



## BetterLife Initiates Preclinical Study of AP-003 (rhIFN $\alpha$ 2b) against Delta Variant of SARS-CoV-2

VANCOUVER, August 25, 2021 - BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: [BETR](#) / OTCQB: [BETRF](#) / FRA: [NPAU](#)), an emerging biotechnology company primarily focused on developing compounds to treat neurological conditions, is pleased to announce initiation of in vitro studies of its recombinant human interferon alpha-2b ("rhIFN $\alpha$ 2b" or "AP-003") against the Delta variant of SARS-CoV-2. The studies are being conducted at Dr. Stephen Barr's Laboratory at the 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.

These in-vitro anti-viral studies of AP-003 against the Delta variant are a follow on to earlier in-vitro studies conducted at UWO which have shown potent and similar anti-viral activity of AP-003 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. The Company expects to release the results on the of rhIFN $\alpha$ 2b /AP-003 activity against Delta variant in the next two weeks.

Ahmad Doroudian, CEO of BetterLife, said, "COVID-19 is very much still a threat to the global population and its variants are the 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."

"The global vaccine roll-out is making headway; however, there are still several reasons why there is a need for an effective, easy to administer, non-invasive treatment, such as AP-003. This includes the time it will take to vaccinate the global population; not knowing the duration of protection afforded by the current vaccines; emergence of SARS-CoV-2 variants; and emergence of possible totally new coronavirus pandemics in the future. AP-003, being a Type I interferon, is a broad acting anti-viral agent, and therefore potentially could be effective in all these scenarios."

## **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.

TD-0148A, which is in Preclinical and IND-enabling studies, is the only non-hallucinogenic and non-controlled psychedelic candidate on the market and it is unique in that it is unregulated and therefore can be self-administered. BetterLife's synthesis patent for TD-0148A eliminates regulatory hurdles and its pending patent for method of use covers treatment of depression, migraines, post-traumatic stress disorder and other neuro-psychiatric disorders. The global depression drugs market reached US\$12.41 billion in 2019 and 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-010, which is in Preclinical and IND-enabling studies, is based on Honokiol, the active anxiolytic ingredient of magnolia bark. BetterLife's patented formulation improves bioavailability by 2x and formulations covered include oral capsules, tablets and sub-lingual delivery. BetterLife's pending method of use patent covers treatment of benzodiazepine dependency, anxiety, insomnia, etc. The global benzodiazepines market is expected to grow to US\$4.15 billion in 2017 (from US\$3.48 billion in 2019) at a CAGR of 2.25%.

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](http://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://covarnet.ca>).

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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.