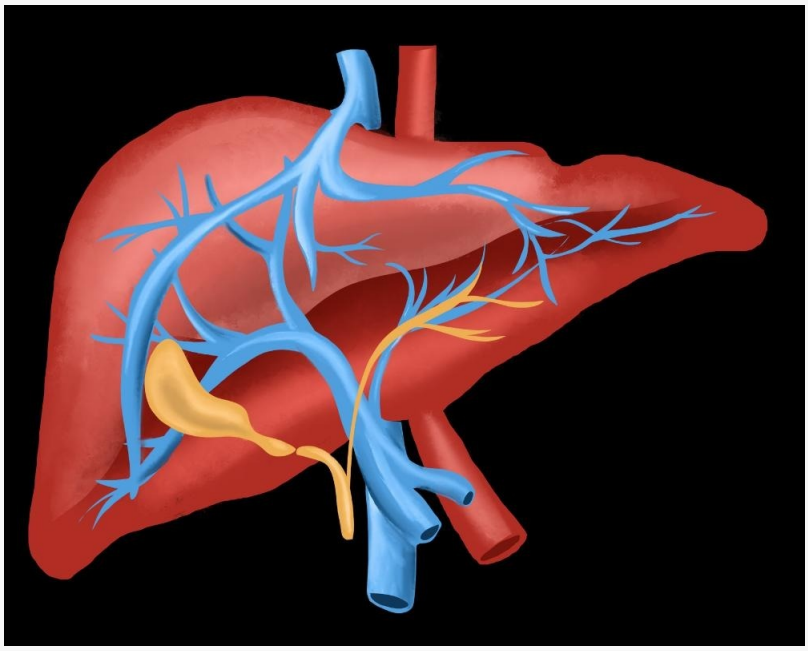
Pioneering High-Throughput Assay for Swift Detect of Liver Cancer Unveiled by HKG Epitherapeutics Ltd and Collaborators

Revolutionizing HCC Detection with Unique DNA Methylation Analysis



Groundbreaking Technology: The epiLiver test, developed by HKG Epitherapeutics Ltd and partners, represents a leap forward in early detection of Hepatocellular Carcinoma

HONG KONG, CHINA, June 12, 2023 /EINPresswire.com/ -- HKG Epitherapeutics Ltd., in collaboration with the International Centre for Diarrhoeal Disease Research, Bangabandhu Sheikh Mujib Medical University, and a consortium of distinguished Bangladeshi clinicians and scientists, has unveiled an innovative high-throughput assay for the early detection of Hepatocellular Carcinoma (HCC). The groundbreaking assay, which has been published in the esteemed peer-reviewed international journal Nature Communications (https://www.nature.com/articles/s41467-023-39055-7), identifies HCC through unique DNA methylation patterns. This could herald a new era in the early detection of HCC among high-risk populations, including individuals with liver diseases, type 2 diabetes, and alcoholism, with the potential to significantly reduce the morbidity and mortality rates associated with this cancer.

HCC, a prevalent global cancer, is often detected at advanced stages, leading to treatment challenges and reduced survival rates. The developed assay uses sophisticated sequencing and multiplexing techniques to differentiate HCC samples from normal tissues, other blood samples, and non-HCC tumors, overcoming the limitations of traditional diagnostic methods.

The research group evaluated the assay on 554 clinical study participants, comprising HCC patients, non-HCC cancer patients, individuals with chronic hepatitis B, and healthy controls. The results revealed an HCC detection sensitivity of 84.5% at 95% specificity, demonstrating its

promising potential for early HCC detection (registered in ClinicalTrialsGov as NCT03483922, a registry of clinical trials run by the United States National Library of Medicine at the National Institutes of Health).

Professor Moshe Szyf, the Chairman of HKG Epitherapeutics Ltd., a fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences and a pioneer in the field of epigenetics, stated that this study is a strong confirmation of the company's approach to early detection of disease using a combination of epigenetics and multiplexed next-generation sequencing as a global platform. The company intends to provide the test shortly for its global and local customers at its CLIA-CAP accredited laboratory in HK Science Park and add this test to its growing portfolio of epigenetic tests."

David Cheishvili, an epigeneticist who is leading research and innovation at HKG Epitherapeutics Ltd. and a lead author, stated, "Our developed high-throughput assay represents an innovative step forward in cancer detection. It contributes significantly to the early detection of HCC, with the potential to transform cancer diagnostics and patient outcomes."

Mamun Al Mahtab, a renowned Bangladeshi hepatologist, medical scientist, author, and columnist, who was the principal investigator and played an instrumental role in the project, stated that "While further study is required, this development represents a substantial stride towards a standard early detection tool for individuals at high risk of HCC, with the ability to considerably reduce the disease's impact on people at risk of developing HCC".

Wasif Ali Khan, a scientist at the renowned icddr,b clinical research institute in Dhaka remarked, "This breakthrough signifies a crucial moment in HCC detection. The potential to save lives is tremendous, reflecting our team's unwavering commitment to advance cancer diagnostics and improving the health of the Bangladesh population. We are planning to launch this test in Bangladesh to reduce the burden of HCC and improve the health of the people of Bangladesh."

For more information about this study, please contact Prof. Moshe Szyf moshe.szyf@hkgepitherapeutics.com and Dr. David Cheishvili david.cheishvili@hkgepitherapeutics.com Dr. Wasif Khan wakhan@icddrb.org and Professor Dr. Mamun Al Mahtab shwapnil@agni.com.

About HKG Epitherapeutics Ltd.:
HKG Epitherapeutics Ltd. is a biotech firm dedicated to developing a platform of cutting-edge early detection tools based on epigenetic technology and advanced next-generation sequencing. The company, led by renowned epigeneticist Professor Moshe Szyf, is leading epigenetic research with the goal of enhancing cancer diagnosis, treatment, and patient outcomes. Find out more about us at https://hkgepitherapeutics.com/ or follow us on twitter https://twitter.com/Epi_Aging, Facebook https://www.facebook.com/epitherapeutics/ or Linkedin https://www.linkedin.com/feed/update/urn:li:activity:7072285976370245632/.

About icddr,b:
icddr,b (International Centre for Diarrhoeal Disease Research, Bangladesh) is an international public health research institute based in Bangladesh. Established in 1960, icddr,b has been at the forefront of discovering low cost solutions to key public health challenges facing people in poverty and provides robust evidence of their effectiveness at a large scale. Instrumental in the development of oral rehydration therapy (ORT), icddr,b's research in this area has been credited with saving more than 70 million lives worldwide. From an early focus on cholera and diarrhoeal disease, the scope has expanded to encompass most of the global public health challenges.

Find out more at www.icddrb.org or follow us on Twitter @icddr_b

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