

Cyclica and Cures Within Reach announce a joint drug repurposing study

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- Dr. Bruce Bloom, President & Chief Science Officer of Cures Within Reach.

Challenge

Cyclica Inc. and Cures Within Reach are pleased to announce the successful conclusion of a drug repurposing study designed to identify potentially successful drug candidates in the treatment of Idiopathic Pulmonary Fibrosis (IPF).

Researchers at Cures Within Reach have identified certain drug candidates with the potential to treat IPF, a progressive and severe lung disease. Cures Within Reach asked Cyclica to assist in prioritizing research efforts by providing a quantitative analysis of the potential of certain compounds considered to be possible repurposing candidates for the treatment of IPF. Cyclica’s Ligand Express™ platform, a patented computational bioinformatics and systems biology algorithm, was employed to identify potential drug-protein interactions by ‘docking’ a drug to all structurally-known proteins. Once these protein docking sites were identified, Cyclica then uses systems biology data and analytical tools to better understand how these drug repurposing candidates impact the human body and, more specifically, how these candidates might be repurposed to treat IPF.



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- Dr. Bruce Bloom, President & Chief Science Officer of CWR.

Cyclica ultimately identified three drugs as strong repurposing candidates. “We are very pleased with the information provided by Cyclica’s novel approach. Our scientific team used these results to evaluate the effectiveness of Cyclica’s Ligand Express™, as well as to focus our resources on drug repurposing candidates with a higher probability of success”, said Dr. Bruce Bloom, President & Chief Science Officer of Cures Within Reach.



“We are pleased with the results we were able to generate for Cures Within Reach. Our technology was used to address a costly and time-consuming issue facing drug developers and organizations such as Cure Within Reach – where to focus capital investment as well as scientific resources to facilitate the likelihood of developing successful therapeutics for IPF and other disease targets”, stated Paul Angelico, President & CEO of Cyclica.

Cures Within Reach and Cyclica will continue to work together to identify novel treatment compounds and repurposing drug candidates for diseases for which no efficacious therapy currently exists. The details of this partnership have not been publically disclosed.

ABOUT CURES WITHIN REACH

Cures Within Reach (www.cureswithinreach.org), a non-profit organization based in Skokie, Illinois, works to catalyze repurposing research, a methodology that tests approved drugs’ ability to treat diseases other than their currently approved usage, to quickly and affordably improve patient lives by facilitating a more rapid development of new treatments for patients with limited or no existing therapeutic options. Cures Within Reach accomplishes this through collaborations that connect researchers and funding, by facilitating crowd sourcing and community, and by identifying alternative financing models and incentives.

Cures Within Reach’s repurposing research projects have generated 13 “new” treatments making direct patient impact in the following diseases through off-label use in clinical practice or through a commercialization track: autoimmune lymphoproliferative syndrome, familial dysautonomia, Types 1 and 2 diabetes, lung cancer, non-Hodgkin’s lymphoma, multiple sclerosis, Parkinson’s disease, prostate cancer, myelodysplastic syndrome and 4 additional pediatric auto-immune diseases. Cures Within Reach has a portfolio of current projects poised to make additional impact in pediatric delirium, pediatric brain tumors, adult recurrent glioblastoma, chronic limb ischemia, fecal transplants, heart failure, lung cancer, ascites, melanoma, autism, Alzheimer’s disease, prematurity, pediatric leukemia, suicide/depression, and polycystic kidney disease.

ABOUT CYCLICA INC.

Cyclica Inc. (www.cyclicarx.com), headquartered in Toronto, Ontario Canada, and with US offices in Cambridge, Massachusetts, is a technology company using computational methods and analytics to improve drug discovery and development by reducing complex Big Data into high utility insights. These pre-clinical insights/predictions improve current attrition rates of lead therapeutic compounds, and improve patient outcomes with fewer side effects. Cyclica has created vast stores of proprietary, pre-computed data that is useful for analyzing cross-reactivity of molecules to assess safety and efficacy. As such, Cyclica risk adjusts development pipelines, and provides actionable analysis to help guide pharmaceutical development strategies.