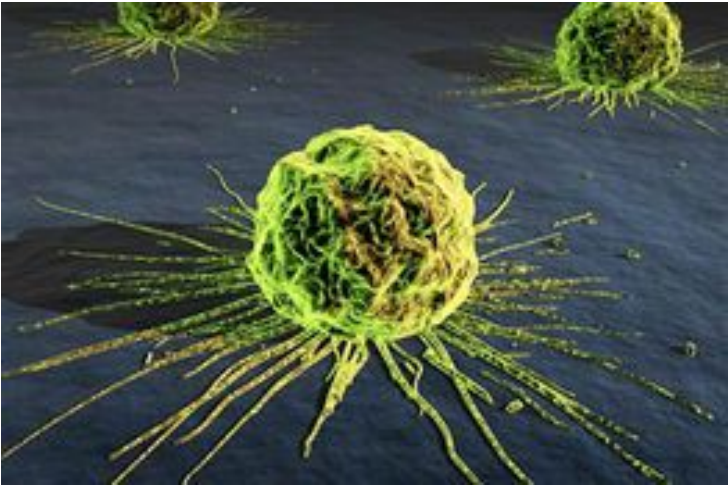


## Clearbridge BioMedics reveals ClearCell FX System

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**Singapore:** Clearbridge BioMedics revealed its next generation ClearCell FX System, which is developed for in-vitro diagnostic applications. The new ClearCell FX System is based on inertial focusing microfluidics and is label-free. Circulating tumor cells (CTCs) in a patient's blood sample are separated and isolated using this novel 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 channeled 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. The ClearCell FX System will allow physicians and researchers to rapidly isolate CTCs for further diagnostic testing and even cell culture, paving the way for the use of CTCs in treatment monitoring and personalized medicine.

"The technology for the ClearCell FX system was developed by Clearbridge BioMedics in collaboration with the National University of Singapore 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 managing director, Clearbridge BioMedics.

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.

John Pritchard, head of Diagnostics at Cambridge Consultants, said: "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."

Set up in late 2009, Clearbridge BioMedics is a spin-off company from the National University of Singapore. The company's first generation ClearCell System, which was launched for the cancer research market in 2011, is one of the first non-

biomarker based systems commercially available to detect, isolate and retrieve CTCs from blood. In early 2013, Clearbridge BioMedics raised \$7.2 million as its Series B funding. This injection of funds is being used to develop this next generation ClearCell System. Clearbridge BioMedics is ISO13485 certified for the development of cell-based in-vitro diagnostic devices.