

# Neutropenia

## What is it?

*Neutropenia* is the decrease in the number of infection-fighting white blood cells (called *neutrophils*) in your body and is a common side effect of chemotherapy treatments. It usually takes 10 to 14 days after chemotherapy for your white cell count to reach its lowest level (nadir). If the levels drop too low, your risk of infection increases.

Your bone marrow usually produces enough white blood cells after the nadir to keep your treatment on schedule and protect you from infection. However, if your bone marrow cannot produce enough white cells, your chemotherapy treatment will be delayed until your white blood cells return to a safe level.

## What are the symptoms?

You usually won't even know you have neutropenia until your doctor does a blood test. However, if you have an infection, you will likely run a fever. If you get an infection, you may have to be hospitalized because your immune system is weakened and not very good at fighting the infection.

## How is it diagnosed?

Your doctor can tell if you have neutropenia by ordering a simple blood test called a complete blood count (CBC), which measures your white blood cells. A normal white blood count is 4,500 to 10,000 white blood cells per microliter (mcl). Your health care team will tell you the schedule for monitoring your blood count based on your specific chemotherapy treatment and regimen.

## How is it treated?

Your doctor will likely prescribe a growth factor if your bone marrow needs help to produce white blood cells. *Neulasta*® (pegfilgrastim) or *Neupogen*® (filgrastim), the short-acting form of Neulasta, are white blood cell growth factors. These medications help your body produce more white blood cells and prevent the complications of neutropenia.



TIPS

## Tips to Help

Although you can't prevent neutropenia, you can reduce your risk of infection:

- Check your temperature daily when your white count is at its nadir (approximately 10 days after your chemotherapy treatment or when your health care team indicates), if you feel feverish, have chills, or feel achy. Call your doctor or nurse if your temperature is 100.5° F or higher.
- Avoid large crowds if your white blood cell count is low.
- Wash your hands frequently with soap and clean cuts with soap and water immediately; apply an antibiotic ointment.

## Words to Know

**Neutropenia:** A condition in which your white blood count is low. This makes you vulnerable to infection. It is a common side effect of chemotherapy.

**Neutrophil:** A white blood cell that fights bacterial infection.

**Nadir:** When your white blood count is at its lowest level.

**Neulasta:** A long-term growth factor medication given with chemotherapy to improve or maintain your white blood cell count.

**Neupogen:** A short-term growth factor medication given on a daily basis to improve or maintain your white blood cell count.