



PRESS RELEASE

CELLMADE AND ITS PARTNERS ESTABLISH THE PROJECT INFLAMMAGREEN. THIS INITIATIVE FOCUSES ON THE DEVELOPMENT OF THERAPEUTICAL SOLUTIONS LIMITING INFLAMMATORY AND PRO-OXYDANT PROCESSES IN HUMANS AND FARM ANIMALS VIA THE VALORISATION OF VEGETAL BIOMASS.

April 2020

CellMade, a biopharmaceutical company engaged in the discovery and development of biomarkers and nutraceutical products for the early diagnosis and preventive treatment of metabolic and inflammatory diseases (notably affecting the hepato-gastroenterological sphere) established **the innovative InflammaGreen project**.

The InflammaGreen project is the result of a collaboration between **the company CellMade**, which specializes in the development of diagnostic and nutraceutical solutions for metabolic and inflammatory pathologies in humans, **the company ID4FEED**, which specializes in the eco-extraction of compounds and the design of products to fight inflammatory and oxidative stresses encountered by farm animals, and **the Laboratory of Molecular Chemistry and Environment (LCME) of the Savoie Mont-Blanc University**, specialized in the eco-extraction and chemical characterization of compounds derived from plants for the purpose of recovering and valorizing plant biomass and waste.

The objective of the InflammaGreen project is to develop *in vitro* solutions enabling to slow the progression of non-alcoholic fatty liver disease in humans and reduce metabolic disorders related to feed or environmental stress in farm animals *via* the inhibition of inflammatory and pro-oxidant processes, **and this, through the recovery of plant biomass and agricultural waste**.

The InflammaGreen project will make it possible to develop novel and innovative solutions selected for their biological activities and having applications in human and farm animal health. The InflammaGreen project is highly eco-compatible through the selected manufacturing processes respecting the principles of green chemistry. The recovery of plant biomass and agricultural waste is part of a circular economy approach on a regional scale. **In addition to the significant effects expected in the fields of human and farm animal health in need of satisfactory solutions, a significant environmental benefit is also expected.** During this project, the partners will eco-extract active molecules from plant waste, characterize and isolate molecules of interest, assess *in vitro* their anti-inflammatory and antioxidant effects using dedicated cellular models, and further optimize and guide the extraction of selected chemical entities screened for high biological activity.

As part of the submission of the InflammaGreen initiative to the R&D Booster 2020 call for projects, Lyon Biopôle and Terralia labelled the described project!



PRESS RELEASE

A strong public-private cooperation in response to a major health care problem! With the uptrend of western-style dietary habits accompanied by an ever-increasing sedentary lifestyle, the number of people suffering from chronic overweight and obesity is continuously rising. *“In France, and for the adult population only, more than 6 million people suffer from obesity and approximately 16 Million people are overweighed. If we don’t react now, a real epidemic of Non-Alcoholic Steatohepatitis (NASH) will develop and will generate unprecedented costs for the health care systems within the next 10, 20, 30 years. No public health care system will be able to cover such costs”, said Ronald Bronsaer.* In line with its translational research initiatives, CellMade wishes to rethink the current clinical model coupling diagnostic tools and medical nutrition products for early detection and preventive treatment of metabolic diseases.

Our current activity is dedicated to the development of a non-invasive diagnostic tool coupled to a medical nutrition product. CellMade’s approach allows for early and preventive management of patients suffering from NASH. Prevention, or at least slowing down the progression, of NASH is potentially the only option to overcome development of associated metabolic diseases such a Type II Diabetes and cardiovascular disease. As of today, no direct therapeutical treatment for NASH is authorized.

About CellMade: A Biopharmaceutical company studying metabolic dysfunction at the basis of widespread diseases such as obesity, non-alcoholic fatty liver disease, type II diabetes and cardiovascular diseases. CellMade and its scientific partners identify new biomarkers and therapeutic targets and develop a comprehensive range of medical nutrition products. The current biomarker and medical nutrition development projects focus on early diagnosis and preventive treatment of NASH. The Company established joint laboratory facilities with the University Savoie Mont Blanc and is located within the University laboratories at the scientific campus of Le Bourget-du-Lac (France). The medical nutrition product is a multi-hit approach based upon solid scientific proof. The Company enters into clinical development. The phase I/II and II studies will demonstrate safety and efficacy of CellMade’s clinical nutrition product. Finally, the Company will submit application dossiers to regulatory authorities as to obtain the authorization for labelling the clinical nutrition product with strong health claims.

About the LCME laboratory: The LCME is an academic research laboratory of the Savoie Mont Blanc University (EA1651) organized around 14 university lecturers and researchers, 5 administrative and technical support staff, 2 post-docs and 7 doctoral students. The LCME is specialized in the fields of environmental chemistry and green chemistry, in particular the eco-compatible synthesis of molecules and materials, as well as the recovery of plant biomass and waste. Processes respecting the principles of green chemistry and implementing unconventional media and methods activation (ultrasound, photochemistry, supercritical fluids, ionic liquids, etc.) are particularly studied. The projects developed in the laboratory concern fundamental research (study of mechanisms, identification of molecules and associated properties, *in-situ* monitoring and transformation of chemical processes, etc.) and



PRESS RELEASE

applied research (development of prototypes, recovery of waste from the territory into molecules of interest, etc.).

About ID4FEED: The company designs natural solutions based on plants and plant extracts in order to fight against deregulation of the oxy-inflammatory cycle in farm animals subjected to various stresses. The expertise of the R&D team resides in the fields of plant physiology and the induction of plant defenses (elicitation of the production of active secondary metabolites), of eco-extraction of plant metabolites (respectful processes of the environment), of the design of formulas and combinations of plants in all their forms (total of the plant, essential oils, purified molecules), of galenic (encapsulation of the active ingredients for targeted salting out in animals), tests *in vitro* and *in vivo* activity, and quality control.

Contact(s) :

www.laboratoire-cellmade.fr

ronald.bronsaer@laboratoire-cellmade.fr

Tel : 04.57.34.53.02