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ThinkCyte K.K.
Axcelead Drug Discovery Partners, Inc.

ThinkCyte and Axcelead DDP collaborate to advance
novel phenotypic screening methods

Tokyo and Fujisawa, Japan. December 27, 2022: ThinkCyte and Axcelead Drug Discovery Partners (DDP) announced a research partnership focused on developing new approaches to screen candidate drugs for treating human diseases. The partnership will combine Ghost Cytometry[1], ThinkCyte's AI-driven cell characterization and sorting technology, with Axcelead DDP's phenotypic screening techniques[2] and its diverse compound library of over 1.5 million candidate drugs to evaluate how these compounds change cellular phenotypes (their form and function) in a disease setting.

Phenotypic drug discovery is a powerful method used in early therapeutic development and looks more broadly at how candidate drugs affect diseased cells compared to conventional target-based approaches. By combining Axcelead DDP's world-class compound library and deep expertise in phenotypic screening with Ghost Cytometry as a new high-throughput way to identify phenotypic changes in living cells without any labels, the partnership aims to develop a novel phenotypic drug discovery platform that can identify hit compounds that may be missed by standard drug screening approaches with bias from cell staining.

"We are very excited about the research partnership with Axcelead DDP, a leader in the field of drug discovery screening," said Waichiro Katsuda, CEO at ThinkCyte. "By combining Axcelead DDP's extensive drug discovery experience and infrastructure, including its compound library, with our novel cell-based phenotypic screening technology, we aim to further advance the field of phenotypic drug discovery and provide a unique technology solution that will help find new drugs faster."

"Through this unique research partnership with ThinkCyte, we are able to diversify our drug discovery screening capabilities and increase the potential to identify novel hit compounds," said Yoshinori Ikeura, CEO at Axcelead DDP. "By taking a high-throughput approach that looks at the effects of candidate drugs on cells in a more holistic way, we aim to contribute to the discovery of innovative drugs that address areas of high unmet medical needs."

[1] Ghost Cytometry: AI-driven, image-based high-speed cell analysis technology

[2] Phenotypic Screening: Non-targeted screening to identify molecules which induce morphological and functional changes in cells

About ThinkCyte K.K.

ThinkCyte, founded in 2016 with offices in Tokyo, Japan and San Carlos, California is a biotechnology company that develops innovative scientific instruments based on integrated, multidisciplinary technologies to enable life science research, diagnostics, and therapeutic development. The company pioneered Ghost Cytometry, a proprietary AI-based, label-free cell sorting technology and partners with major global biopharmaceutical companies and leading academic research institutes to further drive groundbreaking research. For more information, please visit www.thinkcyte.com.

To learn more about research partnerships or other partnering opportunities with ThinkCyte, contact contact@thinkcyte.com.

About Axcelead Drug Discovery Partners, Inc.

Launched in July 2017, Axcelead DDP is Japan's first integrated drug discovery solutions provider, having taken over the drug discovery capabilities of Takeda Pharmaceutical Company Limited. The company provides integrated services, from the discovery of drug targets to the optimization of small- and medium-molecule drug candidates, in which the company has particular expertise. Axcelead also helps bridge the gap to clinical development.

For more information, please visit https://www.axcelead.com/en/