MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
LABORATORIES

Test Update 722

Posted Date 06/24/2020
Effective Date 06/30/2020
Update Type New Tests
CPT Code 81450

NEW TEST

Myeloid NGS panel

Order Code: MYENG

CPT Code: 81450

Effective June 30, 2020, MLabs will offer an in-house Myeloid NGC panel (MYENG) test to replace several referral testing:

NGS for Myeloid Neoplasma

Order code: NGSHM

Referral Laboratory: Mayo Medical Laboratories

FoundationOne Heme

Order code: MISC

Referral Laboratory: FoundationOne

Myeloid Malignancies Mutation Panel

Order code: MISC

Referral Laboratory: ARUP

Tempus Genomic Sequencing

Order code: TMPUS

Referral Laboratory: Tempus

Collection Instructions: 5 mL EDTA (lavender) whole blood; 3 mL EDTA (lavender) bone marrow; Alternative specimens: Fresh/frozen tissue and fresh aspirates or body fluids; Fibroblast culture from skin biopsy or buccal swab may be acceptable for additional testing intended to differentiated germline and somatic molecular alterations.

Test Usage: This test is intended for the molecular evaluation of myeloid neoplasms including myeloproliferative neoplasms (MPN), myelodysplastic syndromes (MDS), myelodysplastic/myeloproliferative neoplasms, acute myeloid leukemias (AML), mastocytosis and myeloid neoplasms with eosinophilia and gene rearrangement. The detection of molecular alterations described in these neoplasms can be useful in their diagnosis and classification. In addition, the pattern of particular alterations can be prognostically informative and can have implications for the use of both targeted and conventional therapies. Given the wide variety of different, clinically significant molecular alterations present in myeloid neoplasms and the importance of the molecular landscape of co-occurring alterations, a next-generation sequencing (NGS) panel-based approach is the optimum method for interrogating these neoplasms. The DNA portion of this NGS panel evaluates 50 genes for substitution and insertion/deletion mutations. RNA is also interrogated for recurrent gene fusions described in myeloid neoplasms and acute leukemias, which may not be detected by conventional cytogenetics (cryptic). While this panel is primarily designed to detect recurrent, somatic molecular alterations described in myeloid neoplasms, germline alterations associated with a genetic predisposition to myeloid neoplasms (e.g. CEBPA, DDX41, RUNX1, ANKRD26, ETV6, GATA2, etc.) can also be detected. This test is intended for diagnostic specimens, not for the detection of minimal residual disease.

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