

# Blood test can screen multiple cancers

A home-grown biotech company has begun a large-scale clinical study for a blood test that can offer early screening of up to nine different cancers that have high mortality rates.

The test by Mirxes uses a combination of biomarkers to screen for lung, breast, colorectal, liver, stomach (gastric), oesophageal, ovarian, pancreatic and prostate cancers.

Biomarkers are measurable DNA, RNA or protein components that indicate disease such as cancer.

The test is the first in the world to use this combo of blood-borne circulating microRNA (miRNA) and DNA methylation biomarkers to detect multiple cancers.

Early detection of cancer is critical for patient survival. For example, a patient diagnosed with early-stage lung cancer has a more than 80 per cent chance of survival

compared with just 10 per cent for patients diagnosed with late-stage lung cancer.

Project CADENCE will receive an investment of at least \$50 million over a three-year period, and is expected to recruit more than 12,000 individuals for study, Mirxes said on Thursday.

The study will also create more than 80 new positions in research, manufacturing and data science over the next three years.

Currently, a number of cancer screening tools make use of biomarkers found in blood that detect the presence of cancer cells. One example is Gastroclear, a blood test that can accurately detect gastric cancer in its early stages. Traditionally, gastric cancer is diagnosed through endoscopy.

At the announcement ceremony on Thursday, Health Minister Ong

Ye Kung witnessed the signing of a Memorandum of Understanding (MOU) between Mirxes and the National Cancer Centre Singapore, Nanyang Technological University, Singapore, National University Hospital, Singapore General Hospital, Singapore Translational Cancer Consortium, Tan Tock Seng Hospital and the Yong Loo Lin School of Medicine.

The MOU creates a new public-private partnership to address the rising incidence of cancer here and the cost savings that would arise from early cancer detection.

The research is expected to recruit more than 12,000 individuals, including healthy average-risk individuals, high-risk individuals, patients with benign conditions and newly diagnosed patients who have not received cancer treatment.

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