

#### ctDNA ANALYSIS RESULT SPOT-MAS 10: EARLY DETECTION OF 10 CANCERS

## **PATIENT INFORMATION**

PERSONAL INFORMATION		SAMPLE INFORMATION		TEST INFORMATION	
Full Name:	Sample Patient	Sample Type:	Blood	Ordering Physician:	Dr. GS
NRIC/Passport/ID:	Xxxx Xxxxx Xxxxxx	Date Collected:	01/01/2025	MCR/MMC no.:	Xxxx Xxxxx Xxxxxx
Gender:	Female	Date Received by Lab:	02/01/2025	Sample Collection Place:	Sample Hospital
Date of Birth:	19/01/1987			Date Reported:	20/01/2025

### CLINICAL INFORMATION

**Remark:** 

An in-depth analysis and commentary on a clinical topic, supported by the latest evidence and insights. Clinical comments can also include personal experiences.

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### **RISK ASSESSMENT**



This result is only valid on the received sample

### NOTE:

- A negative result (no ctDNA signal detected yet) does NOT COMPLETELY rule out the presence of a tumor because the tumor is out of scope (10 types) OR is located in a difficult location for ctDNA release<sup>(1)</sup> OR the secondary cancer has a radically different omics from the primary cancer<sup>(2)</sup>.
- The sensitivity of the test is 70.8% for cancerous lesions and 78.1% when combined with the assessment of precancerous lesions in the digestive tract<sup>(3,4)</sup>, which means that for every 100 cases of the disease, about 22 cases will be missed (the sensitivity of the test varies depending on the type of organ within the scope of investigation<sup>(5,6)</sup>).
- The negative predictive value of the test is 99.9%<sup>(3)</sup> which means that for every 1000 ASYMPTOMATIC cases with negative results, about 999 cases actually do not have cancer.
- Recommend using this test as a supporting screening test, NOT as a substitute for recommended routine cancer screening tests. You should continue to have regular health check-ups and cancer screenings as instructed by your doctor.

 Bettegowda, Chetan et al. "Detection of circulating tumor DNA in early- and late-stage human malignancies." Science Translational Medicine 6.224 (2014). doi: 10.1126/scitranslmed.3007094.
Hao, Xiaoke et al. "DNA methylation markers for diagnosis and prognosis of common cancers." Proceedings of the National Academy of Sciences 114.28 (2017). doi: 10.1073/pnas.1703577114.
Nguyen, et al. "Prospective validation study: a non-invasive circulating tumor DNA-based assay for simultaneous early detection of multiple cancers in asymptomatic adults." BMC Medicine 23, 90 (2025) https://doi.org/10.1186/s12916-025-03929-y

(4) Carbonell, Chantelle, et al. Cancer Control 31 (2024): doi:10732748241307360.

(5) Nguyen, et al. "Multimodal analysis of methylomics and fragmentomics in plasma cell-free DNA for multi-cancer early detection and localization." eLife 12:RP89083 (2023).

https://doi.org/10.7554/eLife.89083.3

(6) Nguyen, et al. "Evaluation of a multimodal ctDNA-based assay for detection of aggressive cancers lacking standard screening tests." Future Oncology: 1-11 (2024). doi: 10.1080/14796694.2024.2413266.

**Notice:** The performance of the test is based on data from the K-DETEK clinical validation study (ClinicalTrials.gov ID: NCT05227261).



LABCODE ID: SAAAAAR29 | ECD ID: ECDXXXX01 | PERFORMED TEST: 5 SPOT-MAS

TUMOR-OF-ORIGIN PREDICTION

Ovarian and endometrial cancer screening scope applies to females only.

.2 This report is electronically signed by

Laboratory Director

Christopher Wong, PhD

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ED N PATHOLOGISTS