



Introduction

The BGI SENTIS™ Lung Cancer Panel is a Next Generation Sequencing (NGS)-based genetic test that enables highly accurate mutation detection across the most clinically relevant genes associated with lung cancer.

The panel allows highly sensitive detection of actionable mutations across 20 genes from tissue or 13 genes from liquid biopsy samples, providing a comprehensive molecular profiling of lung cancer for clinicians and researchers.

ne Power of Knowing

BGI SENTIS™ Lung Cancer Panel (Tissue/ctDNA)

Advantages



Comprehensive

- A single assay that detects most common types of genomic alterations including base substitutions, InDel, CNV and fusions
- Evidence-based therapeutic interpretation: providing molecular evidence for the consideration of more than 42 targeted therapies



Flexible

Accepts various sample types

- BGI SENTISTM Lung Cancer Panel (Tissue): fresh tissue, FFPE, or DNA
- BGI SENTISTM Non-invasive Lung Cancer Panel (ctDNA): peripheral blood or DNA



Reliable

- The median adequate sequencing depth is up to 500x using tissue samples and up to 4000x using ctDNA

Gene Panel

GENE	Mutation Types	GENE	Mutation Types
AKT1*	SNV	KRAS	SNV
ALK	Fusion, CNV, SNV	MAP2K1	SNV
BRAF	SNV	MET	Indel, CNV
DDR2*	SNV	NRAS	SNV
EGFR	SNV, Indel, CNV	NTRK1	Fusion
ERBB2	Indel, CNV	PIK3CA	SNV
FBXW7*	SNV	PTEN*	SNV
FGFR3	Fusion	RET	Fusion
HRAS*	SNV	ROS1	SNV, Fusion
KIT*	SNV	TP53*	SNV

^{*}Genes not included for liquid biopsy

Sample Requirements

SENTIS™ Lung Cancer Panel (Tissue, 20 genes)

- >60mg tissue or 10 FFPE 10mm*10mm (5-10 μ m) sections or 2-3 samplings of biopsy or ≥500ng good quality, tumor DNA

SENTIS™ Non-invasive Lung Cancer Panel (ctDNA, 13 genes)

- ≥8mL of peripheral blood (separated plasma and formed elements)
- ≥8mL of peripheral blood collected in Streck Cell-Free DNA BCT® tube

TAT

17 calendar days (from sample arriving at BGI lab to report)

Workflow





Counselling and Consent





Sample Collection





DNA Extraction and QC





Targeted Capture and NGS

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Data Analysis and Interpretation





Report Ready





Genetic Counselling

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The NGS sequencers / kits / services are not available in Hong Kong and US. Please contact a representative for regional availability.