

FILGRASTIM

Brand names Neupogen, Nivestim, Ratiograstim, Tevagrastim, Zarzio
Used in the following combined preparations None

GENERAL INFORMATION

Filgrastim is a synthetic form of G-CSF (granulocyte-colony stimulating factor), a naturally occurring protein responsible for the manufacture of white blood cells, which fight infection. Deficiency of G-CSF, therefore, increases the risk of infection. The drug works by stimulating bone marrow to produce white blood cells. It also causes bone marrow cells to move into the bloodstream, where they can be collected for use in the treatment of bone marrow disease, or to replace bone marrow lost during intensive cancer treatment. Filgrastim

is used to treat patients with congenital neutropenia (deficiency of G-CSF from birth), some AIDS patients, and those who have recently received high doses of chemo- or radiotherapy during bone-marrow transplantation or cancer treatment. Such patients are prone to frequent and severe infections.

Bone pain is a common adverse effect but it can be controlled using painkillers. There is an increased risk of leukaemia (cancer of white blood cells) if filgrastim is given to patients with certain rare blood disorders.

QUICK REFERENCE

Drug group Blood stimulant
Overdose danger rating Medium
Dependence rating Low
Prescription needed Yes
Available as generic No

INFORMATION FOR USERS

Your drug prescription is tailored for you. Do not alter dosage without checking with your doctor.

How taken/used



Injection.

Frequency and timing of doses
Once daily.

Adult dosage range

0.1–1.2 million units/kg body weight, depending upon condition being treated and response to treatment.

Onset of effect

24 hours (increase in numbers of white blood cells); several weeks (recovery of normal numbers of white blood cells).

Duration of action

1–7 days.

Diet advice
None.

Storage

Store in a refrigerator out of the reach of children.

Missed dose

Take as soon as you remember. If your next dose is due within 6 hours, do not take the missed dose. Take the next scheduled dose as usual.

Stopping the drug

Do not stop taking the drug without consulting your doctor; stopping the drug may lead to worsening of the underlying condition.

Exceeding the dose

An occasional unintentional extra dose is unlikely to cause problems. But if you notice any unusual symptoms or if a large overdose has been taken, notify your doctor.

SPECIAL PRECAUTIONS

Be sure to tell your doctor if:

- You suffer from any blood disorders.
- You have sickle-cell disease.
- You have osteoporosis.
- You are taking other medicines.



Pregnancy

Safety in pregnancy not established. Discuss with your doctor.



Breast-feeding

Safety in breast-feeding not established. Discuss with your doctor.



Infants and children

No special problems.



Over 60

No special problems.



Driving and hazardous work

No known problems.



Alcohol

No known problems.

POSSIBLE ADVERSE EFFECTS

Adverse effects resulting from short courses of filgrastim are unusual. Most common is bone

pain, which is probably linked to the stimulant effect of the drug on bone marrow.

Symptom/effect	Frequency		Discuss with doctor		Stop taking drug now	Call doctor now
	Common	Rare	Only if severe	In all cases		
Bone/muscle pain	●		●			
Skin rash		●		●		
Cough/breathlessness		●		●		
Generalized/abdominal swelling		●		●		●

INTERACTIONS

Cytotoxic chemotherapy or radiotherapy should not be administered within 24 hours of taking filgrastim because of the risk of increasing the damage these treatments inflict on the bone marrow.

PROLONGED USE

Prolonged use may lead to a slightly increased risk of certain leukaemias. Cutaneous vasculitis (inflammation of blood vessels of the skin), osteoporosis (weakening of the bones), hair thinning, enlargement of the spleen and liver, and bleeding due to reduction in platelet numbers may also occur.

Monitoring Blood checks and regular physical examinations are performed, as well as bone scans to check for bone thinning.