

UKM and Mirxes partner to develop early detection test for colorectal cancer in Malaysia

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Universiti Kebangsaan Malaysia (UKM), through its Medical Molecular Biology Institute (UMBI), has signed a Memorandum of Understanding (MoU) with Mirxes, a Singapore-headquartered RNA technology company. The partnership aims to develop a blood-based early detection test for colorectal cancer in Malaysia.

Colorectal cancer is the most common cancer in Malaysian men and the second most common in women. It is also the country's third leading cause of cancer death. The current recommended screening test, immunochemical Faecal Occult Blood Test (iFOBT), has limitations. It detects blood in stool, but sensitivity towards early stage of colorectal cancer is low, and the test can be inconvenient. A blood-based test will advance screening and early detection of colorectal cancer in Malaysia, making it more accurate, convenient and accessible.

This partnership leverages UMBI's expertise in cancer and molecular biology research, as well as Mirxes' proprietary miRNA technology, and experience in the development and commercialisation of early cancer detection solutions. It will also utilise archived biospecimens from UMBI and The Malaysian Cohort Biobank, Southeast Asia's largest biobank, to identify biomarkers for an accurate and sensitive colorectal cancer early detection test.

Cancer early detection tests improve treatment success and patient survival rates, leading to significantly improved health and economic outcomes. This partnership between UKM and Mirxes also extends beyond the current focus on colorectal cancer, paving the way for the potential development and commercialisation of a wider range of made-in-Malaysia blood-based cancer early detection tests such as those for stomach and lung cancers. These tests have the potential to generate significant revenue, estimated to reach RM400 million in the next five years.

The MoU also includes staff exchange and training programmes for knowledge transfer between UKM and Mirxes, as well as the establishment of a joint laboratory for translational research and clinical testing.