



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.





NPM1 MRD Analysis

Alternative Name

NPM1 Minimal Residual Disease

Methodology

Molecular

Test Description

NPM1 MRD Analysis is performed by PCR and fragment analysis of exon 12 of the NPM1 gene to detect small insertion mutations. Testing is performed on plasma with a PCR modification to improve sensitivity. The lower limit of detection of mutated NPM1 in this assay is 5×10^{-3} (0.5%). Positive results are reported quantitatively if the percentage of mutated DNA is $\geq 1\%$, and they are reported qualitatively if $< 1\%$.

Clinical Significance

High-sensitivity testing to detect residual NPM1 mutation in AML may be useful for further refining prognosis and for early detection of relapse.

Specimen Requirements

- **Peripheral blood:** 5 mL in EDTA tube.
- **Bone marrow:** 2 mL in EDTA tube.
- **FFPE tissue:** Paraffin block is preferred. Alternatively, send 1 H&E slide plus 5-10 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative. Do not use zinc fixatives.

Note: Test in DNA-based, suitable for Freeze & Hold option.

Storage & Transportation

Use cold pack for transport, making sure cold pack is not in direct contact with specimen.

CPT Code(s)*

81310

New York Approved

No

Level of Service

Global

Turnaround Time

7 days

References

1. Schnitttinger S, Kern W, Tschulik C, et al. Minimal residual disease levels assessed by NPM1 mutation–specific RQ-PCR provide important prognostic information in AML. *Blood*. 2009; 114:2220-2231.
2. Krönke J, Schlenk RF, Jensen KO, et al. Monitoring of minimal residual disease in NPM1-mutated acute myeloid leukemia: a study from the German-Austrian acute myeloid leukemia study group. *J Clin Oncol*. 2011; 29(19):2709-16.

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

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