

Cocrystal Pharma Selects Two Lead Antiviral Drug Candidates for its COVID-19 Oral Drug Program

Novel broad-spectrum oral lead candidates CDI-988 and CDI-873, discovered using Cocrystal's antiviral drug discovery platform, demonstrate superior in vitro potency against SARS-CoV-2 and activity against all variants of concern including Omicron

Clinical trials with oral program and CDI-45204 inhalation/pulmonary-delivered COVID-19 antiviral candidates expected to begin in 2022

BOTHELL, Wash., Jan. 27, 2022 (GLOBE NEWSWIRE) -- Cocrystal Pharma, Inc. (Nasdaq: COCP) ("Cocrystal" or the "Company") has selected two investigational novel antiviral drug candidates for further development as oral treatments for SARS-CoV-2, the virus that causes COVID-19. *CDI-988 and CDI-873* target a highly conserved region in the active site of SARS-CoV-2 main (3CL) protease required for viral RNA replication. Cocrystal plans to initiate a first-in-human trial with one selected candidate as soon as possible this year.

Although *CDI-988* and *CDI-873* are chemically differentiated, both exhibited superior *in vitro* potency against SARS-CoV-2 with activity maintained against current variants of concern including Omicron. In preclinical studies, both candidates demonstrated a favorable safety profile and pharmacokinetic properties supportive of daily oral dosing. Additionally, *CDI-988* and *CDI-873* were specifically designed and developed using Cocrystal's proprietary structure-based drug discovery platform technology.

"We are excited to have discovered two lead COVID-19 oral antiviral candidates that both demonstrate highly encouraging preclinical efficacy and safety data," said Sam Lee, Cocrystal's President and interim co-CEO. "We plan to continue evaluating both *CDI-988* a n d *CDI-873* for clinical development, while we are also rapidly advancing our inhalation/pulmonary SARS-CoV-2 lead candidate *CDI-45205* toward clinical development. The objective of our multipronged strategy is to offer highly potent and safe antiviral therapeutics for hospitalized patients, as well as for those not requiring hospitalization, including for prophylactic use to provide protection to uninfected individuals who may become exposed. We expect one oral candidate in addition to our inhalation/pulmonary candidate to advance into clinical trials this year."

"Cocrystal is focused on rapidly advancing COVID-19 therapeutic candidates with multiple routes of administration. The newly emerging Omicron variant continues to rapidly spread worldwide with breakthrough infection even in people who are fully vaccinated, demonstrating a critical need for effective antiviral therapy for COVID-19. We are very pleased to have two lead oral candidates, giving us a potential edge in the anticipated large oral delivery therapeutic market. In addition to initiating two COVID-19 trials in 2022, we anticipate completion of our influenza CC-42344 Phase 1 study this year," said James

Martin, Cocrystal's CFO and interim co-CEO.

Earlier this month Cocrystal received guidance from the U.S. Food and Drug Administration (FDA) for further development of *CDI-45205* in response to the Company's pre-Investigational New Drug (IND) briefing package. The Company believes the FDA's response clarifies the pathway for a planned Phase 1 study and provides direction for a subsequent Phase 2 study.

About CDI-45205

CDI-45205 is among a group of protease inhibitors obtained by Cocrystal under an exclusive license agreement with the Kansas State University Research Foundation (KSURF) in 2020. *CDI-45205* and several analogs showed potent *in vitro* activity against the SARS-CoV-2 Delta (India/B.1.617.2), Gamma (Brazil/P.1), Alpha (United Kingdom/B.1.1.7) and Beta (South African/B.1.351) variants, surpassing the activity observed with the original Wuhan strain. *CDI-45205* has also shown good bioavailability in mouse and rat pharmacokinetic studies via intraperitoneal injection, and no cytotoxicity against a variety of human cell lines. Preclinical research demonstrated a strong synergistic effect with the FDA-approved COVID-19 medicine remdesivir. Additionally, a proof-of-concept animal study demonstrated that daily injection of *CDI-45205* exhibited favorable *in vivo* efficacy in mice infected with MERS-CoV-2.

About CC-42344

CC-42344 is a novel oral PB2 inhibitor that has shown excellent antiviral activity against influenza A strains, including pandemic and seasonal strains, as well as strains resistant to Tamiflu[®] and Xofluza[™]. *CC-42344* also has favorable pharmacokinetic and drug-resistance profiles. Cocrystal has completed preclinical IND-enabling studies with *CC-42344* and has received clearance from the Australian Human Research Ethics Committees (HREC) to initiate a Phase 1 clinical trial with subject enrollment expected to begin in the first quarter of 2022. The World Health Organization (WHO) estimates there are approximately 1 billion cases of influenza annually worldwide, resulting in 3 million to 5 million cases of severe illness and 290,000 to 650,000 deaths. The Centers for Disease Control and Prevention (CDC) estimates that between October 1, 2019 and April 4, 2020, there were between 39 million and 56 million cases of influenza in the U.S., resulting in 410,000 to 740,000 hospitalizations and 24,000 to 62,000 deaths.

About Cocrystal Pharma, Inc.

Cocrystal Pharma, Inc. is a clinical-stage biotechnology company discovering and developing novel antiviral therapeutics that target the replication process of influenza viruses, coronaviruses (including SARS-CoV-2), hepatitis C viruses and noroviruses. Cocrystal employs unique structure-based technologies and Nobel Prize-winning expertise to create first- and best-in-class antiviral drugs. For further information about Cocrystal, please visit <u>www.cocrystalpharma.com</u>.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding our plans to commence clinical trials for our COVID-19 antiviral candidates in 2022, our further development of CDI-45205, the potential efficacy of our antiviral product candidates against existing and new variants of COVID-19, our anticipated completion of the Phase 1 study for

our influenza CC-42344 product candidate in 2022, the anticipated continued need for therapeutic antiviral treatment and our potential advantages in the market for such products. The words "believe," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "could," "target," "potential," "is likely," "will," "expect" and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forwardlooking statements largely on our current expectations and projections about future events. Some or all of the events anticipated by these forward-looking statements may not occur. Important factors that could cause actual results to differ from those in the forward-looking statements include, but are not limited to, the risks arising from supply chain disruptions on our ability to obtain products including raw materials and test animals as well as similar problems with our vendors and our current contract research organizations (CROs) and future CROs and contract manufacturing organizations, the ability of our CROs to recruit volunteers for, and to proceed with, clinical trials, the presence of new lockdowns in Australia, the impact of the COVID-19 pandemic including new variants on the national and global economy, the duration of presently discovered COVID-19 variants and our ability to treat new variants, the cooperation of the FDA in accelerating development in our COVID-19 program and potential delays related to the FDA's review of our submissions, our collaboration partners' technology and software performing as expected, the results of future preclinical and clinical trials, and general risks arising from clinical trials, receipt of regulatory approvals, regulatory changes, and development of effective treatments and/or vaccines by competitors, including as part of the programs financed by the U.S. government. Further information on our risk factors is contained in our filings with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2020. Any forward-looking statement made by us herein speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forwardlooking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

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Source: Cocrystal Pharma, Inc.