

# 癌蹤跡 AlphaLiquid® Detect

## A Tumor-informed, Hybrid Capture-based ctDNA Assay for Minimal Residual Disease (MRD) Detection

AlphaLiquid® Detect 是業界首創基於 Hybrid Capture NGS 的個人化液態切片檢測，可用於 I-III 早期實體瘤患者的微量殘存疾病 (MRD) 檢測和追蹤。每位患者客製化檢測同時追蹤最高1,000個來自腫瘤的基因變異，以及藥物對應靶點 (如EGFR ex19del / L858R / T790M, KRAS G12C, BRAF V600E...)。

AlphaLiquid® Detect 可實現癌症復發早期偵測，與影像追蹤相比具有顯著領先時間。

### Key Features



**Hybrid Capture NGS** enables highly specific and sensitive targeting of up to 1,000 targets



**Personalized** panel including both tissue-informed bespoke markers and well-established therapeutic targets



**Clinically actionable** for relapse monitoring and adjuvant therapy guidance



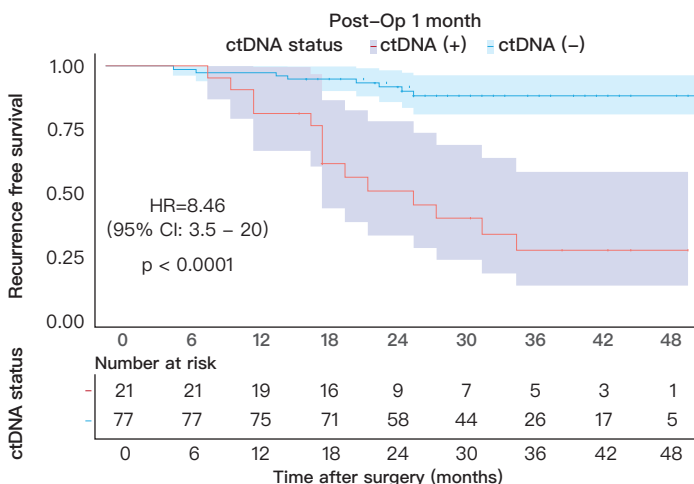
**Exceptional** detection levels (<0.005% LoD)

### Specifications

Assay Type	<ul style="list-style-type: none"> <li>Tissue-based whole exome sequencing (WES)</li> <li>Targeted hybrid capture NGS based on proprietary HQS™ technology</li> </ul>
Sample Requirement	<ul style="list-style-type: none"> <li>Tissue: FFPE (10um x 10 sections) or FF</li> <li>Blood: &gt;10ml of whole blood</li> </ul>
Targets	Customized panel of up to 1,000 targets including both tissue-informed bespoke markers and established therapeutic targets of choice
Detected Alterations	Single nucleotide variants (SNVs), Insertions & deletions (InDels)
Sequencing Depth	Ultradeep sequencing at >100,000x coverage
Limit of Detection	0.005%~0.0005% ctDNA fraction

### Clinical Validation- MRD Detection In Colorectal Cancer

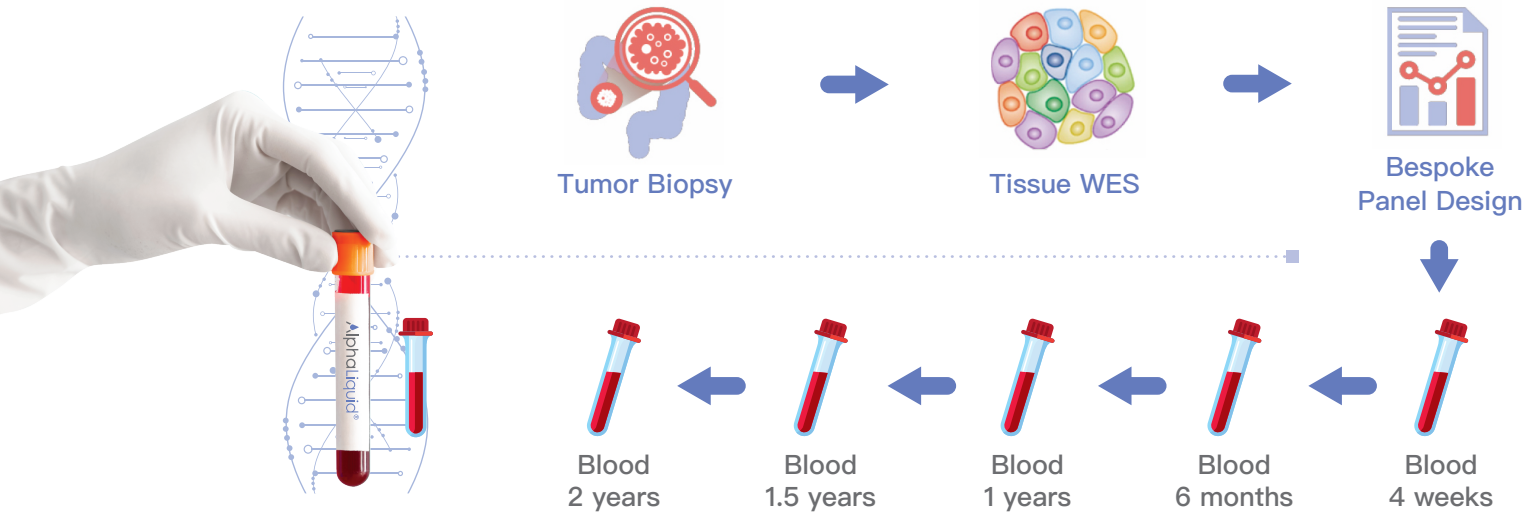
Based on the large cohort multi-center study, MRD positivity as determined by the AlphaLiquid® Detect assay showed a strong association with poor recurrence free survival.



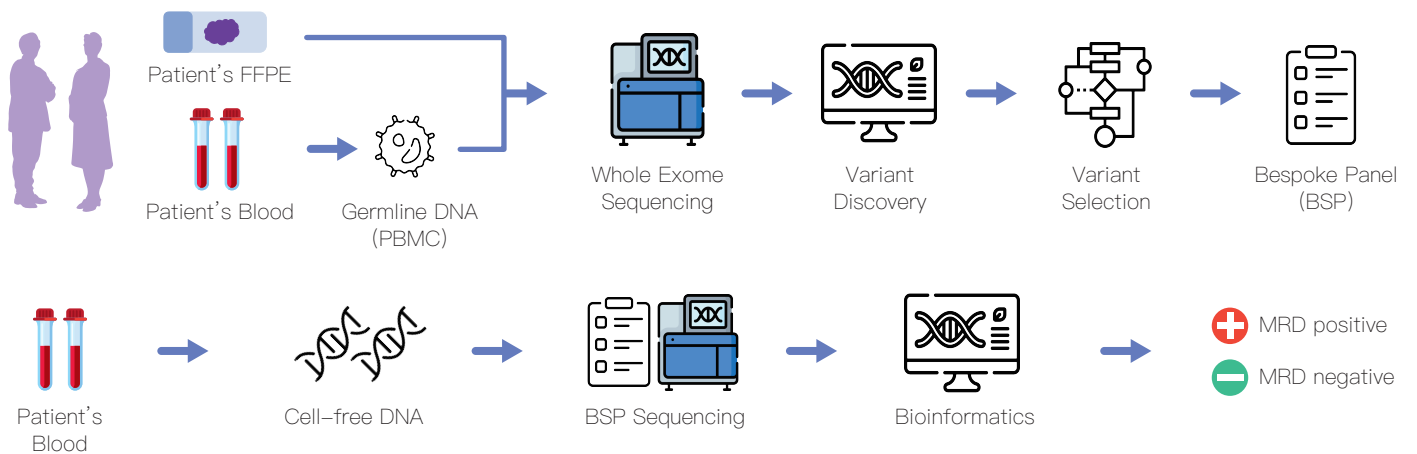
Cohort Size	98 patients with follow-up of > 2 years
CRC Stage	II ~ III
Prior Treatment	Received curative surgery and / or adjuvant therapy
Specificity	96.2%
Hazard Ratio	8.46 (95% CI: 3.85-20; p<0.0001)

## Test Process

- ① 患者腫瘤組織及血液進行全基因外顯子定序(WES)
- ② 根據腫瘤組織分析結果設計個人化基因變異追蹤套組，並加入常見標靶藥物對應基因突變(如EGFR ex19del / L858R / T790M, KRAS G12C, BRAF V600E...)
- ③ 持續透過超高深度Hybrid Capture NGS液態切片血液檢測追蹤，偵測是否帶有循環腫瘤DNA(ctDNA) 變異



## Inspection Process



## Differences From Other Testing Methods

	AlphaLiquid® Detect	Company N
Experiment	Hybrid Capture	Multiplex PCR
Number of targets	up to 1,000	16-plex
Variant types	SNV / InDels	SNV
Extra targets	Therapeutic targets	NA

### References

1. Sunghoon H, et al. Personalized circulating tumor DNA assay with large-scale mutation coverage for sensitive minimal residual disease detection in colorectal cancer British Journal of Cancer. 2023 Apr Accepted