



[Home](#)

2. Nutropin AQ

Nutropin AQ NuSpin

Pronunciation: *NOO-trope-in*

Generic name: [somatropin](#)

Dosage form: subcutaneous injection

Drug class: [Growth hormones](#)

Medically reviewed by [Carmen Pope, BPharm](#). Last updated on Apr 18, 2024.

[Uses](#) [Side effects](#) [Warnings](#) [Cost](#) [Dosage](#) [Interactions](#)

What is Nutropin AQ?

Nutropin AQ (somatropin) is an injectable preparation that may be used to treat children with growth failure due to growth hormone deficiency (GHD), idiopathic short stature (ISS), Turner syndrome (TS), and chronic kidney disease (CKD) up to the time of renal transplantation. It can also treat adults with either child-onset or adult-onset GHD.

Nutropin AQ (somatropin) replaces naturally occurring (endogenous) growth hormone (GH) and is identical in amino acid sequence to endogenous GH. GH plays a vital role in the development of tissues, bones, and organs in children and teens, and Nutropin AQ may be given to children and teenagers who are short or growing slowly because their bodies do not produce enough GH. In adults, Nutropin AQ helps maintain a balance between lean mass and body fat, even when puberty has finished and the person has reached full height.

Somatropin has been in use since 1985. Nutropin AQ was FDA-approved on December 29, 1995.

Nutropin AQ NuSpin is a prefilled, disposable, multi-dose device that contains Nutropin AQ and allows people to self-administer their own Nutropin AQ. It is available in 3 strengths: Nutropin AQ NuSpin 5, Nutropin AQ NuSpin 10, and Nutropin AQ NuSpin 20.

Nutropin AQ side effects

Get emergency medical help if you have signs of an allergic reaction: hives; difficulty breathing; swelling of your face, lips, tongue, or throat.

Nutropin AQ can cause serious side effects (see warnings below).

Serious breathing problems may occur in patients with Prader-Willi syndrome who use Nutropin AQ. If you have Prader-Willi syndrome, call your doctor promptly if you develop signs of lung or breathing problems such as shortness of breath, coughing, or new or increased snoring.

Also, call your doctor at once if you have:

- pain in your knees or hips, walking with a limp
- ear pain, swelling, warmth, or drainage
- numbness or tingling in your wrist, hand, or fingers
- severe swelling or puffiness in your hands and feet
- changes in behavior
- vision problems, unusual headaches
- changes in the shape or size of a mole
- pain or swelling in your joints
- pancreatitis – severe pain in your upper stomach spreading to your back, nausea, and vomiting
- high blood sugar – increased thirst, increased urination, dry mouth, fruity breath odor
- increased pressure inside the skull – severe headaches, ringing in your ears, dizziness, nausea, vision problems, pain behind your eyes or
- signs of an adrenal gland problem – extreme weakness, severe dizziness, weight loss, changes in skin color, feeling very weak or tired.

Common side effects of Nutropin AQ may include:

- pain, itching, or skin changes where the medicine was injected
- swelling, rapid weight gain
- muscle or joint pain or pain in the hands
- numbness or tingling
- stomach pain, gas
- headache, back pain or
- cold or flu symptoms, stuffy nose, sneezing, sore throat, ear pain.

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 Genentech at 1-888-835-2555 or the FDA at 1-800-FDA-1088.

 [Nutropin AQ side effects](#) (more detail)

Related/similar drugs

Genotropin

Genotropin is a human growth hormone used to treat growth failure in children and adults who lack ...

Reviews & ratings

[6 Reviews](#)

[View more](#)

Norditropin

Norditropin is used to treat growth hormone deficiency (GHD) in adults and children and other ...

Reviews & ratings

[3 Reviews](#)

[View more](#)

FEATURED

Skytrofa

Skytrofa injection is a once-weekly, slow-release human growth hormone (lonapegsomatropin) ...

Reviews & ratings

[Add a review](#)

[View more](#)

Omnitrope

Omnitrope (somatropin) is a form of human growth hormone used to treat adults and children with ...

Reviews & ratings

[4 Reviews](#)

[View more](#)

Humatrope

Humatrope injection (somatropin) is a human growth hormone used to treat growth failure in children ...

Reviews & ratings

[7 Reviews](#)

[View more](#)

Ngenla

Ngenla is a long-acting human growth hormone used to treat children aged 3 and older who are not ...

Reviews & ratings

[Add a review](#)

[View more](#)

Sogroya

Sogroya information from Drugs.com, includes Sogroya side effects, interactions and indications.

Reviews & ratings

[Add a review](#)

[View more](#)

Warnings and serious effects

Do not use in patients with a known hypersensitivity to Nutropin AQ, somatropin, or any of the inactive ingredients. Get emergency medical help if you have signs of an allergic reaction such as hives; difficulty breathing; or swelling of your face, lips, tongue, or throat.

May increase the risk of death if given to patients with acute critical illnesses, such as recent open-heart or abdominal surgery, trauma, or acute respiratory failure. Should not be administered until recovery has occurred.

Nutropin AQ has been reported to increase the risk of death in children with Prader-Willi Syndrome (PWS) who are severely obese, with a history of upper airway obstruction, sleep apnea, or severe respiratory impairment. Do not use.

Generally, should not be used when there is active cancer. Any pre-existing cancer should be inactive and treatment completed before starting treatment with Nutropin AQ. Discontinue if there is evidence of recurrent cancer activity. Pituitary tumors should be ruled out before starting treatment since growth hormone deficiency (GHD) may be an early sign of the presence of a pituitary tumor (or, rarely, other brain tumors).

May increase the risk of a second cancer occurring (for example, intracranial tumors) in patients who have survived childhood cancers. Your healthcare provider should monitor you for these.

Do not use in patients with active proliferative or severe non-proliferative diabetic retinopathy preexisting papilledema, or children with closed epiphysis.

High blood pressure inside the brain (intracranial hypertension) has been reported in a small number of people treated with somatropin products. Symptoms usually occur within the first eight (8) weeks of starting treatment but are usually reversible after discontinuation or dose reduction. Patients with Turner Syndrome, chronic kidney disease (CKD), and PWS may be at increased risk. Tell your healthcare provider immediately if you develop eye swelling, visual changes, headache, nausea, and/or vomiting.

Treatment with Nutropin AQ may decrease insulin sensitivity, particularly at higher dosages. As a result, previously undiagnosed impaired glucose tolerance (IGT) and overt diabetes mellitus may be unmasked during somatropin treatment, and new-onset type 2 diabetes mellitus has been reported in patients taking somatropin. Your healthcare provider should regularly monitor blood glucose levels in all patients treated with somatropin, particularly those with risk factors. Dosages of other drugs used to treat or prevent diabetes for diabetes, may require adjustment.

May cause fluid retention with symptoms such as swelling, joint pain, or carpal tunnel syndrome, especially in adults. Tell

your healthcare provider.

Your healthcare provider will conduct regular laboratory tests to monitor your cortisol levels and thyroid function. Patients who undergo rapid growth may also be at risk for slipped capital femoral epiphysis (SCFE) – where the growth plate is damaged and the head of the bone moves. Tell your healthcare provider if you or your child develops a limp or hip/knee pain. Children with scoliosis should also be monitored for progression of the curve.

May cause pancreatitis. Tell your healthcare provider if you develop persistent severe abdominal pain.

Patients with Turner Syndrome have an increased risk of developing otitis media, and other ear or cardiovascular conditions. Children with CKD may require extra monitoring for other conditions.

Nutropin AQ cost

The cost of prescription drugs varies depending on your insurance plan and which pharmacy you use. Refer to our [price guide](#) page for more information about Nutropin AQ cost.

You may also be eligible for a Nutropin AQ coupon or Nutropin AQ copay card. Ask your doctor or pharmacist if you qualify.

Before taking

Do not use it if you have a known hypersensitivity to Nutropin AQ, somatropin, or any of the inactive ingredients.

Tell your doctor about all your health conditions, including, if you:

- Have liver or kidney disease or diabetes
- Have pancreas problems
- Have an abnormal curvature of the spine (scoliosis), a limp, or knee or hip pain
- Have breathing problems or sleep apnea (breathing stops during sleep);
- Have a pituitary gland disorder
- Have an underactive thyroid;
- Have a head injury or brain tumor
- Have had childhood brain cancer and radiation treatment
- Have active cancer or have had cancer in childhood
- Have a serious illness due to lung failure, or complications from recent surgery, injury, or medical trauma
- Have closed epiphyses
- Have eye problems caused by diabetes (diabetic retinopathy); or
- you are being treated for Prader-Willi syndrome and you are overweight or have severe breathing problems (including sleep apnea) breathing problems, sleep apnea (breathing stops during sleep);
- Are pregnant or intending to become pregnant
- Are breastfeeding or intend to breastfeed.

Pregnancy

It is also not known whether Nutropin AQ can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nutropin AQ should be given to a pregnant woman only if clearly needed.

Breastfeeding

It is not known whether Nutropin AQ is excreted in human milk. Talk to your healthcare provider about the best way to feed your baby.

i [Nutropin AQ pregnancy and breastfeeding warnings](#) (more detail)

How is Nutropin AQ administered?

Nutropin AQ is administered subcutaneously (under the skin), either by a healthcare professional or patients can be taught how to self-administer it.

- Do not self-administer Nutropin AQ until your healthcare provider has shown how to do so. Ask your doctor or pharmacist if you have questions.
- Nutropin AQ NuSpin devices are designed to be easy to use and are disposable.

The dose of the NuSpin device determines how much medicine can be administered, for example, the Nutropin AQ NuSpin 20 (Blue) delivers doses from 0.2 to 0.7mg in increments of 0.2mg.

- Your doctor will determine the correct dose for you.

The product can be used for 28 days after it has been primed and kept under proper storage conditions.

For the first use of each NuSpin 20, always follow the New NuSpin 20 Set Up Instructions to ensure that air is expelled from the cartridge.

- Do not store with the needle attached. The needle should be removed and safely disposed of immediately after use.

May be self-administered under the skin of the upper thigh or abdomen (not within an inch of the belly button) or administered by a caregiver into the upper arm or buttock.

- Prepare your injection only when you are ready to give it. Do not shake the medicine. Do not use it if the medicine looks cloudy, has changed colors, or has particles in it. Call your pharmacist for new medicine.
- Do not inject into the same place two times in a row. Rotate injection sites every week to avoid lipoatrophy (the localized loss of fat tissue).

You may need frequent medical tests.

Nutropin AQ dosage

Growth Hormone Deficiency (GHD)

- Children: Up to 0.3 mg/kg/week
- Pubertal Patients: Up to 0.7 mg/kg/week

Idiopathic Short Stature

- Up to 0.3 mg/kg/week

Chronic Kidney Disease

- Up to 0.35 mg/kg/week

Turner Syndrome

- Up to 0.375 mg/kg/week

Adult GHD

- Non-weight-based regimen: Initially, 0.2 mg/day (range 0.15–0.3 mg/day) increased gradually every 1–2 months by increments of approximately 0.1–0.2 mg/day.
- Weight-based regimen: Initially no more than 0.006 mg/kg/day; the dose may be increased up to a maximum of 0.025 mg/kg/day in patients \leq 35 years old or 0.0125 mg/kg/day in patients >35 years old.

i [Detailed Nutropin AQ dosage information](#)

What happens if I miss a dose?

Use the medicine as soon as you can, but skip the missed dose if it is almost time for your next dose. Do not use two doses at one time. Call your doctor if you miss more than 3 doses in a row.

What happens if I overdose?

Follow your healthcare provider's instructions and always check your Nutropin AQ label to make sure you have the correct vial dosage for you.

Overdose can cause tremors or shaking, cold sweats, increased hunger, headache, drowsiness, weakness, dizziness, fast heartbeat, and nausea. Long-term overdose may cause excessive growth.

Seek emergency medical attention or call the Poison Help line at 1-800-222-1222 if you have overdosed or are experiencing symptoms of an overdose.

What should I avoid while using Nutropin AQ?

When Nutropin AQ is administered subcutaneously at the same site over a long period, tissue atrophy may result. This can be avoided by rotating the injection site.

Avoid dropping the NuSpin device. If you drop it, check to see if it is damaged. You should also check to see that the black dose knob and the Activator are moving properly. If you notice the NuSpin is damaged, contact your healthcare professional or call 1-866-NUTROPIN for advice.

Do not place it underwater or use alcohol to clean it. Use a damp cloth to wipe away dirt.

What other drugs will affect Nutropin AQ?

Tell your doctor about all your other medicines, especially:

- birth control pills or hormone replacement therapy
- cytochrome p450 metabolized drugs (such as amitriptyline, dextromethorphan, propranolol, or tramadol)
- insulin or oral diabetes medicine or
- a steroid (prednisone, dexamethasone, methylprednisolone, and others).

This list is not complete. Other drugs may affect Nutropin AQ, including prescription and over-the-counter medicines, vitamins, and herbal products. Not all possible drug interactions are listed here.

i [Nutropin AQ drug interactions](#) (more detail)

Does Nutropin AQ interact with my other drugs?

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

Nutropin AQ

+

Enter a drug name

Add

Storage

Store Nutropin AQ NuSpin in the refrigerator at 36° to 46°F (2° to 8°C) when not in use to maintain the potency of the medication. Protect from light. Do not freeze.

You may keep the NuSpin device outside of the refrigerator for no longer than one hour per day, out of direct sunlight, before returning to the refrigerator. Do not use Nutropin AQ NuSpin outside of the refrigerator for longer than one hour. If you are uncertain about whether you can use Nutropin AQ you can call 1-866-NUTROPIN for additional assistance. Call this number, their specialty pharmacy, or their healthcare team if the Nutropin AQ NuSpin malfunctions.

When traveling, keep Nutropin AQ NuSpin dry and place it in a water-resistant container before placing it in a cooler.

Ingredients

Active: somatropin.

Inactive: sodium chloride, phenol, polysorbate 20, sodium citrate (unspecified form).

Nutropin AQ is available in the following pen cartridge and NuSpin forms:

- Nutropin AQ Pen Cartridge 10 mg/2 mL (yellow color band), and Nutropin AQ Pen Cartridge 20 mg/2 mL (purple color band)
- Nutropin AQ NuSpin 5 mg/2 mL (clear device), Nutropin AQ NuSpin 10 mg/2 mL (green device), and Nutropin AQ NuSpin 20 mg/2 mL (blue device).

Manufacturer

Nutropin aq 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 11 for Nutropin AQ.

Accretropin (somatropin) - Emergent Biosolutions Canada Inc.

▼

Formulation type	Strength
Multi-Dose Vial	5 mg/mL Discontinued, Voluntarily Revoked

View [Accretropin](#) information in detail.

Genotropin (somatropin) - Pharmacia & Upjohn Company LLC

▼

Humatrope (somatropin) - Eli Lilly and Company

▼

Norditropin (somatropin) - Novo Nordisk Inc.

▼

Nutropin (somatropin) - Genentech, Inc.

▼

Nutropin AQ (somatropin) - Genentech, Inc.

▼

Omnitrope (somatropin) - Sandoz Inc.

▼

Saizen (somatropin) - EMD Serono, Inc.

▼

Serostim (somatropin) - EMD Serono, Inc.

▼

Zomacton (somatropin) - Ferring Pharmaceuticals Inc.

▼

Zorbtive/Serostim (somatropin) - EMD Serono, Inc.

▼

References

- 1. [Product Label](#)

More about Nutropin AQ (somatropin)

- [Check interactions](#)
- [Compare alternatives](#)
- [Pricing & coupons](#)
- [Side effects](#)
- [Dosage information](#)
- [During pregnancy](#)
- [Drug class: growth hormones](#)
- [Breastfeeding](#)
- [En español](#)

Patient resources

- [Nutropin AQ NuSpin 10 advanced reading](#)
- [Nutropin AQ NuSpin 5 \(Advanced Reading\)](#)
- [Nutropin AQ Pen \(Advanced Reading\)](#)

Other brands

[Genotropin](#), [Norditropin](#), [Omnitrope](#), [Humatrope](#), ... +6 more

Professional resources

- [Nutropin AQ prescribing information](#)
- [Somatropin \(AHFS Monograph\)](#)

Other brands

[Genotropin](#), [Norditropin](#), [Omnitrope](#), [Humatrope](#), ... +4 more

Other formulations

- [Nutropin](#)

Related treatment guides

- [Pediatric Growth Hormone Deficiency](#)
- [Short Stature for Age](#)
- [Idiopathic Short Stature](#)
- [Adult Human Growth Hormone Deficiency](#)
- [Turner Syndrome](#)
- [Growth Retardation, Chronic Renal Failure](#)

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

[Review this drug](#)

Drugs.com Mobile App

Access drug & treatment information, identify pills, check interactions and set up personal medication records.



About

- [About Drugs.com](#)
- [Advertising policy](#)
- [Attribution & citations](#)

Terms & privacy

- [Terms of use](#)
- [Editorial policy](#)
- [Privacy policy](#)

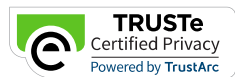
Support

- [Help center](#)
- [Sitemap](#)
- [Contact us](#)



[Subscribe to our newsletter](#) for the latest medication news, new drug approvals and FDA alerts.

Drugs.com provides accurate and independent information on more than 24,000 prescription drugs, over-the-counter medicines and natural products. This material is provided for educational purposes only and is not intended for medical advice, diagnosis or treatment. Data sources include Micromedex (updated 7 Apr 2025), Cerner Multum™ (updated 13 Apr 2025), ASHP (updated 10 Apr 2025) and others.



Ad Choices
ADVERTISEMENT



Copyright © 2000-2025 Drugs.com. All rights reserved.