

Facts about Acute Myeloid Leukemia

EPIDEMIOLOGY

Acute Myeloid Leukemia (AML) is a life-threatening cancer that impacts the blood and bone marrow.¹

68

The incidence of AML increases with age. AML is uncommon before age 45; and the average age of a patient with AML is about 68 years.²

In the U.S. in 2018

30%

AML accounts for approximately 30% of all new cases of leukemia.²



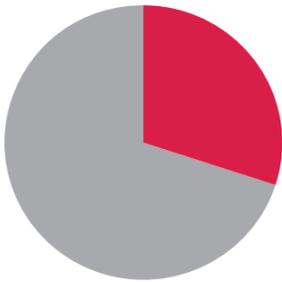
19,000

Approximately 19,000 new patients will be diagnosed with AML.²

FLT3 MUTATIONS

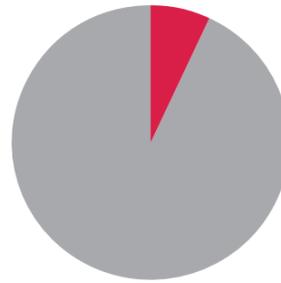
AML is associated with various gene alterations and mutations within the FLT3 gene are the most commonly identified.³

Incidence and Impact



The FLT3-ITD mutation impacts approximately 30% of AML patients.³

This mutation is associated with worsened disease free survival and overall survival.^{4,5}



The FLT3-TKD mutation impacts approximately 7 percent of AML patients.³

Although the clinical impact of this mutation is less clear, it has been associated with treatment resistance.^{6,7}

TREATMENTS

Treatment approaches for AML include:⁸



Chemotherapy



Stem cell/bone marrow transplant



Hypomethylating agents



Targeted therapies



Clinical trials

BURDEN OF DISEASE



According to a 2016 study using US and UK data across the spectrum of AML patients, the economic burden of AML treatment is high. Hospitalization is a key driver of this burden.⁹

¹ American Cancer Society. What is acute myeloid leukemia? (02-22-2016). <https://www.cancer.org/cancer/acute-myeloid-leukemia/about/what-is-aml.html>. Accessed 05-10-2018.

² American Cancer Society. Key statistics for acute myeloid leukemia (01-04-2018). <https://www.cancer.org/cancer/acute-myeloid-leukemia/about/key-statistics.html>. Accessed 03-12-2018.

³ Patel JP, Gönen M, Figueroa ME, et al. Prognostic relevance of allelic genetic profiling in acute myeloid leukemia. *N Engl J Med*. 2012;366(12):1079-89.

⁴ Whitman SP, Archer KJ, Feng L, et al. Absence of the wild-type allele predicts poor prognosis in adult de novo acute myeloid leukemia and the internal tandem duplication of FLT3: a Cancer and Leukemia Group B study. *Cancer Res*. 2001;61(19):7233-9.

⁵ Whitman SP, Maharry K, Radmacher MD, et al. FLT3 internal tandem duplication associates with adverse outcome and gene- and microRNA-expression signatures in patients 60 years of age or older with primary cytogenetically normal acute myeloid leukemia: a Cancer and Leukemia Group B study. *Blood*. 2010;116(18):3622-6.

⁶ Bacher U, Haferlach C, Kern W, Haferlach T, Schnittger S. Prognostic relevance of FLT3-TKD mutations in AML: the combination matters—an analysis of 3082 patients. *Blood*. 2008;111(5):2527-37.

⁷ Alvarado Y, Kantarjian H, Luthra R, et al. Treatment with FLT3 inhibitor in patients with FLT3-mutated acute myeloid leukemia is associated with development of secondary FLT3-tyrosine kinase domain mutations. *Cancer*. 2014;120(14):2142-9.

⁸ Döhner H, Estey E, Grimwade D, et al. Diagnosis and management of AML in adults: 2017 ELN recommendations from an international expert panel. *Blood*. 2017;129(4):424-47.

⁹ Zeidan AM, Mahmoud D, Kucmin-Bemelmans IT, et al. Economic burden associated with acute myeloid leukemia treatment. *Expert Rev Hematol*. 2016;9(1):79-89.