

### FORM 51-102F3 MATERIAL CHANGE REPORT

#### Item 1 Name and Address of Company

BetterLife Pharma Inc. (the "Company") 1275 West 6<sup>th</sup> Avenue Suite 300 Vancouver, British Columbia V6H 1A6

#### Item 2 Date of Material Change

October/November 2021

#### Item 3 News Releases

News releases dated October 25, November 4, November 5 and November 16, 2021.

#### Item 4 Summary of Material Change

On October 27-28, 2021, the Company presented at the Benzinga Global Small Cap Conference, which can be accessed at:

#### https://www.youtube.com/watch?v=u7YoNeAFGn4.

On November 8-9, 2021, the Company participated in a panel discussion at the Microdose Wonderland: <u>Miami Conference</u> that delved into a discussion centered around *psychedelic medicine, what we already know and beyond.* The conference in the psychedelic medicine space brought together key thought leaders, market influencers, accomplished scientists and researchers, well-known celebrities, leading bankers, entrepreneurs and CEOs.

During November 2021, the Company obtained the first set of neurological receptor functional binding data on its lead compound, 2-bromo-LSD ("TD-0148A"). TD-0148A is a second-generation Lysergic Acid Diethylamide ("LSD") derivative molecule that the Company believes will mimic the projected therapeutic potential of LSD without causing the undesirable psychoactive dissociative side effects, such as hallucinations. The receptor binding data shows that TD-0148A exhibits differential functional activity (agonism, antagonism or neutral) on neurological receptors which are known to play key roles in neuropsychiatric disorders. Of particular interest were the 5-hydroxytryptamine (serotonin) (5-HT) receptor family, where TD-0148A differential functional activity was seen with select 5HT receptor subtypes.

Also during the month, the Company obtained the first set of behavioral animal pharmacology data for its TD-0148A, as part of its collaboration with the laboratory of Dr. Adam L. Halberstadt at the University of California San Diego (UCSD). The head-twitch-response ("HTR") assay in mice is commonly used to evaluate a compound's hallucinogenic potential in humans. Dr. Halberstadt's laboratory is one of the leading research groups focusing on the development of automated HTR assessment methods. The data from Dr. Halberstadt's studies confirm that TD-0148A does not

induce the HTR in mice even at very high doses (up to 10 mg/kg), whereas LSD induces a robust HTR at much lower doses (0.05-0.1 mg/kg).

On November 12, 2021, the Company issued 5,000 common shares to a third party pursuant to vesting of restricted stock units and 362,069 common shares to a third party for services.

#### Item 5 Full Description of Material Change

Refer to Item 4 and the news release in Schedule "A".

#### Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102

This Report is not being filed on a confidential basis in reliance on subsection 7.1(2) of National Instrument 51-102.

#### Item 7 Omitted Information

No information has been omitted on the basis that it is confidential information.

#### Item 8 Executive Officer

Further information can be obtained from Ahmad Doroudian, Chief Executive Officer of the Company, at (604) 221-0595.

#### Item 9 Date of Report

November 16, 2021

#### **SCHEDULE "A"**



### BetterLife Pharma: Invitation to the Benzinga Global Small Cap Conference

VANCOUVER, October 25, 2021 - BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: <u>BETR</u> / OTCQB: <u>BETRF</u> / FRA: <u>NPAU</u>), an emerging biotech company focused on the development and commercialization of cutting-edge treatments for mental disorders, will be presenting at the Benzinga Global Small Cap Conference taking place on October 27-28, 2021. We invite our shareholders and all interested parties to explore investment opportunities within the global small cap space.

Sign up to get a free spectator pass for the event: https://www.benzinga.com/events/small-cap/october-2021-global/

We look forward to seeing you there.

#### **About BetterLife Pharma**

BetterLife Pharma Inc. is an emerging biotechnology company engaged in the development and commercialization of next generation psychedelic products for the treatment of mental disorders. Utilizing drug delivery platform technologies, BetterLife is also refining and developing drug candidates from a broad set of complementary interferon-based technologies which have the potential to engage the immune system to fight virus infections, such as the coronavirus disease (COVID-19) and human papillomavirus.

For further information about the company, please visit BetterLife Pharma.

#### **BetterLife Pharma:**

Ahmad Doroudian, Chief Executive Officer Email: <a href="mailto:Ahmad.Doroudian@blifepharma.com">Ahmad.Doroudian@blifepharma.com</a>

Phone: 1-604-221-0595

#### For more information, please contact:

David Melles, Investor Relations Manager Email: <a href="mailto:David.Melles@blifepharma.com">David.Melles@blifepharma.com</a>

Phone: 1-778-887-1928

#### **About the Benzinga Global Small Cap Conference**

The Benzinga Global Small Cap Conference bridges the gap between Small Cap companies, investors, and traders. Learn about small cap investing with clearly defined educational modules, take a look at a curated group of small cap investment opportunities, and connect with the global small cap audience in an intimate, virtual setting.

For more information and/or to register for the conference please visit: <a href="https://www.benzinga.com/events/small-cap/october-2021-global/">https://www.benzinga.com/events/small-cap/october-2021-global/</a>

#### **Cautionary Note Regarding Forward-Looking Statements**

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.



# BetterLife Obtains TD-0148A In Vitro Pharmacology Data Confirming its Activity in Key Receptors Implicated in Depression and Neuropathic Pain

VANCOUVER, British Columbia, November 4, 2021 - BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: <u>BETR</u> / OTCQB: <u>BETRF</u> / FRA: <u>NPAU</u>), an emerging biotech company focused on the development and commercialization of cutting-edge treatments for mental disorders, is pleased to announce that it has obtained the first set of neurological receptor functional binding data on its lead compound, 2-bromo-LSD ("TD-0148A").

TD-0148A is a second-generation Lysergic Acid Diethylamide ("LSD") derivative molecule that BetterLife believes will mimic the projected therapeutic potential of LSD without causing the undesirable psychoactive dissociative side effects, such as hallucinations. The receptor binding data shows that TD-0148A exhibits differential functional activity (agonism, antagonism or neutral) on neurological receptors which are known to play key roles in neuropsychiatric disorders. Of particular interest were the 5-hydroxytryptamine (serotonin) (5-HT) receptor family, where TD-0148A differential functional activity was seen with select 5HT receptor subtypes.

"We are pleased to confirm the differential activity of BetterLife TD-0148A on key neurotransmitter receptors. These results will provide the basis for ongoing preclinical pharmacology studies to understand the basis of the difference between TD-0148A and its parent compound, LSD, in particular the lack of hallucinations with TD-0148A," said BetterLife's Chief Executive Officer, Dr. Ahmad Doroudian.

Dr. Doroudian further commented, "TD-0148A is protected by several BetterLife-owned patents (granted and provisional). BetterLife believes that TD-0148A has great therapeutic potential for the treatment of debilitating psychiatric and neurological disorders with high unmet need, such as depression, post-traumatic stress disorder and cluster headaches. It is towards this goal that we are putting all our resources and hope to bring TD-0148A to US IND and the clinic by H2 2022."

#### 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 neuropsychiatric and neurological disorders.

TD-0148A, which is in preclinical and IND-enabling studies, is a non-hallucinogenic and non-controlled LSD derivative in development 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 composition and method-of-use covers treatment of depression, cluster headaches, post-traumatic stress disorder and other neuropsychiatric and neurological disorders. The global depression drugs market

reached US\$12.41 billion in 2019 and projected to reach nearly 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 pending method-of-use and formulations patent covers treatment of anxiety related disorders including benzodiazepine dependency and insomnia. 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.

#### **Contact Information**

#### BetterLife Pharma:

Ahmad Doroudian, Chief Executive Officer Email: ahmad.doroudian@blifepharma.com

Phone: 1-604-221-0595

#### For more information, please contact:

David Melles, Investor Relations Manager Email: <a href="mailto:David.Melles@blifepharma.com">David.Melles@blifepharma.com</a>

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### Developing Psychedelic Medicine Beyond What We Already Know!

VANCOUVER, British Columbia, November 5, 2021 - BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: <u>BETR</u> / OTCQB: <u>BETRF</u> / FRA: <u>NPAU</u>), an emerging biotech company focused on the development and commercialization of cutting-edge treatments for mental disorders, will participate in a panel discussion at the Microdose Wonderland: <u>Miami Conference</u>, November 8-9, 2021.

This preeminent business gathering in the psychedelic medicine space is bringing together key thought leaders, market influencers, accomplished scientists and researchers, well-known celebrities, leading bankers, entrepreneurs and CEOs. This event will showcase the scientific advancement, clinical progression, and corporate growth of many organizations in the sector. It is expected to draw people from all over the world that are passionate about the global mental health issues that are ubiquitous.

BetterLife Pharma is delighted to participate in a distinguished panel with a group of experts that will be delving into a discussion centered around *psychedelic medicine*, *what we already know and beyond*. The moderator will guide the panel through this discourse by answering some key questions like:

- How far can we go with psychedelic medicine?
- Could it unlock the keys to a longer life?
- Are compounds hiding in plain sight?

Here are the details of the specific event:

**Date:** Monday, November 8<sup>th</sup>, 2021.

Time: 2:40pm-3:05pm ET

To participate in this discussion, you can register here.

#### **About BetterLife Pharma**

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WHO, depression is one of the leading causes of disability, impacting approximately 265 million people in the world.

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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.

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## BetterLife Obtains TD-0148A Behavioural Pharmacology Data Confirming its Projected Non-hallucinogenic Property

VANCOUVER, British Columbia, November 16, 2021 - BetterLife Pharma Inc. ("BetterLife" or the "Company") (CSE: <u>BETR</u> / OTCQB: <u>BETRF</u> / FRA: <u>NPAU</u>), an emerging biotech company focused on the development and commercialization of cutting-edge treatments for mental disorders, is pleased to announce it has obtained the first set of behavioral animal pharmacology data for its lead compound, 2-bromo-LSD ("TD-0148A"), as part of its collaboration with the laboratory of Dr. Adam L. Halberstadt at the University of California San Diego (UCSD).

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"We are pleased to confirm the projected non-hallucinogenic nature of TD-0148A as part of our behavioural pharmacology studies conducted in collaboration with Dr. Halberstadt and his team. TD-0148A is a potential novel new therapy to treat debilitating psychiatric and neurological disorders with high unmet need, such as depression, post-traumatic stress disorder and cluster headaches. BetterLife is fully focused on bringing TD-0148A to the US IND stage and into the clinic as soon as possible, and our collaborations with global experts such as Dr. Halberstadt, a leading scientist in the field of psychedelics research, will help us realize our vision," said BetterLife's Chief Executive Officer, Dr. Ahmad Doroudian.

As part of the agreement between BetterLife and UCSD, Dr. Halberstadt's team will work with BetterLife to test TD-0148A in various preclinical models that are established in their lab. The team's expertise is to understand how psychedelics and related compounds interact with the serotonergic system and how those molecules could be developed to treat psychiatric and neurodevelopmental disorders. Dr. Halberstadt's research focuses on the pharmacology of psychedelic drugs and their derivatives; he is a co-founder of the Psychedelics and Health Research Initiative (PHRI) at UCSD and served as the primary editor of the 2018 book *Behavioral Neurobiology of Psychedelic Drugs*.

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For further information, please visit www.abetterlifepharma.com.

#### **About UC San Diego School of Medicine**

Established in 1968, UCSD School of Medicine is consistently ranked among the top medical school programs in the country for primary care and research by *U.S. News & World Report* and among the top 10 medical schools for National Institutes of Health total funding. The school is internationally recognized as a place where discoveries are delivered — bringing breakthroughs from the research lab to patients' bedsides. Faculty members care for patients at UC San Diego Health, where primary care is available at several convenient locations throughout San Diego County and our advanced specialty care consistently ranks among the nation's best.

For further information, please visit: <a href="mailto:medschool.ucsd.edu">medschool.ucsd.edu</a>

#### **Contact Information**

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