TREATMENT APPROACHES IN AML: KEY TESTING FOR PERSONALIZED CARE

INSIST! AML

Patient Empowerment Network

KEY TESTS FOLLOWING AN AML DIAGNOSIS

Bone Marrow Biopsy to Assess Bone Marrow Blasts:

- Doctors measure the percentage of blasts in marrow cells when making a diagnosis.
- Blasts are young abnormal white blood cells in the bone marrow.

Genetic Testing (Molecular Profiling) to:

- Identify chromosomal abnormalities.
- Identify gene mutations associated with AML. Common AML mutations include:
  - FLT3
  - IDH1
  - IDH2
  - NPM1
  - TP53

  Additional AML mutations with prognostic value include:
  - ASXL1
  - DNMP3A
  - RUNX1

IMPORTANT QUESTIONS TO ASK YOUR DOCTOR

- What type of leukemia do I have, and what is the bone marrow blast percentage?
- Do I have any mutations or chromosomal abnormalities?
- Are there any specific treatments for my AML?
- Do I have a choice between a high-intensity or low-intensity therapy?
  - What are the pros and cons of each treatment?

View Treatment Approaches in AML: Key Testing for Personalized Care here.

GLOSSARY OF TERMS

Bone Marrow Biopsy: Procedure that involves collecting a small sample of bone marrow, usually from the hip bone, in order to be examined by a laboratory. This procedure is used to confirm a diagnosis and may be used to monitor the disease over time.

Differentiation Syndrome: A side effect that usually occurs within 1 to 2 weeks after starting cancer treatment but can occur later.

FLT3 Mutation: FLT3 stands for Fms-like tyrosine kinase. This gene mutation occurs in approximately 30 percent of AML patients.

Gene Mutation: A permanent change in the DNA sequence that makes up a gene. Changes can occur due to mistakes when the DNA is copied or as the result of environmental factors.

Genetic Testing (Molecular Profiling): Laboratory testing that identifies certain genes, proteins, or other molecules in a sample of tissue, blood or other body fluid. In cancer, it may also be used to evaluate treatment or make a prognosis.

IDH (Isocitrate Dehydrogenases) Mutations: Mutations in IDH1 or IDH2 are detected in approximately 20 percent of patients with acute myeloid leukemia (AML).

NPM1 (Nucleophosmin-1) Mutation: The most common gene mutation identified in adult AML.