

Breakthrough T1D Network for Canada – Advocacy Q&A

Q. What is the Breakthrough T1D Network for Canada, in simple terms?

The Breakthrough T1D Network for Canada (BTNC) is a nationally anchored, public-private partnership designed to coordinate and actively manage cell-based therapy trials for type 1 diabetes (T1D), as a starting point, across Canada. It connects clinical sites, manufacturing capacity, regulatory expertise, and commercialization pathways so therapies move faster into clinical use, and the benefits of Canadian innovation stay in Canada.

Q. What is being asked of the federal government?

A. BTNC is requesting a \$62 million federal investment over five years, which would anchor a \$100 million total initiative when combined with \$25 million from Breakthrough T1D and \$13 million from industry and research institutions. All federal research funding would be matched at least 1:1, maximizing the impact of public dollars.

Q. Why is the federal government being asked to support this?

A. Only the federal government can catalyze a coordinated, pan-Canadian effort at this scale. Without federal leadership, research and trials remain fragmented, and discoveries made in Canada are often commercialized elsewhere. Federal participation anchors trials, talent, and investment in Canada and ensures Canadians benefit from breakthroughs developed here.

Q. Why focus on type 1 diabetes instead of another disease?

A. Type 1 diabetes is one of the most clinically ready areas in regenerative medicine. Peer-reviewed assessments identify T1D as among the diseases closest to curative breakthroughs using cell and gene therapies. Canada has a unique advantage: our researchers and clinicians have performed more insulin-producing cell transplants than any other country and are already supporting multiple trials. This makes T1D the most credible and measurable place to lead.

Q. Does this mean other diseases are being ignored?

A. No. Type 1 diabetes is the starting point, not the end goal. The same infrastructure, workforce, manufacturing standards, regulatory pathways, and trial coordination developed through BTNC are directly transferable to other advanced therapies, including those for cancer, rare diseases, and organ repair.

Q. Why invest now?

A. Canada is at a time-sensitive moment. Cell and gene therapies are moving from research into real-world clinical use, and countries that act now are locking in trials, talent, and investment. Without coordinated action, Canada risks losing a generation of health and economic benefits from discoveries it helped fund.

Q. What economic return does this investment generate?

A. According to Statistics Canada, every dollar invested in health research and development generates approximately \$5.75 in economic value. Applying this ratio, a \$100 million investment in BTNC could generate approximately \$575 million in economic value through job creation, R&D activity, commercialization revenue, and foreign investment.

Q. How did you get to those numbers?

A. Those figures are based on established economic impact ratios. I will ask the experts at Breakthrough to provide a more detailed explanation and get back to you with specifics.

Q. How does this help manage healthcare costs over time?

A. Type 1 diabetes is a lifelong disease that drives high and growing healthcare costs. BTNC modeling shows that accelerating the arrival of a cure by just five years could avoid approximately \$15 billion in healthcare costs across Canada, largely by reducing complications such as kidney failure, cardiovascular disease, blindness, and hospitalizations, which are costly comorbidities for the healthcare system.

Q. Is this a risky investment?

A. BTNC uses milestone-based funding, independent expert review, and clear decision points to advance the most promising efforts. This disciplined approach reduces duplication and increases the likelihood of success compared to fragmented, uncoordinated funding.

Q. How are public funds protected?

A. Federal funds are matched by partners and released in stages based on performance. BTNC governance includes independent oversight, financial reporting, and alignment with federal contribution-agreement standards to ensure transparency and accountability.

Q. Is BTNC a new institute? How will you limit bureaucracy?

A. No. BTNC is not a new building or institution. It is a coordinated network that organizes and manages work already happening across Canada under a single, accountable national framework. It will be managed through Breakthrough T1D's current framework and overseen by our Chief Scientific Officer.

Q. How does this benefit provinces and health systems?

A. While federally funded, the benefits flow directly to provinces through expanded clinical trial capacity, earlier access to advanced therapies, workforce training, and long-term reductions in diabetes-related healthcare costs.

Q. How does this benefit Canada's economy and workforce?

A. BTNC will help retain Canadian intellectual property, attract private and foreign investment, and create more than 120 highly skilled jobs over its first five years. By anchoring commercialization in Canada, successful therapies are more likely to be manufactured and scaled domestically.

Q: How do you justify the 5.75x ROI projection to generate \$575M in economic value?

A: The ROI projection is grounded in Statistics Canada data on the economic impact of life sciences R&D investments. It reflects direct and indirect benefits including job creation, increased R&D spending, commercialization revenues, foreign investment attraction, and productivity gains.

Q: Can you be more specific about what “economic value” means?

A: Economic value includes high-skilled job creation; domestic R&D growth; IP retention; manufacturing and commercialization revenues; foreign direct investment; and avoided healthcare costs. Together, these contribute to GDP growth and long-term fiscal sustainability.

Q: Regarding the projected \$15B in cost avoidance, what underpins the economic modeling?

A: The estimate reflects avoided direct healthcare costs associated with T1D complications such as kidney failure, cardiovascular disease, blindness, and hospitalizations, as well as reduced reliance on lifelong insulin therapy and glucose monitoring. Conservative assumptions are applied using published Canadian cost-of-illness data.

Q. How does this support emerging talent?

A. BTNC builds a national workforce in cell therapy, clinical translation, and advanced manufacturing through shared training, mentorship, and hands-on trial experience, capability Canada will need across future advanced therapies.

Q. What does success look like in five years?

A. means doubling the number of T1D cure therapies trialed in Canada, supporting the commercialization of at least 10 academic discoveries, strengthening Canada’s regenerative medicine ecosystem, and positioning Canada as a preferred destination for advanced-therapy development.

Q. What happens if the federal government does not invest?

A. Without coordinated federal leadership, Canada risks losing trials, talent, and commercialization opportunities to jurisdictions that are moving faster. Discoveries made with Canadian public funds will continue to generate health and economic returns elsewhere.

Q. Why does this matter now?

A. Canada discovered insulin, yet the global insulin industry is dominated by companies outside the country. Regenerative medicine for type 1 diabetes represents a rare chance to lead again, to be leaders, and this time, to keep the benefits in Canada.

