



OncoTrack Advance

NGS based genomic profiling of solid tumors from blood (SNVs, InDels & Fusions)

High precision multibiomarker

CAP accredited & extensively validated assay

Depth of sequencing ≥20,000X (pre UMI)



Salient Features

- Tumor agnostic assay covering 117 Pan cancer genes as recommended by guidelines (FDA, NCCN, ASCO, ESMO etc.) for SNVs, InDels & 15 genes for fusion analysis.
- Comprehensive coverage of complete coding regions of all the genes and intron/exon boundaries for SNVs & InDels detection
- Intronic regions of fusion genes & key partners covered for fusion detection on cfDNA
- Highly sensitive and can accurately detect low frequency mutations upto 0.2% Variant Allele
 Frequency (VAF) at high confidence
- Analysis and reporting as per AMP/ASCO/CAP guidelines
- Detects **Primary driver mutation** and **Secondary resistance** markers
- Enables Minimal Residual Disease (MRD) detection

Can be Complementary, Alternative, Reflex and Serial to Tissue Biopsy NGS Test

Use in Clinical Practice

Indicated for	Average depth of sequencing

Advanced solid tumors ≥20,000X (pre UMI)

Before first-line therapy or at progression ≥2000X (post UMI)

Sample type Overall concordance with tissue testing

Peripheral Blood in Streck Tube (10ml X 2) 98% (PMID: 29379323)

Limit of Detection (LOD)

Alteration Type	Analytical Sensitivity#	Limit of Detection (LOD)	Analytical Specificity##	#Analytical Sensitivity	
		30ng		defined as the Detection Rate for	
SNVs*	≥95%	>0.2 AF%	100%	variants present at or above the limit of	
INDELS*	≥95%	>0.2 AF%	100%	detection (LoD).	
Fusions **	≥95%	≥3 reads	100%	##Analytical Specificity defined as 1 minus	
* Tested on cfDNA reference stand	the per-sample false positive rate				

Assay Specifications

Well - validated100% Scored inHigh throughput Illumina'sGlobal standards foras per CAPCAP proficiencysophisticated NGSthe best laboratoryguidelinesevaluation programsequencing platformspractices followed

Test Details

Sample Type

Peripheral Blood in Streck Tube (10ml X 2) Test Code: MGM2718

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 (SNVs & InDels - 117 Genes)									
ABL1	BAP1	CDX2	EZH2	GNAQ	KIT	MYC	PDGFRA	RAD54L	SMO
ABL2	BARD1	CHEK1	FANCL	GNAS	KRAS	MYCN	PIK3CA	RAF1	SPOP
AKT1	BRAF	CHEK2	FBXW7	HNF1A	MAP2K1	MYD88	PMS2	RB1	SRC
ALK	BRCA1	CSF1R	FGFR1	HRAS	MAP2K2	NF1	POLD1	RET	STK11
APC	BRCA2	CTNNB1	FGFR2	IDH1	MAPK1	NF2	POLE	RHEB	TERT
AR	BRIP1	DDR2	FGFR3	IDH2	MET	NOTCH1	PPP2R2A	RHOA	TP53
ARAF	C11orf65	EGFR	FGFR4	JAK1	MLH1	NPM1	PTCH1	RIT1	TSC1
ARID1A	CCND1	ERBB2	FLT3	JAK2	MPL	NRAS	PTEN	ROS1	TSC2
ARID1B	CDH1	ERBB3	FOXA1	JAK3	MSH2	NTRK1	PTPN11	SETD2	VHL
ATM	CDK12	ERBB4	FOXL2	KDM5C	MSH6	NTRK3	RAD51B	SF3B1	
ATR	CDK4	ERCC2	GATA3	KDM6A	MTOR	PALB2	RAD51C	SMAD4	
ATRX	CDKN2A	ESR1	GNA11	KEAP1	MUTYH	PBRM1	RAD51D	SMARCB1	

,	AII HRR	genes	are	coverea	including	BRCAI	ana	BRCAZ	

Gene List (Fusions - 15 Genes)								
ALK	EGFR	FGFR1	FGFR3	MET	NTRK1	NTRK3	ROS1	
BRAF	ERBB2	FGFR2	FGFR4	NRG1	NTRK2	RET		

Case Study

Identify resistance mutations Test performed - Oncotrack Advance



52-year-old Female

Diagnosis

- Diagnosed in 2020 with high grade lung adenocarcinoma in right lung legion
- Tested positive for ROS1 fusion by FISH in 90% of cell in tumour block
- ALK & EGFR was negative
- Treated with ROS1 inhibitor and responded well
- Relapse observed in 2023

Test Performed

- Rebiopsy was not clinically recommended
- NGS test on Liquid Biopsy sample was advised.
- OncoTrack Advance -Liquid Biopsy test by NGS (SNVs, InDels & Fusions) was performed at MedGenome lab

Results

- The test precisely detected CD74/ROS1 fusion at good confidence on blood (plasma cfDNA)
- Additionally, a well- known resistance mutation G2032R was detected in ROS1 gene that could have contributed to relapse on ROS1 inhibitor
- Due to the presence of resistance mutation, patient was not responding to ROS1 inhibitor

Precise report of Ontrack Advance empowered the clinician to put the patient on alternate and improved treatment plan.