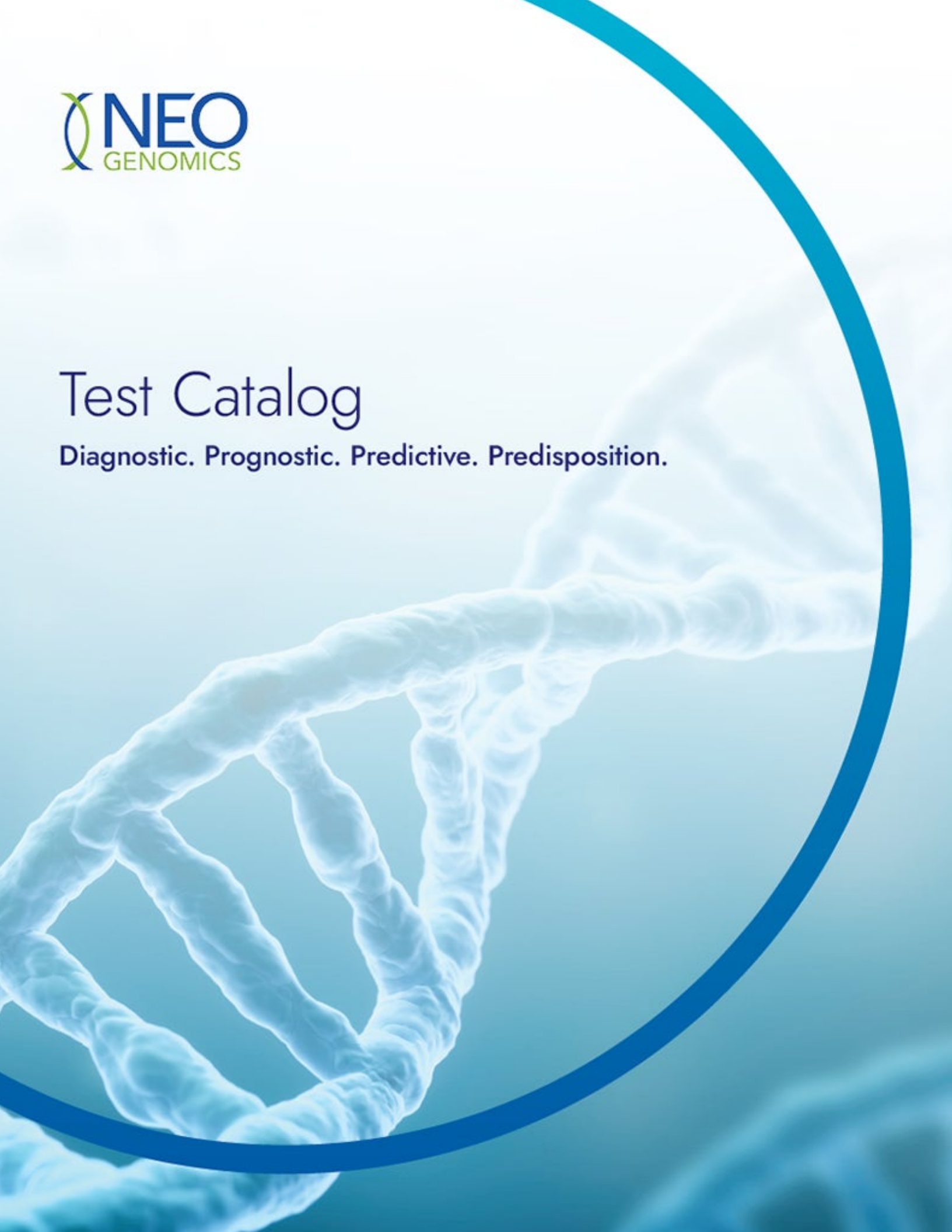
NEO GENOMICS

Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



NeoTYPE® Discovery Profile for Hematologic Cancers

Alternative Name

NeoTYPE Heme Discovery, Heme Discovery Profile

Methodology

Molecular

Test Description

The NeoTYPE Discovery Profile for Hematologic Cancers analyzes 302 genes through next-generation sequencing (NGS): ABL1, ABL2, AKT1, AKT2, AKT3, ALK, ANKRD26, APC, ARAF, ARHGEF1, ARID1A, ARID1B, ARID2, ASXL1, ASXL2, ATG2B, ATM, ATP2A2, ATRX, AXL, B2M, BAP1, BCL2, BCL2L11, BCL6, BCOR, BCORL1, BCR, BIRC3, BLM, BRAF, BRCA1, BRCA2, BRINP3, BRIP1, BTK, C17orf97, CALR, CARD11, CBFB, CBL, CBLB, CBLC, CCND1, CCND2, CCND3, CD274, CD33, CD79A, CD79B, CDC25C, CDK2, CDK4, CDK6, CDKN1B, CDKN2A, CDKN2B, CEBPA, CHEK2, CIC, CIIT, CREBBP, CRLF2, CSF1R, CSF3R, CTC1, CTCF, CTNNB1, CUX1, CXCR4, CYLD, DAXX, DCK, DDX3X, DDX41, DIS3, DKC1, DNMT1, DNMT3A, EBF1, EED, EGFR, EGLN1, EGR1, ELANE, EP300, EPCAM, EPHA2, EPHA7, EPOR, ERBB2, ERBB3, ERCC4, ETNK1, ETV6, EZH2, FANCA, FANCB, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FANCL, FANCM, FAS, FAT1, FBXW7, FGFR1, FGFR2, FGFR3, FLT3, FOXO1, FUBP1, G6PC3, GAB2, GATA1, GATA2, GATA3, GFI1, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, GSKIP, H1-4, HAX1, HIF1A, HNRNPK, HRAS, ID3, IDH1, IDH2, IGF1R, IKBKB, IKZF1, IKZF3, IL7R, IRAK4, IRF4, ITPKB, JAK1, JAK2, JAK3, KDM6A, KDR, KEAP1, KIT, KLF2, KLHL6, KMT2A, KMT2C, KMT2D, KRAS, LUC7L2, MALT1, MAP2K1, MAP3K1, MAP3K14, MAPK1, MCL1, MDM2, MDM4, MED12, MEF2B, MET, MLH1, MPL, MSH2, MSH6,MTOR, MYC, MYCN, MYD88, NBN, NCAPH, NF1, NFKBIE, NHP2, NOP10, NOTCH1, NOTCH2, NOTCH3, NPM1, NRAS, NSD1, NT5C2, NTRK1, NTRK2, NTRK3, NUP214, NUP98, P2RY8, PALB2, PAX5, PDCD1LG2, PDGFRA, PDGFRB, PHF6, PIGA, PIK3CA, PIK3CD, PIK3R1, PIM1, PLCG1, PLCG2, PML, PMS2, POT1, PPM1D, PRDM1, PRPF40B, PRPF6, PRPF8, PRPS1, PTCH1, PTEN, PTPN11, PTPRC, RAC1, RAD21, RAD51C, RAD51D, RB1, RBBP6, REL, RHEB, RHOA, RICTOR, RIPK1, RIT1, RPL11, RPL35A, RPL5, RPN1, RPS10, RPS15, RPS17, RPS26, RPS7, RTEL1, RUNX1, S1PR2, SAMD9, SAMD9L, SAMHD1, SBDS,SETBP1, SETD2, SF1, SF3A1, SF3B1, SGK1, SH2B3, SLX4, SMAD4, SMARCB1, SMC1A, SMC3, SMO, SOCS1, SPEN, SRP72, SRSF2, STAG2, STAT3, STAT5B, STAT6, STK11, SUZ12, TBL1XR1, TCF3, TENT5C, TERC, TERT, TET2, TET3, THPO, TINF2, TLR2, TNFAIP3 TNFRSF14, TP53, TP63, TRAF2, TRAF3, TSC1, TSC2, U2AF1, U2AF2, UBR5, VHL, WAS, WRAP53, WT1, XPO1, ZFHX4, ZMYM3, and ZRSR2. Test reports include a summary of all results together. Note: FLT3 is performed by NGS only. FLT3 by other molecular method can be ordered as an add-on if desired.

Clinical Significance

The NeoTYPE Discovery Profile for Hematologic Cancers is a qualitative next-generation sequencing (NGS) test for the detection of DNA alterations in 302 genes of various myeloid and lymphoid disorders. The assay covers genes implicated in the pathogenesis of lymphomas and leukemias, including acute myeloid leukemia (AML), myeloproliferative neoplasms (MPN), myelodysplastic syndrome (MDS), chronic myelogenous leukemia (CML), chronic myelomonocytic leukemia (CMML), juvenile myelomonocytic leukemia (JMML), angioimmunoblastic T-cell lymphoma (AITL)/peripheral T-cell lymphoma (PTCL), chronic lymphocytic leukemia (CLL), among others. The results may provide insight into the pathobiology of the malignancy, aid in risk assessment, and identify potential therapeutic options and clinical trials based on molecular drivers.

The NeoTYPE Discovery Profile for Hematologic Cancers is intended for predictive and prognostic purposes. In some cases, it may aid in diagnosis/subtype, e.g. HCL, MDS with SF3B1, MPN, or AML.

Specimen Requirements

- **Bone Marrow Aspirate:** 2-3 mL sodium heparin tube. EDTA tube is acceptable.
- **Peripheral Blood:** 3-5 mL sodium heparin tube. EDTA tube is acceptable.
- **FFPE tissue:** Paraffin block. Alternatively, send 1 H&E slide plus 10-14 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative is the recommended fixative. Do not use zinc or mercury fixatives (B5). Highly acidic or prolonged decalcification processes will not yield sufficient nucleic acid to accurately perform molecular studies.

Storage & Transportation

Use refrigerated cold pack for transport. Make sure cold pack is not in direct contact with specimen.

CPT Code(s)*

81455x1

Medicare MolDX CPT Code(s)*

81479

New York Approved

Yes

Level of Service

Global

Turnaround Time

14 Days

*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.

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

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