

WPD Pharmaceuticals Reports Active Compound in Licensed Drug Candidate Reduces Coronavirus Replication in Vitro by 100%

To develop in collaboration with CNS Pharmaceuticals antiviral drug candidates licensed from Moleculin Biotech for the international markets

VANCOUVER, British Columbia, April 09, 2020 -- **WPD Pharmaceuticals Inc.** (CSE: WBIO)(FSE: 8SV1) (the “**Company**” or “**WPD**”) a clinical stage pharmaceutical company, is pleased to announce that independent research on its WP1122 drug compound found 2-deoxy-D-glucose (“**2-DG**”) to reduce replication of SARS-CoV-2, the virus that causes COVID-19, by 100% in in vitro testing. WPD in collaboration with its development partner CNS Pharmaceuticals, Inc. (“**CNS**”)(Nasdaq: CNSP) intends to develop several preclinical drug candidates including WP1122, which will be tested on a range of viruses including the coronavirus SARS-CoV-2.

WPD has licensed rights to a portfolio of drug candidates, including WP1122, through its license partner, Moleculin Biotech, Inc. (“**Moleculin**”)(Nasdaq: MBRX). Recently, researchers at the University of Frankfurt disclosed the findings in their article submitted to NatureResearch on March 11, 2020 (Bojkova, D et al; DOI: 10.21203/rs.3.rs-17218/v1) (<https://www.researchsquare.com/article/rs-17218/v1>). The authors reported that inhibiting glycolysis with non-toxic concentrations of 2-DG completely prevented SARS-CoV-2 replication in Caco-2 cells. Glycolysis is a process by which cells convert glucose into energy and infected (host) cells are induced by viruses to dramatically increase their dependence on glycolysis. 2-DG inhibits glycolysis because, although it appears to cells to be glucose, it is in fact a decoy that cannot be converted into energy.

WP1122 is referred to as a “prodrug” of 2-DG whereby chemical elements are added to 2-DG to improve its delivery in vivo. Once administered, these added elements are removed by normal metabolic processes and what remains is 2-DG. As a result, 2-DG is the active compound in WP1122. In chemical terms, it is referred to as the active “moiety” (subpart) of WP1122.

“We are excited with this breakthrough on our WP1122 drug candidate and the early implications are that it could have positive effects on reducing the spread of COVID-19,” commented **Mariusz Olejniczak, CEO of WPD**. *“I would like to commend our license partner, Moleculin and the researchers at the University of Frankfurt for their expedited work and the willingness of the authors to pre-release this data will help support our development of WP1122 for treating COVID-19.”*

Walter Klemp, Chairman and CEO of Moleculin added: *“This discovery essentially put our development efforts in to turbo-drive. We are moving as quickly as we can to prepare WP1122 for clinical trials. With the US and EU having established accelerated approval procedures for COVID-19 related projects, we expect this to move very quickly. We look forward to WPD’s help, especially as it relates to expediting things in Europe.”*

According to WPD’s license partner Moleculin, 2-DG is often referred to as the ‘active moiety’ in WP1122. The issue with 2-DG is that its often metabolized too quickly by the body, so human tissues and organs can’t get enough concentration to be therapeutic. Therefore, even though 2-DG is active against a range of viruses, including SARS-CoV-2, it isn’t useful as a clinical therapy because it metabolizes too rapidly. WP1122 works to solve this problem because it is a ‘prodrug’ of 2-DG. Its structure enables it to achieve much higher tissue/organ concentrations than 2-DG alone, but once it’s in the cell, it metabolizes into the exact same 2-DG that is so effective in vitro.

About WPD Pharmaceuticals

WPD is a biotechnology research and development company with a focus on oncology, namely research and development of medicinal products involving biological compounds and small molecules. WPD has 10 novel drug candidates with 4 that are in clinical development stage. These drug candidates were researched at institutions including the Mayo Clinic and Emory University, and WPD currently has ongoing collaborations with Wake Forest University and leading hospitals and academic centers in Poland.

WPD has entered into license agreements with Wake Forest University Health Sciences and sublicense agreements with Moleculin Biotech, Inc. and CNS Pharmaceuticals, Inc., respectively, each of which grant WPD an exclusive, royalty-bearing sublicense to certain technologies of the licensor. Such agreements provide WPD with certain research, development, manufacturing and sales rights, among other things. The sublicense territory from CNS Pharmaceuticals and Moleculin Biotech includes 31 countries in Europe and Asia, including Russia.

On Behalf of the Board

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Cautionary Statements:

Neither the Canadian Securities Exchange nor the Investment Industry Regulatory Organization of Canada accepts responsibility for the adequacy or accuracy of this release.

This press release contains forward-looking statements. Forward-looking statements are statements that contemplate activities, events or developments that the Company can develop effective drugs against cancer and possibly SARS Covid - 19. Factors which may prevent the forward looking statement from being realized include that competitors or others may successfully challenge a granted patent and the patent could be rendered void; that we are unable to raise sufficient funding for our research; that we may not meet the requirements to receive the grants awarded; that our drugs don't provide positive treatment, or if they do, the side effects are damaging; competitors may develop better or cheaper drugs; and we may be unable to obtain regulatory approval for any drugs we develop. Readers should refer to the risk disclosure included from time-to-time in the documents the Company files on SEDAR, available at www.sedar.com. Although the Company believes that the assumptions inherent in these forward-looking statements are reasonable, they are not guarantees of future performance and, accordingly, they should not be relied upon and there can be no assurance that any of them will prove to be accurate. Finally, these forward-looking statements are made as of the date of this press release and the Company assumes no obligation to update them except as required by applicable law.