Current Agreements

Dealdoc

Collaboration agreement for treating atherosclerosis

twoXAR
The University of Chicago Medicine

May 25 2016

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Companies:	twoXAR The University of Chicago Medicine
Announcement date:	May 25 2016
Deal value, US$m:	n/d

Details

Announcement date:	May 25 2016
Industry sectors:	Academic Diagnostic Research tools
Therapy areas:	Cardiovascular » Atherosclerosis
Technology types:	Small molecules Software tools
Deal components:	Collaborative R&D

Financials

Deal value, US$m:	n/d

Termsheet

twoXAR announced a collaboration with the Department of Medicine at the University of Chicago focused on the identification and investigation of potential new medicines for treating atherosclerosis.

As part of this collaboration, twoXAR will use its disease-to-candidate prediction software to integrate and analyze diverse biomedical data sets to predict efficacious drug candidates for in vivo testing.

Researchers at the University of Chicago will test the effectiveness of predicted drug candidates in promoting vascular endothelial health and in preventing atherosclerosis.

Press Release

PALO ALTO, Calif.--(BUSINESS WIRE)--twoXAR, Inc., a company dedicated to improving health through computation, today announced a collaboration with the Department of Medicine at the University of Chicago focused on the identification and investigation of potential new medicines for treating atherosclerosis. As part of this collaboration, twoXAR will use its disease-to-candidate prediction software to integrate and analyze diverse biomedical data sets to predict efficacious drug candidates for in vivo testing.

“Multi-disciplinary approaches, including those driven by technology, have the potential to elucidate novel disease mechanisms and further support the development of new medicines.”

Researchers at the University of Chicago will test the effectiveness of predicted drug candidates in promoting vascular endothelial health and in preventing atherosclerosis. Cultured endothelial cells treated with the predicted molecules will be stimulated by tumor necrosis factor alpha (TNFa) in vitro followed by in vivo testing in animal models of atherosclerosis. twoXAR will provide scientific expertise to assist the Department of Medicine at the University of Chicago in the selection and delivery of candidates for pre-clinical study.

“Better medicines that not only address the symptoms of atherosclerosis, but help prevent it all together, represents an important opportunity to help millions of people around the world who suffer from the health effects of arterial plaque buildup,” said Yun Fang, PhD, Assistant Professor, Department of Medicine, University of Chicago. “Multi-disciplinary approaches, including those driven by technology, have the potential to elucidate novel disease mechanisms and further support the development of new medicines.”

Atherosclerosis is a narrowing of the arteries caused by plague buildup. Atherosclerosis often has no symptoms until a plaque ruptures or the buildup is severe enough to block blood flow. Coronary artery disease (CAD) arising from atherosclerosis is the leading cause of mortality in the U.S., killing over 370,000 people annually.

“We are very excited about this collaboration which will further validate the power of our software-driven approach in accelerating the discovery of new medicines for diseases like CAD which affects millions of people worldwide,” said Andrew A. Radin, co-founder and CEO of twoXAR. “Arriving at lead compounds to carry forward in preclinical studies can require years of research and millions of dollars. Within hours, we were able to identify 10 leads with acceptable safety profiles and literature evidence for efficacy to carry forward in pre-clinical testing. Additionally, our disease models are helping reveal new information about the molecular mechanisms underlying arteriosclerosis.”

twoXAR has developed patent-pending algorithms that enable it to find unanticipated associations between disease and drug candidates orders of magnitudes faster than wet lab-based approaches. The company’s integrative biomedical software platform rapidly evaluates massive public and proprietary datasets to identify and rank high probability disease-to-candidate matches. These matches can then be used to prioritize existing candidates, perform targeted searches and identify novel drug candidates for further preclinical and clinical testing. The platform is disease agnostic and has been tested on more than 40 conditions to date in therapeutic areas including autoimmune, oncologic, and neurologic disorders.

About twoXAR

Founded in 2014, twoXAR is transforming how large integrated biomedical datasets are harnessed to accelerate disease-to-candidate identification in new drug development. Based in Palo Alto, California, the twoXAR team includes experts in drug discovery, biomedical informatics, computational biology, data science, software development and preclinical validation. For more information please visit, www.twoXAR.com.

Filing Data

Not available.

Contract

Not available.