



## WPD PHARMACEUTICALS' WP1220 DRUG DEMONSTRATES MEDIAN REDUCTION OF 56% IN SKIN CANCER LESIONS IN CLINICAL TRIALS

*Data Presented at the 4<sup>th</sup> Annual World Congress of Cutaneous  
Lymphomas in Barcelona, Feb 2020*

**Vancouver, British Columbia** – February 18, 2020 – WPD Pharmaceuticals Inc. (CSE: WBIO)(FSE: 8SV1) (the “**Company**” or “**WPD**”), a clinical stage pharmaceutical company, in collaboration with license partner, Moleculin Biotech, Inc. (“**Moleculin**”)(Nasdaq: MBRX) is pleased to announce the final data from the CTCL clinical trial of WP1220 for the treatment of cutaneous T-cell lymphoma (CTCL), which was published and presented by Dr. M. Sokolowska-Wojdylo in conjunction with the 4<sup>th</sup> Annual World Congress of Cutaneous Lymphomas in Barcelona, Spain on February 13, 2020.

WP1220 is part of WPD’s p-STAT3 inhibitor drug portfolio and is the first drug used in monotherapy for patients with CTCL, usually located in the lymphatic system of the skin and often mistaken with psoriasis or eczema. The final results supported the safety of topical WP1220 and demonstrated a median improvement in the Composite Assessment of Index Lesion Severity (CAILS) score of 56% in treated (index) lesions for patients completing the study.

**Mariusz Olejniczak, CEO of WPD** commented, “*We are encouraged by the results which could be considered a significant breakthrough in cancer research. Our continued collaborative work with Moleculin has been very successful and look forward to advancing our research with such an experienced and world class team.*”

*“Late last year, we announced the preliminary results of this proof of concept Phase 1 trial. For years, p-STAT3 (the activated form of STAT3) has been considered an ‘undruggable’ target because of the difficulty of reaching and affecting this cell-signaling protein,”* commented **Walter Klemp, Moleculin’s Chairman and CEO**. *“The results of this trial are encouraging with 56% reduction in skin cancer lesions, and we feel strongly that this treatment could be a viable treatment for decreasing CTCL.”*

**Introduction & Objectives:** Mycosis Fungoides (“**MF**”), the most common variant of CTCL, is a disease with symptomatic, disfiguring skin lesions. STAT3, an oncogenic transcription factor, has been identified as a critical regulator of MF, whereby the activation of STAT3 through phosphorylation (p-STAT3) has been linked to tumor proliferation and suppression of immune responses. WP1220, a synthetic compound, potently inhibits the activity of p-STAT3 and the growth of CTCL cell lines. This Phase 1b study was designed to demonstrate the safety and efficacy of WP1220 after topical treatment of MF.

**Results:** Of 5 subjects enrolled, 9 lesions were assessed according to the CAILS scoring system. The only adverse event (AE) was mild contact dermatitis in one subject felt not to be related to the drug. 4 of the 5 subjects had significant improvement in CAILS scores on index lesions, with a median reduction of 56% (range 25%-94%). Improvement was noted within 7 days of treatment initiation and maintained 1 month after discontinuation. Independent dermatologic review based on photographic documentation was conducted and corroborated these findings.

**Conclusions:** WP1220, an inhibitor of p-STAT3, shows safety and significant efficacy in MF after topical treatment. We believe this is the first demonstration in humans that inhibition of p-STAT3 with topical therapy has efficacy in CTCL. A larger Phase 2 study is now being planned.

### **About Moleculin Biotech, Inc.**

Moleculin Biotech, Inc. is a clinical stage pharmaceutical company focused on the development of a broad portfolio of oncology drug candidates for the treatment of highly resistant tumors. The Company's clinical stage drugs are: Annamycin, a Next Generation Anthracycline, designed to avoid multidrug resistance mechanisms with little to no cardiotoxicity being studied for the treatment of relapsed or refractory acute myeloid leukemia, more commonly referred to as AML, WP1066, an Immune/Transcription Modulator capable of inhibiting p-STAT3 and other oncogenic transcription factors while also stimulating a natural immune response, targeting brain tumors, pancreatic cancer and hematologic malignancies, and WP1220, an analog to WP1066, for the topical treatment of cutaneous T-cell lymphoma. Moleculin is also engaged in preclinical development of additional drug candidates, including other Immune/Transcription Modulators, as well as compounds capable of Metabolism/Glycosylation Inhibition.

For more information about the Company, please visit <http://www.moleculin.com>.

### **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 MD Anderson Cancer Center, 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.

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

*'Mariusz Olejniczak'*

Mariusz Olejniczak  
CEO, WPD Pharmaceuticals

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**Cautionary Statements:**

*Investors are cautioned that, except as disclosed in the Company's CSE listing statement, prepared in accordance with the policies of the CSE, any information released or received with respect to the transaction may not be accurate or complete and should not be relied upon. Trading in the securities of the Company should be considered highly speculative.*

*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. Forward-looking statements in this press release include that our findings could have a significant impact on understanding the role of STAT3 inhibition and that WPD's drugs could be developed into novel treatments for cancer. 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 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.*