Rexahn Pharmaceuticals Announces Publication of Study on Neuroprotective Effects of Clavulanic Acid

Clavulanic Acid Demonstrated Neuroprotective Effects in Animal Models of Neurodegenerative Disease

ROCKVILLE, Md.--(BUSINESS WIRE)--Rexahn Pharmaceuticals, Inc. (NYSE Amex: RNN), a clinical stage pharmaceutical company developing and commercializing potential best in class oncology and CNS therapeutics, today announced the publication of a research article in Drug Development Research (71:351-357, 2010) on the neuroprotective effects of clavulanic acid, the active pharmaceutical ingredient of Serdaxin(R), Rexahn's lead CNS therapeutic currently in Phase II clinical trials. The article demonstrates that clavulanic acid protects neurons from neurotoxin-induced brain damage in animal models of human neurodegenerative disease.

In the study, when administered to rodents that were exposed to neurotoxin kainic acid or 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP), clavulanic acid protected neurons in the hippocampus and dopaminergic neurons in the substantia nigra, regions of the brain that are critical in Alzheimer's and Parkinson's disease, respectively. These results indicate that clavulanic acid may possess potent neuroprotective effects and warrants further investigation of its therapeutic use in Parkinson's disease (PD) and Alzheimer's disease (AD).

"This is a highly encouraging study that establishes the neuroprotective properties of clavulanic acid, the active ingredient in our lead CNS drug candidate, Serdaxin," said Chang Ahn, Chief Executive Officer of Rexahn. "This study adds another dimension to the clinical benefits of Serdaxin. The exciting neuronal protective properties of clavulanic acid make it a highly promising treatment for neuronal cell death diseases like Parkinson's and Alzheimer's."

Parkinson's disease afflicts five million people worldwide, and with the aging of the baby boom generation that population is expected to double by 2030. According to the Alzheimer's Association, by 2050 the number of Americans aged 65 and older with Alzheimer's is projected to reach between 11 million and 16 million -- unless medical breakthroughs identify ways to prevent or more effectively treat the disease.

Despite the clinical urgency, currently approved AD and PD drugs only provide symptomatic relief. Therefore, developing disease-modifying therapies is an imperative to control the impending epidemic of these diseases.
Dr. Ahn added, "Clavulanic acid has breakthrough potential of shielding the brain cell survival mechanisms, rather than fighting one-by-one the multitude of triggers that can activate the cell death mechanisms common in Alzheimer's and Parkinson's. With at least five major triggers identified for Alzheimer's disease and three major dysfunctioning mechanisms for Parkinson's disease, neuronal protection shown by clavulanic acid may present a better and stronger defense than attempting to intercept each incoming threat."

About Rexahn Pharmaceuticals, Inc.

Rexahn Pharmaceuticals is a clinical stage pharmaceutical company dedicated to developing and commercializing first in class and market leading therapeutics for cancer, CNS disorders, sexual dysfunction and other unmet medical needs. Rexahn currently has three drug candidates in Phase II clinical trials, Archexin(R), Serdaxin(R), and Zoraxel(TM) - all potential best in class therapeutics - and a robust pipeline of preclinical compounds to treat multiple cancers and CNS disorders. Rexahn also operates key R&D programs of nano-medicines, 3D-GOLD, and TIMES drug discovery platforms. For more information, please visit www.rexahn.com.

Safe Harbor

To the extent any statements made in this press release deal with information that is not historical, these are forward-looking statements under the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about Rexahn's plans, objectives, expectations and intentions with respect to future operations and products and other statements identified by words such as "will," "potential," "could," "can," "believe," "intends," "continue," "plans," "expects," "anticipates," "estimates," "may," other words of similar meaning or the use of future dates. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause Rexahn's actual results to be materially different than those expressed in or implied by Rexahn's forward-looking statements. For Rexahn, particular uncertainties and risks include, among others, the difficulty of developing pharmaceutical products, obtaining regulatory and other approvals and achieving market acceptance; the marketing success of Rexahn's licensees or sublicensees; the success of clinical testing; and Rexahn's need for and ability to obtain additional financing. More detailed information on these and additional factors that could affect Rexahn's actual results are described in Rexahn's filings with the Securities and Exchange Commission, including its most recent annual report on Form 10-K and subsequent quarterly reports on Form 10-Q. All forward-looking statements in this news release speak only as of the date of this news release. Rexahn undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Source: Rexahn Pharmaceuticals, Inc.