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2. Insulin glargine

Insulin glargine

Pronunciation: *IN-su-lin-GLAR-gine*

Brand names: Basaglar KwikPen, Basaglar Tempo Pen, Lantus vial, Lantus Solostar pen, Semglee vial, ... [show all 9 brands](#)

Dosage form: subcutaneous injection

Drug class: [Insulin](#)

Medically reviewed by [Melisa Puckey, BPharm](#). Last updated on Dec 6, 2023.

[Uses](#) [Side effects](#) [Warnings](#) [Before taking](#) [Dosage](#) [Interactions](#) [FAQ](#)

What is insulin glargine?

Insulin glargine is a long-acting insulin used to treat type 1 and [type 2 diabetes](#) in certain patients to improve and maintain blood glucose levels. Insulin glargine is a man-made form of human insulin that is used once daily to provide a base level of insulin that keeps working for 24 hours or longer.

Insulin glargine is available under the brand names [Lantus](#), [Basaglar](#), [Toujeo](#), [Semglee](#), and [Rezvoglar](#).

Rezvoglar, Lantus, Semglee, and Toujeo are FDA-approved to be used for use in adult and pediatric patients with type 1 and type 2 diabetes. Basaglar is FDA-approved to be used by adults for type 2 diabetes and also for adults and pediatric patients with [type 1 diabetes](#). In patients with type 1 diabetes, insulin glargine must be used together with a short-acting insulin.

Insulin glargine side effects

Common insulin glargine side effects may include [low blood sugar](#), swelling, weight gain, allergic reaction, itching, rash, or thickening or hollowing of the skin where you injected the medicine (lipodystrophy).

Serious insulin glargine side effects

Get emergency medical help if you have signs of insulin allergy: redness or swelling where an injection was given, [itchy skin](#) rash over the entire body, trouble breathing, fast heartbeats, feeling like you might pass out, or swelling in your tongue or throat.

Insulin glargine may cause other serious side effects. Call your doctor at once if you have:

- rapid weight gain, swelling in your feet or ankles;
- [shortness of breath](#); or
- low blood potassium--leg cramps, [constipation](#), irregular heartbeats, fluttering in your chest, increased thirst or urination, numbness or tingling, muscle weakness or limp feeling.

This is not a complete list of side effects, and others may occur. Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

 [Insulin glargine side effects](#) (more detail)

Related/similar drugs

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Learn about Ozempic (semaglutide) for type 2 diabetes treatment, weight management, cardiovascular ...

Reviews & ratings

6.6 / 10

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Rybelsus

Rybelsus tablets are used to improve blood sugar control in adults with type 2 diabetes, and may ...

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8.5 / 10

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Trulicity

Trulicity is an injectable diabetes medicine that is used together with diet and exercise to ...

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Lantus

Lantus is a long acting form of insulin used to treat type 1 or type 2 diabetes.

Learn about side ...

Reviews & ratings

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Tresiba

Tresiba (insulin degludec) is used to treat diabetes mellitus. Includes

Tresiba side effects ...

Reviews & ratings

4.3 / 10

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Victoza

Victoza helps control blood sugar levels and reduce the risk of serious heart problems in people ...

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Reviews & ratings

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Reviews & ratings

6.8 / 10

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Basaglar

Basaglar (insulin glargine) is a long-acting insulin that is used to improve blood sugar control in ...

Reviews & ratings

2.7 / 10

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Warnings

Never share an injection pen, even if you changed the needle.

Before taking this medicine

You should not use insulin glargine if you are allergic to insulin, or if you are having an episode of [hypoglycemia](#) (low blood sugar) or [diabetic ketoacidosis](#) (call your doctor for treatment).

Different brands of insulin glargine are specifically approved for different age groups and different diabetes types. The safety and effectiveness of insulin glargine in pediatric patients younger than 6 years of age with type 1 diabetes and pediatric patients with type 2 diabetes has not been established.

Tell your doctor if you have ever had:

- liver or kidney disease; or
- [heart failure](#) or other heart problems.

Tell your doctor if you also take [pioglitazone](#) or [rosiglitazone](#) (sometimes contained in combinations with [glimepiride](#) or metformin). Taking certain oral diabetes medicines while you are using insulin may increase your risk of serious heart problems.

Pregnancy

Tell your doctor if you are pregnant or plan to become pregnant, as it is not known if insulin glargine will harm your unborn baby. Follow your doctor's instructions about using this medicine if you are pregnant or you become pregnant. Controlling diabetes is very important during pregnancy.

Breastfeeding

Tell your healthcare provider if you are breastfeeding or are planning to breastfeed, as it is not known if insulin glargine may harm your breastfeeding baby.

 [Insulin glargine pregnancy and breastfeeding warnings](#) (more detail)

How should I use insulin glargine?

Follow all directions on your prescription label and read all medication guides or instruction sheets. Use the medicine exactly as directed. Ask your doctor or pharmacist if you don't understand how to use an injection.

Prepare an injection only when you are ready to give it. Do not use it if the medicine looks cloudy, has changed colors, or has particles in it.

Insulin glargine is injected under the skin, using a syringe or insulin pen, once per day at the same time of day.

Insulin can be injected into your upper legs (thighs), upper arms, or stomach area (abdomen). Do not inject into the same place two times in a row. Avoid injecting into skin that is damaged, tender, bruised, pitted, thickened, scaly, or has a scar or hard lump.

When treating type 1 diabetes, use your short-acting insulin before meals as directed by your doctor.

Insulin glargine must not be given with an insulin pump or mixed with other insulins. Do not inject insulin glargine into a vein or a muscle.

Your dose needs may change if you switch to a different brand, strength, or form of this medicine. Avoid medication errors by using only the medicine your doctor prescribes.

If you use an injection pen, use only the injection pen that comes with insulin glargine. Attach a new needle before each use. Do not transfer the insulin from the pen into a syringe.

Never share an injection pen, even if you changed the needle. Sharing these devices can pass infections from person to person.

Blood sugar can be affected by stress, illness, surgery, exercise, alcohol use, or skipping meals.

Low blood sugar (hypoglycemia) can make you feel very hungry, dizzy, irritable, or shaky. To quickly treat hypoglycemia, eat or drink hard candy, crackers, raisins, fruit juice, or non-diet soda. Your doctor may prescribe glucagon injections in case of severe hypoglycemia.

Tell your doctor if you have frequent symptoms of [high blood sugar \(hyperglycemia\)](#), such as increased thirst or urination. Ask your doctor before changing your medication dosage.

Wear a medical alert tag or carry an ID card to let others know you have diabetes.

Insulin glargine is available as:

Basaglar 100 units/mL is available as Basaglar KwikPen 3 mL, BasaglarTempo Pen

3 mL

Lantus 100 units/mL is available as a Lantus multiple-dose vial 10 mL, Lantus SoloStar prefilled pen 3 mL

Rezvoglar 100 units/mL available as Rezvoglar KwikPen prefilled pen 3 mL

Semglee 100 units/mL available as Semglee multiple-dose vial 10 mL, Semgleeprefilled pen 3 mL

Toujeo 300 units/mL available as Toujeo SoloStar prefilled pen 1.5 mL, Toujeo Max SoloStar 3 mL prefilled pen

 [Detailed Insulin glargine dosage information](#)

What happens if I miss a dose?

Call your doctor for instructions if you miss a dose. Do not use more than one dose in a 24-hour period unless your doctor tells you to.

Get your prescription refilled before you run out of medicine completely.

What happens if I overdose?

Seek emergency medical attention or call the Poison Help line at 1-800-222-1222. Insulin overdose can cause severe hypoglycemia. Symptoms include [drowsiness](#), confusion, blurred vision, numbness or tingling in your mouth, trouble speaking, muscle weakness, clumsy or jerky movements, seizure (convulsions), or loss of consciousness.

What should I avoid while using insulin glargine?

Avoid driving or hazardous activity until you know how insulin glargine will affect you. Your reactions could be impaired.

Avoid medication errors by always checking the medicine label before injecting your insulin.

Avoid drinking alcohol or using medicines that contain alcohol. It may interfere with your diabetes treatment.

What other drugs will affect insulin glargine?

Many drugs can affect your blood sugar and may also affect insulin glargine. This includes prescription and over-the-counter medicines, vitamins, and [herbal products](#). Tell your doctor about all other medicines you use. Not all possible interactions are listed here.

Tell your doctor if you also take [pioglitazone](#) or [rosiglitazone](#) (sometimes contained in combinations with [glimepiride](#) or metformin). Taking certain oral diabetes medicines while you are using insulin may increase your risk of serious heart problems.

 [Insulin glargine drug interactions](#) (more detail)

Does insulin glargine interact with my other drugs?

Enter medications to view a detailed interaction report using our [Drug Interaction Checker](#).

insulin glargine

+

Enter a drug name

Add

Storage

Storing unopened (not in use) insulin glargine:

- Refrigerate at 36°F–46°F (2°C–8°C)
- Do NOT use after the expiration date.

Storing opened (in use) insulin glargine:

- Storage once in use varies for different brands of insulin glargine. For storage information for the different brands of insulin glargine while in use, check prescribing information.

General storage information

- Keep this medicine in its original container protected from heat and light.
- Do not store an injection pen with the needle attached. Do not reuse a needle or syringe. Place them in a puncture-proof "sharps" container and dispose of it following state or local laws. Keep out of the reach of children and pets.

Company

Basaglar manufactured by: Eli Lilly and Company, Indianapolis, IN 46285 USA.

Lantus manufactured by: sanofi-aventis U.S. LLC, Bridgewater, NJ 08807, A SANOFI COMPANY.

Rezvoglar manufactured by: Eli Lilly and Company, Indianapolis, IN 46285, USA.

Semglee manufactured by: Biocon Biologics Inc. 245 Main St, 2nd Floor, Cambridge, MA 02142 USA.

Toujeo manufactured by: sanofi-aventis U.S. LLC, Bridgewater, NJ 08807, A SANOFI COMPANY.

Insulin glargine Biosimilars

Biosimilar and interchangeable products are biological products that are highly similar to and have no clinically meaningful differences from the reference product.

Reference products

These are biological products that have already been approved by the FDA, against which biosimilar products are compared. There are 4 for insulin glargine.

Basaglar (insulin glargine) - Eli Lilly and Company



Formulation type	Strength	
Autoinjector	300 units/3 mL (100 units/mL)	
View Basaglar information in detail.		
Lantus (insulin glargine) - Sanofi-Aventis U.S. LLC		▼
Semglee (insulin glargine) - Mylan Pharmaceuticals Inc.		▼
Toujeo (insulin glargine) - Sanofi-Aventis U.S. LLC		▼

Lantus interchangeable products

Interchangeable biosimilar products can be dispensed by a pharmacist without the intervention of the prescriber of the reference product.

Pharmacy laws for biosimilar prescribing may vary by state.

Rezvoglar (insulin glargine-aglr) - Eli Lilly and Company	▼
Semglee (insulin glargine-yfgn) - Biocon Biologics Inc.	▼

Popular FAQ

How and where should I inject insulin?	▼
When is the best time to take Toujeo?	▼
How long can Toujeo stay out of the refrigerator?	▼
What are the different types of insulin?	▼
Soliqua vs Lantus: What's the difference between them?	▼
Can Toujeo be given twice a day?	▼
How many pens are in a box of Toujeo?	▼
Is Toujeo a fast or long-acting insulin?	▼
What is the difference between Soliqua and Xultophy?	▼

[View more FAQ...](#)

References

1. [Food and Drug Administration \(FDA\) Basaglar Product Label](#)
2. [Food and Drug Administration \(FDA\) Toujeo Product Label](#)
3. [Food and Drug Administration \(FDA\) Rezvoglar Product Label](#)
4. [Food and Drug Administration \(FDA\) Lantus Product Label](#)
5. [Food and Drug Administration \(FDA\) Semglee Product Label](#)

More about insulin glargine

- [Check interactions](#)
- [Compare alternatives](#)
- [Pricing & coupons](#)
- [Reviews \(292\)](#)
- [Latest FDA alerts \(3\)](#)
- [Side effects](#)
- [Dosage information](#)
- [During pregnancy](#)
- [Support group](#)
- [Drug class: insulin](#)

Patient resources

- [Insulin glargine, recombinant advanced reading](#)
- [Insulin glargine-aglr, recombinant \(Advanced Reading\)](#)
- [Insulin glargine-yfng, recombinant \(Advanced Reading\)](#)
- [Insulin Glargine \(U-100\) Cartridge Systems and Pens](#)
- [Insulin Glargine \(U-100\) Vials](#)
- [Insulin Glargine \(U-300\) Pens](#)

Other brands

[Lantus](#), [Basaglar](#), [Toujeo](#), [Semglee](#), [Rezvoglar](#)

Professional resources

- [Insulin Glargine monograph](#)
- [Insulin Glargine \(FDA\)](#)

Other brands

[Lantus](#), [Basaglar](#), [Toujeo SoloStar](#), [Semglee](#), [Rezvoglar](#)

Related treatment guides

- [Type 2 Diabetes](#)
- [Diabetes, Type 1](#)

Further information

Always consult your healthcare provider to ensure the information displayed on this page applies to your personal circumstances.

[Medical Disclaimer](#)

DRUG STATUS

Availability

Rx Prescription only


Pregnancy & Lactation

 Risk data available

CSA Schedule*

N/A Not a controlled drug

Approval History

 Drug history at FDA



User Reviews & Ratings

4.2 / 10

[292 Reviews](#)

Images

[Toujeo Max SoloStar \(insulin glargine\) 300 units per mL \(U-300\) 3 mL prefilled pen](#)



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