



**For Immediate Release**

## **Argos Therapeutics and Université de Montréal Present Novel Method to Create Personalized Immunotherapy Treatments that Stimulate HIV-Specific T Cells**

**-Data Presented at XVII International AIDS Conference-**

**MONTREAL, QC and DURHAM, N.C. - August 5, 2008** – Argos Therapeutics and Université de Montréal today announced the presentation of new information on Argos' process for developing dendritic cell-based immunotherapies for HIV. Results from the study demonstrate that loading monocyte-derived dendritic cells with combinations of HIV antigen RNA stimulates the expansion of HIV-specific T cells, which attack and kill HIV-infected cells. Argos' immunotherapies are generated by the Company's Arcelis™ technology, which is a platform for creating autologous, RNA-loaded dendritic cell-based therapies perfectly matched to each patient's unique virus. These data were presented in an oral poster discussion August 5, 2008 at the XVII International AIDS Conference in Mexico City.

“A key step in the durable control of HIV infection requires enhancing the development of memory immune responses and the stimulation of potent cytotoxic T cells through therapeutic vaccination,” said Charles Nicolette, Ph.D., Chief Scientific Officer of Argos. “Working with our colleagues at the Université de Montréal, we have shown that Argos' approach of transfecting dendritic cells with autologous, HIV-specific antigens effectively activates dendritic cells and enhances the HIV-specific T cell response. We believe that these results support our methods of developing potent immunotherapies that help patients' immune systems more effectively fight HIV infection.”

The inability of the immune system to effectively mount a response against HIV may be caused by a defect in the maturation of T cell memory. To explore this hypothesis, researchers from Dr. Rafick-Pierre Sékaly's laboratory at the Université de Montréal and Argos tested whether modified dendritic cells, derived from monocytes of HIV-infected individuals, could correct the defective maturation of HIV-specific CD8 T-cells responsible for virus eradication. To potentially improve the magnitude and quality of the anti-HIV T-cell response, maturing dendritic cells were transfected with mRNA-encoding autologous HIV sequences combined with mRNA-encoding immune modulatory molecules. These modified dendritic cells were then tested for their ability to expand and mature T cell responses *in vitro*.

The results of these recent assessments, presented for the first time at the International AIDS Conference in Mexico, show that this novel product induces greater proliferation, maturation and differentiation of HIV-specific CD8 cells *in vitro*. These properties, especially expanding

memory cells, which are required for long term protection against pathogens, represent an improvement over other approaches.

“We believe that this improvement may represent a significant step forward and is worthy of future clinical development,” said Dr. Sékaly, professor of immunology at the Université de Montréal. “The fact that we can stimulate a specific, long-term immune response gives us great hope that, with additional development, we will be able to give people infected with HIV a new option to battle the virus.”

The abstract, titled, “*The co-transfection of monocyte derived dendritic cells (DC) by different combinations of HIV antigen RNA and molecular adjuvant RNA enhanced the response of HIV-specific CD8+ T cells,*” was authored by Oleg Yegorov, Bader Yassine-Diab, Tom Baumgartner, Harris Carpenter, Irina Tcherepanova, Don Healey, Charles Nicolette, and Rafick-Pierre Sékaly.

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#### **About the Arcelis™ Technology**

Arcelis is Argos’ proprietary technology for personalizing RNA-loaded dendritic cell immunotherapies for HIV, other infectious diseases, and cancer. This platform is based on optimizing a patient’s own (autologous) dendritic cells to trigger a pathogen- or tumor-specific immune response. To address the challenge of the unique genetic profile of each patient’s disease and the genetic mutations of that disease, Argos loads the autologous dendritic cells with a sample of messenger RNA (“mRNA”) isolated from their disease. Through this process, dendritic cells can potentially prime immune responses to the entire antigenic repertoire, resulting in an immunotherapeutic that is customized to the patient’s specific disease. The development of the Arcelis platform is part of Argos’ broad collaboration with Kirin Pharma Company, Ltd.

#### **About Argos Therapeutics, Inc.**

*Argos is an immunotherapy company developing new treatments for cancer, infectious and autoimmune diseases, and transplantation rejection. The Company has generated multiple platform technologies and a diverse pipeline of products based on its expertise in the biology of dendritic cells - the master switch that turns the immune system on or off. [www.argostherapeutics.com](http://www.argostherapeutics.com)*

#### **About the Université de Montréal**

*Deeply rooted in Montreal and dedicated to its international mission, the Université de Montréal is one of the top universities in the French-speaking world. Founded in 1878, the Université de Montréal constitutes today the largest centre of higher education and research in Québec and the second largest in Canada. Advancing healthcare is a top priority for the Université de Montréal whose scientists are internationally renowned for their practical and clinical investigations. [www.umontreal.ca](http://www.umontreal.ca)*

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