

Package leaflet: information for the user



100 units/ml solution for injection in a vial

insulin glargine

SANOFI

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 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 side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

- What Lantus is and what it is used for
- What you need to know before you use Lantus
- How to use Lantus
- Possible side effects
- How to store Lantus
- Contents of the pack and other information

1. What Lantus is and what it is used for

Lantus is a solution for injection containing insulin glargine. Insulin glargine is a modified insulin, very similar to human insulin.



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Therapeutic indications

Lantus is used to treat diabetes mellitus in adults, adolescents and children aged 2 years and above. Diabetes mellitus is a disease where your body does not produce enough insulin to control the level of blood sugar. Insulin glargine has a long and steady blood-sugar-lowering action.

2. What you need to know before you use Lantus

Contraindications

Do not use Lantus

If you are allergic to insulin glargine or any of the other ingredients of this medicine (listed in section 6).

Precautions for use; special warnings

Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Lantus. Follow closely the instructions for posology, monitoring (blood and urine tests), diet and physical activity (physical work and exercise) as discussed with your doctor. If your blood sugar is too low (hypoglycaemia), follow the guidance for hypoglycaemia (see box at the end of this leaflet).

Travel

Before travelling consult your doctor. You may need to talk about

- the availability of your insulin in the country you are visiting,
- supplies of insulin, syringes etc.,
- correct storage of your insulin while travelling,
- timing of meals and insulin administration while travelling,
- the possible effects of changing to different time zones,
- possible new health risks in the countries to be visited,
- what you should do in emergency situations when you feel unwell or become ill.

Illnesses and injuries

In the following situations, the management of your diabetes may require a lot of care (for example, adjustment to insulin dose, blood and urine tests):

- If you are ill or have a major injury then your blood sugar level may increase (hyperglycaemia).
- If you are not eating enough your blood sugar level may become too low (hypoglycaemia).

In most cases you will need a doctor. **Make sure that you contact a doctor early.** If you have type 1 diabetes (insulin dependent diabetes mellitus), do not stop your insulin and continue to get enough carbohydrates. Always tell people who are caring for you or treating you that you require insulin.

Some patients with long-standing type 2 diabetes mellitus and heart disease or previous stroke who were treated with pioglitazone and insulin experienced the development of heart failure. Inform your doctor as soon as possible if you experience signs of heart failure such as unusual shortness of breath or rapid increase in weight or localised swelling (oedema).

Other medicines and Lantus

Some medicines cause changes in the blood sugar level (decrease, increase or both depending on the situation). In each case, it may be necessary to adjust your insulin dose to avoid blood sugar levels that are either too low or too high. Be careful when you start or stop taking another medicine.

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Before taking a medicine ask your doctor if it can affect your blood sugar level and what action, if any, you need to take.

Medicines that may cause your blood sugar level to fall (hypoglycaemia) include:

- all other medicines to treat diabetes,
- angiotensin converting enzyme (ACE) inhibitors (used to treat certain heart conditions or high blood pressure),
- disopyramide (used to treat certain heart conditions),
- fluoxetine (used to treat depression),
- fibrates (used to lower high levels of blood lipids),
- monoamine oxidase (MAO) inhibitors (used to treat depression),
- pentoxifylline, propoxyphene, salicylates (such as aspirin, used to relieve pain and lower fever),
- sulfonamide antibiotics.

Medicines that may cause your blood sugar level to rise (hyperglycaemia) include:

- corticosteroids (such as "cortisone" used to treat inflammation),
- danazol (medicine acting on ovulation),
- diazoxide (used to treat high blood pressure),
- diuretics (used to treat high blood pressure or excessive fluid retention),
- glucagon (pancreas hormone used to treat severe hypoglycaemia),
- isoniazid (used to treat tuberculosis),
- oestrogens and progestogens (such as in the contraceptive pill used for birth control),
- phenothiazine derivatives (used to treat psychiatric disorders),
- somatropin (growth hormone),
- sympathomimetic medicines (such as epinephrine [adrenaline], salbutamol, terbutaline used to treat asthma),
- thyroid hormones (used to treat thyroid gland disorders),
- atypical antipsychotic medicines (such as clozapine, olanzapine),
- protease inhibitors (used to treat HIV).

Your blood sugar level may either rise or fall if you take:

- beta-blockers (used to treat high blood pressure),
 - clonidine (used to treat high blood pressure),
 - lithium salts (used to treat psychiatric disorders).
- Pentamidine (used to treat some infections caused by parasites) may cause hypoglycaemia which may sometimes be followed by hyperglycaemia. Beta-blockers like other sympatholytic medicines (such as clonidine, guanethidine, and reserpine) may weaken or suppress entirely the first warning symptoms which help you to recognise a hypoglycaemia. If you are not sure whether you are taking one of those medicines ask your doctor or pharmacist.

Lantus with alcohol

Your blood sugar levels may either rise or fall if you drink alcohol.

Pregnancy and breast feeding

Ask your doctor or pharmacist for advice before taking any medicine.

Inform your doctor if you are planning to become pregnant, or if you are already pregnant. Your insulin dose may need to be changed during pregnancy and after giving birth. Particularly careful control of your diabetes, and prevention of hypoglycaemia, is important for the health of your baby.

If you are breast-feeding consult your doctor as you may require adjustments in your insulin doses and your diet.

Driving and using machines

Your ability to concentrate or react may be reduced if:

- you have hypoglycaemia (low blood sugar levels),
- you have hyperglycaemia (high blood sugar levels),
- you have problems with your sight.

Keep this possible problem in mind in all situations where you might put yourself and others at risk (such as driving a car or operating machines). You should contact your doctor for advice on driving if:

- you have frequent episodes of hypoglycaemia,
- the first warning symptoms which help you to recognise hypoglycaemia are reduced or absent.

Important information about some of the ingredients of Lantus

This medicine contains less than 1 mmol (23 mg) sodium per dose, i.e. it is essentially "sodium-free".

3. How to use Lantus

Dose

Always use this medicine exactly as your doctor has told you.

Check with your doctor or pharmacist if you are not sure. Based on your life-style and the results of your blood sugar (glucose) tests and your previous insulin usage, your doctor will:

- determine how much Lantus per day you will need and at what time,
- tell you when to check your blood sugar level, and whether you need to carry out urine tests,
- tell you when you may need to inject a higher or lower dose of Lantus.

Lantus is a long-acting insulin. Your doctor may tell you to use it in combination with a short-acting insulin or with tablets used to treat high blood sugar levels. Many factors may influence your blood sugar level. You should know these factors so that you are able to react correctly to changes in your blood sugar level and to prevent it from becoming too high or too low. See the box at the end of this leaflet for further information.

Use in children and adolescents

Lantus can be used in adolescents and children aged 2 years and above. There is no experience with the use of Lantus in children below the age of 2 years.

Frequency of administration

You need one injection of Lantus every day, at the same time of the day.

Method of administration

Lantus is injected under the skin. Do NOT inject Lantus in a vein, since this will change its action and may cause hypoglycaemia.

Your doctor will show you in which area of the skin you should inject Lantus. With each injection, change the puncture site within the particular area of skin that you are using.

How to handle the vials

Look at the vial before you use it. Only use it if the solution is clear, colourless and waterlike, and has no visible particles in it. Do not shake or mix it before use. Make sure that neither alcohol nor other disinfectants or other substances contaminate the insulin. Do not mix Lantus with any other insulins or medicines. Do not dilute it. Mixing or diluting may change the action of Lantus. Always use a new vial if you notice that your blood sugar control is unexpectedly getting worse. This is because the insulin may have lost some of its effectiveness. If you think you may have a problem with Lantus, have it checked by your doctor or pharmacist

If you use more Lantus than you should

– If you **have injected too much Lantus**, your blood sugar level may become too low (hypoglycaemia). Check your blood sugar frequently. In general, to prevent hypoglycaemia you must eat more food and monitor your blood sugar. For information on the treatment of hypoglycaemia, see box at the end of this leaflet.

If you forget to use Lantus

– If you **have missed a dose of Lantus** or if you **have not injected enough insulin**, your blood sugar level may become too high (hyperglycaemia). Check your blood sugar frequently.

For information on the treatment of hyperglycaemia, see box at the end of this leaflet.

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

If you stop using Lantus

This could lead to severe hypoglycaemia (very high blood sugar) and ketoacidosis (build-up of acid in the blood because the body is breaking down fat instead of sugar). Do not stop Lantus without speaking to a doctor, who will tell you what needs to be done.

Insulin Mix-ups

You must always check the insulin label before each injection to avoid mix-ups between Lantus and other insulins.

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.

Hypoglycaemia (low blood sugar) can be very serious. If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause brain damage and may be life-threatening. If you have symptoms of low blood sugar, take actions to increase your blood sugar level **immediately**.

If you experience the following symptoms, contact your doctor immediately:

large-scale skin reactions (rash and itching all over the body), severe swelling of skin or mucous membranes (angiooedema), shortness of breath, a fall in blood pressure with rapid heartbeat and sweating. These could be symptoms of **severe allergic reactions to insulins and may become life-threatening**.

Very common reported side effects (may affect more than 1 in 10 people)

- **Hypoglycaemia**

As with all insulin therapy, the most frequent side effect is **hypoglycaemia**.

Hypoglycaemia (low blood sugar) means that there is not enough sugar in the blood. For further information on the side effects of low blood sugar or high blood sugar, see the box at the end of this leaflet.

Common reported side effects (may affect up to 1 in 10 people)

- **Skin changes at the injection site**

If you inject your insulin too often at the same skin site, fatty tissue under the skin at this site may either shrink (lipoatrophy) or thicken (lipohypertrophy). Thickening of fatty tissue may occur in 1 to 2% of patients while shrinking may occur uncommonly. Insulin that you inject in such a site may not work very well. Changing the injection site with each injection may help to prevent such skin changes.

- **Skin and allergic reactions**

3 to 4% of patients may experience reactions at the injection site (such as reddening, unusually intense pain on injection, itching, hives, swelling or inflammation). They can also spread around the injection site. Most minor reactions to insulins usually resolve in a few days to a few weeks.

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

- Severe **allergic reactions to insulins**

Associated symptoms may include large-scale skin reactions (rash and itching all over the body), severe swelling of skin or mucous membranes (angiooedema), shortness of breath, a fall in blood pressure with rapid heartbeat and sweating. These could be symptoms of **severe allergic reactions to insulins and may become life-threatening**.

- **Eye reactions**

A marked change (improvement or worsening) in your blood sugar control can disturb your vision temporarily. If you have proliferative retinopathy (an eye disease related to diabetes) severe hypoglycaemic attacks may cause temporary loss of vision.

- **General disorders**

In rare cases, insulin treatment may also cause temporary build-up of water in the body, with swelling in the calves and ankles.

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

In very rare cases, dysgeusia (taste disorders) and myalgia (muscular pain) can occur.

Other side effects with frequency not known (frequency cannot be estimated from available data)
Insulin treatment can cause the body to produce antibodies to insulin (substances that act against insulin). Rarely, this may require a change to your insulin dose.

Use in children and adolescents

In general, the side effects in children and adolescents of 18 years of age or less are similar to those seen in adults. Complaints of injection site reactions (injection site pain, injection site reaction) and skin reactions (rash, urticaria) are reported relatively more frequently in children and adolescents of 18 years of age or less than in adults. Clinical study safety data are not available for children under 2 years.

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

5. How to store Lantus

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 carton and on the label of the vial after "EXP". The expiry date refers to the last day of that month.

Unopened vials

Store in a refrigerator (2°C – 8°C). Do not freeze. Do not put Lantus next to the freezer or a freezer pack. Keep the vial in the outer carton in order to protect from light.

Opened vials

Once in use, the vial may be stored for a maximum of 4 weeks in the outer carton not above 25°C and away from direct heat or direct light.

Do not use it after this time period. It is recommended that the date of the first use be noted on the label. Do not use Lantus if you notice particles in it. Only use Lantus if the solution is clear, colourless and waterlike.

HYPERGLYCAEMIA AND HYPOGLYCAEMIA

Always carry some sugar (at least 20 grams) with you. Carry some information with you to show you are diabetic.

HYPERGLYCAEMIA (high blood sugar levels)

If your blood sugar is too high (hyperglycaemia), you may not have injected enough insulin.

Why does hyperglycaemia occur?

Examples include:

- you have not injected your insulin or not injected enough, or if it has become less effective, for example through incorrect storage,
- you are doing less exercise than usual, you are under stress (emotional distress, excitement), or you have an injury, operation, infection or fever,
- you are taking or have taken certain other medicines (see section 2, "Other medicines and Lantus").

Warning symptoms of hyperglycaemia

Thirst, increased need to urinate, tiredness, dry skin, reddening of the face, loss of appetite, low blood pressure, fast heartbeat, and glucose and ketone bodies in urine. Stomach pain, fast and deep breathing, sleepiness or even loss of consciousness may be signs of a serious condition (ketoacidosis) resulting from lack of insulin.

What should you do if you experience hyperglycaemia? Test your blood sugar level and your urine for ketones as soon as any of the above symptoms occur. Severe hyperglycaemia or ketoacidosis must always be treated by a doctor, normally in a hospital.

HYPOGLYCAEMIA (low blood sugar levels)

If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause a heart attack or brain damage and may be life-threatening. You normally should be able to recognise when your blood sugar is falling too much so that you can take the right actions.

Why does hypoglycaemia occur?

Examples include:

- you inject too much insulin,
- you miss meals or delay them,
- you do not eat enough, or eat food containing less carbohydrate than normal (sugar and substances similar to sugar are called carbohydrates; however, artificial sweeteners are NOT carbohydrates),
- you lose carbohydrates due to vomiting or diarrhoea,
- you drink alcohol, particularly if you are not eating much,

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.

What Lantus contains

insulin glargine (equivalent to 3.64 mg).
– The other ingredients of Lantus are: zinc chloride, m cresol, glycerol, sodium hydroxide (see section 2 "Important information about some of the ingredients of Lantus"), hydrochloric acid, polysorbate 20 (10 ml vial only) and water for injections.

What Lantus looks like and contents of the pack
Lantus 100 units/ml solution for injection in a vial is a clear, colourless and waterlike solution.

Each vial contains 5 ml of solution for injection (equivalent to 500 units) or 10 ml of solution for injection (equivalent to 1000 units) and they are available in packs of 1, 2, 5 and 10 vials of 5 ml or 1 vial of 10 ml.

Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer
Sanofi-Aventis Deutschland GmbH
D-65926 Frankfurt am Main
Germany

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THIS MEDICAMENT
Is a product, which affects your health, and its consumption contrary to instructions is dangerous for you. Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medicament. <ul style="list-style-type: none">• The doctor and the pharmacist are the experts in medicines, their benefits and risks. • Do not by yourself interrupt the period of treatment prescribed. • Do not repeat the same prescription without consulting your doctor. • Keep all medicaments out of reach of children. <p>Council of Arab Health Ministers, Union of Arab Pharmacists.</p>

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– you have recently suffered hypoglycaemia (for example the day before) or if it develops slowly,
– you have almost normal or, at least, greatly improved blood sugar levels,
– you have recently changed from an animal insulin to a human insulin such as Lantus,
– you are taking or have taken certain other medicines (see section 2, "Other medicines and Lantus").

In such a case, you may develop severe hypoglycaemia (and even faint) before you are aware of the problem. Be familiar with your warning symptoms. If necessary, more frequent blood sugar testing can help to identify mild hypoglycaemic episodes that may otherwise be overlooked. If you are not confident about recognising your warning symptoms, avoid situations (such as driving a car) in which you or others would be put at risk by hypoglycaemia.

What should you do if you experience hypoglycaemia?

- Do not inject insulin. Immediately take about 10 to 20 g sugar, such as glucose, sugar cubes or a sugar-sweetened beverage. Caution: Artificial sweeteners and foods with artificial sweeteners (such as diet drinks) are of no help in treating hypoglycaemia.
- Then eat something that has a long-acting effect in raising your blood sugar (such as bread or pasta). Your doctor or nurse should have discussed this with you previously. The recovery of hypoglycaemia may be delayed because Lantus has a long action.
- If the hypoglycaemia comes back again take another 10 to 20 g sugar.
- Speak to a doctor immediately if you are not able to control the hypoglycaemia or if it recurs.

Tell your relatives, friends and close colleagues the following:

If you are not able to swallow or if you are unconscious, you will require an injection of glucose or glucagon (a medicine which increases blood sugar). These injections are justified even if it is not certain that you have hypoglycaemia.

It is advisable to test your blood sugar immediately after taking glucose to check that you really have hypoglycaemia.