

[Leukemia - Eosinophilic - Overview](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 09/2015

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Eosinophilic Leukemia. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

Leukemia is a cancer of the blood cells. Leukemia begins when healthy blood cells change and grow uncontrollably.

About blood cells

Blood cells are made in the bone marrow, the spongy tissue inside the larger bones in the body. Changes in the bone marrow cells can cause too many or too few of certain blood cells. There are different types of blood cells:

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- Red blood cells that carry oxygen throughout the body
- White cells that fight infection
- Platelets that help the blood to clot

About leukemia

Types of leukemia are named after the specific blood cell that becomes cancerous, such as the lymphoid cells, which are a type of white blood cell, or the myeloid cells, which are bone marrow cells that turn into cells that fight bacterial infections.

There are four main types of leukemia in adults:

- [Acute lymphocytic leukemia \(ALL\)](#) [3]
- [Chronic lymphocytic leukemia \(CLL\)](#) [4]
- [Acute myeloid leukemia \(AML\)](#) [5]
- [Chronic myeloid leukemia \(CML\)](#) [6]

About eosinophilia and eosinophilic leukemia

Eosinophilia is a condition that develops when the bone marrow makes too many eosinophils, a type of white blood cell. People can have many eosinophils without having leukemia. For example, sometimes the body makes too many eosinophils because of an allergy or an infection with a parasite. This type of eosinophilia is called secondary eosinophilia and is much more common than eosinophilic leukemia.

Chronic eosinophilic leukemia is a subtype of clonal eosinophilia, meaning it is caused by a new genetic mutation or change in the blood cells. It is sometimes called hypereosinophilic syndrome (HES). This disease is classified as a myeloproliferative neoplasm (MPN). Myelo- means bone marrow and proliferative means too much blood cell growth.

This section focuses on chronic eosinophilic leukemia. Acute eosinophilic leukemia is very rare and is treated similarly to [acute myeloid leukemia \(AML\)](#) [5].

Looking for More of an Overview?

If you would like additional introductory information, explore this related item. Please note this link will take you to another section on Cancer.Net:

- [Cancer.Net Patient Education Video](#) [7]: View a short video led by an ASCO expert in leukemia that provides basic information and areas of research.

The [next section in this guide is Statistics](#) [8], which explains that eosinophilic leukemia is rare.

Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/leukemia-eosinophilic/overview>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/31282>

[4] <http://www.cancer.net/node/31278>

[5] <http://www.cancer.net/node/31280>

[6] <http://www.cancer.net/node/31277>

[7] <http://www.cancer.net/node/27376>

[8] <http://www.cancer.net/node/18757>