

First Southeast Asian study to advance pulmonary hypertension early detection

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To identify biomarkers that are relevant to early detection of pulmonary hypertension

MiRXES Pte Ltd, a Singapore-headquartered biotechnology company, has collaborated with National University Heart Centre, Singapore (NUHCS) and National Heart Centre Singapore (NHCS) in a nationwide effort to manage the risk of pulmonary hypertension.

The organizations jointly launched Southeast Asia's first multi-center study, **S**ingapore **P**ulmonary **H**ypertension **E**arly detection with miRNA biomarkers (**SPHERE**), at the NUS ncRNA Symposium and Liquid Biopsy Summit 2022. SPHERE aims to develop miRNA signatures pertinent to Asia, for early detection of pulmonary hypertension (PH).

SPHERE seeks to build on important insights gained from CIPHER, a multi-center study aimed to identify miRNA biomarker signatures for early detection of pulmonary hypertension.

While CIPHER focused on biospecimens collected from Caucasian populations, SPHERE aims to provide further evidence to validate CIPHER PH miRNA biomarker classifier to support the development and validation of the miRNA-based diagnostic test for early identification and diagnosis of PH, and to identify PH miRNA biomarkers that are relevant to Asian populations.

The study aims to recruit about 200 patient volunteers by the end of 2023. The volunteers will comprise newly diagnosed PH patients and existing PH patients from two specialist centers in Singapore – NUHCS and NHCS – as well as healthy control volunteers. Patients from NUHCS and NHCS will have their blood collected and tested for miRNA biomarkers. The team aims to present the initial findings of the SPHERE study at a conference in 2024.