



Drugs and Supplements

Liraglutide (Subcutaneous Route)

Description and Brand Names

Drug information provided by: [Merative](#), [Micromedex](#)®

US Brand Name

Saxenda

Victoza

Liraglutide injection is used with diet and exercise to lower blood sugar in people with type 2 diabetes. It is also used to reduce the risk of life-threatening events, including heart attack and stroke, in adults with type 2 diabetes and established heart or blood vessel disease. This medicine is a glucagon-like peptide-1 (GLP-1) receptor agonist.

Liraglutide injection is also used together with a reduced-calorie diet and proper exercise to help patients with obesity lose weight.

This medicine is available only with your doctor's prescription.

This product is available in the following dosage forms:

- Solution

Before Using

In deciding to use a medicine, the risks of taking the medicine must be weighed against the good it will do. This is a decision you and your doctor will make. For this medicine, the following should be considered:

Allergies

Tell your doctor if you have ever had any unusual or allergic reaction to this medicine or any other medicines. Also tell your health care professional if you have any other types of allergies, such as to foods, dyes, preservatives, or animals. For non-prescription products, read the label or package ingredients carefully.

Pediatric

Appropriate studies have not been performed on the relationship of age to the effects of Victoza® in children younger than 10 years of age. Use of Saxenda® is not recommended in children. Safety and efficacy have not been established.

Geriatric

Appropriate studies performed to date have not demonstrated geriatric-specific problems that would limit the usefulness of liraglutide injection in the elderly.

Breastfeeding

There are no adequate studies in women for determining infant risk when using this medication during breastfeeding. Weigh the potential benefits against the potential risks before taking this medication while breastfeeding.

Drug Interactions

Although certain medicines should not be used together at all, in other cases two different medicines may be used together even if an interaction might occur. In these cases, your doctor may want to change the dose, or other precautions may be necessary. When you are taking this medicine, it is especially important that your healthcare professional know if you are taking any of the medicines listed below. The following interactions have been selected on the basis of their potential significance and are not necessarily all-inclusive.

Using this medicine with any of the following medicines is usually not recommended, but may be required in some cases. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Abiraterone Acetate
- Acarbose
- Acetohexamide

- Chloroquine
- Chlorothiazide
- Chlorpropamide
- Chlorthalidone
- Ciprofloxacin
- Delafloxacin
- Enoxacin
- Furosemide
- Gatifloxacin
- Gemifloxacin
- Gliclazide
- Glimepiride
- Glipizide
- Gliquidone
- Glyburide
- Grepafloxacin
- Hydrochlorothiazide
- Hydroflumethiazide
- Hydroxychloroquine
- Indapamide
- Insulin
- Insulin Aspart, Recombinant
- Insulin Bovine
- Insulin Degludec
- Insulin Detemir
- Insulin Glargine, Recombinant
- Insulin Glulisine
- Insulin Lispro, Recombinant
- Lanreotide Acetate
- Levofloxacin
- Lomefloxacin
- Metformin
- Metolazone
- Moxifloxacin
- Nateglinide
- Norfloxacin
- Octreotide Acetate
- Ofloxacin
- Pasireotide Diaspartate
- Polythiazide
- Repaglinide
- Somatogon-ghla
- Sparfloxacin
- Thiocetic Acid
- Tolazamide
- Tolbutamide
- Triamterene
- Trovafloxacin

Using this medicine with any of the following medicines may cause an increased risk of certain side effects, but using both drugs may be the best treatment for you. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Acebutolol
- Atenolol

- Betaxolol
- Bisoprolol
- Carteolol
- Carvedilol
- Celiprolol
- Esmolol
- Glecaprevir
- Labetalol
- Levobunolol
- Metipranolol
- Metoprolol
- Nadolol
- Nebivolol
- Oxprenolol
- Penbutolol
- Pibrentasvir
- Pindolol
- Practolol
- Propranolol
- Semaglutide
- Sotalol
- Timolol
- Tirzepatide

Other Interactions

Certain medicines should not be used at or around the time of eating food or eating certain types of food since interactions may occur. Using alcohol or tobacco with certain medicines may also cause interactions to occur. Discuss with your healthcare professional the use of your medicine with food, alcohol, or tobacco.

Other Medical Problems

The presence of other medical problems may affect the use of this medicine. Make sure you tell your doctor if you have any other medical problems, especially:

- Alcohol use disorder, history of or
- Cholelithiasis (gallstones), history of—May increase risk for pancreatitis.
- Angioedema (swelling of the face, lips, tongue, throat, arms, or legs) caused by GLP-1 receptor agonists, history of—Use with caution. May increase the risk of this condition occurring again.
- Dehydration or
- Gastroparesis (stomach does not empty food normally) or
- Kidney disease (eg, chronic kidney failure), severe or
- Pancreatitis (inflammation of the pancreas), or history of—Use with caution. May increase risk for more side effects.
- Depression, history of or
- Gallbladder disease—Use with caution. May make these conditions worse.
- Diabetic ketoacidosis (ketones in the blood) or
- Type I diabetes—Victoza® should not be used in patients with these conditions. Insulin is needed to control these conditions.
- Fever or
- Infection or
- Surgery or
- Trauma—These conditions may cause temporary problems with blood sugar control and your doctor may want to treat you temporarily with insulin.
- Medullary thyroid carcinoma (cancer of the thyroid), family history of or
- Multiple endocrine neoplasia syndrome type 2 (MEN 2)—Should not be used in patients with these conditions.

Proper Use

When you start using Victoza®, it is very important that you check your blood sugar often, especially before and after meals, and at bedtime. This will help lower the chance of having very low blood sugar.

This medicine should come with a Medication Guide and patient instructions. Read and follow these instructions carefully. Ask your doctor if you have any questions.

You may take this medicine with or without food.

If you will be using liraglutide at home, your doctor will teach you how the injections will be given. Be sure you understand exactly how the medicine is to be injected.

This medicine is given as a shot under the skin of your stomach, thighs, or upper arm. Use a different body area each time you give yourself a shot. Keep track of where you give each shot to make sure you rotate body areas.

If you use Victoza® with insulin, do not mix them into the same syringe. It is acceptable to inject these in the same body area, but the shots should not be right next to each other. Do not use Saxenda® together with insulin.

Allow the medicine to warm at room temperature before using it.

Check the liquid in the pen. It should be clear and colorless. Do not use this medicine if it is cloudy, discolored, or if has particles in it.

Use a new needle each time you inject your medicine. Do not store the prefilled pen with the needle attached.

Never share medicine pens with others under any circumstances. It is not safe for one pen to be used for more than one person. Sharing needles or pens can result in transmission of infection.

Follow carefully the special meal plan your doctor gave you. This is the most important part of controlling your diabetes, and is necessary if Victoza® is to work properly. Also, exercise regularly and test for sugar in your blood or urine as directed.

Dosing

The dose of this medicine will be different for different patients. Follow your doctor's orders or the directions on the label. The following information includes only the average doses of this medicine. If your dose is different, do not change it unless your doctor tells you to do so.

The amount of medicine that you take depends on the strength of the medicine. Also, the number of doses you take each day, the time allowed between doses, and the length of time you take the medicine depend on the medical problem for which you are using the medicine.

- For injection dosage form:
 - For type 2 diabetes:
 - Adults and children 10 years of age and older—At first, 0.6 milligram (mg) injected under the skin once a day for 1 week. Your doctor may increase your dose as needed and until your blood sugar is controlled. However, the dose is usually not more than 1.8 mg once a day.
 - Children younger than 10 years of age—Use and dose must be determined by your doctor.
 - For reducing the risk of heart attacks and strokes:
 - Adults—At first, 0.6 milligram (mg) injected under the skin once a day for 1 week. Your doctor may increase your dose as needed.
 - Children—Use and dose must be determined by your doctor.
 - For treatment of obesity:
 - Adults—At first, 0.6 milligram (mg) injected under the skin once a day for 1 week. Your doctor will increase your dose weekly up to 3 mg every week.
 - Children—Use is not recommended.

Missed Dose

If you miss a dose of this medicine, skip the missed dose and go back to your regular dosing schedule. Do not double doses.

If you miss a dose of this medicine for 3 days or more, call your doctor to talk about how to restart your treatment.

Storage

Keep out of the reach of children.

Do not keep outdated medicine or medicine no longer needed.

Ask your healthcare professional how you should dispose of any medicine you do not use.

Unopened prefilled pens: Store in the refrigerator. Do not freeze. Do not use if it has been frozen.

Opened prefilled pens: Store in the refrigerator or at room temperature for 30 days. Keep the pen away from direct heat and light. Throw away any opened pen after 30 days.

Always remove the needle from the pen before storing the medicine. This prevents leakage of the remaining medicine and prevents air bubbles from forming in the cartridge.

Throw away used needles in a hard, closed container that the needles cannot poke through. Keep this container away from children and pets.

Precautions

It is very important that your doctor check your or your child's progress at regular visits to make sure that this medicine is working properly. Blood and urine tests may be needed to check for unwanted effects.

Do not use Saxenda® if you are also using Victoza®. They contain the same medicine.

It is very important to carefully follow any instructions from your health care team about:

- Alcohol—Drinking alcohol may cause severe low blood sugar. Discuss this with your health care team.
- Other medicines—Do not take other medicines during the time you are using liraglutide unless they have been discussed with your doctor. This especially includes nonprescription medicines such as aspirin, and medicines for appetite control, asthma, colds, cough, hay fever, or sinus problems.
- Counseling—Other family members need to learn how to prevent side effects or help with side effects if they occur. Also, diabetic patients may need special counseling about diabetes medicine dosing changes that might occur because of lifestyle changes, such as changes in exercise and diet. Furthermore, counseling on contraception and pregnancy may be needed because of the problems that can occur during pregnancy in patients with diabetes.
- Travel—Keep a recent prescription and your medical history with you. Be prepared for an emergency as you would normally. Make allowances for changing time zones and keep your meal times as close as possible to your usual meal times.
- In case of emergency—There may be a time when you need emergency help for a problem caused by your diabetes. You need to be prepared for these emergencies. It is a good idea to wear a medical identification (ID) bracelet or neck chain at all times. Also, carry an ID card in your wallet or purse that says that you have diabetes and a list of all of your medicines.

Check with your doctor right away if you have a mass in the neck, difficulty with swallowing, hoarseness, or trouble breathing. These may be symptoms of a serious thyroid problem.

Pancreatitis (swelling of the pancreas) may occur while you are using this medicine. Check with your doctor right away if you have sudden and severe stomach pain, chills, constipation, nausea, vomiting, fever, or lightheadedness.

This medicine may cause serious allergic reactions, including anaphylaxis and angioedema, which can be life-threatening and requires immediate medical attention. Call your doctor right away if you have a rash, itching, hoarseness, large, hive-like swelling on the face, eyelids, lips, tongue, throat, hands, legs, feet, or genitals, trouble breathing, trouble swallowing, or any swelling of your hands, face, or mouth after using this medicine.

This medicine does not cause hypoglycemia (low blood sugar). However, low blood sugar can occur when you use liraglutide with other medicines that can lower blood sugar, such as insulin, metformin, or a sulfonylurea. Low blood sugar also can occur if you delay or miss a meal or snack, exercise more than usual, drink alcohol, or cannot eat because of nausea or vomiting. Victoza® may increase the risk for low blood sugar in children 10 years of age and older, even if they are not using other medicines that can lower blood sugar.

- Symptoms of low blood sugar include: anxiety, behavior changes similar to being drunk, blurred vision, cold sweats, confusion, cool, pale skin, difficulty with thinking, drowsiness, excessive hunger, a fast heartbeat, headache (continuous), nausea, nervousness, nightmares, restless sleep, shakiness, slurred speech, or unusual tiredness or weakness.
- If symptoms of low blood sugar occur, eat glucose tablets or gel, corn syrup, honey, or sugar cubes, or drink fruit juice, non-diet soft drink, or sugar dissolved in water to relieve the symptoms. Also, check your blood for low blood sugar. Glucagon is used in emergency situations when severe symptoms such as seizures (convulsions) or unconsciousness occur. Have a glucagon kit available, along with a syringe and needle, and know how to use it. Members of your family also should know how to use it.

Hyperglycemia (high blood sugar) may occur if you do not take enough or skip a dose of your antidiabetic medicine, overeat or do not follow your meal plan, have a fever or infection, or do not exercise as much as usual.

- Symptoms of high blood sugar include: blurred vision, drowsiness, dry mouth, flushed, dry skin, fruit-like breath odor, increased urination (frequency and amount), ketones in the urine, loss of appetite, stomachache, nausea, vomiting, tiredness, trouble breathing (rapid and deep), unconsciousness, or unusual thirst.
- If symptoms of high blood sugar occur, check your blood sugar level and then call your doctor for instructions.

This medicine may cause gallbladder problems, including gallstones. Call your doctor right away if you have stomach fullness, gaseous stomach pain, recurrent fever, or yellow eyes or skin.

If you are using Saxenda®:

- Using this medicine while you are pregnant can harm your unborn baby. Use an effective form of birth control to keep from getting pregnant. If you think you have become pregnant while using this medicine, tell your doctor right away.
- This medicine can increase your heart rate while you are at rest. Your doctor should check your heart rate while you are using this medicine.
- It may also cause some people to have suicidal thoughts and tendencies or to become more depressed. Tell your doctor if you develop any mood changes, strange thoughts, or any unusual behavior while you are using this medicine.

Do not take other medicines unless they have been discussed with your doctor. This includes prescription or nonprescription (over-the-counter [OTC]) medicines and herbal or vitamin supplements.

Side Effects

Along with its needed effects, a medicine may cause some unwanted effects. Although not all of these side effects may occur, if they do occur they may need medical attention.

Check with your doctor immediately if any of the following side effects occur:

More common

- Bladder pain
- bloody or cloudy urine
- chills
- cough
- diarrhea
- difficult, burning, or painful urination
- fever
- frequent urge to urinate
- general feeling of discomfort or illness
- headache
- hoarseness
- joint pain
- loss of appetite
- lower back or side pain
- muscle aches and pains
- nausea
- runny nose
- shivering
- sore throat
- sweating
- trouble sleeping
- unusual tiredness or weakness
- vomiting

Less common

- Blurred vision
- dizziness
- nervousness
- pounding in the ears
- slow or fast heartbeat

Rare

- Anxiety
- cold sweats
- confusion
- cool, pale skin
- depression
- hives or welts, itching, or skin rash
- increased hunger
- large, hive-like swelling on the face, eyelids, lips, tongue, throat, hands, legs, feet, or genitals
- loss of consciousness
- nightmares
- redness of the skin
- seizures
- shakiness
- slurred speech

Incidence not known

- Agitation
- chest tightness
- clay-colored stools
- confusion

- dark urine
- decreased awareness or responsiveness
- decreased urine output
- depression
- difficulty with swallowing
- hostility
- irritability
- muscle twitching
- puffiness or swelling of the eyelids or around the eyes, face, lips, or tongue
- rapid weight gain
- severe sleepiness
- swelling of the face, ankles, or hands
- unpleasant breath odor
- vomiting of blood
- yellow eyes or skin

Some side effects may occur that usually do not need medical attention. These side effects may go away during treatment as your body adjusts to the medicine. Also, your health care professional may be able to tell you about ways to prevent or reduce some of these side effects. Check with your health care professional if any of the following side effects continue or are bothersome or if you have any questions about them:

More common

- Back pain
- belching
- body aches or pain
- constipation
- decreased appetite
- heartburn
- indigestion
- loss of voice
- pain or tenderness around the eyes and cheekbones
- sneezing
- stomach cramps, discomfort, or pain
- stuffy nose
- swollen mouth and tongue
- unpleasant taste
- urge to have bowel movement
- weight loss

Less common

- Bleeding, blistering, burning, coldness, discoloration of the skin, feeling of pressure, hives, infection, inflammation, itching, lumps, numbness, pain, rash, redness, scarring, soreness, stinging, swelling, tenderness, tingling, ulceration, or warmth at the injection site

Incidence not known

- Change or loss of taste

Other side effects not listed may also occur in some patients. If you notice any other effects, check with your healthcare professional.

Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

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