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Singapore to develop next generation cell-based therapy for diabetes treatment

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BetaLife has acquired the rights to human iPSC technology and cell lines from A*STAR



Singapore-based startup BetaLife is collaborating with the Agency for Science, Technology and Research (A*STAR) to accelerate the development of next generation cell-based therapy for diabetes. BetaLife, a stem cell therapy company focused on developing regenerative medicine for diabetes, has acquired the rights to human induced Pluripotent Stem Cell (iPSC) technology from A*STAR.

This technology enables the generation of iPSCs, which are cells that have similar properties to embryonic stem cells, to provide a renewable and sustainable human stem cell resource to generate any mature cell type of interest. Such iPSC-derived cells can potentially be used to regenerate or replace defective tissues in human patients.

According to the International Diabetes Federation, over 530 million people worldwide live with diabetes, and human iPSC-based technology could potentially provide a curative treatment for this chronic disease.

To accelerate development efforts, BetaLife and A*STAR are embarking on a research collaboration, with the goal of generating highly curated human iPSC banks that capture the genetic diversity of Asian ethnicities, and develop human iPSC-derived pancreatic islet cells. This collaboration combines A*STAR's capabilities in stem cells and diabetes biology with BetaLife's infrastructure and proprietary platforms for the scale up and therapeutic development of an off-the-shelf human iPSC-based therapy.