Acute Myeloid Leukemia

What is acute myeloid leukemia (AML)?

AML is a rare and aggressive cancer of the blood and bone marrow.1

...of all adult leukemias worldwide are attributed to AML, with the highest incident rates occurring in the United States, Europe and Australia.2

AML Diagnosis

A diagnosis for AML is based upon:

• Physical exam and medical history

• Complete blood count (CBC)
  To measure proportion of each type of blood cell present

• Blood smear
  To examine the number and shape of different blood cells present

• Bone marrow aspiration and biopsy
  Sample of cells taken from bone marrow

• Immunophenotyping
  To identify different types of cells present and subtype of AML

• Genetic testing
  To identify if any mutations are present and determine subtype of AML

Patient Demographics

Risk factors include:

• Being male

• Previous cancer treatment

• Smoking

• Exposure to radiation

67 MEDIAN AGE at diagnosis6

Role of gene mutations in AML

• Mutations in specific genes are found in many cases of AML.3 These mutations cause the cells to multiply and remain immature, thereby leading to the development and spread of the disease.4

• Mutation testing is recommended for newly diagnosed patients to help identify factors that may determine prognosis.4

According to one study, the most common gene mutations in AML include FLT3 (37%), NPM1 (29%), DNMT3A (23%) and NRAS (10%).5

Resources

1 National Institute of Health (NIH)/National Cancer Institute (NCI). Adult Acute Myeloid Leukemia Treatment (PDQ®) [Internet]. Accessed February 20, 2017.