
What Are Some Common Blood Cancers?

Blood cancers disrupt and affect both the production and function of your blood cells. Your bone marrow is **where your blood is produced**, and typically, this is where these cancers begin. As the stem cells in your bone marrow mature, they develop into the three different types of blood cells. These are your red and white blood cells, and your platelets.

Blood cancer typically interrupts this development process with uncontrolled growth of abnormal blood cells. These are the cancerous cells, and they prevent your blood from performing its normal functions such as clotting to stop excessive bleeding.

Acute Myeloid Leukaemia (AML) & Acute Lymphocytic Leukaemia (ALL)

Acute leukaemias often develop quickly and progress very rapidly if they are not treated immediately.

Both **Acute Myeloid Leukaemia (AML)** and **Acute Lymphocytic Leukaemia (ALL)** begin in the bone marrow where your blood cells are created. It then typically moves into the blood or other parts of the body such as the liver, spleen, lymph nodes, brain, spinal cord, or testicles.

The primary difference between AML and ALL is the type of blood cell that develops abnormally and becomes cancerous. ALL develops from lymphoid blood stem cells while AML develops from myeloid stem cells.

The conventional treatment for both ALL and AML is intensive chemotherapy. However, there are novel targeted therapies that have been developed in more recent years that can be used to treat some forms of acute leukaemia with less toxicity. With high risk leukaemias, some patients may also require a stem cell transplant.

Chronic Myeloid Leukaemia (CML) & Chronic Lymphocytic Leukaemia (CLL)

Chronic leukaemias, on the other hand, develop slowly and progressively get worse over a more extended period.

The primary difference between CML and CLL is the type of blood cell that develops abnormally and becomes cancerous. CLL develops from lymphoid blood stem cells while CML develops from myeloid stem cells.

Treatment for both CML and CLL usually includes some combination of chemotherapy, immunotherapy, and targeted therapy. In some cases, a stem cell transplant may be required.

Lymphoma

Lymphomas are blood cancers that start in lymphocytes and are cancer of one's lymphatic system. Abnormal lymphocytes develop into lymphoma cells; they multiply rapidly and collect in your lymph nodes and can impair your immune system. Your lymphatic system is part of your body's germ-fighting network. Within your lymphatic system, you will find your lymph nodes, bone marrow, thymus gland, and spleen. However, lymphoma can also affect other organs in your body.

There are many different types of lymphoma. The two main subtypes are:

- **Hodgkin's Lymphoma**
- **Non-Hodgkin's Lymphoma**

Treatment plan for lymphoma depends on the type of lymphoma and how severe the cancer is. Treatment for lymphoma can involve a variable combination of chemotherapy, radiation therapy, immunotherapy, and a bone marrow transplant.

Myeloma

Myeloma is a cancer that affects one's plasma cells. Plasma cells play a vital part in keeping your body healthy; they produce antibodies that recognise and fight infections and germs. Abnormal plasma cells produce abnormal proteins that can cause complications instead of working to fight infections. Cancerous plasma cells can also accumulate in the bone marrow and leave no space for healthy cells. The plasma cells can affect the bones and kidneys, and patients sometimes present with unexpected fractures or kidney failure.

Treatment for myeloma is not always immediate if it is detected in the early stages and is determined to be slow-growing. If doctors determine that treatment is necessary, you may need a combination of immunotherapy, chemotherapy, targeted therapy, radiation therapy, and corticosteroids. Some patients may need a stem cell transplant.

Symptoms of Common Blood Cancers

Most common blood cancers tend to manifest with symptoms such as:

- Coughing and Chest Pains
- Reduced Appetite and Nausea
- Difficulty Breathing or Shortness of Breath
- Frequent Infections
- Night Sweats
- Rashes and Itchy Skin
- Weakness and Fatigue
- Fever or Chills
- Swollen and Painless Lymph Nodes (Neck, Armpits, Groin)

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