



PATIENT PACKAGE LEAFLET IN ACCORDANCE  
WITH THE PHARMACISTS REGULATIONS (PREPARATIONS 1986)  
The dispensing of this medicine requires a physician's  
prescription

This leaflet includes injection instructions for patients who inject  
Proleukin by subcutaneous administration only.

**Proleukin®**  
Powder for solution for injection

**Composition:**

Active substance: Aldesleukin 22 X 10<sup>6</sup> IU

**Read the entire leaflet carefully before using this medicine.**

This leaflet contains concise information about this medicine. If you have additional questions, refer to your physician or pharmacist. This medicine was prescribed for the treatment of your ailment. Do not pass it to others. It may harm them, even if they seem to have a similar condition.

Proleukin contains an active substance called Aldesleukin which is a synthetic protein very similar to the one produced by the body, called interleukin - 2 (IL-2) and is part of the immune system. Interleukin-2 activates certain white blood cells called lymphocytes that act against diseases and infections. Interleukin-2 induces the production of lymphocytes in the body, thereby increasing its ability to defend itself.

**What Proleukin is and what is it used for?**

Proleukin belongs to a group of interleukins. It is intended for the treatment of adults with metastatic renal cell carcinoma and metastatic melanoma.

**Before you use Proleukin:**

Proleukin is not recommended for the use of children under the age of 18.

**Do not use Proleukin:**

- There is a known sensitivity to Aldesleukin or to any of the other components of this medicine
- You are bedridden for more than half a day
- If less than 24 months have passed since you were diagnosed with kidney cancer and you have cancer symptoms, even if the cancer has spread to other organs
- There is a history of heart diseases
- You have an infection treated with antibiotics
- You have low oxygen levels in your blood
- You have severe liver, kidneys or any other organ problems
- You suffer from fits (convulsions or seizures) or from brain cancer that has not been successfully treated
- You are currently treated with corticosteroids for the treatment of inflammatory conditions or if you may require these during Proleukin therapy
- You have rheumatoid arthritis, Crohn's disease or any other disease related to your immune system
- You had organ transplantation

In addition, do not use this medicine if your blood tests show that:  
• You have a low count of white blood cells, red blood cells and platelets  
• Your bilirubin or creatinine levels lay outside the normal range

If you have any of the above mentioned conditions discuss it with your doctor.  
You should not be treated with Proleukin.

**Special warnings relating to the use of Proleukin:**

- Inform your physician immediately** if you experience the following symptoms:
- You have **chest pain or irregular heartbeat**. Some patients may require regular electrocardiograms (ECG) tests
  - Shortness of breath or breath faster** during treatment
  - Feeling **extremely tired or sleepy**, this condition may indicate loss of consciousness
  - Fever, shivers, chills, nausea and/or diarrhea**
  - Dizziness** or you have noticed rapid heartbeats. This may be a sign of low blood pressure, often seen within 2 to 12 hours after starting Proleukin administration
  - Treatment with Proleukin puts you at a higher risk of infections. Pay attention to bacterial infections
  - Mood changes. In general, these return to normal after stopping treatment with Proleukin
  - If you have **diabetes**, you may experience changes, increase or decrease in your blood sugar level that may occur more often than usual
  - Kidney or liver disease
  - Problems with your digestive system as a result of an autoimmune disease called **crohn's disease**
  - Red and very itchy rash** or if your skin becomes extremely dry during treatment with Proleukin

Using certain medicines may decrease the effect of Proleukin or increase its side effects. **Inform your doctor or pharmacist if you are using or have recently used any other medications including non-prescription medications and food supplements.** It is particularly important to inform your doctor or pharmacist if you are taking:

- Medicines that affect the heart, central nervous system, liver, kidneys or bone marrow. Consult your doctor if you are not sure what these medicines are prescribed for
- Chemotherapy medicines used to treat cancer: tamoxifen, interferon-alpha, cisplatin, vinblastine and/ or dacarbazine
- Glucocorticoids (a type of steroid) for the treatment of inflammations
- Beta-blockers, used for the treatment of high blood pressure
- Contrast fluids used in imaging tests - CT scans
- Medicines that affect the central nervous system

**Elderly Population (over 65 years):**

Elderly patients may be more sensitive to the side effects of Proleukin. It is recommended that medical staff take extra care when treating this population.

**Children and adolescents:**

Proleukin is not recommended for children under the age of 18. Parents must report any appearance of side effects as well as every additional medication administered to the child.

**Pregnancy and breast-feeding:**

- Inform your doctor before starting treatment** if you are pregnant, may be pregnant or planning to become pregnant. Your doctor will discuss with you the advantages and risks of taking Proleukin during pregnancy

- Both male and female patients should use effective contraceptive measures** during treatment with Proleukin, in order to prevent pregnancy. This precautionary measure is taken with most cancer treatments
- Breast-feeding must be stopped during treatment with Proleukin** as there is a possibility of serious side effects to the baby. Consult your physician if you are pregnant or nursing before taking any medicine.

**Driving and using machines:**

Do not drive or operate dangerous machineries while using this medicine as it may impair alertness.

**How to use Proleukin?**

Always use this medicine according to the instructions given to you by your doctor. You must check with your doctor or pharmacist if you are unsure. The dosage and form of treatment will be determined only by your doctor.

Treatment with Proleukin can be administered in the two following forms:

- Intravenous infusion** (during 24 hours or 15 minutes): This should be carried out in a hospital, under the supervision of a doctor or nurse experienced in the administration of medicines for the treatment of cancer
- Direct subcutaneous injection:** This form of treatment can be administered in a hospital, outpatient clinics or at home, under the supervision of a doctor or nurse

**Tests and follow up:**

Before treatment with Proleukin, your doctor may perform certain tests.

Your doctor will check your response to treatment at regular time intervals and decide on the appropriate needed action.

Your doctor may perform regular blood tests and chest X-rays before and during treatment with Proleukin, to check your organs, blood cell counts, blood sugar level, kidney and liver function.

Your doctor may also perform other functional tests for the heart, respiratory system and mental function.

Follow carefully the instructions given to you by your doctor or nurse.

**If you have accidentally taken an overdose or if a child had swallowed from this medicine**, refer to a hospital's emergency room immediately and bring the package of this medicine with you. You may experience some of the side effects (please see under "side effects").

**If you forgot to take the medicine** at the specified time, take the forgotten dose as soon as you remember and do not take a double dose the next time. Take the next dose at the usual time and consult your doctor. Make sure you take the medicine at the appropriate time to maintain affectivity and safety during the treatment. Continue treatment always according to your doctor's instructions.

**Preparation instructions:**

How should you prepare Proleukin for administration:

- Use a sterilised syringe and needle
- Inject 1.2 ml of water for injections into the Proleukin vial. Direct the water for injections against the side of the vial to avoid excessive formation of foam
- Swirl the vial gently to allow the powder to dissolve completely.
- Do not shake**
- The solution contains 18 million International Units (IU) or 1.1 mg of Proleukin per 1 ml

**The solution is now ready for subcutaneous administration or further dilution for I.V administration.**

**Instructions for proper use of Proleukin:**

**Subcutaneous administration:**

- The dissolved medicine should be used within 24 hours
- The medicine needs to be brought to room temperature before administration and used immediately
- The required dose should be withdrawn and injected subcutaneously
- Proleukin needs to be injected into the subcutaneous tissue. The best areas for injection are soft and loose areas, away from joints, nerves and vital organs
- The injection site should be changed at regular intervals, if Proleukin is administered subcutaneously. This will help prevent pain and redness at the injection site

**Intravenous Administration:**

- Withdraw the required dose of Proleukin from the vial using a sterile syringe
- Dilute as necessary up to 500 ml, with a glucose solution for infusion of 50 mg/ml, containing human albumin of 1 mg/ml. Human albumin should be mixed with the glucose solution before the addition of the dissolved Aldesleukin
- This medicine can be administered intravenously at a daily dose of 18 X 10<sup>6</sup> IU/m<sup>2</sup> over 24 hours for 5 days (according to the treatment cycle)

Check for the presence of particles or discolouration of all solutions for injection before administration. Do not use Proleukin if you see a particulate matters in the solution or if the solution is cloudy or appears to have a more intense yellow colour than usual.

Even if there has been an improvement in your health, do not stop this treatment without consulting your doctor or pharmacist.

**If you stop taking this medicine** you may reduce the effectiveness of this treatment.

Consult your doctor or pharmacist, if you have additional questions regarding the use of this medicine.

**Side Effects:**

Like all medicines, using Proleukin may cause side effects in some patients. Do not be alarmed by the list of the side effects; you may not experience any of them.

The following side effects usually disappear within two days after stopping treatment.

Your doctor may consider it necessary to treat Proleukin's side effects with other medicines.

**Certain side effects may be serious:**

**Common or very common:**

- Blood disorders: low levels of white blood cells (leucopenia) accompanied by fever, sore throat or mouth sores as a result of increased risk of infections; low blood platelets levels, the appearance of bruises and spontaneous bleeding (thrombocytopenia); low levels of red blood cells (anaemia) with symptoms of weakness and pale skin; blood clotting disorders and a sudden onset of shortness of breath, bloody sputum, leg pain and bleeding easily. Increase in white blood cells called eosinophils

which may cause cardiac or lung problems following an inflammation

- Heart and circulatory problems: heart attack, problems with blood vessels, irregular heartbeat, awareness to heart rate, strong chest pain (angina); low or high blood pressure associated with dizziness, blurred vision or constant headache; irregular heart beat (arrhythmia); rapid heart rate (tachycardia); blue color of the lips, tongue and skin due to blood oxygen deficiency (cyanosis)
- Breathing and lung problems: coughing; shortness of breath (dyspnea) or chest discomfort. Accumulation of fluids in the lungs, chest pain, lack of oxygen in the organs and a bloody cough
- Kidney and urine problems: kidney failure associated with fatigue, sleepiness, lack of appetite, vomiting or swollen legs. Blood in the urine, inability to produce urine. Low urine production (oliguria) with high blood levels of urea and creatinine accompanied with symptoms such as vomiting, sleepiness, low muscle tone or breathing difficulties and blood in the urine (haematuria)
- Digestive system and organ problems: stomach, intestines and rectal bleeding, manifested as black stool, vomiting blood (haematemesis) and a swollen abdomen; difficulty in swallowing (dysphagia), swelling and discomfort in the abdominal area, possible signs of liver and/ or spleen enlargement
- Possible signs of over activity of the thyroid gland (hyperthyroidism), such as: rapid heart rate, protruding eyes, weight loss and swelling in the frontal area of the neck.

- Possible signs of reduced activity of the thyroid gland (hypothyroidism), such as: weight gain, fatigue, hair loss, muscle weakness and feeling cold
- Possible signs of high level of lactic acid in the blood, such as: breathing difficulties, fatigue, vomiting and sleepiness
- Changes to the mental state including hearing and feeling of things that do not exist (hallucinations)

- Problems associated with the nervous system: seizures, paralysis, coma, tingling sensation, lack of sensation or loss of movement control, sudden loss of consciousness or fainting; loss of the ability to speak
- High potassium levels (hyperkalemia) associated with cramps, abnormal heart rhythm, dizziness and headaches

Inform your doctor or pharmacist in case these side effects become worse.

**Uncommon:**

- Allergic reactions causing teary eyes, runny nose, skin rash and distress
- Muscle weakness
- Loss of the sense of taste
- Nose bleeding
- Discoloration of the skin (vitiligo)

Inform your doctor or pharmacist in case these side effects become worse.

**Rare:**

- Diabetes
- Weakness associated with lack of energy, tiredness and sleepiness
- Skin rash accompanied by small blisters containing fluid
- Tissue damage at the injection site

In addition, Inflammation of the skin's blood vessels, in the brain and in the rest of the body, has also been reported.

**If any of these side effects become worse or if you notice any side effect not listed in this leaflet, you must consult your doctor.**

**How should this medicine be stored?**

Avoid poisoning! This medicine and all other medicines must be stored in a closed place out of the reach of children and/ or infants. This will help avoid poisoning.

Do not induce vomiting unless specifically instructed by your doctor!

Do not take medicines in the dark! Check the label **each time** you take a medicine. Wear eye glasses if you need them.

Do not use this medicine after the expiry date (exp. date) imprinted on the outer package. The expiry date refers to the last day of that month.

Store the unopened package in a refrigerator between 2-8°C.

**Do not freeze.**

Storage conditions after dissolution: the dissolved solution can be stored for up to 24 hours in a refrigerator between 2-8°C, if not used immediately. The diluted solution can be stored in a refrigerator for up to 48 hours after dissolution, including the duration of infusion. The dissolved or diluted preparation must not be used after the time lines mentioned here

Do not use Proleukin if you notice any particles, cloudiness or a yellow color that appears stronger than usual, in the solution

**Additional information:**

In addition to the active ingredient Aldesleukin, this medicine also contains:

Mannitol, Sodium lauryl sulphate, Sodium dihydrogen phosphate monohydrate, Disodium hydrogen phosphate.

What does this medicine look like and what does the package contain: small glass vial containing a white sterile powder

Registration License Holder: MegaPharm Ltd, P.O. Box 519, Hod Ha'Sharon 45105

Manufacturer: Novartis Pharmaceuticals UK Ltd,

This leaflet was checked and approved by the ministry of health in October 2012

Registration numbers in the Ministry of Health's national book of drugs: 114 02 26025 00

**Additional information:**

• Avoid the use of alcohol, tobacco and other substances that may affect your health.

• Avoid the use of aspirin or other pain relievers, such as ibuprofen, acetaminophen, etc.

• Avoid the use of anticoagulants, such as warfarin, heparin, etc.

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## RLS - Art Work Production Form (APF)

<b>Initiator details</b>	Initiator:	Megapharm		<b>Initiation Date:</b> 24/10/2012	
	Product Name:	Proleukin October 2012		<b>Component:</b> PiL	
	<b>Responsible RA Representative (Initiator):</b>			Sarit Rozen	
	<b>Updated IL Company Version No.:</b>		PRO PIL 062012 P.5		
	<b>Superseded IL Company Version No.:</b>		PRO PIL 092011 P.6 F		
	<b>Approved by (name of initiator representative):</b>				
	<b>Signature &amp; date of approval:</b>				
<b>RLS details</b>	<b>RLS Contact Person:</b>		Gili Wohlfeiler		<b>Status:</b> At work
	HEB+ENG: Gili W.		ARB: Hanna N.	Russian: NA	Graphic Design: Shani A.
	<b>RLS Proof Version No.:</b>		PRO PIL 062012 P.5.4 (23 January 2013)		
	<b>Indicate Type of Request:</b>		<input type="checkbox"/> New		<input checked="" type="checkbox"/> Change
	<b>If Change:</b> Write scope of the change		New MoH format + changes to the text		