

TREATMENT | CLINICAL RESEARCH

Project: Early Combination Therapy for Type 2 Diabetes

Through donor support, Dr. Ravi Retnakaran, Associate Professor in the Division of Endocrinology and Metabolism at the University of Toronto, is discovering if a new therapy may improve the quality of life for people with type 2 diabetes.

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. For people with type 2 diabetes, they can no longer produce or use enough insulin to control their blood sugars, which can lead to health complications such as nerve damage, sight loss, heart disease, kidney failure, anxiety, amputations, and even death.

A new treatment for type 2 diabetes combines long-acting insulin and another medication called GLP1-RA. Clinical trials have shown that, in patients who have lived with type 2 diabetes for many years, this combination can provide excellent blood sugar control, with no increased risk of low blood sugars or weight gain.

Dr. Retnakaran is studying whether this combination therapy affects the following three

hormones that can help with glucose control: glucagon, GLP-1 and GIP. His research will help inform whether this therapy should be used earlier for people with diabetes, improving their blood sugar levels and quality of life.