis
- have epilepsy or have had epileptic seizures
- have or have had a psychiatric illness, particularly severe depression, suicidal ideation or suicide attempt.
- have impaired bone marrow function
- have an impaired immune system due to a transplant.

Warnings and precautions

Talk to your doctor before using Multiferon if you have any of the following diseases:

- depression or psychiatric disorder
- thyroid dysfunction
- lung disease (for example, chronic obstructive pulmonary disease)

- diabetes
- disease which affects the ability of the blood to clot, for example if you have had a blood clot
- impaired bone marrow function
- impaired kidney or liver function
- had a heart attack and/or any heart disease (heart failure, rhythm disorder)
- advanced cancer
- psoriasis
- infection (symptoms associated with a cold such as fever and cough)
- chronic inflammation of the liver (hepatitis)
- HIV
- have had a kidney and/or liver transplant.

If you suffer from diabetes, your doctor will check your blood sugar regularly. The amount of blood sugar could vary during treatment. If so, your doctor will adjust the dose of your antidiabetic medicine.

Virus warning

When medicines are produced from human plasma or blood, certain precautions are taken to prevent the transfer of infections to patients. This includes careful selection of blood and plasma donors to ensure that people at risk of carrying an infection are excluded and testing of individual donations for signs of virus/infection. The manufacturers of these products have also adopted steps in the manufacturing process that inactivate or remove viruses from blood and plasma. In spite of this, the risk for transferring infectious agents cannot be totally ruled out when using medicines made from human blood or plasma. This also applies to new, previously unknown viruses and other types of infections.

The measures taken for Multiferon are considered effective against enveloped viruses like human immunodeficiency virus (HIV), hepatitis B and hepatitis C viruses and non-enveloped viruses like hepatitis A and parvovirus B19.

Other medicines and Multiferon

Tell your doctor, pharmacist or nurse if you are taking, have recently taken or might take any other medicines. Multiferon may affect or be affected by other medicines like:

- narcotic medicines
- sleeping pills
- sedatives
- theophylline (medicine to treat asthma and bronchitis)
- aminophylline (medicine to treat asthma)
- shosaikoto (a Chinese herbal medicine).

Multiferon with food and drink

It is important to drink a lot of fluid during treatment with Multiferon.

Pregnancy and breast-feeding

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor, pharmacist or nurse for advice before taking this medicine. There is as yet no experience of use during pregnancy. Therefore, women of childbearing potential who take Multiferon must use effective contraception to avoid pregnancy.

It is not known whether interferon alpha passes into breast milk. Always tell your doctor before using this medicine on a regular basis while breastfeeding.

Driving and using machines

Treatment with Multiferon may reduce the ability of certain individuals to react appropriately. You are responsible for judging whether you are in condition to operate a motor vehicle or to perform work requiring special alertness. One of the factors that may affect your ability in these respects is the use of medicinal products due to their effects and/or side effects. Description of these effects and side

effects is found in other sections. You should therefore read all the information in this leaflet for guidance. Consult your doctor, pharmacist or nurse if you are uncertain.

3. How to use Multiferon

Always use this medicine exactly as your doctor has told you. Check with your doctor, pharmacist or nurse if you are not sure.

Your doctor determines the dose individually based on your needs and conditions. Never change the prescribed dose on your own. Always consult your doctor.

Multiferon is injected subcutaneously (under the skin) by a doctor, nurse or yourself. Your doctor should give you thorough instructions about how much Multiferon should be injected, how it should be injected, how often and how long the treatment should last. For instructions on injecting Multiferon, see Instructions for injecting Multiferon.

If you think the effect of Multiferon is too weak or too strong, consult your doctor.

If you use more Multiferon than you should

Contact a doctor or hospital for risk assessment and advice if you have taken too large a dose of the medicine, or if for example, a child has ingested the medicine by mistake.

If you forget to use Multiferon

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

4. Possible side effects

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

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any side effects not listed in this leaflet.

The most common side effects are fever, chills, sweating, fatigue, stiffness, joint or muscle pain, headache, loss of appetite and nausea. These acute side effects can usually be reduced by taking paracetamol and will usually lessen with continued therapy.

The frequency of the reported side effects is described below.

Very common (affecting more than 1 out of 10 people): Lower white cell counts, loss of appetite, nausea, reduced level of calcium in blood, headache, diarrhoea, hair loss, increased sweating, muscle pain, joint pain, flu-like symptoms, fatigue, fever, stiffness, reduced appetite.

Common (affecting 1-10 out of 100 people): Lower platelet counts, anaemia, nausea/vomiting.

Uncommon (affecting 1-10 out of 1,000 people): effect on the salt and electrolyte balance, depression, anxiety, altered mental status, confusion, behaviour disorders, nervousness, reduced memory, sleeping disturbances, nervous disorder, vertigo, taste disturbance, pins and needles, reduced touch sensation, trembling, inflammation of the eyes, visual disturbance, rhythm disorders, palpitation, high- or low blood pressure, stomach pain, dry mouth, aggravated psoriasis, itching, proteins in urine and increased number of cells in urine, chest pain, oedema, altered results of lab tests, weight loss.

Rare (affecting 1-10 out of 10,000 people): Pneumonia, herpes, changes in blood values such as agranulocytosis (see below), autoimmune conditions (conditions where the body attacks its own cells and causes inflammation and/or tissue damage), acute allergic reactions (symptoms like urticaria,

local swelling in skin, breathing difficulties), change in the function of the thyroid gland, high blood sugar, suicide, suicide attempts, suicidal thoughts, coma, vascular changes (blood clots, bleeding) in the brain, convulsions, transient impotence, cardiac arrest, heart attack, chronic heart failure, pulmonary oedema, bluish skin, lips and mucous membrane (due to reduced blood oxygen supply), vasculitis, difficulty in breathing, cough, increased bowel movements, constipation, heartburn/acid reflux, feeling of pressure on the diaphragm, flatulence, pancreatitis, liver disorders such as liver failure, skin rash, dry skin and mucous membrane, nose bleed, rhinitis, systemic lupus erythematosus (SLE; disease with rash, joint disorders, affected kidneys and blood), inflammation in the joints, acute renal failure (especially in cancer patients with kidney disease), reduced renal function.

Very rare (affecting less than 1 out of 10,000 people): Idiopathic thrombocytopenic purpura (minor bleeding in skin and mucous membrane), sarcoidosis (disease with symptoms of inflammation like fever, general reaction, joint pain and red aching swellings of the lower part of the legs), diabetes mellitus, increased level of blood lipids, recurrent peptic ulcer, intestinal bleeding, reactions at the administration site including very rare cases of necrosis.

Stop using Multiferon and immediately contact a doctor if you experience any of the following symptoms (angio-oedema):

- Swelling of face, tongue or throat
- Difficulties swallowing
- Nettle rash/hives and difficulties breathing

Contact a doctor immediately:

- If your vision is impaired or is lost after or during the treatment with Multiferon, contact your doctor immediately.
- If you develop any signs of depression, such as low spirits, a feeling of worthlessness or suicidal thoughts during treatment with Multiferon, contact your doctor immediately.

In rare cases, Multiferon may affect the white blood cells and hence impair the immune system. If you get an infection with symptoms like fever with severely reduced general condition or fever with local symptoms like pain in neck/throat/mouth or difficulties urinating, contact your doctor immediately. The doctor will then take blood samples to rule out agranulocytosis. It is very important that you inform the treating doctor about your medicines.

5. How to store Multiferon

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

Do not use this medicine after the expiry date, which is stated on the label and carton. The expiry date refers to the last day of that month.

The content of the syringe is for single use. Any remaining material should be discarded.

Store in a refrigerator (2°C – 8°C). Store in the original package in order to protect from light. Do not freeze.

Multiferon syringes can be removed from the refrigerator for one single period of maximum 2 months and stored at a temperature not above 25°C, after which the product must be discarded. Do not forget to mark the date on the carton, when removed from the refrigerator.

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 protect the environment.

6. Contents of the pack and other information

What Multiferon contains

- The active substance is interferon alpha. One pre-filled syringe (0.5 ml) contains 3 million IU human leucocyte interferon alpha (HuIFN-alpha-Le)
- The other ingredients are human albumin, anhydrous sodium dihydrogen phosphate, anhydrous disodium phosphate, sodium chloride and water for injections.

What Multiferon looks like and contents of the pack

The solution is clear and colourless to light yellow.

Pack size: 6 x 0.5 ml (0.5 ml = 3 Million IU).

Marketing Authorisation Holder

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Instructions for injecting Multiferon

The following instructions explain how to inject Multiferon by yourself. Read these instructions carefully and follow them step by step. Your doctor or nurse will instruct you. Do not try to inject on your own if you are not sure how to do so. These instructions are for subcutaneous use (under the skin).

1. Injection material

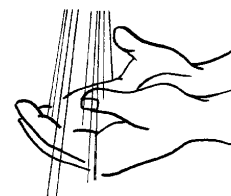
Remove a syringe from the package and check that it is not damaged.

Return the package to the refrigerator.

Let the syringe lie at room temperature for 30 minutes prior to the injection.

Prepare an alcohol wipe.

Wash your hands thoroughly prior to the injection.



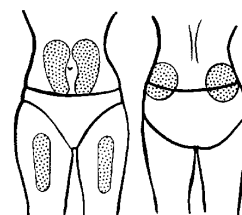
2. The pre-filled syringe

- Remove the plastic cap from the needle.
- The syringe is now ready for use.

3. Injection sites

Choose an injection site.

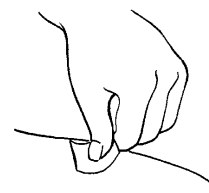
- Stomach
- Front of the thighs
- Upper, outer part of the buttocks



To avoid skin problems that could easily arise from injecting at the same site every time, change the injection site for each injection.

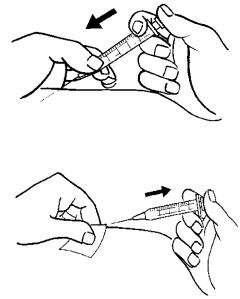
4. How to inject

- Use an alcohol wipe to clean the skin at the injection site you have chosen. Allow the skin to dry.
- Grip the skin (about 5 cm wide) between your index finger and thumb and lift.



This lifts the fatty layer from the underlying muscle. Keep this grip.

- Hold the syringe at a 45° angle and insert the needle through the skin with the other hand. Do not let the needle end up too near the skin surface.
- Release your grip on the skin. Hold the needle with you thumb and index finger and slowly inject until the syringe is empty.
- Pull the needle out and apply light pressure to the injection site with the alcohol wipe.



It is normal for there to be a little bleeding after the needle has been pulled out.

5. After the injection

- Discard the used syringe and needle in a container for harmful waste.
(This is important so that nobody gets pricked by the needles.)
- The content in the syringe is for single use. Any remaining material should be discarded.
- Always keep medicines and injection material out of the reach of children.

Contact your nurse or doctor if you have any questions.