Stem Cell Network
Powering Regenerative Medicine

Réseau de Cellules Souches
Propulsons la médecine régénératrice

Securing Canada's Future in Stem Cell and Regenerative Medicine
2026 Pre-Budget Submission

Stem Cell Network

Submission to the House of Commons Standing Committee on Finance

April 2026

Summary of Recommendations

Recommendation 1: Establish a Made-In-Canada Designation and Prioritized Pathway for Advanced Therapeutics

Recommendation 2: Expand coordinated support for early-stage scaling to bridge the commercialization gap for Canadian life sciences biotechnology companies

Recommendation 3: Commit to the longevity of the Strategic Science Fund (SSF) through stable, multi-year funding

Pre-Budget Submission

Across the G7, we face what can only be described as a silent pandemic. Cancer, cardiovascular disease, neurodegenerative disorders, chronic respiratory disease, and diabetes now account for a majority of deaths and are the primary drivers of rising health system costs and economic strain.[1] By 2050, nearly one in three people in G7 countries will be over the age of 65 placing unprecedented pressure on healthcare systems, labour markets, and public finances.[2]

At the same time, we are on the cusp of a transformative shift in medicine. Regenerative medicine (RM), the field focused on repairing, replacing, and regenerating cells, tissues, and organs offers the potential to move beyond managing disease to restoring health at its source. These therapies, including cell and gene therapies, represent the next frontier of care: durable, potentially curative, and increasingly personalized.

This is not only a health opportunity, but also an economic one. The global regenerative medicine market is currently valued at approximately $50–60B USD and is projected to grow to roughly $150B USD by the early-to-mid 2030s.[3] North America accounts for the largest share of this market, creating a significant opportunity for Canada. If Canada captures between 5–10% of the market, it could generate between $7–

[1] https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0336036&utm_source
[2] https://healthsystemsfacts.org/aging/?utm_source
[3] https://www.persistencemarketresearch.com/market-research/regenerative-medicine-market.asp?utm_source

15B annually in economic activity, anchoring high-value jobs, biomanufacturing capacity, and long-term productivity growth.

Canada is uniquely positioned to seize this opportunity. Regenerative medicine was born here, and decades of public investment have built one of the world's leading ecosystems of researchers, clinicians, and emerging biotechnology companies. From stem cell discovery to enabling technologies underpinning mRNA vaccines, Canadian science has repeatedly transformed global health. Yet too often, these breakthroughs are commercialized elsewhere, leaving Canadian patients waiting and Canada capturing only a fraction of the economic return.

The stakes extend beyond health and economics. Regenerative medicine is a strategic dual-use technology with applications for both civilian and defence populations. The same platforms that regenerate tissue, repair organs, and treat chronic disease can also support battlefield trauma care, burn and wound healing, neuro-regeneration, and rapid response to biological threats. In this context, regenerative medicine is not simply a health innovation it is sovereign health and defence infrastructure, critical to national resilience and security. A Canada-first designation for regenerative medicine innovations, designed to accelerate approval and adoption, would strengthen domestic resilience, helping to offset Most Favoured Nation (MFN) pricing risks and safeguard Canada against disruptions in U.S.-dependent drug supply chains.

Despite this promise, Canada risks falling behind. Early-stage life sciences investment has declined sharply, leaving companies with limited runway and increasing the likelihood that Canadian intellectual property will be sold or scaled abroad. Fragmented regulatory and reimbursement systems, designed for yesterday's medicines, delay access, deter investment, and undermine competitiveness. The result is clear: Canadian discoveries benefit global markets, while Canadian patients wait years longer for access.

Type 1 diabetes is among the conditions closest to a curative breakthrough in regenerative medicine. As outlined in the Breakthrough T1D pre-budget submission, this area reflects both Canada's scientific leadership and the near-term opportunity to translate discovery into real-world outcomes. Ensuring that Canadians living with diabetes benefit from these advances will depend not only on continued research progress, but on modernized regulatory, clinical trial, and access systems capable of supporting next-generation therapies.

To secure our advantage, Canada requires a strategic, Canada-first approach that bridges the commercialization gap and prioritizes Canadian patients for Canadian-developed therapies. By formalizing a prioritized pathway for advanced therapeutics, expanding support for early-stage scaling, and committing to the long-term stability of the Strategic Science Fund, the government can turn

regenerative medicine into a cornerstone of national productivity, health system sustainability, and sovereign security.

Recommendation 1: Establish a Made-In-Canada Designation and Prioritized Pathway for Advanced Therapeutics

Establish a Made-in-Canada Designation and Prioritized Pathway for Advanced Therapeutics, including regenerative medicine and cell and gene therapies, with dedicated resources to support priority review and coordinated regulatory, health technology assessment, and reimbursement processes, thereby accelerating patient access to Canadian-developed and publicly funded innovations.

As a distinct class of therapies, advanced therapeutics require modernized regulatory and access frameworks. Leading jurisdictions, including Japan through its *Sakigake* designation and the United States through the FDA's Breakthrough Therapy and Regenerative Medicine Advanced Therapy (RMAT) pathways, demonstrate how priority review, regulatory flexibility, and integrated support can accelerate market entry while maintaining rigorous safety standards.

Canada's current and under-used advanced therapeutics pathway should move beyond a case-by-case regulatory approach to a predictable, criteria-based system with a formal designation, priority review timelines, and early, continuous engagement across regulators, health technology assessment, and payers. It should support adaptive approval models, including the use of real-world evidence, and enable earlier patient access through clinical trials. Additionally, it should not be viewed as a tool of last resort by regulators, but rather one that can offer a competitive economic advantage while delivering leading-edge therapies to patients quickly and safely.

This approach would also improve time-to-market, attract private capital, and incentivize domestic and global firms to launch and test in Canada. It would also strengthen domestic biotechs and ensure stronger economic returns on public research investments.

Without an efficient clinical trial and approvals environment that considers time and costs, Canadian discoveries will continue to reach foreign patients before Canadians. For example, the Montreal-based biotech ExCellThera received millions in public funding to develop its blood cancer therapy, Zemcelpro. The therapy successfully received authorization from the European Medicines Agency (EMA) but remains unavailable to Canadian patients due to duplicative, costly and burdensome domestic regulatory requirements. A modernized, risk-proportionate oversight framework is vital to end innovation drain and ensure domestic successes are not forced to commercialize abroad.

Recommendation 2: Expand support for early-stage scaling to bridge the commercialization gap for Canadian life sciences biotechnology companies

Canada's life sciences sector is constrained by a valuation ceiling, where promising companies are forced into early foreign acquisition due to limited domestic scale-up infrastructure and insufficient early-stage de-risking capital. This results in the loss of intellectual property, productivity, tax revenue, and the economic return on decades of public investment. As global competitors intensify investment across the life sciences value chain, the risk of continued capital and talent flight is increasing.

To secure long-term economic value, federal support must focus on the earliest stages of company formation (pre-seed and seed-stage ventures) where Canadian bioentrepreneurs require support to generate foundational data, build intellectual property, and reach investment readiness. This is particularly critical for cell and gene therapies (CGTs), which have long development timelines, high capital intensity, and complex manufacturing requirements, making early and sustained de-risking essential. Early-stage manufacturing and CMC (chemistry, manufacturing and controls) development represent significant cost and technical barriers, even before companies enter clinical trials. As such, targeted measures should include co-investment mechanisms, translational and de-risking programs, and supports that offset the costs of early manufacturing, prototyping and CMC development, delivered with the speed and flexibility required to match private capital timelines. These supports should be designed to help companies reach defined technical and regulatory milestones, improving investment readiness and enabling the attraction of private capital, while also enabling access to specialized expertise.

The Stem Cell Network (SCN) has a proven track record in supporting companies at this critical stage. Through programs such as its Fueling Biotechnology Partnerships and Incubation Investment Awards, SCN provides targeted support to early-stage companies at the point where risk is highest and private capital is least available. An assessment of SCN-supported biotechs demonstrates a 1:30 leverage ratio, with every dollar invested by SCN attracting approximately $30 in follow-on funding. For example, a $500,000 SCN grant to Vancouver-based Aspect Biosystems enabled the generation of key data that led to a $2.6 billion milestone-based partnership with Novo Nordisk.

Expanding this model would enable more Canadian regenerative medicine companies to survive the earliest stages of development, reach key value inflection points, and remain anchored in Canada. This approach will strengthen domestic biotech formation, retain high-value intellectual property, and ensure that next-generation therapies are developed and ultimately manufactured domestically, advancing economic growth, health system resilience, and national health security.

Recommendation 3: Commit to the longevity of the Strategic Science Fund through stable, multi-year funding

The Government of Canada should commit to the long-term stability and predictability of the Strategic Science Fund (SSF), a unique federal program designed to support independent, nationally focused organizations that bridge Canada's science, technology and innovation ecosystem. As a recipient of SSF funding, the Stem Cell Network exemplifies the program's impact as a national platform for advancing regenerative medicine from proof of concept through to health and economic outcomes. At a time when global competitors are scaling mission-driven innovation agencies, predictable funding for SSF is essential to maintain Canada's competitive position.

SCN demonstrates how strategic, sustained federal investment acts as a force multiplier within Canada's innovation system. Over 25 years, SCN has helped build a nationally coordinated research ecosystem that is moving science out of the lab and into the clinic and market. Equally important SCN's talent development focus has been critical to building a robust and growing cadre of experts able to work in regenerative medicine and across Canada's life sciences sector. SCN's network model addresses a critical gap not served by traditional granting programs by enabling research and talent to grow and stay within our borders. This can also be said regarding other SSF recipient organizations.

SSF-funded organizations play an essential national and system-level role, reducing fragmentation, coordinating national capacity, and ensuring that federal investments translate into real-world outcomes. As noted in a joint letter to the Minister of Industry from SSF recipients, SSF organizations function as cost-efficient, independent national platforms that deliver high return on investment while strengthening Canada's productivity, health system preparedness, and global competitiveness. Without stable, multi-year SSF commitments, Canada risks accelerating the outflow of high-value intellectual property and skilled personnel to competing jurisdictions and diminishing its reputation as a leader in science culture, research and innovation.

A strong and stable SSF program will ensure continuity across the innovation pipeline, enabling organizations like SCN to continue leveraging public investment, attracting private capital, and delivering measurable economic, health and social outcomes. In doing so, the Government of Canada will secure a high-growth sector that underpins economic resilience, health system sustainability, and national security.

About the Stem Cell Network

The Stem Cell Network (SCN) is a mission-driven not-for-profit organization that unites researchers, clinicians, industry leaders, and health champions dedicated to transforming lives through regenerative medicine. As Canada's only national organization with a specific focus on this field, SCN is uniquely positioned to drive progress in the fight against disease and power Canada's economy through company creation and the development of future leaders.

Powered by a pan-Canadian community of multidisciplinary experts and next-generation talent, the Stem Cell Network (SCN) focuses exclusively on stem cell and regenerative medicine (RM) research.

Since its inception, SCN has invested over $162 million in Canadian regenerative medicine research, leveraging an additional $176 million from partners. This funding has positioned Canada as a global leader in regenerative medicine, fostering world-class expertise, spinning out innovative biotech companies, and pioneering life-changing clinical trials.