

Ceapro Inc. Expands Collaborative Research Program with McMaster University to Develop an Inhalable Immuno-Therapeutic/-Prophylactic for COVID-19-Induced Lung Fibrosis

 Continuation of research with McMaster University to validate the anti-fibrotic properties of the Company's PGX-Processed yeast beta glucan in experimental models of lung fibrosis and to pave the way for Phase 1 clinical trial

EDMONTON, Alberta, Aug. 11, 2022 (GLOBE NEWSWIRE) -- Ceapro Inc. (TSX-V: CZO; OTCQX: CRPOF) ("Ceapro" or the "Company"), a growth-stage biotechnology company focused on the development and commercialization of active ingredients for healthcare and cosmetic industries, announced it has entered into an additional research project expanding on the ongoing collaboration with McMaster University to develop an inhalable immuno-therapeutic/-prophylactic for COVID-19-induced lung fibrosis. The research project, entitled "PGX-processed yeast beta-glucans as an inhalable immuno-therapeutic/-prophylactic for COVID-19-induced lung fibrosis," is aimed at developing a treatment for individuals suffering from the long-term effects of COVID-19.

This project builds on the collaboration between Dr. Kietjl Ask, Dr. Todd Hoare and Ceapro's labs initiated in August 2019 aimed at developing innovative drug delivery systems using the disruptive PGX Technology to optimize drug formulations used in areas of high unmet medical needs such as idiopathic lung fibrosis and antibiotic-resistant infections. To date, the PGX Technology has demonstrated the ability to purify and dry yeast beta glucan (YBG) into uniform inhalable particles that could modulate the immune system through a specific mechanism of action. Findings are under peer review.

"It is very exciting to see that modulators of pro-fibrotic macrophages emerge as novel antifibrotic therapeutic agents potentially useful for patients with fibrotic disease," commented Dr. Ask. "We are very pleased to continue to contribute toward the development of this exciting therapeutic strategy."

The expanded research program will be under the leadership of Dr. Ask, and Dr. Hoare at McMaster University. Additionally, Dr. Martin Kolb will join in co-leading the project. Dr. Kolb is a Professor within the Division of Respirology in the Department of Medicine and Pathology & Molecular Medicine and the Research Director of the Firestone Institute for Respiratory Health at St. Joseph's Healthcare Hospital. His research insight on mechanisms of lung injury, repair and fibrosis along with his clinical first-hand experience with several hundred patients on interstitial lung disease and COVID-19-induced lung fibrosis well

positions him to be an invaluable additional expert to Drs. Ask and Hoare.

To advance this promising technology into clinical trials, the aim of the project is to optimize the delivery of PGX-YBG to the lung and validate its performance for reducing lung fibrosis, both alone and loaded with an anti-inflammatory drug currently used for COVID-19 therapy. "We are excited to build on the promising results we have already achieved with PGX-Processed yeast beta-glucan to advance this technology closer to the clinic and ultimately benefit patients," said Dr. Hoare.

The long-term effects of COVID-19 on individual health remain to be elucidated, with numerous reports emerging of fibrotic changes in the lung beyond the acute phase of the disease. Dr. Kolb explained, "Pulmonary fibrosis continues to be a disease group with major unmet clinical need for many patients in Canada and across the world. I am grateful for the opportunity to tackle the treatment of pulmonary fibrosis in partnership with such an innovative group of people at Ceapro."

"Conducting research during a pandemic has been a major challenge, but the McMaster and Ceapro research teams have been relentless despite all the challenges and I would like to thank them and applaud the innovative work that they have accomplished so far," stated Gilles Gagnon, M.Sc., MBA, President and CEO of Ceapro. "Under the leadership of Drs. Kolb, Ask and Hoare, I feel confident that this project will bring benefits to patients while creating value for shareholders."

Ceapro, in collaboration with Mitacs, a national, not-for-profit organization that has fostered growth and innovation in Canada for over 20 years, will help provide funding for the three post-graduate students involved in this project over the next year.

About Pressurized Gas eXpanded Liquid Technology (PGX)

Ceapro's patented Pressurized Gas eXpanded (PGX) technology is a unique and disruptive technology with several key advantages over conventional drying and purification technologies that can be used to process biopolymers into high-value, fine-structured, openporous polymer structures and novel biocomposites. PGX is ideally suited for processing challenging high-molecular-weight, water-soluble biopolymers. It has the ability to make ultra-light, highly porous polymer structures on a continuous basis, which is not possible using today's conventional technologies. PGX was invented by Dr. Feral Temelli from the Department of Agricultural, Food & Nutritional Science of the University of Alberta (U of A) along with Dr. Bernhard Seifried, now Senior Director of Engineering Research and Technology at Ceapro. The license from U of A provides Ceapro with exclusive worldwide rights in all industrial applications.

About McMaster University

McMaster University, one of four Canadian universities listed among the Top 100 universities in the world, is renowned for its innovation in both learning and discovery. It has a student population of 23,000 and more than 175,000 alumni in 140 countries.

McMaster University is a globally renowned institution of higher learning and an innovative research community committed to advancing human and societal health and well-being. Our focus on collaboratively exchanging ideas and approaches makes us uniquely positioned to

pioneer groundbreaking solutions to real-world problems leading to a Brighter World.

About Mitacs

Mitacs is a not-for-profit organization that fosters growth and innovation in Canada by solving business challenges with research solutions from the best academic institutions in the world. Mitacs is funded by the Government of Canada, the Government of Alberta, the Government of British Columbia, Research Manitoba, the Government of New Brunswick, the Government of Newfoundland and Labrador, the Government of Nova Scotia, the Government of Ontario, Innovation PEI, the Government of Quebec, the Government of Saskatchewan, and the Government of Yukon.

For Mitacs news, please visit: www.mitacs.ca/en/newsroom

About Ceapro Inc.

Ceapro Inc. is a Canadian biotechnology company involved in the development of proprietary extraction technology and the application of this technology to the production of extracts and "active ingredients" from oats and other renewable resources. Ceapro adds further value to its extracts by supporting their use in cosmeceutical, nutraceutical, and therapeutics products for humans and animals. The Company has a broad range of expertise in natural product chemistry, microbiology, biochemistry, immunology and process engineering. These skills merge in the fields of active ingredients, biopharmaceuticals and drug-delivery solutions. For more information on Ceapro, please visit the Company's website at www.ceapro.com.

For more information contact:

Jenene Thomas JTC Team, LLC Investor Relations and Corporate Communications Advisor T (US): +1 (833) 475-8247

E: czo@jtcir.com



Source: Ceapro Inc.