THE CASE FOR CANADA: FUNDING PHASE 2 OF THE MARATHON OF HOPE CANCER CENTRES NETWORK

Submitted by:

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MARATHON OF HOPE CANCER CENTRES NETWORK

RÉSEAU DES CENTRES D'ONCOLOGIE DU MARATHON DE L'ESPOIR

Recommendation: That the government provide funding in the amount of $80 million for Phase 2 of the Terry Fox Marathon of Hope Cancer Centres Network beginning April 2026.

Summary

Inspired by Terry Fox, the Marathon of Hope Cancer Centres Network (MOHCCN) unites cancer patients, researchers, oncologists and donors across Canada in an unprecedented collaboration to improve outcomes for cancer patients. Together, we are generating a national strategy to ensure every cancer patient in Canada receives the right treatment at the right time for their unique cancer, regardless of who they are or where they live.

Launched in 2021 with $150M in federal government support, matched by partner institutions and the Terry Fox Foundation for a $300M program, the Network has met, or is on track to meet, ambitious Phase 1 milestones:

- Created a Team Canada of Cancer Research with 48 institutions, 1,300 individuals and over 100 partners across all provinces;
- Generating Canada's largest and most comprehensive cancer resource – the "Gold Cohort" – with genomic and clinical data from 15,000 patients;
- Advancing equity by including underserved populations in the Gold Cohort, incorporating patients at all levels of the network and expanding access to precision oncology beyond major centres;
- Trained over 40 early-career researchers to lead Canada's next generation of precision oncology experts.

Our Contribution Agreement ends in March 2026, and we seek funding for Phase 2. The Terry Fox Foundation is committing $80M towards this phase, with an additional $40M from partner institutions. However, this is insufficient for success. We ask the federal government to invest **$80M**, for a total investment of $200M, to realize the Network's full potential. This national investment brings together the federal government, the Terry Fox Research Institute (TFRI) and Foundation and remarkable Canadian cancer research centres to create a better future for patients.

In Phase 2, we will:

- Launch GenerationAll, a Canada-wide initiative expanding precision oncology to more patients.
- Implement KnowMyGenes, a new program to identify individuals with inherited cancer risk and improve targeted early detection.
- Expand partnerships with community hospitals and Indigenous health systems to foster inclusion and reconciliation.
- Deploy and grow the Gold Cohort to accelerate precision oncology research and care.
- Work with public and private sector partners to develop artificial intelligence (AI)-powered tools for diagnosis and treatment.
- Build capacity for an innovative Canadian early-phase cancer clinical trials program in collaboration with biopharma.

MOHCCN is a **nation-building project** to improve patient outcomes, reduce costs, fuel Canada's economy and reinforce data sovereignty. Healthcare costs will be reduced not only through technological advances and efficiencies, but also through earlier detection and avoidance of

unnecessary treatments. Costs of cancer care will accelerate unless concerted action is taken to improve outcomes. Phase 2 of MOHCCN is an investment ***now*** to reduce costs – in both lives and expenses – later.

The Marathon of Hope Cancer Centres Network: Finishing the marathon against cancer that Terry Fox started

Two in five Canadians are expected to face a diagnosis in their lifetime, with one in four ultimately dying from the hundreds of diseases we collectively call cancer. In this context, precision oncology – tailoring treatments to each patient's unique tumour biology – offers a clear pathway towards improved outcomes and quality of life for cancer patients.

Since Terry's passing in 1981, significant strides have been made in cancer research and care in his name. Survival rates for many cancers have increased dramatically and people with cancer can now live significantly healthier and longer lives. But there is still much to be done. Precision oncology is already helping many patients in Canada, but making this accessible to all requires a united approach.

Phase 1: Building the Network

The MOHCCN is creating this national strategy to accelerate precision oncology. Since its inception in 2021, it has united 48 member institutions and more than 100 research and funding partners who share data, knowledge and resources like never before for the benefit of all Canadians. By building a diverse and inclusive Canadian dataset from 15,000 patients, we are constructing an invaluable resource for researchers, clinicians and patients for many generations. We have invested in 41 early-career researchers to shape the future of precision oncology. Patients and survivors are integrated into the Network and participate as equals in all activities, including the design and adjudication of competitions, ensuring that everything we do respects and reflects their needs and values. Importantly, we have also created policies and methods to work together and share data across jurisdictions to increase competitiveness and discoveries.

Phase 2: Precision oncology for all Canadians

Precision medicine improves outcomes for cancer patients by targeting the unique genetic and biological characteristics of each patient's cancer, delivering precise treatments for their disease. While some patients already benefit from this approach, **a coordinated national effort** is needed to make it a reality for all cancer patients.

Phase 2 will deliver on this need by:

- **Advancing prospective enrolment:** through GenerationAll, we will combine genomic sequencing of newly diagnosed patients with rapid return of results to their care teams to inform treatment.

- **Supporting data-driven discoveries:** we will enhance data sharing and analysis using state-of-the-art tools, including AI, to support innovative research.
- **Further developing the Gold Cohort:** we will complete an additional 11,000 cases, for a total of 26,000, while innovating to reduce per-case costs, enhancing efficiency and accessibility.
- **Building a early-phase cancer clinical trials program:** in response to recent reductions in US trial funding, we will work with biopharma to create a new program centred on Canadian trials innovation, which will launch at least three new trials per year.

Alignment with government priorities

1. A national strategy

The MOHCCN unites researchers, clinicians, patients and donors from across the country under the common vision of accelerating precision oncology. This effort reflects the Government of Canada's mandate to support nation-building projects, enhance interprovincial collaboration and "build one Canadian economy".

Phase 2 will expand the Network, with emphasis on smaller centres, including in the North. We will deploy GenerationAll, a pan-Canadian program that will deliver precision oncology to more Canadians, establishing precision medicine as a foundational national infrastructure.

Impact: Canada has world-class researchers; when they coordinate, the quality of their research is further elevated. This national approach is building Canada's global reputation and expertise as a leader in research and precision oncology, embodying the federal government's call to "redefine Canada's international position".

2. Improving outcomes and quality of life

Guided by Terry Fox's vision of a world without cancer, the MOHCCN's ultimate goal is to save lives and improve health outcomes for cancer patients – directly serving the Government of Canada's mission to enhance quality of life and well-being.

Phase 1 set the stage for these advances by creating a rich research resource while building capacity across the country to begin using comprehensive genomic analysis to inform care decisions. Phase 2 will implement GenerationAll to inform treatment options in real time and understand which patients are most likely to benefit from genomic sequencing. We will also implement KnowMyGenes, a novel program to study inherited cancer susceptibility to identify patient relatives at higher risk of developing cancer.

Impact: Around 2,000 cancer patients enrolled in projects doing prospective sequencing are already benefitting from the Network. Phase 2 will expand our reach and impact, helping not only cancer patients who participate in the MOHCCN now but also generations to come. The KnowMyGenes program will help identify family members of cancer patients who themselves are more likely to develop cancer, enabling targeted screening for high-risk populations. Both individuals and health systems benefit from earlier detection, when cancers are more treatable.

3. Health equity and accessibility

The MOHCCN is designed to ensure that its research represents the full spectrum of Canadian populations and, in turn, that *everyone* can benefit from its outcomes. The Network specifically aligns with the Government's mandate to advance reconciliation with Indigenous Peoples and to improve the quality of life of all Canadians, no matter their identity or location.

About one-third of patients in the Gold Cohort to date (~3,000) belong to populations identified as underserved and/or underrepresented in research. The dataset being generated hence reflects the rich diversity of Canada's populations, building an invaluable cancer research resource both here and worldwide.

Impact: When people and communities are represented in research, they can benefit from the results of that research. Our commitment to inclusion means that our research will lead to tangible advancements in cancer care for more Canadians, regardless of their situation.

4. AI and data sovereignty

AI provides unique opportunities for big data analysis, and the MOHCCN has created one of the largest and most complete cancer resources in the world. The TFRI's Digital Health and Discovery Platform enables safe and secure data-driven analyses and development of state-of-the-art AI tools. These tools will be deployed to support data processing efficiencies and application of precision oncology in the real world, embodying the Government's call to deploy AI and build expertise at scale across sectors.

Impact: The Gold Cohort provides a rich dataset to enable high-quality AI-powered research across Canadian healthcare and biopharmaceutical sectors. Most importantly, it will also enable efficient care at scale, improving the lives of countless cancer patients. This dataset and the tools surrounding it are created and stored in Canada and accessed for research through secure, federated architecture, maintaining sovereignty over this invaluable resource.

5. Clinical trials

Clinical trials advance cancer care and testing of new therapies and are associated with lower drug costs and better outcomes for participating patients. Budgetary cuts from the US National Cancer Institute make it imperative to support innovative early-phase trials in Canada. In addition to benefitting patients, outcomes align with several Government priorities, including reducing government operational costs, nurturing Canada's economy and innovation agenda, attracting and retaining global talent, improving quality of life and promoting inter-provincial collaboration.

Impact: The Network's unified approach to comprehensive genomic sequencing is attracting industry partners who can tap into our pan-Canadian partnerships to reach more patients while simplifying trials, increasing Canada's competitiveness internationally. Support of least 12 new, early-phase trials will provide more opportunities for patients to participate in, and benefit from, trials while also fostering a dynamic Canadian biopharma sector, attracting new investment.

6. Health economics

Precision oncology is the future of cancer care, but must be deployed in a way that controls costs while maximizing benefits. Phase 2 will optimize the use of precision oncology to contain healthcare costs across various health contexts, including provincial and urban/rural/remote considerations. This work aligns with the Government's mandate to spend less on government operations and "build one Canadian economy".

As the Network moves increasingly to prospective enrolment, we will collect high-quality health technology assessment data to enhance understanding of which patients benefit most from comprehensive genomic sequencing and create guidance for health systems to deploy this technology efficiently. The Network also promotes job creation, including in genomic medicine, AI and data science.

Impact: The Network's national approach means that health system learnings and technology advances are shared more readily, including in smaller centres. We will continue to build the precision oncology workforce of today and tomorrow, from coast to coast to coast.

A unique funding model

In 2019, Health Canada and TFRI signed a Contribution Agreement to establish the Network which stipulated that the Government of Canada would invest up to $150M over five years, matched 1:1 by cancer centres, institutions and philanthropy.

Based on the achievements of Phase 1, the Terry Fox Foundation and institutional partners have committed to providing $120M towards Phase 2. We ask the Government of Canada to contribute a further $80M, for a total investment of $200M.

About the Terry Fox Research Institute: TFRI invests in groundbreaking scientific projects to accelerate discoveries for the benefit of cancer patients. With many partners, including the Government of Canada, we lead two innovative projects that embody Terry Fox's spirit to improve the lives of cancer patients through precision medicine: the MOHCCN and the DHDP.