

# Early Results of BetterLife Preclinical Study Showing AP-003 (rhIFNa2b) has Similar Potent Efficacy Against Different Variants of COVID-19

VANCOUVER, British Columbia, July 15, 2021 (GLOBE NEWSWIRE) -- BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: <u>BETR</u> / OTCQB: <u>BETRF</u> / FRA: <u>NPAU</u>), an emerging biotechnology company primarily focused on developing compounds to treat neurological conditions, is pleased to announce early positive in vitro results of its SARS-CoV-2 ("COVID-19") anti-viral, recombinant human interferon alpha-2b ("rhIFNα2b" or "AP-003"), from the Dr. Stephen Barr Laboratory and state-of-the-art ImPaKT Facility at Western University ("UWO"). AP-003's first proposed target indication is for people at higher risk to develop severe COVID-19 disease.

Early data show potent and similar anti-viral activity against the COVID-19 Wuhan reference strain ( $EC_{50}=0.51$ ), Alpha (B.1.1.7, UK,  $EC_{50}=1.26$ ) and Beta (B.1.351, South Africa,  $EC_{50}=0.25$ ) variants. Further studies are ongoing to validate these early results and to test AP-003 activity against Gamma (Brazil), Delta (India) and Lambda (Peru) variants.

The rhIFN $\alpha$ 2b, a Type I interferon, is a naturally occurring protein integral to the body's first line of anti-viral defenses. There is evidence that coronaviruses, such as COVID-19, have mechanisms which suppress IFN $\alpha$ 2b production, allowing the virus to evade the innate immune system and replicate unabated. Multiple clinical analyses show a significant link between deficiency in Type 1 interferon and development of severe COVID-19 disease. There is also accumulating evidence from preclinical studies that coronavirus replication is blocked by the addition of exogenous IFN $\alpha$ 2b, thereby allowing cells to restore their normal anti-viral activity. An exploratory study in Wuhan, China, in COVID-19 patients, showed that patients treated with inhaled rhIFN $\alpha$ 2b had a more rapid rate of viral clearance than patients in the comparator arm who did not receive inhaled rhIFN $\alpha$ 2b.

Ahmad Doroudian, CEO of BetterLife, said, "COVID-19 is very much still a threat to the global population and its variants are a key challenge when developing therapeutics to protect against it. The broad mechanism of action of interferon is such that our scientists hypothesized it could be equally effective against different variants. We are very pleased to see that early preclinical data confirms this as this takes us one step closer to the potential result of reducing overall hospitalization rate, long-term tissue damage and death by reducing the overall severity of the disease."

"BetterLife will continue to work to extend the broad acting anti-viral efficacy of AP-003 to other emerging COVID-19 variants while simultaneously seeking strategic partners that can push forward the development of this promising treatment."

Separately, BetterLife has entered into a clinical research agreement with the Pontificia Universidad Católica de Chile to conduct a randomized placebo-controlled trial in COVID-19 patients to test the Company's proprietary inhaled AP-003.

Dr. Ahmad Doroudian shared additional information in an interview with Proactive Investors which can be viewed at: <u>https://youtu.be/FKJuHmrH9cl.</u>

# About BetterLife Pharma

BetterLife Pharma Inc. is an emerging biotechnology company primarily focused on developing and commercializing two compounds, TD-0148A and TD-010, to treat neurological disorders such as depression, cluster headaches and anxiety.

The global depression drugs market reached US\$12.41 billion in 2019 and it is projected to reach near US\$25 billion by 2030. According to the WHO, depression is one of the leading causes of disability, impacting approximately 265 million people in the world. TD-0148A is being developed for the treatment of major depressive disorder. It has been synthesized using BetterLife's patented manufacturing process and is the only non-hallucinogenic and non-controlled psychedelic candidate on the market. It is unique in that it is not regulated and therefore can be self-administered. TD-010 is a treatment of anxiety without the addictive potential of benzodiazepines. TD-0148A and TD-010 are both in Preclinical and IND-enabling studies. BetterLife also owns a drug candidate for the treatment of viral infections such as COVID-19 and is in the process of seeking strategic alternatives for further development.

For further information please visit www.abetterlifepharma.com.

# About Western University - Dr. Stephen Barr Laboratory

Dr. Stephen Barr, PhD, is an Associate Professor in the Department of Microbiology & Immunology at Western University. His research focuses on the complex virus-host interactions of emerging viral pathogens, with a focus on the host interferon response. His team studies Containment Level 2 and Level 3 viruses such as HIV, Ebola-like viruses, and SARS-CoV-2, in the new state-of-the-art ImPaKT Facility featuring barrier-enclosed imaging scanners and instrumentation. This high-tech equipment allows Dr. Barr and his team to develop tools and methods to better understand the progression of emerging infectious diseases (in vitro and in vivo), identify/test novel antiviral agents, develop diagnostic reagents to characterize hidden reservoirs of pathogens, and for the early and accurate detection of infections. Dr. Barr is also part of Canada's Coronavirus Variants Rapid Response Network (CoVaRR-Net), whose goal is to rapidly answer critical and immediate questions regarding SARS-CoV-2 variants, such as their increased transmissibility, likelihood to cause severe cases of COVID-19, and resistance

to vaccines.

For more information, please visit the Barr Lab (https://publish.uwo.ca/~sbarr9/) and CoVaRR-Net (https://covarrnet.ca).

#### **Contact Information**

# BetterLife Pharma:

Ahmad Doroudian, Chief Executive Officer Email: <u>ahmad.doroudian@blifepharma.com</u> Phone: 1-604-221-0595

# Media enquiries:

Buchanan Henry Harrison-Topham / Jamie Hooper / Ariadna Peretz betterlife@buchanan.uk.com

Phone: +44 (0) 20 7466 5000 www.buchanan.uk.com

#### Western University:

Dr. Stephen Barr, Associate Professor Email: <u>stephen.barr@uwo.ca</u> Phone: 1-519-661-3438

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No securities exchange has reviewed nor accepts responsibility for the adequacy or accuracy of the content of this news release. This news release contains forward-looking statements relating to product development, licensing, commercialization and regulatory compliance issues and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this release are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the failure to satisfy the conditions of the relevant securities exchange(s) and other risks detailed from time to time in the filings made by the Company with securities regulations. The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date of this news release and the Company will update or revise publicly any of the included forward-looking statements as expressly required by applicable law.