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Singapore's Lucence launches the first-ever alternative, early-detection lung cancer test in Hong Kong

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Collaborative research with HKPOS, aiming to increase survival rates of lung cancer patients through non-invasive and accurate early detection methods



Lucence, a Singaporean precision oncology company, and Hong Kong Precision Oncology Society (HKPOS) are embarking into a research collaboration to evaluate a blood test for early lung cancer detection. This two-year research study is the first early detection of its kind to be conducted in Hong Kong.

Lucence and HKPOS will be collaborating to provide and evaluate outcomes of a comprehensive screening protocol for Hongkongers at high-risk for lung cancer. 600 lung cancer patients aged 45-74 from the Hong Kong Adventist Oncology Centre will participate in the study. CT scan by HKPOS and an advanced liquid biopsy test combining both circulating DNA and RNA, will be conducted on these patients.

While low-dose CT scans are a valuable tool for early detection, the study aims to explore complementary, less invasive methods to enhance patient comfort and diagnostic accuracy. The study investigates the sensitivity and specificity of liquid biopsy tests for predicting lung cancer lesions measuring 6-20mm, in comparison to using only low-dose CT scans.

Lucence's liquid biopsy test samples tumors with a simple, less painful blood draw. This method can detect circulating tumor DNA and RNA in the blood, potentially improving both cancer screening and diagnosis. Patients with lung nodules detected by low-dose CT scans will then be screened using Lucence's liquid biopsy.

Dr. Min-Han Tan, Founder, CEO and Medical Director of Lucence, commented, “My personal mission is to bring potentially life-saving technology to cancer care, and this research partnership with HKPOS will do exactly this. HKPOS has the vision of ending lung cancer in Hong Kong and I believe this research project can highlight the value of better screening. Research aims to increase survival rates of lung cancer patients through non-invasive and accurate early detection methods.”

In 2023, Lucence performed a similar research study with the US Veterans Affairs for lung nodule evaluation with blood-tests. The study found that through a combination of liquid biopsy with PET/CT to detect lung nodules, sensitivity for lung cancer diagnosis in small nodules was improved by 33% compared with using PET/CT.