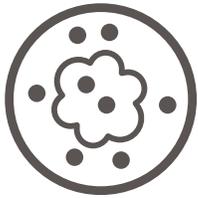


# Acute Myeloid Leukemia (AML)

AML is a blood cancer that starts in the bone marrow but moves quickly into the blood, sometimes spreading to other parts of the body.

## What is AML?



Leukemia is classified based on two attributes—its speed of progression and the type of white blood cells affected.

Leukemia is described as being either **acute** (fast growing) or **chronic** (slow growing), and either **myelogenous** (affecting the myeloid cells) or **lymphocytic** (affecting the lymphoid cells, or lymphocytes).

## Global Incidence

AML is the most common type of acute leukemia in adults. Patients **70 and older** have a higher incidence rate

In 2021, the worldwide incidence of AML was nearly **144,645**



**Fast Growing Leukemia**

Acute Lymphocytic Leukemia

**Acute Myeloid (or Myelogenous) Leukemia**



**Slow Growing Leukemia**

Chronic Lymphocytic Leukemia

**Chronic Myeloid (or Myelogenous) Leukemia**

## Causes and Risk Factors



Today, researchers understand a lot more about what may cause AML. DNA mutations, which may result from exposure to radiation, cancer-causing chemicals or the aging process, are commonly found in AML cells.

## Signs and Symptoms

At first, patients with AML often have non-specific symptoms usually associated with more common ailments like the flu. Often, signs and symptoms result from a shortage of normal blood cells, which happens when the leukemia cells crowd out the normal blood-making cells in the bone marrow.

These signs and symptoms include:



Fever



Easy bruising or bleeding



Shortness of breath



Weight loss or loss of appetite



Weakness or feeling tired



Petechiae [red or purple pinpoint spots on the skin]

## Prognosis

**In general, prognosis for AML patients is poor.**

Prognosis is influenced by patient age, AML subtype, and other factors

Estimated 5-year survival rate for AML is **29.5%** in US populations

The median survival after relapse is **<5 months** for older patients in the US

## Treatment

Standard types of frontline (or initial) treatment for AML include:



**Chemotherapy**, which may be given in two phases: induction therapy and consolidation therapy



**Stem cell/bone marrow transplants** which are typically used in younger, generally healthy patients when a donor is available



**Hypomethylating agents** which are typically used in older patients who are ineligible for intensive treatment



Research has also shown that the **presence or absence of specific gene mutations**—including in isocitrate dehydrogenase (IDH), CEBPA, NPM and FLT3—can inform prognosis and guide treatment decisions in AML



Innovative, **targeted therapies** directed against mutations - those currently approved and those in development - **have broadened the treatment landscape**