

## **Test Definition: NGAMT**

MayoComplete Acute Myeloid Leukemia, Therapeutic Gene Mutation Panel (FLT3, IDH1, IDH2, TP53), Next-Generation Sequencing, Varies

Reporting Title: AML, 4 Gene, NGS, V

Performing Location: Rochester

#### Ordering Guidance:

This test is a subset of the NGSHM / Myeloid Neoplasms, Comprehensive OncoHeme Next-Generation Sequencing, Varies test and focuses more specifically on the gene mutations that are most utilized for therapeutic management of acute myeloid leukemias (AML). If a wider gene mutation analysis is desired or the indication for testing is for a myeloid malignancy other than AML, then NGSHM should be considered.

## **Shipping Instructions:**

Peripheral blood and bone marrow specimens must arrive within 14 days of collection.

## **Necessary Information:**

The following information is required:

- 1. Clinical diagnosis
- 2. Pertinent clinical history, including disease phase (diagnostic, remission, relapse/refractory) and therapy status (especially if patient has received a hematopoietic stem cell transplant).
- 3. Clinical or morphologic suspicion
- 4. Date of collection
- 5. Specimen source

#### **Specimen Requirements:**

Submit only 1 of the following specimens:

Preferred Specimen Type: Bone marrow aspirate

Container/Tube:

Preferred: Lavender top (EDTA) or yellow top (ACD)

Acceptable: Green top (sodium heparin)

Specimen Volume: 2 mL Collection Instructions:

1. Invert several times to mix bone marrow.

- 2. Send bone marrow specimen in original tube. Do not aliquot.
- 3. Label specimen as bone marrow.

Specimen Stability: Ambient (preferred)/Refrigerate

Specimen Type: Peripheral blood

Container/Tube:

Preferred: Lavender top (EDTA) or yellow top (ACD)

Acceptable: Green top (sodium heparin)

Specimen Volume: 3 mL Collection Instructions:

- 1. Invert several times to mix blood.
- 2. Send whole blood specimen in original tube. Do not aliquot.
- 3. Label specimen as blood.



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Specimen Stability: Ambient (preferred)/Refrigerate

Specimen Type: Extracted DNA from blood or bone marrow

Container/Tube: 1.5- to 2-mL tube with indication of volume and concentration of the DNA

Specimen Volume: Entire specimen

Collection Instructions: Label specimen as extracted DNA and source of specimen

Specimen Stability: Frozen (preferred)/Refrigerate/Ambient

## Specimen Minimum Volume:

Blood, Bone marrow: 1 mL

Extracted DNA: 100 mcL at 20 ng/mcL concentration

#### Forms:

1. Hematopathology Patient Information (T676)

2. If not ordering electronically, complete, print, and send a Hematopathology/Cytogenetics Test Request (T726) with the specimen.

Specimen Type	Temperature	Time	Special Container	
Varies	Varies	14 days		

## Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Туре	Reportable
NGAMT	MP040	Specimen Type	Plain Text	Yes

#### **Result Codes:**

Result ID	Reporting Name	Туре	Unit	LOINC®
MP040	Specimen Type	Alphanumeric		31208-2
601698	NGAMT Result	Alphanumeric		No LOINC Needed
601700	Pathogenic Mutations Detected	Alphanumeric		82939-0
601699	Interpretation	Alphanumeric		69047-9
601701	Clinical Trials	Alphanumeric		82786-5
601702	Variants of Unknown Signficance	Alphanumeric		93367-1



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Result ID	Reporting Name	Туре	Unit	LOINC®
601703	Additional Notes	Alphanumeric		48767-8
601704	Method Summary	Alphanumeric		85069-3
601705	Disclaimer	Alphanumeric		62364-5
601706	AML 4 Gene Panel Gene List	Alphanumeric		36908-2
601707	Reviewed By:	Alphanumeric		18771-6

LOINC and CPT codes are provided by the performing laboratory.

## **Supplemental Report:**

No

## **CPT Code Information:**

81120

81121

81245

81246

81352

## **Reference Values:**

An interpretive report will be provided