

New Comprehensive Solid Tumour Panel: The Oncomine™ Precision Assay

Tumour genetic profiling has become fundamental, not only to inform on tumour diagnosis and prognosis, but also to drive therapeutic decisions in daily practice. With the goal of delivering the right cancer treatment to the right patient at the right time, precision oncology promises to improve outcomes for many cancer patients. To this end, AmPath now offers a new and comprehensive solid tumour panel, the Oncomine™ Precision Assay.

The Oncomine™ Precision Assay is a next-generation sequencing (NGS) solution. When compared with the EGFRASSEQ panel, the Oncomine™ Precision Assay has a significantly expanded profile that includes all relevant and emerging targets in precision oncology. The assay enables the detection of 2 769 unique variants, including mutations (45), copy number variants (CNVs) (14) and fusion variants (19) across 50 key genes.

TABLE 1: COMPREHENSIVE LIST OF GENES INCLUDED IN THE ONCOMINE™ PRECISION ASSAY

DNA hotspots			CNVs	Fusions	
AKT1	ESR1	MAP2K2	ALK	ALK	AR
AKT2	FGFR1	MET	AR	BRAF	EGFR
AKT3	FGFR2	MTOR	CD274	ESR1	MET
ALK	FGFR3	NRAS	CDKN2A	FGFR1	
AR	FGFR4	NTRK1	EGFR	FGFR2	
ARAF	FLT3	NTRK2	ERBB2	FGFR3	
BRAF	GNA11	NTRK3	ERBB3	MET	
CDK4	GNAQ	PDGFRA	FGFR1	NRG1	
CDKN2A	GNAS	PIK3CA	FGFR2	NTRK1	
CHEK2	HRAS	PTEN	FGFR3	NTRK2	
CTNNB1	IDH1	RAF1	KRAS	NTRK3	
EGFR	IDH2	RET	MET	NUTM1	
ERBB2	KIT	ROS1	PIK3CA	RET	
ERBB3	KRAS	SMO	PTEN	ROS1	
ERBB4	MAP2K1	TP53		RSPO2	
				RSPO3	

TABLE 2: DETAILS OF THE ONCOMINE™ PRECISION ASSAY

Test mnemonic(s)	<p>OPANGS</p> <p>Note: The mnemonics below are used for Discovery Health patients only and the oncologist must supply a pre-authorisation code to request:</p> <ul style="list-style-type: none"> • OPALUNG (lung tumours) • OPACOL (colorectal tumours)
Clinical indication	<p>Oncology patients, particularly those with:</p> <ul style="list-style-type: none"> • Non-small cell lung carcinoma (NSCLC) • Colorectal carcinoma (CRC)
Specimen type	<p>Formalin Fixed Paraffin Embedded Tissue (FFPE):</p> <ul style="list-style-type: none"> • 3-6 normal slides (not charged) with 10 micron thick unstained recuts
Turnaround time	Two weeks (10 working days)
Cost (2022 cash price)	R13 519.00