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Rexahn Pharmaceuticals Completes Exploratory Phase I Clinical Study of RX-3117

Emerging anti-cancer agent meets primary endpoint of oral bioavailability in patients

ROCKVILLE, Md.--(BUSINESS WIRE)-- Rexahn Pharmaceuticals, Inc. (NYSE Amex: RNN), a clinical stage pharmaceutical company commercializing potential best in class oncology and CNS therapeutics, today announced that it has completed its exploratory Phase I clinical trial of RX-3117 in cancer patients. The phase I study, which was conducted in Europe, had the primary objective of determining the oral bioavailability of RX-3117 in humans. The study demonstrated that RX-3117 is bioavailable when delivered orally to patients. There were no adverse events reported in this study.

Dr. Chang Ahn, Chief Executive Officer, Rexahn, stated, "This first in human clinical study confirms good bioavailability of RX-3117, a key differentiator of this exciting anti-cancer agent. As a potential future alternative to market leading antimetabolites, RX-3117 can be given by oral administration to potentially treat solid tumors in the colon, lung, bladder and pancreas. With these positive results, Rexahn and Teva will move the RX-3117 development program into the next phase."

Prof. Dr. Godefridus J. (Frits) Peters, Head Laboratory Medical Oncology, VU University Medical Center, Amsterdam, the Netherlands, stated, "The results of this exploratory Phase I trial are really exciting and promising. RX-3117 has a novel and unique mechanism of action and different metabolism compared to other nucleoside analogs. Its oral bioavailability is unique for most antimetabolites and gives promise for future therapeutic development."

In September 2009, Rexahn entered into a commercialization and development agreement with Teva Pharmaceutical Industries Limited for RX-3117. Under the agreement, Rexahn is eligible to receive development, regulatory and sales milestone payments, as well as royalties on net sales worldwide.

About RX-3117

RX-3117 is a small molecule, new chemical entity (NCE) and nucleoside compound. Potential indications of RX-3117 are solid tumors including colon, lung and pancreatic cancers. In pre-clinical studies, RX-3117 demonstrated an ability to overcome cancer drug resistance in cancer cells, in particular, gemcitabine-resistance in human lung cancer cells. Rexahn has been awarded patents for RX-3117 in the United States, China, Europe, Korea, Mexico, and Japan.

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®, Serdaxin®, and Zoraxel™ 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.

Rexahn Pharmaceuticals, Inc.

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