Short-term insulin therapy successfully induces remission in Type 2 diabetes

August 2, 2016 (Toronto) –

A new study published in BMJ Open Diabetes Research and Care shows that early intervention with short-term intensive insulin therapy for four weeks can successfully induce a remission of Type 2 diabetes that lasts for up to one year thereafter. The study led by Dr. Ravi Retnakaran, an endocrinologist with Leadership Sinai Centre for Diabetes at Mount Sinai Hospital, part of Sinai Health System, showed that the earlier that short-term intensive insulin therapy was administered after the diagnosis of diabetes, the more successful it was in sustaining a 48 week remission.

Short-term intensive insulin therapy is typically administered for a period of two to four weeks and can decrease insulin resistance, reduce glucagonemia, improve pancreatic beta-cell function and induce a remission that can last up to one year in just under 50 per cent of patients. The study showed that those who had been diagnosed within the preceding two years and then undergone the treatment had the longest sustained remission. Patients who had sustained remission had better baseline beta-cell function that was preserved across the one year after stopping the treatment.

“This study points us in a very important direction in our quest to address one of the most prevalent chronic diseases today. The first point is the clear benefit of short-term intensive insulin therapy, and the second is the importance of early intervention within the first few years after diagnosis. Our quest is to better understand the factors that determine remission so that we can offer long term solutions for our patients. The current study tells us that one key factor is early intervention with short-term insulin therapy during a window of opportunity that only exists in the first few years after diagnosis,” said Dr. Retnakaran.

Dr. Retnakaran, an endocrinologist with Leadership Sinai Centre for Diabetes at Mount Sinai Hospital and an investigator with the Lunenfeld-Tanenbaum Research Institute collaborated with Drs. Bernard Zinman and Caroline K. Kramer, both of Leadership
Sinai Centre for Diabetes at Mount Sinai Hospital and Lunenfeld-Tanenbaum Research Institute in conducting a major clinical trial known as RESET-IT that aims to induce remission of Type 2 diabetes. The institute ranks amongst the top diabetes research centres in the world.

More than three million Canadians have Type 2 diabetes and the World Health Organization recently warned that rates have quadrupled since 1980, with 422 million people worldwide living with diabetes. The rate is expected to double in the next 20 years.

To read the full study, click here.

Patients interested in participating in the RESET IT trial should contact: Ms. Haysook Choi at Mount Sinai Hospital at (416) 586-8778 or haysook.choi@sinaihealthsystem.ca.

**About the Lunenfeld-Tanenbaum Research Institute**

The Lunenfeld-Tanenbaum Research Institute, part of Sinai Health System, is a leading biomedical research centre, ranking amongst the top biomedical research institutes in the world. Established in 1985, the institute is profoundly advancing understanding of human biology in health and disease. Many of the breakthroughs that began as fundamental research have resulted in new and better ways to prevent, diagnose and treat prevalent conditions. The institute is affiliated with the University of Toronto and is focused on women's and infants' health, cancer biology, stem cell biology, neurobiology, diabetes, arthritis, health systems research, population health services and solutions, and systems biology. [www.lunenfeld.ca](http://www.lunenfeld.ca).

-30-

For more information or to arrange an interview, please contact:

Sally Szuster  
Senior Manager, Communications and Public Affairs, Sinai Health System  
416-586-4800 ext. 8713  
sszuster@sinaihealthsystem.ca