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Rexahn Reports Positive Top-line Phase IIa Data for SerdaxinTM in Patients with Major Depressive Disorder (MDD)

ROCKVILLE, Md.--(BUSINESS WIRE)-- Rexahn Pharmaceuticals, Inc. (NYSE Amex: RNN), a clinical stage biopharmaceutical company focused on developing multi-indication therapeutics in CNS and oncology, today announced top-line results from a Phase IIa clinical study of Serdaxin(TM), its major depressive disorder (MDD) drug candidate.

The randomized, double blind, placebo controlled and dose ranging study enrolled 77 patients and was conducted at multiple sites in the United States to assess the Serdaxin's safety and preliminary efficacy. The study showed that patients ages 18-65 with MDD exhibited clinically meaningful improvement over baseline in symptoms of depression as measured by the Montgomery-Asberg Depression Rating Scale (MADRS) total score. A marked clinical response was observed within two weeks in patients taking Serdaxin. Additionally, a significantly lower drop-out rate among patients taking Serdaxin compared with those patients taking a placebo was observed (<20% treatment groups vs. >50% placebo group).

Commenting on the findings, Dr. Robert A. Riesenberg, a nationally recognized psychiatrist and principal investigator at the Atlanta Center for Medical Research, said, "The wide range and consistency of Serdaxin's effects in this study suggests a new treatment paradigm for patients suffering from depression."

Dr. Riesenberg added, "Serdaxin exhibited an onset of action in fewer than two weeks, and was found to be safe and well tolerated with no appearance of serious side effects commonly linked to currently marketed antidepressant drugs."

"Serdaxin clinical trials continue to demonstrate unprecedented efficacy, much faster onset of action compared to currently marketed drugs, and lifestyle benefits for patients with major depressive disorder," said Dr. Chang Ahn, Rexahn's Chairman and Chief Executive Officer. "The continued strength of Serdaxin's clinical trial data further solidifies Serdaxin as a potentially new and preferable therapy in the standard of care for this disease."

Rexahn is currently in active discussions with multiple pharmaceutical companies with the goal of identifying a strategic partner to assist in the global development and planned commercialization of Serdaxin. Rexahn expects Phase IIb clinical development to be initiated in early 2010.

About Serdaxin^{TM}

Serdaxin^{TM} is a potential market leading CNS neuroprotective agent and antidepressant. Among lead indications, we are investigating Serdaxin for depression in Phase II clinical

trials. Serdaxin may achieve greater and broader therapeutic coverage, and appears to have no serious side effects such as nausea, vomiting, insomnia, weight gain, sexual dysfunction, cognitive deficit or motor impairment that are linked to existing antidepressant drugs. Serdaxin has well-established and excellent human safety. In preclinical studies, Serdaxin had onset of action in less than two days. Based on its novel mechanism as a dual serotonin and dopamine enhancer, it is a potential treatment for multiple CNS disorders where these neurotransmitters are depleted or implicated in CNS-based illnesses, such as Parkinson's disease (PD). Serdaxin has the potential to address both non-motor and motor events of PD by serving as a neuroprotective agent and addressing loss of dopaminergic neurons that lead to loss of control of movements; and further, enhancing serotonin and dopamine levels that are involved in depression and mood disorders. Rexahn has multiple clinical programs planned for Serdaxin including depression and anxiety disorders, Parkinson's disease, Alzheimer's and neurodegenerative illnesses, neuroprotection and biodefense uses.

About Rexahn Pharmaceuticals, Inc.

Rexahn Pharmaceuticals is a clinical stage pharmaceutical company dedicated to commercializing first in class and market leading therapeutics for cancer, disorders of the CNS, sexual dysfunction and other unmet medical needs. Rexahn currently has three drug candidates in Phase II clinical trials - Archexin(TM), Serdaxin(TM), 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 has key R&D programs in cancer nano-medicines and multi-target aimed ligands drug discovery technologies. For more information, please visit www.rexahn.com.

Safe Harbor

This press release contains forward-looking statements. Rexahn's actual results may differ materially from anticipated results, and expectations expressed in these forward-looking statements, as a result of certain risks and uncertainties, including Rexahn's lack of profitability, and the need for additional capital to operate its business to develop its product candidates; the risk that Rexahn's development efforts relating to its product candidates may not be successful; the possibility of being unable to obtain regulatory approval of Rexahn's product candidates; the risk that the results of clinical trials may not be completed on time or support Rexahn's claims; demand for and market acceptance of Rexahn's drug candidates; Rexahn's reliance on third party researchers and manufacturers to develop its product candidates; Rexahn's ability to develop and obtain protection of its intellectual property; and other risk factors set forth from time to time in our filings with the Securities and Exchange Commission. Rexahn assumes no obligation to update these forward-looking statements.

Source: Rexahn Pharmaceuticals, Inc.