# YOUR AML NAVIGATOR

**Resource Guide** 



## THE ROLE OF GENETIC TESTING IN AML

- Identifies genetic mutations.
- Determines your specific AML subtype.
- Provides insight into your risk and disease prognosis.
- Informs and personalizes your treatment options.
- Monitors your treatment response and assesses the effectiveness of therapy.

## **TYPES OF GENETIC TESTS IN AML**

- Cytogenetic Analysis (or Karyotyping)
- Fluorescence in situ Hybridization (FISH test)
- Molecular Testing, which includes:
  - Polymerase Chain Reaction (PCR)
  - DNA Sequencing
  - Next-Generation Sequencing

#### **COMMON BIOMARKERS IN AML**

<b>FLT3</b> (Fms-Like Tyrosine Kinase) Mutation:	This gene mutation occurs in approximately 30 percent of AML patients.
<b>IDH</b> (Isocitrate Dehydrogenases) Mutation	Mutations in IDH1 or IDH2 are detected in approximately 20 percent of patients with AML.
<b>NPM1</b> (Nucleophosmin-1) Mutation	The most common molecular mutation identified in adult AML.
TP53 (Tumor Protein 53)	A gene that helps stop the growth of tumors. TP53 is the most frequently mutated gene in human tumors. TP53 mutation rates are low in AML.

#### TAKE ACTION

;	Make sure you see an AML specialist. Discuss which tests you should undergo with your doctor.	ì	Do your own research on the findings. Work with your healthcare team to determine a personalized treatment plan for your AML.
•	Review the results with your doctor	•	Ask your doctor when you should be re-tested

#### **TARGETED THERAPY**

**Targeted Therapies** block the growth of cancer by interfering with specific molecules involved in the progression and spread of cancer. Targeted therapies include a class of treatment called **Inhibitors**.

FDA-Approved <u>AML Inhibitor Therapies</u> include:

- FLT3 Inhibitors: Midostaurin (Rydapt); Gilteritinib (Xospata); Sorafenib (Nexavar)
- **IDH Inhibitors**: Enasidenib (Idhifa); Ivosidenib (Tibsovo)

FDA-Approved <u>Novel Inhibitor Therapies</u> are used across all mutational subtypes of AML include:

- BCL-2 Inhibitors: Venclexta (Venetoclax)
- Hedgehog Inhibitors: Glasdegib (Daurismo)