

Insilico announces AI-powered drug discovery collaboration with Janssen

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Insilico Medicine will demonstrate the discovery process and detailed platform capabilities



Hong Kong-based Insilico Medicine, a leader in deep generative reinforcement learning for target discovery, small molecule generation, and prediction of clinical trial outcomes, has announced that it has entered into a multi-target drug discovery agreement with Janssen Pharmaceutical N.V. (Janssen), one of the Janssen Pharmaceutical Companies of Johnson & Johnson. The collaboration was facilitated by Johnson & Johnson Innovation LLC.

Under the terms of the agreement, Insilico Medicine will design small-molecule hits with the defined properties for several targets nominated by Janssen and to receive upfront and milestone payments. Insilico Medicine will demonstrate the discovery process and detailed platform capabilities.

Since 2015 Insilico Medicine pioneered the field of generative adversarial networks and reinforcement learning for generative chemistry and generative biology and published multiple research publications and patents in the area including proof-of-concept studies with experimental validation. In 2020 it unveiled the Chemistry42 generative chemistry operating system and made first on-site deployments with the big pharmaceutical companies and drug discovery partnerships.

Insilico Medicine develops software that leverages generative models, reinforcement learning (RL), and other modern machine learning techniques for the generation of new molecular structures with specific properties. Insilico Medicine also develops software for the generation of synthetic biological data, target identification, and the prediction of clinical trials outcomes. The company integrates two business models; providing AI-powered drug discovery services and software through its Pharma.AI platform and developing its own pipeline of preclinical programs. The preclinical program is the result of pursuing novel drug targets and novel molecules discovered through its platforms.