



PharmaTher Expands Psychedelic Patent Portfolio with Filing of U.S. Patent Application for Novel Ketamine Formulation

- Strengthens position to become a leader in the intradermal delivery of FDA prescription-based ketamine products
- Supports commercializing novel uses and delivery methods of psychedelics

TORONTO, July 21, 2021 (GLOBE NEWSWIRE) -- PharmaTher Holdings Ltd. (the "Company" or "PharmaTher") (OTCQB: PHRRF) (CSE: PHRM), a clinical-stage psychedelics biotech company, today announced that it has filed a provisional patent application with the U.S. Patent and Trademark Office outlining a novel formulation of ketamine for intradermal administration as potential treatments for mental health, neurological and pain disorders. The Company's intellectual property portfolio includes 19 granted patent and patent applications filed in over 150 countries.

Fabio Chianelli, CEO of PharmaTher, commented: "As we continue to advance our clinical programs with ketamine, we are building a robust intellectual portfolio of potential prescription-based ketamine products and psychedelics through novel uses, formulations and delivery forms to treat various diseases and disorders. I am pleased with our continued dedication to becoming a leader of novel ketamine products and implementing a patent strategy that would protect our clinical development and commercialization initiatives."

The patent application, entitled "Methods and Compositions of Ketamine Formulation for Intradermal Administration," describes the potential improvement and therapeutic value of ketamine by delivering it through the skin. Intradermal drug delivery, defined as bypassing the outermost layer of the skin (*the stratum corneum*) by a suitable device (*i.e. patch or spray*) and depositing the drug in the underlying viable skin layers (*the epidermis and dermis*), is an attractive alternative drug delivery approach employed to overcome certain drug administration challenges present in oral, subcutaneous and intramuscular injections, intravenous, and intranasal delivery. Also, intradermal delivery methods and compositions provide the potential for significant reduction of skin irritation, rapid and controlled drug uptake, pharmacodynamics and pharmacokinetics, as well as improved bioavailability and deposition of the drug at a pre-specified volume.

PharmaTher is positioning itself as an innovator of novel uses, formulations and delivery forms of ketamine. PharmaTher has a robust pharmaceutical pipeline including, an FDA approved IND to conduct a Phase 2 clinical trial evaluating ketamine to treat Parkinson's disease, and upcoming clinical studies with KETABET™ ([ketamine and betaine](#)) for depression and ketamine for amyotrophic lateral sclerosis ([Lou Gehrig's disease](#)).

The Company also focuses on incorporating psychedelics (*i.e. ketamine, psilocybin, DMT, MDMA and LSD*) in a microneedle patch with the potential to improve on the safety (*i.e. fewer side effects*), efficacy (*i.e. bioavailability, optimized dosing regimen including continuous system delivery*) and compliance (*i.e. storage, distribution and self-administration*) of these compounds.

In addition, the Company continues to evaluate novel uses of ketamine that would follow the FDA 505(b)(2) regulatory pathway targeting rare disorders that could receive orphan drug designation and large market indications that the FDA could grant fast track designation. As a result, certain PharmaTher current and future programs have the potential to meet the requirements for these FDA designations.

About PharmaTher Holdings Ltd.

PharmaTher Holdings Ltd. (OTCQB: PHRRF) (CSE: PHRM) is a clinical-stage psychedelics biotech company focused on the research, development and commercialization of novel uses, formulations and delivery methods of psychedelics to treat mental health, neurological and pain disorders. PharmaTher is currently conducting an FDA approved phase 2 clinical study with ketamine to treat Parkinson's disease and is developing a novel microneedle patch for the intradermal delivery of psychedelics.

Learn more at: [PharmaTher.com](#) and follow us on [Twitter](#) and [LinkedIn](#).

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These statements relate to future events or future performance. The use of any of the words "could", "intend", "expect", "believe", "will", "projected", "estimated", "potential", "aim" and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on PharmaTher Holdings Ltd. (the "Company") current belief or assumptions as to the outcome and timing of such future events. Forward-looking information is based on reasonable assumptions that have been made by the Company at the date of the information and is subject to known and unknown risks, uncertainties, and other factors that may cause actual results or events to differ materially from those anticipated in the forward-looking information. Given these risks, uncertainties and assumptions, you should not unduly rely on these forward-looking statements. The forward-looking information contained in this press release is made as of the date hereof, and Company is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. The foregoing statements expressly qualify any forward-looking information contained herein. Factors that could cause actual results to differ materially from those anticipated in these forward-looking statements are described under the caption "Risk Factors" in Company's management's discussion and analysis for the period of February 28, 2021 ("MD&A"), dated April 28, 2021, which is available on the Company's profile at www.sedar.com.

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