

HRR Track

Homologous Recombination Repair (HRR) genes including BRCA1 & BRCA2 analysis through blood.

High precision multibiomarker | NGS based genomic profiling | Depth of sequencing $\geq 20,000X$ (pre UMI)

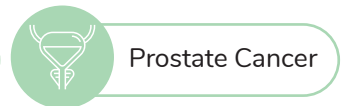
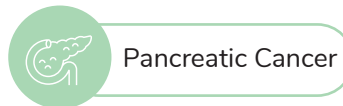
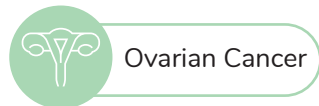
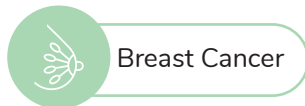
Complementary, Alternative, Reflex and Serial to Tissue Biopsy.



Salient Features

- Screens for the mutations (SNVs and InDels) in 15 Homologous Recombination Repair (HRR) genes including BRCA1 and BRCA2 genes
- Complete coding regions and splice site boundaries (+/-10 bp) are covered
- Detects both somatic and germline* variants.
- Informs PARPi eligibility.

*Germline variants to be confirmed on whole blood DNA



Use in Clinical Practice

| | |
|--|--|
| Indicated for <ul style="list-style-type: none"> • Prostate, Ovarian, Breast and Pancreatic cancer | Average depth of sequencing <ul style="list-style-type: none"> • >20,000X (Pre UMI) • >2000X (Post UMI) |
| Sample type <ul style="list-style-type: none"> • Peripheral Blood in Streck Tube (10ml X 2) | Overall concordance with tissue testing <ul style="list-style-type: none"> • 98% (PMID: 29379323) |

Limit of Detection (LOD)

| Alteration Type | Analytical Sensitivity [#] | Limit of Detection (LOD) | Analytical Specificity ^{##} |
|-----------------|-------------------------------------|--------------------------|--------------------------------------|
| | | 30ng | |
| SNVs* | $\geq 95\%$ | >0.2 AF% | 100% |
| INDELS* | $\geq 95\%$ | >0.2 AF% | 100% |

[#]Analytical Sensitivity defined as the Detection Rate for variants present at or above the limit of detection (LoD).

^{##}Analytical Specificity defined as 1 minus the per-sample false positive rate

* Tested on cfDNA reference standards

Assay Specifications

Well - validated as per CAP guidelines

100% Precision on Reference standards

100% Scored in CAP proficiency evaluation program

High throughput Illumina's sophisticated NGS sequencing platforms

Global standards for the best laboratory practices followed

Test Details

Sample Type

Peripheral Blood in Streck Tube (10ml X 2)
Test Code: MGM2455

Shipping Condition

Ship same or next day at room temperature. Do not freeze or refrigerate

TAT

14 Working days from sample receipt at the laboratory to result

Gene List (15 Homologous Recombination Repair (HRR) pathway genes)

| | | | | |
|-------|-------|-------|---------|--------|
| ATM | BRCA2 | CHEK1 | PALB2 | RAD51C |
| BARD1 | BRIP1 | CHEK2 | PPP2R2A | RAD51D |
| BRCA1 | CDK12 | FANCL | RAD51B | RAD54L |

Case Study on HRR Track



Test Performed: HRR Track and HRR somatic mutation panel
56-year-old Male Prostatic acinar adenocarcinoma, grade 5

| Genomic alteration | Nucleotide change | Depth / VAF | AMP Classification [^] | Interpretation | Treatment Recommendation |
|----------------------------|-------------------------------|-------------|---------------------------------|----------------|--|
| BRCA2 p.Gly3153 AlafsTer10 | c.9458del (ENST00000380152.8) | 2720X / 46% | Tier 1 | Deleterious | Confers sensitivity to PARP inhibitors |

HRR track Liquid Biopsy test identified pathogenic mutation in BRCA2 gene at 46% VAF which can be useful for treatment decisions.

HRR somatic mutation panel on Tissue Biopsy also detected same mutation at 65.6%. Germline confirmation is under process

MedGenome Liquid Biopsy NGS Assays

OncoTrack Ultima
(Solid Tumors)

LungTrack Advance
(SNVs, InDels, Fusions)

OncoTrack
(EGFR, BRAF, KRAS, NRAS)

HRR Track
(15 HRR Gene including BRCA1 & BRCA2)

Talk to the Experts:

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