

## **Leukemia - Chronic Myeloid - CML - Phases** [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 08/2014

**ON THIS PAGE:** You will learn about how doctors describe the growth or spread of CML. This is called the phase. To see other pages, use the menu on the side of your screen.

To help doctors plan treatment and predict prognosis, which is the chance of recovery, CML is divided into three different phases: chronic, accelerated, or blastic.

**Chronic phase.** The blood and bone marrow contain less than 5% blasts, which are immature white blood cells. This phase can last for several years, although without effective treatment the disease can progress to the accelerated or blast phases (see below). About 90% of people have chronic phase CML when they are diagnosed. Some people with chronic phase leukemia have symptoms when they are diagnosed and some do not; most symptoms go away once treatment begins.

**Accelerated phase.** There is no one definition of accelerated phase, although most patients with this phase of CML have 10% to 19% blasts in both the blood and bone marrow or more than 20% basophils in the peripheral blood. These cells sometimes have new cytogenetic changes in addition to the Philadelphia chromosome, because of additional DNA damage and mutations in the CML cells.

**Blast phase, also called blast crisis.** In the blast phase, there are 20% or more blasts in the blood or bone marrow or the leukemia blasts have spread outside of the bone marrow, and it is difficult to control the number of white blood cells. Additional genetic changes are also often found in the CML cells. The blast cells can look like the immature cells seen in acute lymphoblastic leukemia for about 25% of patients or acute myeloid leukemia for most patients. Patients in blast crisis often have a fever, an enlarged spleen, weight loss, and generally feel unwell.

**Recurrent CML.** Recurrent CML is CML that has come back after treatment.

Without effective treatment, CML in chronic phase will eventually move into accelerated phase at first and then into blast crisis in about six to eight years after diagnosis. Patients who have more blasts or an increased number of a special type of white blood cell called a basophil, chromosome changes in addition to the Philadelphia chromosome, high numbers of white blood cells, or a very enlarged spleen often experience blast crisis sooner.

*Information about the phase of CML will help the doctor recommend a treatment plan. The next section helps explain the treatment options for CML. Use the menu on the side of your screen to select Treatment Options, or you can select another section, to continue reading this guide.*

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**Links:**

[1] <http://www.cancer.net/cancer-types/leukemia-chronic-myeloid-cml/phases>

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