

Next Generation Sequencing Oncology Panels

LUNG PANEL 26 GENE PANEL

AKT1, ALK, BRAF, DDR2, EGFR, ERBB2, FGFR1, FGFR3, HRAS, KRAS, MAP2K1, MET, MSH2, MSH6, NRAS, NTRK1, NTRK2, NTRK3, PIK3CA, PMS2, PTEN, RET, ROS1, MLH1, SMAD4, TP53

COLORECTAL PANEL 17 GENE PANEL

AKT1, BRAF, HRAS, KRAS, MET, MLH1, MSH2, MSH6, NRAS, NTRK1, NTRK2, NTRK3, PIK3CA, PMS2, PTEN, SMAD4, TP53

MELANOMA PANEL 15 GENE PANEL

BRAF, CTNNB1, GNA11, GNAQ, KIT, MAP2K1, NF1, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PIK3CA, PTEN, TP53

MYELOID PANEL 42 GENE PANEL

ABL1, ABL2, ASXL1, BCR, BCOR, BRAF, CALR, CBL, CEBPA, CSF3R, DNMT3A, ETV6, EZH2, FLT3, GATA1, GATA2, GNAS, HRAS, IDH1, IDH2, JAK2, KIT, KRAS, MLL, MYD88, MPL, NPM1, NRAS, PHF6, PTEN, PTPN11, RAD21, RUNX1, SETBP1, SF3B1, SRSF2, SMC3, STAG2, TET2, TP53, WT1, ZRSR2

COMPREHENSIVE CANCER PANEL 523 GENE PANEL

GIST PANEL 8 GENE PANEL

KIT, PDGFRA, SDHB, SDHC, SDHD, NTRK1, NTRK2, NTRK3

NEURO PANEL 12 GENE PANEL

ATRX, BRAF, CDKN2A, CDKN2B, CDKN2C, EGFR, HIST3H3, IDH1, IDH2, MYC, MYCN, MYCL1

SARCOMA PANEL 28 GENE PANEL

ALK, APC, BRAF, CDK4, CTNNB1, ETV6, EWSR1, FOXO1, GLI1, IDH1, IDH2, KIT, MDM2, MYOD1, NAB2, NF1, NTRK1, NTRK2, NTRK3, PAX3, PAX7, PDGFRA, PDGFRB, SDHB, SDHC, SMARCB1, TFE3, WT1

MYELOMA PANEL 42 GENE PANEL

AKT2, AKT3, ATM, BIRC3, BRAF, CCND1, CDKN1B, CDKN2A, CXCR4, EGFR, FGFR3, IDH1, IDH2, IRF4, IKZF1, JAK2, KDM6A, KRAS, MYC, MYD88, NRAS, PIK3CA, PIM1, RB1, STAT3, TP53

Starting in November 2020, the Molecular Pathology Laboratory at Beaumont will offer a new and more advanced series of Next Generation Sequencing (NGS) tests that are:

- designed to sequence both RNA and DNA
- detects single nucleotide variants (SNVs), indels, copy number change (CNV) and gene fusions
- designed to assess pan-cancer biomarkers of MSI, TMB, NTRK1/NTRK2/NTRK3 for solid tumors

WHAT ARE THE SPECIMEN TYPES?

Testing can be performed on

- paraffin blocks of tumor tissue
- bone marrow aspirates (lavendar-top EDTA tube)

HOW TO ORDER THESE TESTS?

Insurance pre-authorization is required.

Paper requisition form provided by Beaumont Laboratory needs to be completed and faxed to the Pathology Department at the respective campus where tumor tissue resides.

Fax requisition to

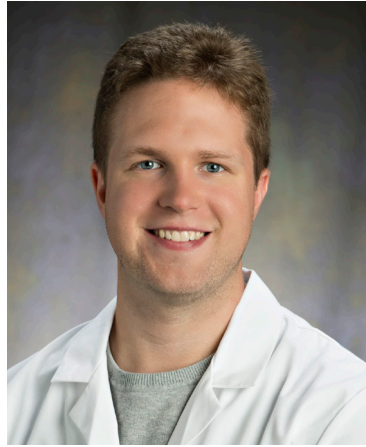
- Dearborn: 313-593-7143
- Farmington Hills, Grosse Pointe and Royal Oak: 248-898-8020
- Taylor: 313-295-5373
- Trenton: 734-671-3680
- Troy: 248-964-4110
- Wayne: 734-467-4290



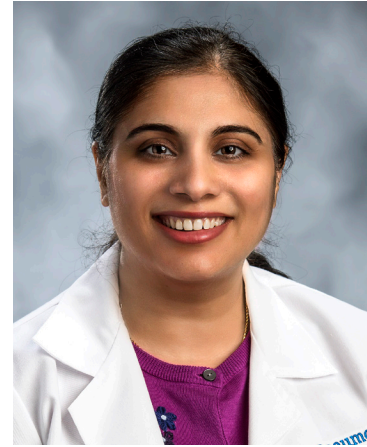
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NGS REPORT

- A personalized interpretive report is generated for each sample that lists the variants detected in each gene, classifies these based on a standardized classification scheme for somatic variants and provides interpretative comments for each variant of known significance.
- Personalized help from molecular pathologists or Ph.D. is available via the phone for assistance with interpretation.

EXPECTED TURN AROUND TIME FOR TEST RESULTS

- Results should be available in 10-15 days and faxed to your office.
- Results are also available in Epic.
- Delays in test results will be communicated to your office.
- Insufficient tissue for molecular testing will be communicated within three to five days.

SOLID TUMOR NGS TEST PANELS

- lung tumor ngs panel (26 genes)
- colorectal cancer ngs panel (17 genes)
- neuro-oncologic ngs panel (12 genes)
- melanoma ngs panel (15 genes)
- sarcoma ngs panel (28 genes)
- gastrointestinal stromal tumor (8 genes)

HEMOLYMPHOID NGS TEST PANELS

- myeloid neoplasm ngs test panel (42 genes)
- myeloma ngs panel (27 genes)

COMPREHENSIVE CANCER NGS PANEL (523 GENES)

TRUSIGHT-15 NGS PANEL (15 GENES) - OLDER PANEL



FOR MORE INFORMATION, CALL THE MOLECULAR LAB AT **248-551-8863**
OR SUSAN DARAISEH, Ph.D. AT **248-898-1277**