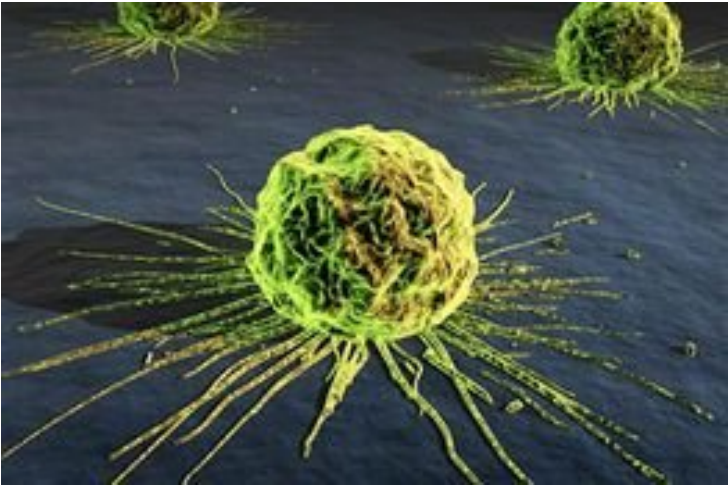


Clearbridge's new system rapidly isolates cancer cells

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Singapore: Clearbridge BioMedics has launched its next generation ClearCell FX System, which has been developed for in vitro diagnostic applications. The new ClearCell FX System is based on inertial focusing microfluidics and is label-free. The ClearCell FX System will allow physicians and researchers to rapidly isolate Circulating Tumor Cells (CTCs) for further diagnostic testing and even cell culture, paving the way for the use of CTCs in treatment monitoring and personalized medicine.

Circulating Tumor Cells (CTCs) in a patient's blood sample are separated and isolated using inertial focusing spiral microfluidics in the single-use CTChip FR. The larger and denser CTCs are separated from the other blood cells within the spiral biochip due to biomechanical differences and are subsequently focused into an enriched CTC stream. These cell streams are then channelled and collected in a tube and can be readily used for downstream molecular analysis, such as mutation testing for targeted therapies. These retrieved cancer cells remain wholly intact and viable due to the label-free separation process used.

Clearbridge BioMedics has engaged leading product development firm Cambridge Consultants to build the ClearCell FX system. Clearbridge BioMedics worked with Cambridge Consultants to design the ClearCell FX System to be a robust platform, suitable for both research and diagnostic applications.

"The technology for the ClearCell FX system was developed by Clearbridge BioMedics in collaboration with the National University of Singapore (NUS) and the Singapore-MIT Alliance for Research and Technology (SMART) center. Our new system will subsequently be undergoing regulatory approval in the US and Europe. Once approved, it will be one of the world's first label-free CTC enrichment systems for diagnostic use. Clearbridge BioMedics believes this system will be an ideal companion diagnostic system that complements various cancer therapies," said Mr Johnson Chen, co-founder and MD, Clearbridge BioMedics.

Mr John Pritchard, head, diagnostics, Cambridge Consultants, said that, "This has been a collaborative merging of our extensive experience in diagnostic device development and Clearbridge BioMedics' expertise in cancer research and diagnostics and it's led to breakthrough technology that will have a huge impact on a lot of people's lives. Our systems engineering approach, coupled with our skills in fluidics, software and compliance, has enabled us to work quickly and efficiently with Clearbridge BioMedics even though we are thousands of miles apart."