

2025-Jan-17

Islet cell transplant studies

As of today's date the only Islet Cell Transplant clinical trial being conducted in Canada is the Vertex 264 study described below: there is a site at VGH, one in Edmonton and another in Toronto. More Islet Cell studies will come, and when they are available they will be listed on this page. For a general introduction to Islet cell transplantation see this [21 minute "The Cure"](#) youtube recorded by me in 2020 for a Diabetes Canada symposium: from timestamp 9'40" to 16'12".

Vertex 264 study at Vancouver General Hospital

The Principal Investigator (PI) is Dr. David Thompson. I am assisting Dr. Thompson with recruitment. The study started recruiting 2024-Aug-28. It involves implantation under the skin/fat/muscle of the abdominal wall (but not "inside" the abdomen or peritoneum) of a number of meshes, each 10 cm in diameter and 2 mm in depth, that are impregnated with human embryo-derived Islet cells. The mesh serves as both a scaffold for the Islets and a barrier preventing immune cell attack. For the 264 study immunosuppression is not required at any time. Initially two meshes will be inserted, but later in the study up to 6 meshes will be inserted.

Basic inclusion criteria:

Type 1 diabetes for >5 years, age 18-65, onset before age 40, last A1c 6.0-9.5, total daily dose insulin < 40 units, BMI (body mass index) 21-30 and ABO blood group A or AB (blood groups O and B are disqualifying) and no diabetic emergencies in the last year (no DKA or severe lows). If you would like to get your ABO blood group tested feel free to use [this requisition](#) (cross out lipase and if you don't need an A1c cross it out as well). ABO blood group testing is not covered by BC Medical so be prepared to pay \$28. Note, you **do not** need to have your Rh blood group (ie Rh + or Rh -) tested: this is another \$25. Women of childbearing age must agree not to become pregnant while having a transplant in place. Alas, women who have had a baby will not qualify because a pregnancy will have immunized their body, and might therefore reject a transplant.

To see if you believe you may qualify go to <https://264.t1diabetestrial.com/> If you meet all the criteria you will be contacted by phone.

Recent reports from China have suggested that harvested cells from individuals with Type 1 diabetes which were programmed into pluri-potential stem cells then differentiated into Islet cells and implanted under the abdominal wall could eliminate the need for insulin: for more see <https://www.nature.com/articles/d41586-024-03129-3> published 2024-Sep-26.

Short URL = <https://bit.ly/ICTCanada>