



## WPD PHARMACEUTICALS' WP1122 DRUG TO BE TESTED ON A RANGE OF VIRUSES INCLUDING CORONAVIRUS

*Independent research suggests new approach to inhibiting the viral replication capability of a range of viruses, including Coronavirus*

**Vancouver, British Columbia** – March 19, 2020 – WPD Pharmaceuticals Inc. (CSE: WBIO)(FSE: 8SV1) (the “Company” or “WPD”) a clinical stage pharmaceutical company, announces, that its license partner Moleculin Biotech, Inc. (Nasdaq: MBRX)(“Moleculin”), has entered into an agreement with a leading government funded research facility in the United States to conduct research on its patented portfolio of molecular inhibitors, including drug candidate, WP1122, for antiviral properties against a range of viruses, including Coronavirus.

Published research has revealed that viral replication can be highly dependent on specific monosaccharides and has demonstrated the effectiveness of a compound known as '2-DG,' a dual decoy of glucose and mannose, in the treatment of certain viruses.<sup>1</sup> This is rooted in an emerging field of research focused on the role of glycolysis and glycosylation, or more specifically, on glucose and mannose metabolism in viral activity, including the coronavirus<sup>2</sup>. Importantly, although 2-DG has shown promise in the laboratory in relevant in vivo models, its potential as a therapy is severely limited by its lack of drug-like properties, including circulation time and organ uptake. The drug candidate, WP1122, is a prodrug of 2-DG (2-deoxy-D-glucose) that, based on recently developed preclinical data appears to overcome 2-DG's lack of drug-like properties and is able to significantly increase tissue/organ concentration.

**Mariusz Olejniczak, CEO of WPD** commented, “We are eager for testing to begin on our WP1122 drug for antiviral properties against viruses, including the prevalent Coronavirus. The in vivo research supporting the use of 2-DG as dual inhibitor of glycolysis and glycosylation to defeat viruses like Coronavirus through multiple effects critical to the progression of viral infection is promising. We believe that during this difficult time, it is the responsibility of every biotech company to remain committed to research and test the entire drug portfolio to find alternative treatment for patients.”

### 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

<sup>(1)</sup>Wang Y., et al. Triggering unfolded protein response by 2-Deoxy-D-glucose inhibits porcine epidemic diarrhea virus propagation. *Antiviral Research* 106 (2014) 33–41. Schmidt M., et al. Interference of Nucleoside Diphosphate Derivatives of 2-Deoxy-D-glucose with the Glycosylation of Virus-Specific Glycoproteins in vivo. *Eur. J. Biochem.* 70, 55-62 (1976). Maehama, T., Patzelt, A., Lengert, M., Hutter, K. J., Kanazawa, K., et al. (1998) Selective down-regulation of human papillomavirus transcription by 2-deoxyglucose. *Int. J. Cancer* 76, 639–646. Leung, H. J., Duran, E. M., Kurtoglu, M., Andreansky, S., Lampidis, T. J., et al. (2012) Activation of the unfolded protein response by 2-deoxy-D-glucose inhibits kaposi's sarcoma-associated herpesvirus replication and gene expression. *Antimicrob. Agents Chemother.* 56, 5794–5803

<sup>(2)</sup>Bagdonaite I., et al. Global aspects of viral glycosylation. *Glycobiology.* 2018, vol. 28, no. 7, 443–467 doi: 10.1093/glycob/cwy021

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 30 countries in Europe and Asia, including Russia.

### **On Behalf of the Board**

*'Mariusz Olejniczak'*

Mariusz Olejniczak  
CEO, WPD Pharmaceuticals

### **Contact:**

Investor Relations  
Email: [investors@wpdpharmaceuticals.com](mailto:investors@wpdpharmaceuticals.com)  
Tel: 604-428-7050  
Web: [www.wpdpharmaceuticals.com](http://www.wpdpharmaceuticals.com)

### **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 anticipates will or may occur in the future. These forward-looking statements reflect the Company's current expectations based on information currently available to management and are subject to a number of risks and uncertainties that may cause outcomes to differ materially from those projected. Factors which may prevent the forward looking statement from being realized is 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](http://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.*