

Simple blood test to identify organ rejection

Astellas Pharma Canada joins the PROOF Centre of Excellence to fund innovative research

Toronto, July 23, 2009 - Astellas Pharma Canada Inc. reaffirmed its commitment to improving the lives of transplant patients through its investment in the PROOF Centre of Excellence's Biomarkers in Transplantation, an innovative research initiative that will one day allow doctors to identify which patients are rejecting a transplanted organ using a simple blood test. This innovative diagnostic tool will help to reduce or eliminate the need for expensive, invasive and fear-evoking post-surgery biopsies while diminishing the burden of transplantation costs on the Canadian health care system.

The 6.5 million dollar project is funded by the PROOF Centre of Excellence, Astellas Pharma Canada Inc., Genome BC, the St. Paul's Hospital Foundation, the University of British Columbia, and the BC Transplant Society. Astellas is the sole corporate sponsor of the Biomarkers in Transplantation initiative.

"Patient care and improving lives has always been our primary focus and the objective of our work," said Fumiaki Sakurai, President of Astellas Pharma Canada. "We are honoured to be part of such a distinguished partnership, working toward a common goal of improving the lives and health outcomes of transplant patients."

The **Biomarkers in Transplantation** project is harnessing the power of advanced genomic, proteomic and computational tools to develop the test, which will diagnose organ rejection before and when it happens, allowing doctors to intervene much earlier and to personalize the patient's immunosuppressant therapy.

"By reducing or replacing the biopsy tests with a biomarker test that measures proteins or genes in the blood we get a quantitative, not qualitative test, that is more accurate, more powerful and gives us better insights into the biology," says Dr. Bruce McManus, Director of the PROOF Centre for Excellence.

Using blood samples from transplant patients, the project leaders, Drs. Paul Keown, Bruce McManus, Rob McMaster, Raymond Ng and their team have uncovered blood biomarkers that will diagnose or predict acute organ rejection in heart and kidney transplant patients.

"We have validated our test in one group of patients and we are now taking our test across Canada in preparation for the Health Canada and FDA approval process which we hope will take under 24 months," says Dr. Keown, Director of Immunology at Vancouver Coastal Health and Head of Nephrology at the University of British Columbia.

Given that the average cost of a heart biopsy encounter in Canada is around \$5-10 thousand dollars – and that the average heart transplant recipient will need at least a dozen of these invasive procedures in the first year alone – the benefits this test will provide are enormous, with estimated cost savings in the tens of millions of dollars a year in Canada for heart transplants alone. Although kidney biopsies are conducted less frequently than for heart transplants, they too represent considerable pain and difficulty for the patients as well as significant cost and strain on resources for the healthcare system.

"This exceptional advancement will make a significant difference in the lives of patients like me who have been through a transplant and the resulting traumatic and expensive biopsies," says Gordon Allan, a heart and kidney transplant recipient who has been involved with the Biomarkers project since 2004.

About Astellas Pharma Canada, Inc.

Astellas Pharma Canada, Inc. is highly focused on customers and their needs and is committed to making

a difference in immunology. The company also seeks to develop breakthrough products in infectious disease, urology, cardiovascular disease and dermatology. Astellas Pharma Inc. is a pharmaceutical company dedicated to improving the health of people around the world through the provision of innovative and reliable pharmaceutical products. Astellas Pharma Canada, Inc., is one of the Astellas Group of companies in North America and an affiliate of Astellas Pharma Inc., located in Tokyo. The organization is committed to becoming a global category leader in focused areas including transplantation by combining outstanding R&D and marketing capabilities. Additional corporate information is available at www.astellas.com/ca.

About the PROOF Centre of Excellence

The Centre of Excellence for Prevention of Organ Failure (PROOF Centre) is a not-for-profit society hosted by the University of British Columbia. The PROOF Centre was established in March 2008 by competitive funding from the Networks of Centres of Excellence Secretariat under the Centre of Excellence for Commercialization and Research (NCE CECR) Program. The PROOF Centre's administrative hub is anchored in the Providence Heart + Lung Institute at St. Paul's Hospital in Vancouver, British Columbia. Partnered resources and core capabilities of the PROOF Centre, including patient cohorts, information management and technology platforms, are situated in Vancouver, elsewhere in British Columbia and Alberta, and around the world.

The PROOF Centre discovers, develops, commercializes and implements biological markers (biomarkers) to prevent, diagnose, predict and better treat heart, lung and kidney failure. The PROOF Centre is a unique, multi-disciplinary engine of talented partners from industry, academia, healthcare, and government, also including patients and the public. The PROOF Centre's "personalized medicine" approach - giving the right person, the right care, at the right time, in the right amount - will reduce the enormous socioeconomic burden of heart, lung and kidney failure and improve health. For more information, visit www.proofcentre.ca

For additional information and to arrange an interview contact:

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