



Medicago and Collectis Enter into Research Agreement to Improve Therapeutic Proteins Using Nuclease Technology

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QUEBEC CITY, QC and SAINT PAUL, MN, Jan. 16, 2012 /CNW/ - Medicago Inc. (MDG: TSX), a biotechnology company focused on developing highly effective and competitive vaccines based on proprietary manufacturing technologies and Virus Like Particles, and Collectis plant sciences, a subsidiary of Collectis SA (Alternext: ALCLS), the French specialist in genome engineering, today announced the signing of a research agreement under which Medicago and Collectis will collaborate to improve therapeutic proteins expressed from tobacco leaves.

"We look forward to working with Collectis plant sciences to assess their nuclease technology for use in our ongoing work to develop biosimilar products," said Dr. Louis-Philippe Vezina, Chief Scientific Officer of Medicago. "This tool has the potential to hasten the expansion of our platform towards the production of a wider range of therapeutic proteins including biosimilars, and complement our existing tools for the control of protein glycosylation."

Luc Mathis, CEO of Collectis plant sciences commented, "I am very proud to see the Collectis technology being applied for use in plants to produce potential products for human health benefit, and expect that we will see additional opportunities for our technology in the near future."

Collectis manufactures DNA scissors called nucleases that can cut precise DNA sequences allowing for the creation of a wide range of specific tools to modify a target gene. Collectis' innovative nucleases have the potential to enable the modification of protein glycosylation patterns in plants with unprecedented control and uniformity, allowing for increased efficacy of therapeutic products. Using nucleases, it is possible to generate a large array of specific glycoprotein variants, and select the best candidate with the optimal glycosylation and produce it at large scale using Medicago's plant-based manufacturing technology. This approach may be applied to optimize efficacy and other protein characteristics such as solubility, therapeutic half-life, tissue distribution and interaction with complement proteins.

About Medicago

Medicago is committed to provide highly effective and competitive vaccines based on proprietary VLP and manufacturing technologies. Medicago is developing VLP vaccines to protect against pandemic and seasonal influenza, using a transient expression system which produces recombinant vaccine antigens in the cells of non-transgenic plants. This technology has potential to offer advantages of speed and cost over competitive technologies. It promises a vaccine for testing in about a month after the identification and reception of genetic sequences from a pandemic strain. This production time frame has the potential to allow vaccination of the population before the first wave of a pandemic strikes and to supply large volumes of vaccine antigens to the world market. Additional information about Medicago is available at www.medicago.com.

About Collectis plant sciences

Established in March 2010, Collectis plant sciences is a subsidiary of Collectis dedicated to the applications of meganucleases in plants. Its main mission is to increase and accelerate usage of Collectis' proprietary technology in agricultural biology, broaden the company's platform to attract new and expanded licensing opportunities and explore the development of proprietary traits for selected applications. Collectis plant sciences is located in Saint Paul, Minnesota, USA. Professor Daniel Voytas, Chief Scientific Officer of Collectis plant sciences, is also Director of the University of Minnesota Center for Genome Engineering.

About Collectis

Collectis improves life by applying its genome engineering expertise to a broad range of applications, including agriculture, bioresearch and human therapeutics. Collectis is listed on the NYSE-Euronext Alternext market (code: ALCLS) in Paris. For further information about Collectis, visit our website at: www.collectis.com. Follow Collectis on twitter: <http://twitter.com/collectis>.

Forward Looking Statements

This news release includes certain forward-looking statements that are based upon current expectations, which involve risks and uncertainties associated with Medicago's business and the environment in which the business operates. Any statements contained herein that are not statements of historical facts may be



deemed to be forward-looking, including those identified by the expressions "anticipate", "believe", "plan", "estimate", "expect", "intend", and similar expressions to the extent they relate to Medicago or its management. The forward-looking statements are not historical facts, but reflect Medicago's current expectations regarding future results or events. These forward-looking statements are subject to a number of risks and uncertainties that could cause actual results or events to differ materially from current expectations, including the matters discussed under "Risks Factors and Uncertainties" in Medicago's Annual Information Form filed on March 31, 2011 with the regulatory authorities. Medicago assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those reflected in the forward-looking statements.

<http://www.medicago.com/English/news/News-Releases/News-ReleaseDetails/2012/Medicago-and-Collectis-Enter-into-Research-Agreement-to-Improve-Therapeutic-Proteins-Using-Nuclease-Technology1127927/default.aspx>