Healx's AI-platform to create world's most detailed rare disease biomedical knowledge graph

10 August 2021 | News

Healx launches AI-powered drug discovery platform "Healnet" with Japan's Ono Pharma, to discovers newtherapies for rare diseases by integrating data from multiple sources into a biomedical knowledge graph

Healx, the AI-powered, UK-founded global drug discovery company, has entered a partnership with Japan's Ono Pharmaceutical Co., Ltd., a global leader in R&D-orientated drug discovery. The collaboration will leverage Healx's innovative indication expansion technology to identify new disease indications with high unmet needs that could be treated by Ono's proprietary assets.

Healx is an expert in the field of AI-powered drug discovery and development and have built a suite of frontier technologies to rapidly identify and progress new therapies for some of the 95% of rare diseases currently without an approved treatment. At the core of Healx's technological capabilities is their AI drug discovery platform, Healnet.

Healnet integrates data from multiple sources – including biomedical research, patient insight, scientific literature and curated proprietary information – to form the world's most detailed rare disease biomedical knowledge graph. This graph is analyzed by Healx's cutting-edge AI methods to pinpoint non-obvious disease-compound relationships with the highest probability of success. Critically, these models are trained to discover novel disease biology and modes of action, without being limited to a single biological target.

Under the terms of the partnership agreement, Healx will deploy Healnet to find multiple new therapeutic indications for Ono's proprietary assets. Healx will also utilise its considerable drug discovery and development expertise to provide Ono with a clear rationale for the predictions as well as a roadmap for preclinical validation of the assets. Ono will then select diseases from Healx's therapeutic recommendations and progress them towards further validation studies.

This research collaboration will expand the precision medicine and drug discovery capabilities of Healx by increasing Healnet's coverage of common disease signatures and enhancing the power and reach of its treatment predictions for conditions with high unmet medical needs.

Toichi Takino, Member of the Board and Senior Executive Officer / Executive Director of Discovery & Research at Ono Pharmaceutical Co., Ltd., said: "We extremely appreciate Healx's AI technology, Healnet, for discovering new therapies that meet unmet medical needs in rare diseases. By combining the profiling data of new drug candidates and Healx's AI

technology, we expect to increase the efficiency of finding clinical indications with high prediction accuracy and identifying new drug candidates."