

“Gain insight into clinically actionable mutations and discover new treatment targets with one of the market’s most comprehensive and affordable panels”



Introduction

Technological advances combined with an improved understanding of the genetic basis of cancer has revolutionized the way we manage cancer. Utilizing the patient’s particular genomic profile, clinicians can now assess the risk of hereditary cancer for the patient and the patient’s family, also tailor the best treatment options.

BGI’s SENTISTM Cancer+Discovery provides clinicians with one of the market’s most comprehensive and accurate Next Generation Sequencing (NGS) based testing solution for the identification of clinically actionable mutations and the discovery of novel variants with important functions in cancer. Supporting both tissue sample and liquid biopsy, the panel offers whole exon coverage of 688 cancer-related genes and interrogates the most common types of alterations, including SNVs, indels, CNVs and fusions in solid tumors.



The Power of Knowing

BGI SENTISTM Cancer+ Discovery Panel (Tissue/ctDNA)

Advantages



Comprehensive

- Whole exon coverage of 688 cancer-related genes, supporting most common types of genomic alterations including base substitutions, InDel, CNV, fusion, TMB and MSI
- Includes genes associated with both sporadic and hereditary cancers
- Provides interpretation on the therapeutic relevance in 3 0 0 + drugs, including 3 6 0 targeted therapies (both approved and currently in clinical trials), 11 immunotherapies and 11 commonly used chemotherapies
- Includes 425 genes in cancer-related pathways for discovery of novel pathogenic variants



Flexible

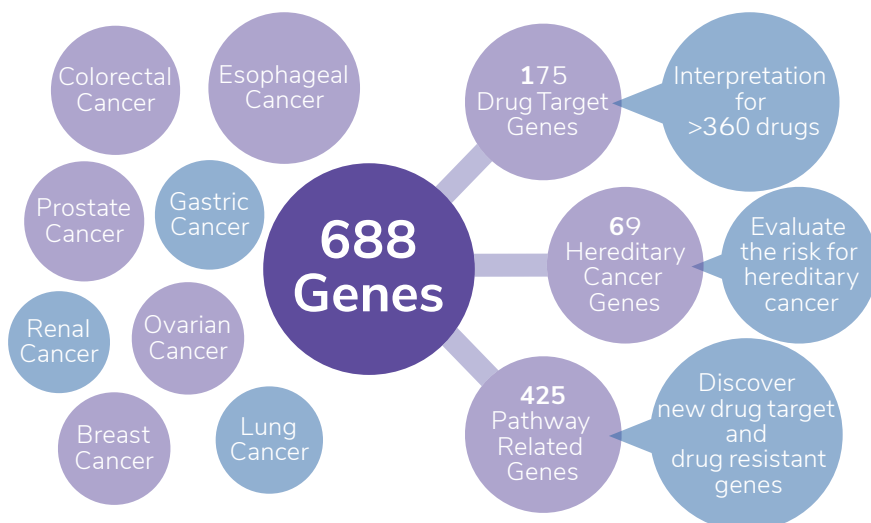
- BGI SENTISTM Cancer+Discovery (Tissue): matched fresh tissue, biopsy, FFPE, DNA and peripheral blood
- BGI SENTISTM Cancer+Discovery (ctDNA): peripheral blood or DNA



Reliable

- The median adequate sequencing depth is up to 9 0 0 x using tissue samples and up to 3000x using ctDNA

Gene Panel Overview



Sample Requirements

BGI SENTIS™ Cancer+Discovery (Tissue)

- >60mg tissue or 15 FFPE 10mm*10mm (5-10µm) sections or ≥3 samplings of biopsy or ≥3µg good quality, tumor DNA

- 5mL of peripheral blood

BGI SENTIS™ Cancer+Discovery (ctDNA)

- ≥10mL of peripheral blood (separated plasma and formed elements) or

- ≥8mL of peripheral blood collected in Streck Cell-Free DNA BCT® tube

TAT

12 weekdays (from sample arriving at BGI lab in Hong Kong to report in Tianjin)

14 calendar days at ISO15189 certified lab in Europe

Technology

Next-Generation Sequencing (NGS)

SENTIS™ Cancer + Discovery (Tissue)	Limit of Detection (LoD)	Positive Predictive Value (PPV)	Sensitivity
Single Nucleotide Variations (SNV)	1%	100%	99.2%
Indels	0.5%	93%	97.8%
Copy Number Amplifications (CNV)	3.4 copies	100%	100%
Splice Variants (SV)	0.5%	100%	100%
SENTIS™ Cancer + Discovery (ctDNA)	Limit of Detection (LoD)	Positive Predictive Value (PPV)	Sensitivity
Single Nucleotide Variations (SNV)	0.6%	97.3%	98.3%
Indels	0.59%	100%	100%
Copy Number Amplifications (CNV)	3.5 copies	100%	100%
Splice Variants (SV)	1.25%	100%	100%

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Workflow

1  Counselling and Consent

2  Sample Collection

3  DNA Extraction and QC

4  Targeted Capture and NGS

5  Data Analysis and Interpretation

6  Report Ready

7  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.

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