



Corsair Pharma and United Therapeutics Enter into Strategic Collaboration to Advance Novel Treprostinil Prodrugs

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SOUTH SAN FRANCISCO, Calif. and SILVER SPRING, Md., Jan. 3, 2018 /PRNewswire/ -- United Therapeutics Corporation (NASDAQ: UTHR), a leading biotechnology company focused on development of therapies for the treatment of pulmonary arterial hypertension (PAH), and Corsair Pharma, Inc., a private biopharmaceutical company developing a transdermal treprostinil prodrug, today announced that they entered into an exclusive license agreement for Corsair's portfolio of patents covering treprostinil prodrugs as well as an equity investment by United Therapeutics in Corsair.

Under the terms of the license agreement, United Therapeutics has been granted an exclusive license to Corsair's intellectual property for the development of treprostinil prodrug formulations. Corsair will continue development of transdermal treprostinil prodrug formulations for PAH. Corsair received upfront consideration, and is entitled to royalty payments based on the commercialization of treprostinil prodrug products by United Therapeutics that are covered by Corsair's patents.

In addition, United Therapeutics made a minority equity investment in Corsair that includes an option to acquire the remaining outstanding shares of Corsair. As part of this collaboration, United Therapeutics and Corsair will collaborate and support each other's development activities. United Therapeutics and Corsair are committed to the development of novel compounds that will allow more PAH patients to benefit from treprostinil by eliminating as far as possible, and as soon as possible, any pain, side effects, or safety risks associated with its delivery.

David Collier, CEO of Corsair Pharma and Velocity Pharmaceutical Development, said, "We are excited to be working with United Therapeutics to develop prodrugs of treprostinil. Both of our companies are committed to developing therapies that meaningfully improve the lives of patients suffering from PAH."

This collaboration is intended to support the success of United Therapeutics' RemoPro™ product, which is designed to bring subcutaneous treprostinil therapy to PAH patients without the infusion site pain currently associated with subcutaneous treprostinil therapy. In addition, Corsair's transdermal treprostinil patch provides another potential delivery method for the widely varied population of PAH patients, many of whom have great difficulty working with continuous infusion pumps 24-hours a day, 7 days per week.

Locust Walk acted as the exclusive financial advisor to Corsair in the transaction.

About Pulmonary Arterial Hypertension (PAH) and Treprostinil

PAH is a serious, progressive and ultimately fatal disease that affects the blood vessels, lungs and heart, causing shortness of breath, markedly reducing quality of life. Current treatments offer some symptomatic relief and some have been shown to delay disease progression, but there is no known cure.

PAH is an orphan disease that affects an estimated 500,000 people globally. In the United States, approximately 35,000-40,000 patients are currently under treatment. Multiple drug therapies target three pathways: prostacyclin, endothelin receptors, and nitric oxide. Combination therapy is increasingly used.

Patients with PAH may not produce enough prostacyclin, a natural substance that keeps blood vessels open and working properly. This makes it more difficult for the body to get the oxygen it needs. Treprostinil is a prostacyclin analogue marketed by United Therapeutics in the United States for use via subcutaneous, intravenous, inhaled and oral tablet routes of administration. United Therapeutics continues to develop treprostinil for use in new indications, through new formulations, and with new delivery devices.

Prodrug formulations of treprostinil are intended to enable subcutaneous delivery without the infusion site pain currently associated with subcutaneous treprostinil. A prodrug is a metabolically inactive compound that, after administration, metabolizes into an active compound. These prodrugs are intended to be inactive in the subcutaneous tissue, which should eliminate site pain. Once the prodrug is absorbed into the blood, it metabolizes into treprostinil.

About United Therapeutics

United Therapeutics Corporation is a biotechnology company focused on the development and commercialization of innovative products to address the unmet medical needs of patients with chronic and life-threatening conditions. [UTHR-g]

About Corsair

Corsair Pharma, Inc. is a development stage biotechnology company operating as a portfolio company of Velocity Pharmaceutical Development, LLC and is focused on the development of novel prodrugs of treprostinil to treat patients with PAH using a once-daily transdermal patch.

About Velocity Pharmaceutical Development, LLC

Velocity Pharmaceutical Development, LLC (VPD) is dedicated to rapidly advancing promising drug candidates to clinical proof of concept using a highly virtual management model. VPD is staffed by a seasoned team of clinical drug developers with expertise identifying attractive drug candidates, target markets, and designing and managing outsourced clinical trials. This expert team manages multiple single asset companies to remove the costly overhead and misaligned incentives present in traditional biotechnology company structures. The company is located in South San Francisco, California. More information is available at www.vpd.net.

Forward-looking Statements

Statements included in this press release that are not historical in nature are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, among others, statements regarding the efforts by Corsair and United Therapeutics to develop treprostinil-based prodrug products, and the capability of those products to reduce or eliminate site pain for patients. These forward-looking statements are subject to certain risks and uncertainties, such as those described in United Therapeutics' periodic and other reports filed with the Securities and Exchange Commission that could cause actual results to differ materially from anticipated results. Such forward-looking statements are qualified by the cautionary statements, cautionary language and risk factors set forth in United Therapeutics' periodic reports and documents filed with the Securities and Exchange Commission, including United Therapeutics' most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. United Therapeutics and Corsair claim the

protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995 for forward-looking statements. United Therapeutics and Corsair are providing this information as of January 3, 2017, and assume no obligation to update or revise the information contained in this press release whether as a result of new information, future events or any other reason.

REMOPRO is a trademark of United Therapeutics Corporation.

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SOURCE United Therapeutics Corporation; Corsair Pharma, Inc.

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