

Japanese firms to develop novel AI-based cell analyzers and testing techniques

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Sysmex and ThinkCyte inks on Joint development and capital alliance



Sysmex Corporation and ThinkCyte, Inc. have signed a joint development and investment agreements during May 2021 for the commercialization of an AI-based cell analysis technology.

Sysmex has been proactively acquiring technologies for analyzing cells, genes, and proteins with a high degree of precision and sensitivity. Among those technologies, a cell analysis platform has been applied to a diverse range of Sysmex products. Sysmex's current focus in this field is to develop technology that precisely analyzes cells using various kinds of information such as cell function and responsiveness, in addition to seeking greater speed in cell analysis.

ThinkCyte possesses "Ghost Cytometry technology," which analyzes morphological information of cells in a fast and simplified process. Compared to the conventional flow cytometry (FCM) technique this method enables users to classify each cell based on its detailed morphological information with respect to its characteristics and functions. This high-resolution analysis will enable highly effective determination of clinical conditions using bodily fluids such as blood, increase accuracy in a wide range of cell-based diagnosis, and lead to better-personalized healthcare.

As a result of ongoing collaborative research between Sysmex and ThinkCyte increasing the feasibility of applying Ghost Cytometry technology to diagnostic techniques with high clinical value, the two companies signed an MoU to start full-fledged joint development of the novel AI-based cell analysis technology.

Furthermore, joint development efforts will help to commercialize cell analyzers and testing techniques using Ghost Cytometry technology for cell analysis (including research purposes) in the field of *in vitro* diagnostics (IVD). Meanwhile, Sysmex agreed on an equity investment in ThinkCyte on May 11, 2021, which is expected to allow the two companies to reinforce their robust partnership.

Through the alliance, Sysmex and ThinkCyte aim to develop novel cell analysis technology and testing techniques by integrating Sysmex's wealth of knowledge and expertise in IVD and ThinkCyte's proprietary Ghost Cytometry technology, thus contributing to the advancement and evolution of healthcare the world over.