



**MAYO CLINIC**  
Mayo Medical Laboratories

# **HEMATOLOGY AND HEMATOPATHOLOGY**

**ADVANCING THE DIAGNOSIS AND MANAGEMENT OF HEMATOLOGIC DISORDERS**



# COMPREHENSIVE TESTING APPROACHES ACROSS THE FULL SPECTRUM OF HEMATOLOGIC DISORDERS

Our comprehensive test menu has been created to aid in the diagnosis and treatment selection across the full spectrum of hematologic disorders. Through our clinical experience, we have developed and validated practice-based, data-driven algorithms that improve patient care, increase efficiency, and reduce costs.

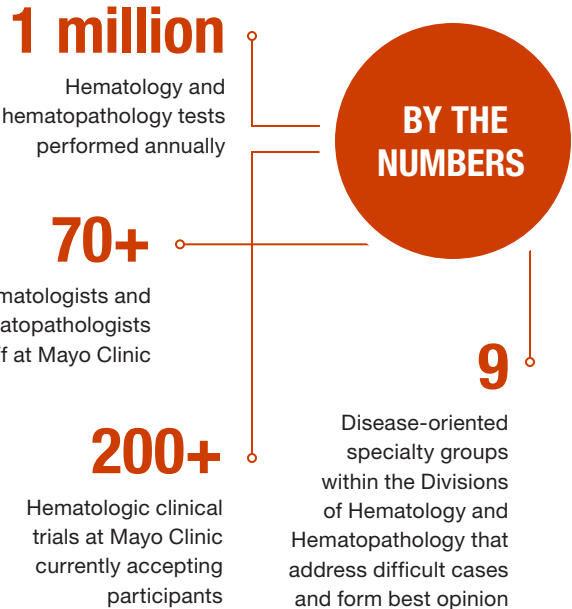
Contact us today at 855-516-8404 to learn how these algorithmic testing approaches can be applied in your hospital and community.

## ACCESS TO MAYO CLINIC HEMATOPATHOLOGISTS, LABORATORIANS, & GENETIC COUNSELORS

Mayo Medical Laboratories supports the local delivery of health care services, so when assistance with testing options, result interpretation, or case review and coordination is needed, Mayo Clinic hematopathologists, laboratorians, and genetic counselors are available to help. This rapport also provides the opportunity for general practice discussions among colleagues.

**Telephone** 855-516-8404

**Email** [rstmmlhematology@mayo.edu](mailto:rstmmlhematology@mayo.edu)



## DISEASE-ORIENTED SPECIALTY GROUPS

Mayo Clinic’s disease-oriented specialty groups serve as integrated, multidisciplinary teams of expert investigators who develop, promote, and conduct clinical and translational research within a disease site or modality. These teams also work to optimize development of research from concept through protocol implementation.

- ACUTE LEUKEMIA
- BENIGN HEMATOLOGY DISORDERS
- BONE MARROW TRANSPLANT
- CHRONIC LYMPHOPROLIFERATIVE DISORDERS
- COAGULATION DISORDERS
- LYMPHOMA
- MYELOYDYSPLASTIC SYNDROMES
- MYELOMA, AMYLOIDOSIS, DYSPROTEINEMIA
- MYELOPROLIFERATIVE NEOPLASMS

## FEATURED TESTS

- ▶ OncoHeme Next-Generation Sequencing Test (Mayo ID: NGSHM)  
*Targeted panel includes 35 genes that are associated with myeloid neoplasms*
- ▶ Next-Generation Sequencing (NGS), Acute Myeloid Leukemia, 8-Gene Panel (Mayo ID: NGAML)  
*Targeted panel includes 8 genes to assist in appropriate classification and prognosis of patients with AML*
- ▶ Mayo Algorithmic Approach for Stratification of Myeloma and Risk-Adapted Therapy Report (Mayo ID: MSMRT)  
*Risk stratification for patients with multiple myeloma to assist in determining treatment and management decisions*
- ▶ Myeloproliferative Neoplasm (MPN), JAK2 V617F with Reflex to CALR and MPL (Mayo ID: MPNR)  
*Sequentially evaluates for the common major gene mutations associated with non-BCR/ABL1 positive myeloproliferative neoplasm*
- ▶ CSF3R Exon 14 and 17 Mutation Detection by Sanger Sequencing (Mayo ID: CSF3R)  
*Aids in the evaluation and classification of chronic neutrophilic leukemia (CNL)*
- ▶ KIT Mutation Exons 8–11 and 17, Hematologic Neoplasms, Sequencing (Mayo ID: KITE)  
*Assesses the presence of somatically acquired KIT mutations in core binding factor (CBF) acute myeloid leukemia*
- ▶ Myelodysplastic Syndrome by Flow Cytometry (Mayo ID: MYEFL)  
*Identifies abnormal patterns of myeloid maturation as seen in myelodysplastic syndromes and other clonal myeloid neoplasms*
- ▶ Minimal Residual Disease Testing for B-ALL and CLL
  - B-ALL Monitoring, MRD Detection (Mayo ID: ALLM)  
*Useful in monitoring a previously confirmed diagnosis of B-cell lymphoblastic leukemia*
  - CLL Monitoring, MRD Detection, Blood (Mayo ID: CLLM)  
CLL Monitoring, MRD Detection, Bone Marrow (PCLLM)  
*Useful in monitoring post-chemotherapy or post-bone marrow transplantation patients with known chronic lymphocytic leukemia*
- ▶ Platelet Transmission Electron Microscopic Study (Mayo ID: PTEM)  
*Assesses platelet ultra-structural abnormalities in congenital and acquired platelet disorders*
- ▶ Platelet Surface Glycoprotein by Flow Cytometry (Mayo ID: PLAFL)  
*Assesses hereditary platelet disorders due to quantitative surface glycoprotein (GP) deficiencies*

## ALGORITHMIC TESTING APPROACH

More than 20 hematology-focused algorithms developed collaboratively among physicians, pathologists, laboratorians, and genetic counselors are available at [mayomedicallaboratories.com/algorithms](http://mayomedicallaboratories.com/algorithms).

These algorithms:

- ▶ Guide proper test utilization.
- ▶ Recommend approaches for diagnosis of specific diseases.
- ▶ Assist in treatment and monitoring of patient care.

### REFERENCES IN SUPPORT OF ALGORITHMIC TESTING APPROACHES

- He R, Wiktor AE, Hanson CA, et al. Conventional karyotyping and fluorescence in situ hybridization: an effective utilization strategy in diagnostic adult acute myeloid leukemia. *Am J Clin Pathol.* Jun 2015;143(6):873-878.
- He R, Wiktor AE, Durnick DK, et al. Bone marrow conventional karyotyping and fluorescence in situ hybridization defining an effective utilization strategy for evaluation of myelodysplastic syndromes. *Am J Clin Pathol.* Jul 2016;146:86-94.

## HEMATOPATHOLOGY CONSULTANTS

DONG CHEN, M.D., PH.D.

APRIL CHIU, M.D.

LINDA DAO, M.D.

ANDREW FELDMAN, M.D.

CURTIS HANSON, M.D.

RONG HE, M.D.

PEDRO HORNA, M.D.

MATTHEW HOWARD, M.D.

JAMES HOYER, M.D.

DRAGAN JEVREMOVIC, M.D., PH.D.

REBECCA L. KING, M.D.

PAUL KURTIN, M.D.

WILLIAM MACON, M.D.

ELLEN MCPHAIL, M.D.

WILLIAM MORICE, II, M.D., PH.D.

PHUONG L. NGUYEN, M.D.

WILLIAM NICHOLS, JR., M.D.

JENNIFER OLIVEIRA, M.D.

RAJIV PRUTHI, M.B.B.S.

KAREN RECH, M.D.

KAAREN REICHARD, M.D.

MIN SHI, M.D., PH.D.

DAVID VISWANATHA, M.D.

DEEPTI WARAD, M.B.B.S.

ADAM WOOD, D.O.

**FOR MORE INFORMATION  
ABOUT TESTING FOR HEMATOLOGIC  
DISORDERS, VISIT:**

[MayoMedicalLaboratories.com/hematology](http://MayoMedicalLaboratories.com/hematology)