WPD Pharmaceuticals Announces New Publication Demonstrating Highly Effective Anticancer Therapy in Animals with Spontaneous Tumors using WPD101 Drug Candidate

Combination of IL-13RA2- and EphA2 receptor-targeted cytotoxins as highly effective anticancer therapy in dogs with spontaneous intracranial gliomas

VANCOUVER, British Columbia, Sept. 01, 2020 -- **WPD Pharmaceuticals Inc. ("WPD" or the "Company") (CSE: WBIO) (FSE: 8SV1),** a clinical stage pharmaceutical company, is excited to announce that a recently published study confirms the high therapeutic potential of IL-13RA2- and EphA2 receptor-targeted cytotoxins in the WPD101 drug candidate. The study found the combination of these cytotoxins as a highly effective anticancer therapy in dogs with spontaneous intracranial gliomas.

WPD101 is a cocktail of recombinant fusion/conjugate proteins designed for the treatment of Glioblastoma (GBM), one of the most aggressive malignant tumors of the central nervous system that is believed to arise from normal glial cells. Clinical development of WPD101 will allow GBM patients access to innovative molecular targeted therapies as an alternative to conventional treatment of limited effectiveness.

The Phase I clinical trial in dogs with spontaneous malignant gliomas was conducted by a team led by John H. Rossmeisl, DVM, MS, Head of Department of Small Animal Clinical Sciences at Virginia-Maryland College of Veterinary Medicine and Waldemar Dębiński, MD, PhD, Professor of Cancer Biology and Director of the Brain Tumor Center of Excellence at Wake Forest Baptist Medical Center Comprehensive Cancer Center, Winston-Salem, NC, USA. Dr. Dębiński is a member of WPD's Scientific Advisory Board. The results of this first of a kind comprehensive study in dogs afflicted with brain tumors was published in "Neuro-Oncology" by Oxford University Press on behalf of the Society for Neuro-Oncology. (Read full publication)

Canine model of spontaneous gliomas represent the closest translational model to human diseases and provide potentially more clinically relevant assessment of potential efficacy in human trials regarding biological and technological aspects of treatment. One approach to glioma treatment is the use of targeted cytotoxins that bind to plasma membrane receptors on tumor cells and are subsequently internalized to deliver a lethal toxin load to targeted cells.

Canine gliomas, as well as human GBM cells, overexpress tumor-associated IL-13RA2 and EphA2 receptors that are not present in normal brain cells. IL-13RA2 and EphA2 are conjointly present in >90% of patients and dogs with GBM.

In the published study, 17 dogs diagnosed with gliomas and immunohistochemically positive for IL-13RA2 (17/17) or/and EphA2 (11/17) receptors were treated with escalating doses of IL-13 and ephrinA1-based cytotoxins. Cytotoxins were delivered through the Convention Enhanced Delivery (CED) method. CED allowed consistent intratumoral delivery of the cocktail with a median coverage of 70% (range 40-94%) of the tumor.

No dose-limiting toxicities were observed. At 42 days of treatment, volumetric tumor reductions were observed in 15/16 dogs, with median reduction of 42% (range 5-94%). Objective tumor responses were observed in 8/16 (50%) dogs, and the median tumor volume reduction was 79% (range 65-94% of tumor volume regression).

The authors of the study conclude that the CED of IL-13RA2/EphA2 targeting cytotoxins at concentrations ranging from 0.05-1.6 mg/mL was safe and resulted in clinically relevant responses in 50% of dogs with gliomas.

The published research was supported by federal, institutional and charitable grants.

WPD is currently developing production for early phase clinical trials in humans, which should be accomplished approximately within one year. The WPD portfolio includes WPD101, WPD102, and WPD103 drug candidates. In addition WPD and its licensors have 40 patents issued or filed in the US, Canada, and EU.

About WPD Pharmaceuticals

WPD is a biotechnology research and development company with a focus on oncology and virology, namely research and development of medicinal products involving biological compounds and small molecules. WPD has licensed in certain countries 10 novel drug candidates with 4 that are in clinical development stage. These drug candidates were researched at medical institutions, 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 for most compounds 30 countries in Europe and Asia, including Russia.

On Behalf of the Board

'Mariusz Olejniczak'
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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 viruses; and that WPD can finish manufacturing to the drug delivery formulation within one year and move to Phase 1 clinical trials. . Factors which may prevent the forward looking statement from being realized include that our supply of compounds for testing may not be sufficient for our needs; lack or funds, permits, subcontractors or other factors may delay our plans; competitors or others may successfully challenge a granted patent and the patent could be rendered void; we may be unable to raise sufficient funding for our research; we may be unable to expend sufficient funds on research to keep our sublicense rights; our grant applications may not be successful or if successful, 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; and competitors may develop better or cheaper drugs; our plans may be delayed; we may not be able to get commercial quantities of our drugs made; 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.