

PredicineWES+™

CLIA-Validated Boosted Whole Exome Sequencing

Exome-wide Molecular Insights

PredicineWES+™ liquid and tissue biopsy next-generation sequencing solution delivers deep and comprehensive genomic insights, offering whole exome sequencing (WES) breadth combined with the exceptional depth from the PredicineATLAS 600-gene pan-cancer panel.

600

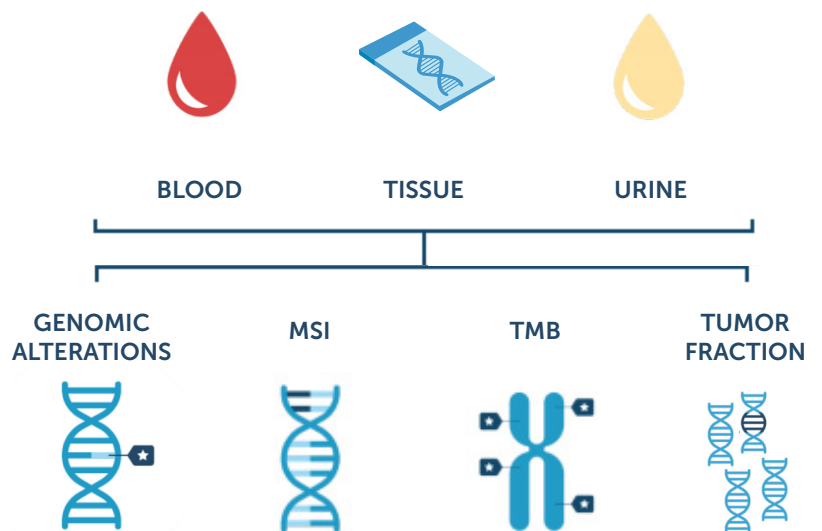
Key cancer genes boosted in 20,000 genes (WES)

20,000x

Sequencing Depth in boosted region (Liquid Biopsy)

2,500x

Sequencing Depth in WES region (Liquid Biopsy)



Methods and Reporting

- Identify key genomic aberrations including single nucleotide variants (SNVs), insertions and/or deletions (Indels), copy number variations (CNVs), DNA rearrangements, tumor mutational burden (TMB), microsatellite instability (MSI) and tumor fraction (TF) in liquid and tissue samples.
- Full exomal gene coverage with boosted 600 key cancer genes across the entire drug development process, enabling unprecedented biomarker analysis in clinical trials, treatment monitoring, and drug resistance detection using blood, urine, or tissue samples.

Workflow

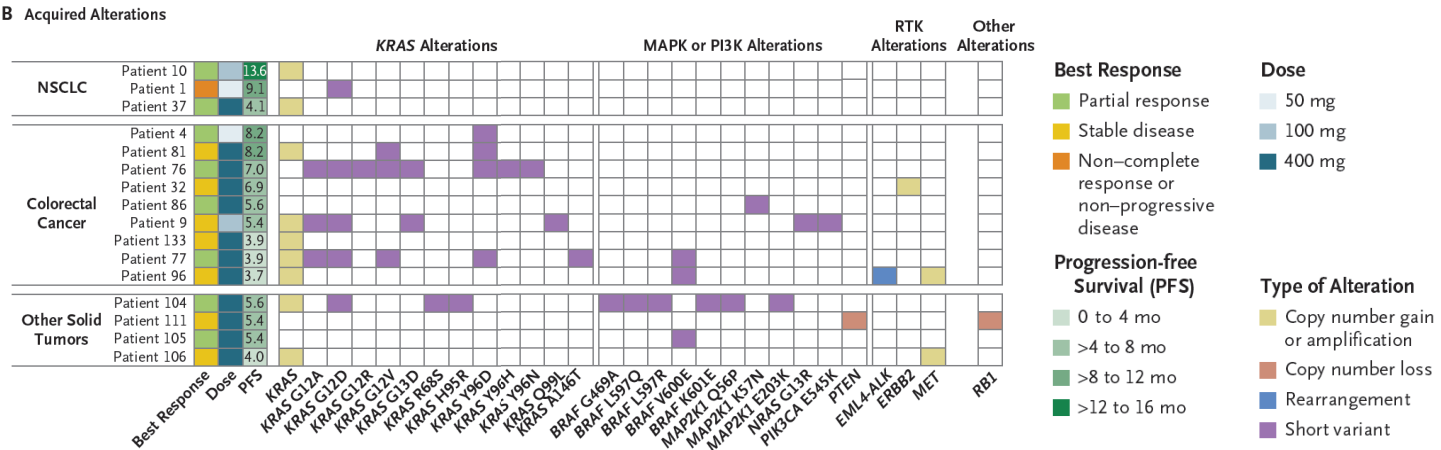


Performance Specifications

Feature	Plasma	Urine	Tissue
Detection Sensitivity (Boosted Region)	SNVs/ Indels: 0.25% AF, reportable range≥ 0.05%; DNA Rearrangements: 0.25% AF, reportable range≥ 0.05%; Copy number Gains: 2.21-2.28 copies, reportable range≥ 2.18 copies	SNVs/ Indels: 0.3% AF, reportable range≥ 0.1%; DNA Rearrangements: 0.3% AF, reportable range≥ 0.1%; Copy number Gains: 2.25-2.34 copies, reportable range≥ 2.2 copies	SNVs/ Indels: 2.5% AF, reportable range≥ 1%; DNA Rearrangements: 2.5% AF, reportable range≥ 1%; Copy number Gains: 3.49-4.39 copies, reportable range≥ 2.35 copies
Detection Sensitivity (WES Region)	SNVs/ Indels: 2.5% AF, reportable range≥ 0.05%	SNVs/ Indels: 2.5% AF, reportable range≥ 0.1%	SNVs/ Indels: 10% AF, reportable range≥ 1%
Turnaround Time (TAT)	10 days	10 days	10 days
Specimen Type and Requirement (CLIA)	20 mL blood	20-40 mL urine	≥ 1mm ³ tissue (5-10 FFPE slides)
Specimen Type and Requirement (RUO)	2-5 mL plasma 4-10 mL blood	20-40 mL urine	≥ 1mm ³ tissue (5-10 FFPE slides)
Genomic and Assay Features	SNVs, Indels, CNVs, DNA Rearrangements, TMB, MSI, Tumor Fraction		
Sequencing	Illumina NGS		
Analytical Validation	CLIA/CAP-accredited workflows		

Note: Some features are only included in the RUO version. Additional information available upon request.

Case Study: Elucidating acquired resistance mechanisms to KRAS G12C inhibitor in clinical trials published in *The New England Journal of Medicine*



New England Journal of Medicine 2023;389:710-21