TEMPUS | ONCOLOGY

NEW YORK STATE

xF Gene Panel

A non-invasive, liquid biopsy panel of 105 genes focused on oncogenic and resistance mutations in cell-free DNA (cfDNA). This panel is designed to provide support for clinical decision making for solid tumors.

- SNVs (single nucleotide variants) and insertions and deletions (indels) are detected in all 105 genes
- Copy Number Gains (CNGs) and gene rearrangements are detected in a subset of genes
- DNA Sequencing Depth: average 20,000x (raw reads) / 5,000x (unique reads)
- Specimen Requirements: Two Streck tubes of peripheral blood (8.5mL each)

The report includes genomic alterations in select genes, microsatellite instability-high status when present,[1] median variant allele fraction (mVAF), therapy options and clinical trials matched to the patient's genomic profile, as well as available clinical history.

xF GENE PANEL

AKT1	*CCND1*	*ESR1*	*IDH1*	*MPL*	*PBRM1*	*RHOA*
AKT2	*CCND2*	*EZH2*	*IDH2*	*MSH2*	*PDCD1LG2*	*RIT1*
ALK	*CCND3*	*FBXW7*	*JAK1*	*MSH3*	*PDGFRA*	*RNF43*
APC	*CCNE1*	*FGFR1*	*JAK2*	*MSH6*	*PDGFRB*	*ROS1*
AR	*CD274 (PD-L1)*	*FGFR2*	*JAK3*	*MTOR*	*PIK3CA*	*SDHA*
ARAF	*CDH1*	*FGFR3*	*KDR*	*MYC*	*PIK3R1*	*SMAD4*
ARID1A	*CDK4*	*FGFR4*	*KEAP1*	*MYCN*	*PMS2*	*SMO*
ATM	*CDK6*	*FLT3*	*KIT*	*NF1*	*PTCH1*	*SPOP*
ATR	*CDKN2A*	*FOXL2*	*KMT2A*	*NF2*	*PTEN*	*STK11*
B2M	*CTNNB1*	*GATA3*	*KRAS*	*NFE2L2*	*PTPN11*	*TERT*
BAP1	*DDR2*	*GNA11*	*MAP2K1*	*NOTCH1*	*RAD51C*	*TP53*
BRAF	*DPYD*	*GNAQ*	*MAP2K2*	*NPM1*	*RAF1*	*TSC1*
BRCA1	*EGFR*	*GNAS*	*MAPK1*	*NRAS*	*RB1*	*TSC2*
BRCA2	*ERBB2 (HER2)*	*HNF1A*	*MET*	*NTRK1*	*RET*	*UGT1A1*
BTK	*ERRFI1*	*HRAS*	*MLH1*	*PALB2*	*RHEB*	*VHL*

GENE REARRANGEMENTS

ALK	*BRAF*	*FGFR2*	*FGFR3*	*NTRK1*	*RET*	*ROS1*

COPY NUMBER GAINS

CCNE1	*EGFR*	*ERBB2 (HER2)*	*MET*	*MYC*

1 MSI status will be reported when the specimen is determined to be MSI-High