

September 20, 2018



## **Corbus Pharmaceuticals Expands Target Indications by Adding More Than 600 Compounds Focused on the Endocannabinoid System from Jenrin Discovery; Includes CRB-4001 with Planned NIH-Supported Phase 2 Study**

- Management to host conference call and webcast this morning at 8:30 a.m. EDT
- Jenrin's extensive pipeline positions Corbus to be a leader in the treatment of inflammatory and fibrotic diseases with small molecules specifically designed to target the endocannabinoid system
- Pipeline includes candidate CRB-4001, a CB1 inverse agonist that is scheduled to enter a Phase 1 study in 2019 followed by a NIH-supported Phase 2 study
- Transaction is expected to have a minimal impact on Corbus' cash flow through the end of 2019 and provides the Company with expanded strategic optionality with unencumbered commercial rights in key geographies

Norwood, MA, Sept. 20, 2018 (GLOBE NEWSWIRE) -- Corbus Pharmaceuticals Holdings, Inc. (NASDAQ: CRBP) ("Corbus" or the "Company") announced today that it has licensed the exclusive worldwide rights to develop, manufacture and market drug candidates from more than 600 compounds targeting the endocannabinoid system from Jenrin Discovery LLC ("Jenrin"). The pipeline includes CRB-4001, Jenrin's 2<sup>nd</sup> generation, peripherally-restricted, CB1 inverse agonist targeting liver, lung, heart and kidney fibrotic diseases. The current portfolio for CRB-4001 includes multiple issued and pending patents.

"Securing this extensive portfolio of endocannabinoid system-targeting compounds strongly complements our existing Phase 3 lead drug lenabasum," said Yuval Cohen, Ph.D., Chief Executive Officer of Corbus. "Our now expanded pipeline is built on robust underlying science based on the endocannabinoid system as a master regulator of inflammation and fibrosis in the body. This transaction is a logical next step in our vision to be a leader in inflammatory and fibrotic diseases by targeting the endocannabinoid system with what we believe is one of the industry's most innovative pipelines. Plans are underway to advance one of the pipeline candidates, CRB-4001, into a Phase 1 safety study before commencing a National Institutes of Health ("NIH")-funded first-in-patient Phase 2 study."

Bob Chorvat, Ph.D. Chief Scientific Officer of Jenrin, stated, "Jenrin is delighted with this

transaction. Corbus shares our vision for the potential of treating a variety of diseases through cannabinoid receptor interaction and importantly has the expertise to pursue promising drug candidates with this mechanism of action.”

“As we have demonstrated with lenabasum, rational drug design of synthetic compounds can be applied to target the endocannabinoid system in specific ways, with the potential to optimize clinical benefits and reduce side effects,” commented Mark Tepper, Ph.D., President and Chief Scientific Officer of Corbus. “Beyond lenabasum and CRB-4001, Corbus now has a pipeline that we believe will support the advancement of one to two new drug candidates into clinical testing each year starting in 2020.”

### **CRB-4001 Planned to Enter Phase 1 in 2019 and has Phase 2 Funding Commitment from NIH**

CRB-4001 was developed in collaboration with and with financial support from the NIH. CRB-4001 was specifically designed to eliminate blood-brain barrier penetration and brain CB1 receptor occupancy that mediate the neuropsychiatric issues associated with first-generation CB1 inverse agonists such as rimonabant.

To provide scientific support for the development of compounds that target the endocannabinoid system as therapeutics for a broad range of diseases, Corbus today announced that George Kunos, M.D., Ph.D., Scientific Director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), a part of the NIH, will join the Company’s Scientific Advisory Board as an uncompensated member. Dr. Kunos is an expert in the biology of the endocannabinoid system with a particular focus on its role in the regulation of metabolic, neuroendocrine, and cardiovascular functions as well as addictive behaviors, and the related therapeutic implications.

The National Center for the Advancement of Translational Science (NCATS), a part of the NIH, conducted and sponsored IND-enabling studies of CRB-4001. Dr. Kunos led the work at the NIH to advance CRB-4001 to clinical testing, including studies in animal models of non-alcoholic fatty liver disease (NAFLD), type 2 diabetes, diet-induced insulin resistance, and type 2 diabetic nephropathy. Dr. Kunos plans to coordinate a Phase 2 proof-of-concept clinical study at the NIH, following the completion of a Phase 1 study by Corbus. Before year-end, Corbus will provide more specific details on the clinical development path of CRB-4001.

### **Significant Market Opportunities for Lenabasum and CRB-4001**

Lenabasum, Corbus’ lead ECS-targeting drug candidate is a synthetic, oral, small-molecule, selective endocannabinoid system receptor agonist that preferentially binds to cannabinoid receptor type 2 (CB2). Lenabasum is currently in a Phase 3 study for treatment of the rare autoimmune disease systemic sclerosis, which affects approximately 200,000 patients in the U.S., Europe and Japan. A Phase 3 study of lenabasum for the treatment of dermatomyositis, another rare autoimmune disease, is planned to begin at the end of 2018. Dermatomyositis affects approximately 80,000 patients in the U.S., Europe and Japan. Lenabasum is currently in a large Phase 2 study for pulmonary exacerbations in cystic fibrosis patients that is funded in part by an up to \$25 million award from the Cystic Fibrosis Foundation. Cystic Fibrosis affects approximately 70,000 patients in the U.S. and Europe. The NIH is also conducting a Phase 2 study of lenabasum for the treatment of systemic

lupus erythematosus, another autoimmune disease.

Corbus believes CRB-4001 adds additional significant potential market opportunities to Corbus' pipeline. Potential indications for CRB-4001 include NASH, primary biliary cholangitis, idiopathic pulmonary fibrosis, radiation-induced pulmonary fibrosis, myocardial fibrosis after myocardial infarction, and acute interstitial nephritis, among others.

### **Transaction Terms and Conditions**

Under the terms of the exclusive licensing agreement, Corbus obtained worldwide commercialization rights to Jenrin's library of more than 600 endocannabinoid system compounds, including CRB-4001, as well as a portfolio of issued and pending patents, for an up-front cash payment and milestone payments to be paid upon the achievement of certain development and regulatory milestones for each compound as well as royalty payments for sales of any Jenrin compound.

### **Conference Call and Webcast Information**

Corbus management will host a conference call for investors, analysts and other interested parties on Thursday, September 20, 2018 at 8:30 a.m. EDT.

The conference call and live [webcast](#) will be accompanied by a slide presentation. To participate in the call, please dial (877) 407-3978 (domestic) or (412) 902-0039 (international). The live webcast and accompanying slides will be accessible on the [Events](#) page of the [Investors](#) section of the Corbus website, [www.corbuspharma.com](http://www.corbuspharma.com), and will be archived for 60 days.

### **About Corbus**

Corbus Pharmaceuticals Holdings, Inc. is a Phase 3 clinical-stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat inflammatory and fibrotic diseases. The Company's lead product candidate, lenabasum, is a novel, synthetic oral ECS receptor (CB2) agonist designed to resolve chronic inflammation and fibrotic processes. Lenabasum is currently being evaluated in systemic sclerosis, cystic fibrosis, dermatomyositis, and systemic lupus erythematosus.

For more information, please visit [www.CorbusPharma.com](http://www.CorbusPharma.com) and connect with the Company on [Twitter](#), [LinkedIn](#), and [Facebook](#).

### **About Jenrin Discovery**

Jenrin Discovery LLC, is a privately held, Pennsylvania-based, discovery stage, life sciences company specializing in the identification and development of novel therapies exploiting cutting-edge ECS receptor pathways for the treatment of metabolic disorders and fibrotic diseases.

### **About Lenabasum**

Lenabasum (formerly known as anabasum) is a synthetic, oral, small-molecule, selective cannabinoid receptor type 2 (CB2) agonist that has been shown to preferentially bind to CB2 expressed on activated immune cells and fibroblasts in animal studies. CB2 activation

triggers physiologic pathways that resolve inflammation, speed bacterial clearance and halt fibrosis. CB2 activation also induces the production of specialized pro-resolving lipid mediators that activate an endogenous cascade responsible for the resolution of inflammation and fibrosis, while reducing production of multiple inflammatory mediators. Through activation of CB2, lenabasum also is believed to have a direct effect on fibroblasts to halt tissue scarring. In preclinical and clinical studies conducted so far, lenabasum has been shown to induce resolution rather than immunosuppression by triggering biological pathways to turn "off" chronic inflammation and fibrotic processes. Lenabasum has demonstrated promising potency in preclinical models of inflammation and fibrosis. Preclinical data and clinical studies to date have shown lenabasum to have a favorable safety, tolerability and pharmacokinetic profile. Data to date suggest that the drug may have clinical benefit as well as a beneficial impact on inflammatory and immunological markers in Phase 2 studies in diffuse cutaneous systemic sclerosis, dermatomyositis and cystic fibrosis. Additional clinical studies are being conducted and/or planned to confirm these preliminary results and support applications for regulatory approval.

### **Forward-Looking Statements**

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and Private Securities Litigation Reform Act, as amended, including those relating to the Company's product development, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statement that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential," "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

Source: Corbus Pharmaceuticals Holdings, Inc.

**###**

Investor Contacts:

Institutional Investor Inquiries  
Ted Jenkins, Senior Director, Investor Relations and Communications  
Corbus Pharmaceuticals, Inc.  
Phone: +1 (617) 415-7745

Email: [ir@corbuspharma.com](mailto:ir@corbuspharma.com)

All Other Investor Inquiries

Jenene Thomas

Jenene Thomas Communications, LLC

Phone: +1 (833) 475-8247

Email: [crbp@jtcir.com](mailto:crbp@jtcir.com)

Media Contact

Eliza Schleifstein

Scient Public Relations

Phone: + 1 (917) 763-8106

Email: [eliza@scientpr.com](mailto:eliza@scientpr.com)

[CRBP-300-196.png](#)



Source: Corbus Pharmaceuticals Holdings, Inc.