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University of Lethbridge chosen to conduct dosage study for novel Parkinson's disease formulations

Biopharmaceutical research company GB Sciences' plant-inspired formulations entering the final stages before first-in-human clinical trials

Gb Sciences, Inc. (OTCQB:GBLX), a leading plant-inspired biopharmaceutical research and development company, has selected the University of Lethbridge to complete a dose range study of Gb Sciences' patent-protected formulations in a rodent model of Parkinson's disease (PD).

"Gb Sciences is an innovator in drug discovery and development, and they have promising drug candidates for the treatment of Parkinsonian movement disorders. With the state-of-the-art behavioral measurement methods at the University of Lethbridge and the exceptional innovative programs, this promises to be an outstanding, productive partnership," says Dr. Robert Sutherland, professor and Chair of the Department of Neuroscience at ULethbridge; Board of Governors Research Chair in Neuroscience; and director of the Canadian Centre for Behavioural Neuroscience.

Gb Sciences plans on filing an Investigational New Drug Application to begin first-in-human clinical trials as early as next year. As the second most common neurodegenerative disease, the market for Parkinson's disease treatments is expected to grow to $8.8 billion by 2026.

Gb Sciences received U.S. Patent No. 10,653,640 in May 2020 for its proprietary cannabinoid-containing therapeutic mixtures for the treatment of PD. Animal studies conducted by the National Research Council of Canada found that Gb Sciences' PD formulations achieved statistically significant reductions in the PD-like motor symptoms associated with the loss of dopamine-producing neurons. Initial toxicity studies for these original PD formulas came back with no significant evidence of adverse effects.

Through GbS Global Biopharma, its wholly owned Canadian subsidiary, Gb Sciences has signed a contract with ULethbridge to complete required rodent dose response studies. These important studies will determine the dose range of active ingredients that will be

used in human trials and will identify potential side effects. These dose response studies are scheduled to begin next month.

“Using rodent models of PD-motor symptoms, we should be able to predict the appropriate dose range and duration of action of Gb Sciences’ PD therapies for its first-in-human trial,” says Sutherland.

“Our drug discovery process has identified ratio-specific mixtures of cannabinoids that achieved the statistically significant reduction of Parkinsonian movement symptoms in an animal model; thus establishing our proof-of-concept for this therapeutic program,” says Dr. Andrea Small-Howard, president and chief science officer of Gb Sciences. “Now, working with the University of Lethbridge, we are taking a major step forward by testing these cannabinoid ratio-specific formulations to establish the dose range for our first-in-human clinical trial.”

To create Gb Sciences’ novel therapies, the company’s goal is to identify ‘minimum essential mixtures’ that retain the efficacy of whole plant extracts, but with the manufacturing and quality control advantages of single ingredient pharmaceutical products. Gb Sciences uses its novel PhAROS™ (Phytomedical Analytics for Research Optimization at Scale) drug discovery engine’s predictive capabilities, combined with rigorous high throughput screening of potential combinations of these plant-derived compounds in established cellular models of disease to determine which minimum essential mixtures from these plant-based materials may be therapeutically beneficial. These minimum essential mixtures are then validated and refined in animal models, in preparation for the first-in-human trial.

To learn more about Gb Sciences, visit www.gbsciences.com.

About Gb Sciences and GbS Global Biopharma

Gb Sciences, Inc. is a plant-inspired, biopharmaceutical research and development company creating patented, disease-targeted formulations of cannabis- and other plant-inspired therapeutic mixtures for the prescription drug market through its Canadian subsidiary, GbS Global Biopharma, Inc. To learn more, visit www.gbsciences.com.

To view online: https://www.ulethbridge.ca/unews/article/university-lethbridge-chosen-conduct-dosage-study-novel-parkinson%E2%80%99s-disease-formulations

PHOTO: Dr. Robert Sutherland, shown on the left, and his lab will determine the dose range of active ingredients that will be used in human trials and will identify potential side effects.

-- 30 --

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