

Hong Kong-based Insilico Medicine focuses on discovery of potential therapeutics for Cystinosis

10 March 2022 | News

Insilico Medicine enters research collaboration with the University of Zurich to apply Insilico's generative Artificial Intelligence platform for the discovery of potential therapeutics for Cystinosis



The MIKADO group, a translational team at the University of Zurich (UZH) focused on generating evidence-driven insights to understand and treat rare inherited kidney diseases, and Hong Kong-based Insilico Medicine, an end-to-end Artificial Intelligence (AI)-driven drug discovery company, have announced a research and development collaboration designed to accelerate the discovery of transformative novel therapeutics for cystinosis. The duration of the initial research collaboration will be one year.

Cystinosis is a rare genetic disease affecting 1 in 100,000-200,000 live births and poses a lifelong risk to those affected. Cystinosis slowly destroys the body's organs including the kidneys, eyes, thyroid, muscles, liver, pancreas, gonads, and brain. There are currently no curative treatments for cystinosis.

Specifically, the MIKADO group will leverage its multi-omics databank obtained from preclinical models and cystinosis-based cell models by using Insilico's comprehensive novel target discovery AI platform PandaOmics to identify cellular and molecular pathways that drive life-threatening complications in cystinosis patients.

The MIKADO group will analyse disease-relevant targetable pathways and utilize Insilico's proprietary algorithms to generate libraries of small molecule compounds that are expected to be validated in preclinical models and cystinosis cell systems using disease-relevant screening technologies developed by the MIKADO group at the UZH.