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# Cocrystal Pharma's COVID-19 Oral and Intranasal/Pulmonary Protease Inhibitors Exhibit Powerful In Vitro Potency Against the SARS-CoV-2 Omicron Variant

*Antiviral activity now confirmed against SARS-CoV-2 and all variants of concern including Omicron, Delta, Alpha, Beta and Gamma*

**BOTHELL, Wash., Dec. 22, 2021 (GLOBE NEWSWIRE)** -- Cocrystal Pharma, Inc. (Nasdaq: COCP) ("Cocrystal" or the "Company") announces that in vitro studies demonstrate its oral and intranasal/pulmonary SARS-CoV-2 main protease inhibitors exhibit antiviral potency against the Omicron variant. The Company earlier confirmed that its protease inhibitors demonstrated broad-spectrum antiviral activity against SARS-CoV-2 and all major previously identified variants including Delta, Alpha, Beta and Gamma. Cocrystal expects to initiate Phase 1 clinical studies with its COVID-19 intranasal/pulmonary protease inhibitor CDI-45205 and an oral COVID-19 protease inhibitor as rapidly as possible.

To confirm the antiviral activity of its protease inhibitors against SARS-CoV-2 Omicron variant, Cocrystal conducted an analysis of SARS-CoV-2 lineages covering all reported Omicron variant sequences including those from South Africa, Europe, Asia and North America, and identified one prevalent mutation in the SARS-CoV-2 main protease. Using its proprietary platform technology and assays, the Company further confirmed in vitro antiviral activity of its protease inhibitors against the Omicron variant.

"Our ability to develop highly sensitive in vitro assays and X-ray crystals within a month is particularly important to evaluate the broad-spectrum activity of our SARS-CoV-2 main protease inhibitors against a heavily mutated Omicron variant," said Sam Lee, Ph.D., Cocrystal's President and interim co-CEO. "Our protease inhibitors bind to a highly conserved region of the active site of the protease that is required for SARS-CoV-2 viral replication. We believe that, due to their novel mechanism of action, our protease inhibitors will be effective against newly emerging SARS-CoV-2 variants. We are also highly encouraged by promising safety profiles of our SARS-CoV-2 oral protease inhibitors from 7-day mouse oral dosing toxicity studies. Our goal is to rapidly advance two protease inhibitors into first-in-human studies as rapidly as possible."

"Omicron has been identified as a variant of concern by both the U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), and is spreading rapidly. Since being identified in the U.S. just three weeks ago, Omicron is now the dominant strain in the U.S. according to the CDC," said James Martin, CFO and interim co-CEO. "Our protease inhibitors are being developed to show broad-spectrum activity against SARS-CoV-2 infections regardless of the variant, with the added feature of high barriers to viral resistance."

CDI-45205 is one of three COVID-19 programs underway at Cocrystal. In the second COVID-19 program, the Company plans to begin a Phase 1 study also as rapidly as possible with an orally administered protease inhibitor. In the third COVID-19 program, Cocrystal is using its unique structure-based technology platform to discover replication inhibitors for oral administration.

### **About CDI-45205**

CDI-45205 is among a group of protease inhibitors obtained by Cocrystal under an exclusive license agreement with 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 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 [www.cocrystalpharma.com](http://www.cocrystalpharma.com).

### **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 goals of initiating Phase 1 clinical studies as rapidly as possible, our attempts to discover replication inhibitors for oral administration, and the potential efficacy of antiviral inhibitors against existing and new variants of COVID-19. 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 forward-looking 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 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, our collaboration partners' technology and software performing as expected, the results of future preclinical and clinical trials, 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 forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

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