Neulasta

Pronunciation: *nu-las-tah*
Generic name: pegfilgrastim
Brand names: Neulasta, Neulasta Onpro Kit
Dosage form: single-dose prefilled syringe for subcutaneous injection (6 mg/0.6 mL), single-dose prefilled syringe co-packaged with the on-body injector (6 mg/0.6 mL)
Drug class: Colony stimulating factors

Medically reviewed by Carmen Pope, BPharm. Last updated on Apr 2, 2025.

What is Neulasta?

Neulasta is used to stimulate neutrophil growth and **reduce infection risk** (manifested by febrile neutropenia) in adults and children with non-myeloid cancer receiving **chemotherapy that can decrease white blood cell counts**.

Neulasta is also used to increase survival in adults and children with **Acute Radiation Syndrome** (ARS).

- The effectiveness of Neulasta injection for ARS was only studied in animals because it could not be studied in people.

It is not used to help mobilize peripheral blood cells needed for stem cell transplantation.

Neulasta (pegfilgrastim) is a man-made form of granulocyte colony-stimulating factor (G-CSF), a protein that stimulates the growth of neutrophils, a type of white blood cell in your body. White blood cells help your body fight infections. Neulasta belongs to the drug class called leukocyte growth factors. It may also be called a colony-stimulating factor.

Neulasta injection gained FDA approval on January 31, 2002. Several biosimilars of Neulasta have been approved (see pegfilgrastim).

Side effects

The **most common side effects** of Neulasta are:

- bone pain
- pain in your arms or legs.

Serious side effects

Neulasta may cause the following serious side effects:

- **Spleen rupture**. Your spleen may become enlarged and can rupture. A ruptured spleen can cause death. Call your healthcare provider right away if you have pain in the left upper stomach area or your left shoulder.
- A serious lung problem called **Acute Respiratory Distress Syndrome** (ARDS). Call your healthcare provider or get emergency help right away if you have shortness of breath with or without a fever, trouble breathing, or a fast rate of breathing.
- **Serious allergic reactions**. Neulasta can cause serious allergic reactions. These reactions can cause a rash over your whole body, shortness of breath, wheezing, dizziness, swelling around your mouth or eyes, fast heart rate, and sweating. If you have any of these symptoms, stop using Neulasta and call your healthcare provider or get emergency medical help right away.
- **Sickle cell crises**. You may have a serious sickle cell crisis, which could lead to death, if you have a sickle cell disorder and receive Neulasta. Call your healthcare provider right away if you have symptoms of sickle cell crisis, such as pain or difficulty breathing.
- **Kidney injury** (glomerulonephritis). Neulasta can cause kidney injury. Call your healthcare provider right away if you develop any of the following symptoms:
    - swelling of your face or ankles
    - blood in your urine or dark colored urine
    - you urinate less than usual
- **Increased white blood cell count** (leukocytosis). Your healthcare provider will check your blood during treatment with Neulasta.
- **Decreased platelet count** (thrombocytopenia). Your healthcare provider will check your blood during treatment with Neulasta. Tell your healthcare provider if you have unusual bleeding or bruising during treatment with Neulasta. This could be a sign of decreased platelet counts, which may reduce the ability of your blood to clot.
- **Capillary Leak Syndrome**. Neulasta can cause fluid to leak from blood vessels into your body's tissues. This condition is called "Capillary Leak Syndrome" (CLS). CLS can quickly cause you to have symptoms that may become life-threatening. Get emergency medical help right away if you develop any of the following symptoms:
    - swelling or puffiness and are urinating less than usual
    - trouble breathing
    - swelling of your stomach area (abdomen) and feeling of fullness
    - dizziness or feeling faint
    - a general feeling of tiredness.
- **Myelodysplastic syndrome and acute myeloid leukemia**. If you have breast cancer or lung cancer, when Neulasta is used with chemotherapy and radiation therapy, or with radiation therapy alone, you may have an increased risk of developing a precancerous blood condition called myelodysplastic syndrome (MDS) or a blood cancer called acute myeloid leukemia (AML). Symptoms of MDS and AML may include tiredness, fever, and easy bruising or bleeding. Call your healthcare provider if you develop these symptoms during treatment with Neulasta.
- **Inflammation of the aorta** (aortitis). Inflammation of the aorta (the large blood vessel that transports blood from the heart to the body) has been reported in patients who received Neulasta. Symptoms may include fever, abdominal pain, feeling tired, and back pain. Call your healthcare provider if you experience these symptoms.

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.

Neulasta side effects (more detail)

Related/similar drugs

Augmentin

Augmentin is a prescription antibiotic combining amoxicillin and clavulanate to treat bacterial ...

Reviews & ratings

5.4 / 10

447 Reviews

View more

Zosyn

Zosyn is used to treat bacterial infections such as urinary tract and skin infections and ...

Reviews & ratings

5 Reviews

View more

FEATURED

Ozempic

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

Reviews & ratings

6.6 / 10

1,504 Reviews

View more

Vancomycin

Vancomycin is used to treat infections of the intestines that cause colitis. Learn about side ...

Reviews & ratings

6.5 / 10

57 Reviews

View more

Amoxicillin/clavulanate

Amoxicillin and clavulanate potassium is a combination antibiotic used to treat bacterial ...

Reviews & ratings

5.3 / 10

910 Reviews

View more

Before taking this medicine

You should not use Neulasta if you are allergic to pegfilgrastim, Neulasta injection, or filgrastim (Neupogen).

To make sure this medicine is safe for you, tell your doctor if you have ever had:

- sickle cell disorder;
- kidney disease;
- acute myeloid leukemia;
- radiation treatment;
- myelodysplasia syndrome (also called "preleukemia"); or
- a latex allergy.

Tell your doctor if you are pregnant or breastfeeding.

Neulasta pregnancy and breastfeeding warnings (more detail)

How should I use Neulasta?

Receiving myelosuppressive chemotherapy

Use Neulasta exactly as prescribed by your doctor. Follow all directions on your prescription label and read all medication guides or instruction sheets.

- This medicine should not be given within 14 days before or 24 hours after you receive chemotherapy.

Neulasta is injected under the skin. A healthcare provider may teach you how to properly use the medication by yourself.

- Read and carefully follow any Instructions for Use provided with your medicine. Ask your doctor or pharmacist if you don't understand all the instructions.
- Your blood may need to be tested often.
- Prepare your injection only when you are ready to give it. Do not use if the medicine looks cloudy, has changed

colors, or has particles in it. Call your pharmacist for new medicine.

- **Carefully follow your doctor's instructions when giving Neulasta to a child who weighs less than 99 pounds (45 kilograms).** The correct dose for a child this size cannot be accurately measured using the prefilled syringe.
- You may need medical tests to help your doctor determine how long to treat you with this medicine.

Store the **prefilled syringe** in its original package in the refrigerator, protected from light. **Do not shake or freeze.**

Take the syringe out of the refrigerator and let it reach room temperature for 15 to 30 minutes before injecting your dose. If a syringe has become frozen, thaw it in a refrigerator. Do not use any syringe that has been frozen more than one time.

- Do not use a syringe that has been left at room temperature for longer than 48 hours.

Nuelasta Onpro

The **Neulasta Onpro Injector** is a special device placed on the skin that delivers your pegfilgrastim dose at a specific time. You will need to wear the device for 27 hours before the dose begins. The timed dose will then be released from the device slowly over a 45-minute period.

- Before your next scheduled Neulasta dose, **avoid** the use of lotions, creams, or oils on your arms and stomach area (abdomen) to help keep the device on your skin.
- Do not use other materials to hold the on-body injector in place that could cover audio/visual indicators or compress the on-body injector against your skin, as this could dislodge the cannula and lead to a missed dose or incomplete dose of Neulasta.
- Keep **Neulasta Onpro** refrigerated until you are ready to wear it. Do not use an Onpro device that has been left out of a refrigerator for longer than 12 hours.
- While wearing Neulasta Onpro, you or a caregiver will need to check the device to make sure it is working properly.
- Each prefilled syringe or Onpro Injector is for one use only. Throw it away after one use, even if there is still medicine left inside.

Use a needle and syringe only once and then place them in a puncture-proof "sharps" container. Follow state or local laws about how to dispose of this container. Keep it out of the reach of children and pets.

Acute Radiation Syndrome

Your healthcare provider will administer this medicine to you.

- Two doses will be administered subcutaneously (under the skin), one week apart.

Neulasta patient tips (more detail)

Dosing information

Dosage of Neulasta for patients receiving myelosuppressive chemotherapy:

- Adults: 6 mg SC once per chemotherapy cycle.
- Children 31 to 44 kg: 4mg (0.4 mL) SC
- Children 21 to 30 kg: 2.5 mg (0.25 mL) SC

- Children 10 to 20 kg: 1.5 mg (0.15 mL) SC
- Children less than 10 kg: 0.1 mg/kg SC

Do not administer between 14 days before and 24 hours after administration of cytotoxic chemotherapy.

Dosage for Acute Radiation Syndrome

Administer the first dose as soon as possible after suspected or confirmed exposure to radiation levels greater than 2 gray (Gy).

Adults

- Initial dose: 6 mg SC as soon as possible after exposure.
- 1 week later: 6 mg SC

Children

Administer the initial dose as soon as possible, then another dose 1 week later.

- 31 to 44 kg: 4mg (0.4 mL) SC
- 21 to 30 kg: 2.5 mg (0.25 mL) SC
- 10 to 20 kg: 1.5 mg (0.15 mL) SC
- Less than 10 kg: 0.1 mg/kg SC

Detailed Neulasta dosage information

What happens if I miss a dose?

Call your doctor for instructions if you miss an injection, or if you have a problem with the Onpro device.

What happens if I overdose?

Seek emergency medical attention or call the Poison Help line at 1-800-222-1222.

Overdose symptoms include bone pain, pain when you breathe, feeling short of breath while lying down, wheezing, gasping for breath, cough with foamy mucus, cold, clammy skin, anxiety, rapid heartbeats.

What should I avoid while using Neulasta?

When using Neulasta Onpro: Avoid traveling, driving, or operating machinery while wearing the device.

What other drugs will affect Neulasta?

Other drugs may interact with pegfilgrastim, including prescription and over-the-counter medicines, vitamins, and herbal products. Tell your doctor about all your current medicines and any medicine you start or stop using.

Neulasta drug interactions (more detail)

Does Neulasta interact with my other drugs?

Enter medications to view a detailed interaction report using our Drug Interaction Checker.

Neulasta

+

Enter a drug name Add

Ingredients

Active ingredient: pegfilgrastim
Inactive ingredients: acetate, polysorbate 20, sodium, and sorbitol in water for injection.

Manufacturer

Neulasta (pegfilgrastim) is made by Amgen Inc., whose headquarters are in Thousand Oaks, California, USA.

Neulasta 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 2 for Neulasta.

Neulasta (pegfilgrastim) - Amgen Inc.

Formulation type	Strength
Pre-Filled Syringe	6 mg/0.6 mL

Neulasta Onpro (pegfilgrastim) - Amgen Inc.

Neulasta, Neulasta Onpro biosimilar products

Biosimilar products can only be dispensed in place of the **reference product** if the healthcare provider specifically prescribes the biosimilar product by name.

Pharmacy laws for biosimilar prescribing may vary by state

Fulphila (pegfilgrastim-jmdb) - Biocon Biologics Inc.

Fylnetra (pegfilgrastim-pbbk) - Kashiv BioSciences, LLC

Nyvepria (pegfilgrastim-apgf) - Hospira Inc., a Pfizer Company

Stimufend (pegfilgrastim-fpgk) - Fresenius Kabi USA, LLC

Udenyca (pegfilgrastim-cbqv) - Coherus BioSciences, Inc.

Udenyca Onbody (pegfilgrastim-cbqv) - Coherus BioSciences, Inc.

Ziextenzo (pegfilgrastim-bmez) - Sandoz Inc.

Popular FAQ

What are biosimilar drugs and how do they compare to biologics?

How do you increase white blood cells during chemo?

What is the difference between Fulphila and Neulasta?

What is the difference between Udenyca and Neulasta?

What does cbqv stand for in pegfilgrastim?

More FAQ

- Why do you take Claritin with Neulasta?
- What biosimilars have been approved in the United States?
- How long do the side effects of the Neulasta (pegfilgrastim) shot last?
- Does Neulasta cause bone pain?

View more FAQ...

References

1. Neulasta Prescribing Information

More about Neulasta (pegfilgrastim)

- Check interactions
- Compare alternatives
- Pricing & coupons
- Reviews (71)

- Drug images
- Side effects
- Dosage information
- Patient tips
- During pregnancy
- Support group
- Drug class: colony stimulating factors

Patient resources

Other brands

Fulphila, Udenyca, Nyvepria, Stimufend, ... +2 more

Professional resources

- Neulasta prescribing information
- Pegfilgrastim (AHFS Monograph)

Other brands

Fulphila, Udenyca, Nyvepria, Stimufend, ... +2 more

Related treatment guides

- Neutropenia Associated with Chemotherapy
- Neutropenia Associated with Radiation
- Febrile Neutropenia
- Hematopoietic Syndrome of Acute Radiation Syndrome

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

10+ years **Approval History**
FDA approved 2002

User Reviews & Ratings

5.1 / 10

71 Reviews

Images

Neulasta 6 mg prefilled syringe


View larger images

Drugs.com Mobile App

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

Download on the App Store GET IT ON Google Play

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.