Myeloma Canada research and science

impact report

2024

myeloma.ca

MYELOMA CANADA

MAKING MYELOMA MATTER

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Myeloma Canada: In pursuit of a *cure and prevention*

A word from Martine Elias

Chief Executive Officer, Myeloma Canada

Dear all,

I am thrilled to share that 2024 was once again a stellar year for Myeloma Canada and our continued support for funding impactful science and research initiatives, as you will discover in the following pages.

Since having been created in 2005, Myeloma Canada has grown into an accomplished and respected organization both nationally and internationally. One of our major strengths lies in our commitment to honouring and preserving our grass roots orientation. As such, we put the needs of our community first. We do this by not only supporting, but working closely with our myeloma community to ensure the research, projects, and initiatives that matter most to them, get done.

In 2024, we refined our funded research strategy and branded it under the banner of the Myeloma Canada Research Initiative (MCRI). The main objective of the MCRI is to fund clinically relevant research aimed at improving myeloma diagnosis, treatment, and patient outcomes, with a focus on improved quality of life and survival. As always, our driving force behind our investment decisions for the MCRI lie within our community and the top 10 priority questions they identified for future myeloma research (see the Myeloma Priority Setting partnership on page 8).

We are delighted to share that in 2024, Myeloma Canada contributed to record-breaking investments in Canadian myeloma science and research projects of over $1.45M. Of this amount, more than $972,000 resulted from Myeloma Canada fundraising activities, campaigns, community-driven fundraising initiatives, and sponsored programs from our pharmaceutical industry partners. This is another milestone amount and one of which we are beyond grateful. The balance of funds, $477,500, was derived from important collaborations with strategic partners and like-minded organizations with whom we have a mutual commitment to advancing myeloma research. Through these partnerships, we were able to expand our collective impact and do more for Canadians affected by myeloma.

Our unprecedented investments and fundraising successes would not have been possible without the outstanding commitment and unremitting support of our exceptional donors, partners, interested parties, volunteers, and staff. Together, we are improving and extending life for Canadians with this challenging disease.

We will continue to be relentless in our pursuit of a life uninterrupted by myeloma. We hope you will join us.

Martine Elias

14
research initiatives of which 9 are collaborative funding partnerships

9
science initiatives

Supporting more than
30
Canadian investigators & their projects

Who *we are*

Myeloma Canada is the only national charitable patient organization created by, and for, Canadians impacted by multiple myeloma. Founded in 2005 as a grassroots initiative, Myeloma Canada remains committed to our 'people-first' focus in all that we do.

Our *mission*

To improve the lives of all Canadians affected by myeloma by accelerating access to the best care while advancing research toward its cure and prevention.

Our *pledge*

We pledge to cultivate and maintain an inclusive environment for our community and our organization. This includes respecting and addressing the diverse needs of all people— First Nations, Métis, and Inuit; historically under-represented and marginalized populations; the LGBTQIA2S+ community; cultural, racial, and ethnic minorities—in all that we do.

Our *vision*

Life uninterrupted by myeloma

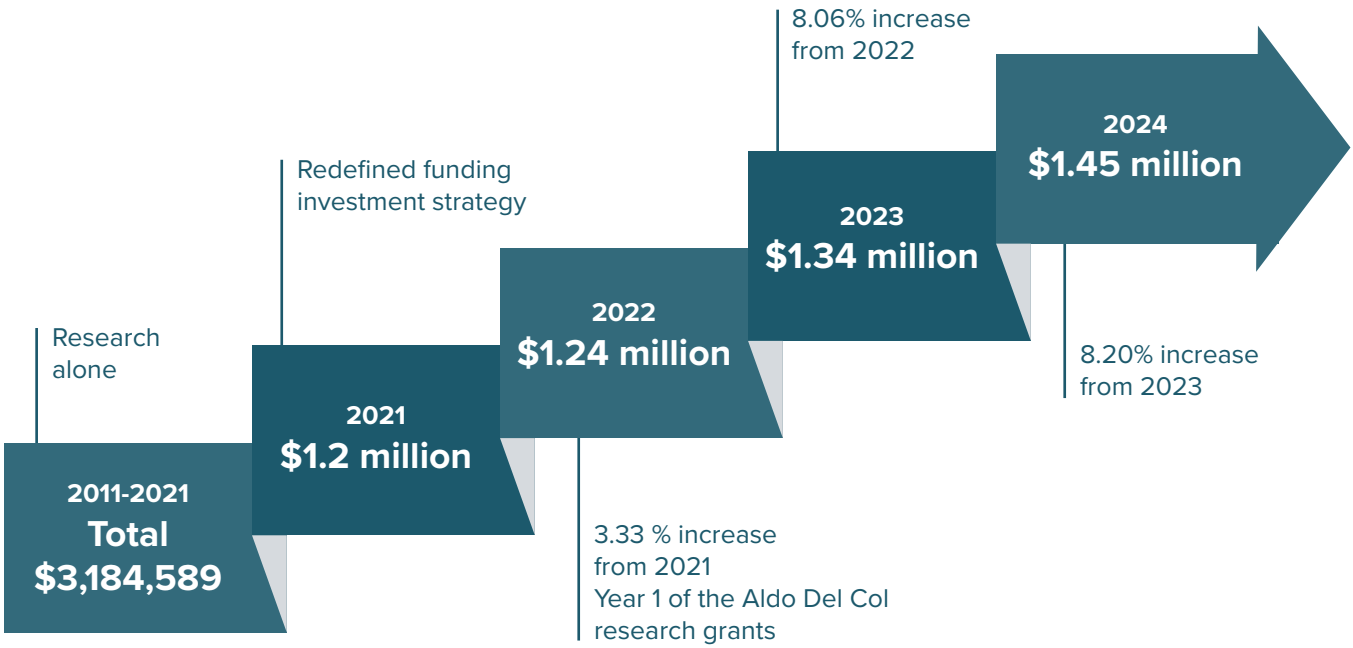
Curing and preventing myeloma through investment in Canadian research.

Best care by accelerating equitable access to the best healthcare and treatments.

Improving lives by empowering and supporting all Canadians impacted by myeloma.

Myeloma Canada investments in *research and science*

In 2021, Myeloma Canada redefined our funded research strategy and principles. Since then, we have realized impressive year-over-year growth in our research and science funding investment initiatives, with a milestone increase of 8.20% from 2023 to 2024.



Community-powered research, *that matters.*

Myeloma Canada's 2024 impact on research and science

$1.45M Total 2024 investments in Canadian myeloma research and science projects

Improving quality of life and survival | ***Increasing*** access to new therapies and treatment options | ***Advancing*** improvements in health systems

Our impact on *research*

Building hope **through research**

The Myeloma Canada Research Initiative (MCRI)

14 **supported research projects:**

6

Developing safer, more effective, *personalized therapies:* TACtful trial: Producing TAC T-cells to target myeloma | NK cell receptor targeting | CAR-T/NK cell design | MY.13 trial: Daratumumab for older adults | Mass-Fix: Ultra-sensitive blood test | Monitoring post-cell therapy patients

5

Minimizing side effects & *improving quality of life:* Real-world data guiding treatment | Optimizing antibody therapy | QoL studies of patients & caregivers | Sarcopenia and frailty-based treatment | Antibiotic use to prevent pneumonia post-ASCT

3

Enabling **future research & data collection:** Moncton Myeloma Biobank | Ottawa myeloma database | Myeloma Canada Research Chair at Hôpital Maisonneuve-Rosemont

Our impact on *science*

Investing **in the future**

Supporting *5 emerging researchers:*

Dory Abelman | Melika Bakharzi | Afsaneh Panahi | Dr Rintu Sharma | Dr Steven Shih

Knowledge-sharing & standardizing care:

15th annual Myeloma Canada *Scientific Roundtable:*

Meeting of the most innovative minds in myeloma
100+ attendees
65 clinicians, researchers, HCPs

5

Myeloma Canada led Canadian *Consensus Guidelines*

standardizing diagnosis, testing, treatment & care

Provincial, national & international *partnerships*

2

Equity **in access & care:** Addressing barriers in Indigenous communities | Promoting EDI in clinical trials

We will continue to be relentless in our pursuit of *life uninterrupted by myeloma.*

The Myeloma Canada *Research Initiative* (MCRI)

Building hope **through research**

Myeloma Priority Setting Partnership (PSP)

The Myeloma Canada Research Initiative (MCRI)

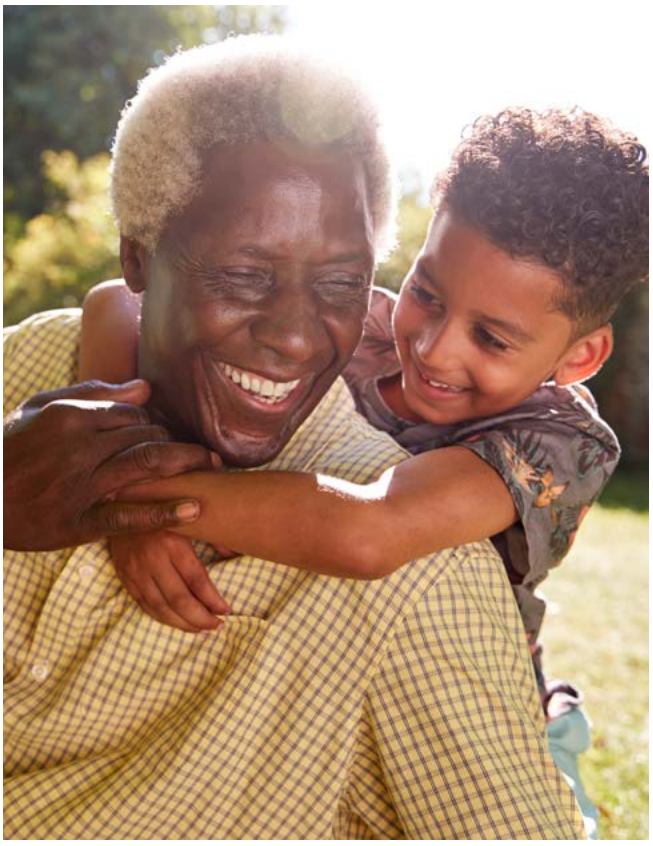
- Our research principles
- Our research strategy
- Valued partnerships

The Myeloma Priority Setting *Partnership* (PSP)

Determining the top 10 priorities for *future myeloma research*

The Myeloma Priority Setting Partnership (PSP) was a unique collaborative project between Myeloma Canada, the Horizon Health Network, and the Maritime SPOR SUPPORT UNIT (MSSU) which adhered to established PSP practices set by the James Lind Alliance. This important project surveyed the Canadian myeloma community of people living with myeloma, caregivers, and healthcare professionals, to determine their Top 10 priorities for future myeloma research.

The results of the Myeloma PSP are important to funders and researchers, and give the Canadian myeloma community a prominent voice in directing Myeloma Canada's research strategy toward projects they define as meaningful.



The Top 10 priorities for future myeloma research:

1. How can we cure myeloma?
2. Are novel immunotherapies (e.g., CAR T) effective for the treatment of myeloma?
3. How can we improve the diagnosing (e.g., faster, less invasive) of myeloma, and what is the impact of earlier diagnosis on patient outcomes (e.g., organ damage, bone deterioration)?
4. What are new treatments for myeloma patients that will improve life expectancy with fewer adverse side effects (e.g., pain, nausea, neuropathy, immune suppression)?
5. How can we personalize a patient's treatment based on their type of myeloma and genetic profile, and what is the impact of personalized medicine on treatment efficacy and disease outcomes?
6. How can we prevent bone deterioration and/or repair bones that have been damaged without negative side effects (like those associated with bisphosphonates) or surgery?
7. How can we safely reduce, cycle, or stop the use of medications (e.g., Dexamethasone and Revlimid) to reduce the side effects of treatment and maintain control over myeloma?
8. How can we reduce or manage the short-term effects (e.g., diarrhea, nausea, fatigue, emotional challenges, skin reactions) and long-term effects (e.g., vision loss, loss of muscle strength) of myeloma treatment?
9. What is the most effective way (i.e., drug combinations, sequence, frequency, and intensity) to treat refractory, relapsed, and drug-resistant myeloma?
10. Can we develop treatments specifically for high risk or aggressive myeloma that will improve outcomes for these patients?

The Myeloma Canada *Research Initiative* (MCRI)

Our funded research principles and strategy:
Building hope through research

In 2024, Myeloma Canada launched the Myeloma Canada Research Initiative (MCRI) which encapsulates our funded research principles and strategy for investing, and/or supporting our investments, in Canadian myeloma science and research.

The MCRI is guided by Myeloma Canada's mission and vision, the findings of our Myeloma Priority Setting Partnership (PSP), and ultimately, ensuring the research that matters most to Canadians living with myeloma gets done. We accomplish this by staying committed to accelerating and improving patient quality of life and/or survival.

In accordance with our Imagine Canada accreditation, we maintain processes and governance that are transparent and open to all interested and invested parties. As such, project applications are reviewed, rated and ranked (if applicable) by an Independent Research Review Committee (IRRC) comprised of healthcare professionals, patients, and caregivers. This peer review process ensures unbiased decision-making and complete transparency with applicants and the myeloma community.

MCRI *principles*

As a grassroots organization, our research investment principles are anchored in the core values that support the priorities identified by our myeloma community: people with myeloma, their caregivers, researchers, and healthcare professionals. As such, the research which we fund must satisfy one or more of the following principles:

1. have a direct impact on **improving quality of life and/or survival;**
2. have a direct impact on **increasing patient access** to new therapies, new treatment; combinations, or improved treatment administration;
3. contribute to **health systems improvements** for people with myeloma.

MCRI *strategy*

Myeloma Canada's research investment strategy is to fund research that is clinically relevant and of priority to our community. This involves focusing on, identifying and addressing existing barriers and knowledge gaps in the diagnosis, treatment, and science of myeloma. Additionally, we educate and encourage patients to become aware of, and actively participate in research where possible, i.e. through clinical trials, bio-banking, and real-world evidence studies.

Our primary objective: Improve quality and length of life for Canadians with myeloma.

Valued *partnerships*

To enrich our funded research strategy of improving quality of life and survival for Canadians with myeloma, we are proud to partner with other like-minded not-for-profit organizations and charities. Through these important and respected collaborations, we broaden the impact of our investments in myeloma science and research. Together, our footprint is greater and our collective funds go further in supporting and advancing Canadian myeloma research.

Returning co-funding partners for 2024:

- The Leukemia & Lymphoma Society of Canada (LLSC)
- Myeloma Foundation 8849M

New co-funding partners for 2024:

- Ontario Institute for Cancer Research (OICR)
- Cancer Research Society (CRS)

Myeloma Canada: Making myeloma matter *since 2005.*

To learn more, visit myeloma.ca.

LEUKEMIA & LYMPHOMA SOCIETY OF CANADA

OICR Ontario Institute for Cancer Research

80 years Cancer Research Society


TaylorMade
WADE'S
WARRIORS
EFF CANCER

Myeloma Canada Research Initiative: *our impact on research*

Accelerating and improving patient *quality of life and survival*

Aldo Del Col research grants

Operating and other grants

The Leukemia & Lymphoma Society of Canada (LLSC) 2024 operating grant

Cancer Research Society (CRS) 2024 operating grant

Myeloma Biobank in New Brunswick

Local research

Multiple Myeloma March research fund-sharing partnership program

The Ottawa Hospital myeloma program

Myeloma Canada Research Chair in Multiple Myeloma at Hôpital Maisonneuve-Rosemont

Developing Patient-reported Outcome Measures (PROMs) in multiple myeloma

2024 Aldo Del Col *research grants*

Project-based competitions **honouring the legacy and memory of Myeloma Canada's co-founder Aldo Del Col**

The Aldo Del Col research grant was launched in 2022 to honour the legacy and memory of Myeloma Canada's co-founder. Funding patient-prioritized Canadian research projects, Aldo Del Col research grants address the knowledge gaps in the diagnosis and treatment of myeloma, and/or related plasma cell disorders that are identified through the Myeloma Priority Setting Partnership (PSP).

In 2024, a total of four Aldo Del Col research grants were awarded to Canadian researchers. Myeloma Canada is honoured to be partnering with esteemed organizations on each of these innovative projects.

1. *GMP virus production for first-in-human cell therapy trial (the TACtful study)*

Jonathan Bramson, PhD
McMaster University, Hamilton, ON

Total funding: $150,000 for 1 year

Funding partners: Research grant equally co-funded (25%) by Myeloma Canada, Ontario Institute for Cancer Research (OICR), The Leukemia & Lymphoma Society of Canada (LLSC), and Myeloma Foundation 8849M

Funding for this project will enable the production of clinical-grade lentivirus needed to create BCMA-TAC T-cells—engineered immune cells that use a T-cell Antigen Coupler (TAC) to target the BCMA antigen on myeloma cells. BCMA-TAC T-cells are expected to match the myeloma-fighting power of existing BCMA-targeted CAR T-cell therapies but with fewer severe side effects. In the upcoming TACtful trial, BCMA-TAC T-cells will be generated from previously cryopreserved blood (collected before autologous stem cell transplantation) using an automated manufacturing process, potentially lowering treatment costs and expanding access for more patients.

PSP priorities

#1 | How can we cure myeloma?

#2 | Are novel immunotherapies (e.g., CAR T) effective for the treatment of myeloma?

#4 | What are new treatments for myeloma patients that will improve life expectancy with fewer adverse side effects (e.g., pain, nausea, neuropathy, immune suppression)?

2. *Correlative study: Fixed duration vs continuous daratumumab in newly diagnosed patients with multiple myeloma (MY13)*

Dr Hira Mian
McMaster University, Hamilton, ON

Total funding: $150,000 over 2 years

Funding partners: Research grant equally co-funded (25%) by: Myeloma Canada, Ontario Institute for Cancer Research (OICR), The Leukemia & Lymphoma Society of Canada (LLSC), and Myeloma Foundation 8849M

Funding for this project will support specialized testing of blood and bone marrow samples from the MY13 trial, which is studying whether older adults with newly diagnosed myeloma need continuous daratumumab + lenalidomide + dexamethasone (DRd) or can safely stop daratumumab after 18 months. These tests will identify “biomarkers” that indicate how aggressive the myeloma is and predict its risk of returning. By revealing patients who need ongoing therapy and those who can discontinue daratumumab without jeopardizing outcomes, the study aims to personalize care, refine treatment strategies, and ultimately improve quality of life.

PSP priorities

#5 | How can we personalize a patient’s treatment based on their type of myeloma and genetic profile, and what is the impact of personalized medicine on treatment efficacy and disease outcomes?

#7 | How can we safely reduce, cycle, or stop the use of medications (e.g., Dexamethasone and Revlimid) to reduce the side effects of treatment and maintain control over myeloma?

3. *Prospective assessment of peripheral blood M-proteins using Mass-Fix to de-escalate therapy*

Dr Jean-Sébastien Claveau
Hôpital Maisonneuve-Rosemont, Université de Montréal, Montreal, QC

Total funding: $150,000 over 2 years

Funding partners: Research grant equally co-funded (50%) by Myeloma Canada and Cancer Research Society (CRS)

Funding for this project will enable the use of "Mass-Fix," a highly sensitive mass spectrometry-based test that is more accurate than conventional blood protein tests (e.g., SPEP), to guide therapy for patients with relapsed or refractory myeloma receiving immunotherapy with bispecific T-cell engagers. By closely tracking myeloma proteins (M-proteins) in the blood, clinicians can identify when the disease is under control and potentially reduce or pause treatment. This approach aims to lower side effects, lessen the financial burden, and tailor therapy without compromising outcomes. If successful, Mass-Fix will help personalize care and help patients maintain remission more comfortably.

PSP priorities

#7 | How can we safely reduce, cycle or stop the use of medications (e.g., Dexamethasone and Revlimid) to reduce the side effects of treatment and maintain control over myeloma?

#8 | How can we reduce or manage the short-term effects (e.g., diarrhea, nausea, fatigue, emotional challenges, skin reactions) and long-term effects (e.g., vision loss, loss of muscle strength) of myeloma treatment?

4. *How to best arm a killer: Analysis of NK cell responsiveness in multiple myeloma patients for rationale design of bi-specific antibodies*

Michele Ardolino, PhD
University of Ottawa, Ottawa Hospital Research Institute, Ottawa, ON

Total funding: $150,000 over 2 years

Funding: Research grant funded (100%) by Myeloma Canada

Funding for this project will support a detailed study to determine which natural killer (NK) cell receptors work best at destroying myeloma cells. NK cells tend to remain active longer than some other immune cells (such as T-cells), making them promising candidates for new treatments. By examining blood samples from patients at various stages of myeloma, this project aims to pinpoint the most effective NK cell receptors. The findings will guide the design of next-generation bispecific antibodies that specifically engage NK cells, potentially informing better treatment strategies for myeloma.

PSP priorities

#1 | How can we cure myeloma?

#2 | Are novel immunotherapies (e.g., CAR T) effective for the treatment of myeloma?

#5 | How can we personalize a patient's treatment based on their type of myeloma and genetic profile, and what is the impact of personalized medicine on treatment efficacy and disease outcomes?

Operating *and other grants*

The Leukemia & Lymphoma Society of Canada (LLSC) 2024 operating grant

Novel immune and myeloma monitoring for patients treated with cell therapy

Dr Annette Hay
Queen's University, Kingston, ON

Total funding: $200,000 over 2 years

Funding partners: Equally co-funded (50%) by the LLSC and Myeloma Canada

Funding for this project will support the development of an innovative laboratory test called the "Triple Test", designed to measure measurable residual disease (MRD), track the presence of cell therapies (such as CAR T-cells or TAC T-cells), and assess overall immune function. In the first phase, the test will be created and validated at Kingston Health Sciences Centre. In the second phase, it will be integrated into the TACtful trial to screen patients before enrollment, monitor MRD, and measure how long the TAC T-cells persist. The ultimate goal is to make the Triple Test widely accessible, improving patient monitoring in future clinical trials and routine care for blood cancers.

PSP priorities

#2 | Are novel immunotherapies (e.g., CAR T) effective for the treatment of myeloma?

#5 | How can we personalize a patient's treatment based on their type of myeloma and genetic profile, and what is the impact of personalized medicine on treatment efficacy and disease outcomes?

Cancer Research Society (CRS) 2024 operating grant

Design of a trogocytosis resistant chimeric antigen receptor to empower NK cells against multiple myeloma*

Dr Alissa Visram
The Ottawa Hospital, Ottawa, ON

Total funding: $125,000 over 2 years

Funding partners: Equally co-funded (50%) by CRS and Myeloma Canada

Funding for this project will support the creation of a new chimeric antigen receptor (CAR) designed to resist "trogocytosis," a process that can weaken immune cells during treatment. These enhanced CARs will be used to engineer both T-cells and natural killer (NK) cells, aiming to make them more effective at eliminating myeloma cells. By preventing trogocytosis from disrupting the immune cells' myeloma-fighting abilities, this approach could lead to stronger, longer-lasting treatments. If successful, these next-generation CAR-T and CAR-NK therapies may offer a more powerful way to treat myeloma.

PSP priorities

#1 | How can we cure myeloma?

#2 | Are novel immunotherapies (e.g., CAR T) effective for the treatment of myeloma?

*Continuation of the 2022 research project, "Can BCMA trogocytosis compromise the anti-tumour activity of CAR NK cells?"

Supporting the creation of a *myeloma biobank in New Brunswick**

RÉSEAU DE SANTÉ Vitalité HEALTH NETWORK
Leader francophone
Francophone Leader

Benefitting: Vitalité Health Network

Total funding: $15,000

Funding partners: Myeloma Canada through the Myeloma Foundation 8849M

Funding for this project will support, from consenting patients, the collection and storage of as many myeloma biological samples as possible over the next two years, i.e. : 2025 and 2026.

The goal: Support the creation of a biobank of real-time myeloma patient data.

*Continuation of the 2023 research project, "Supporting the collection of real-time myeloma data in New Brunswick"

Year-round, our dedicated community of volunteers and donors support our cause by participating in critical fundraising events and campaigns such as our annual Multiple Myeloma Awareness Month campaign, the Multiple Myeloma March, the Myeloma Canada Ride, and our Giving Tuesday/end of year campaign. Funds raised from these programs, along with legacy giving, general donations, employer matching programs, and other ways to give, make it possible for us to invest in important myeloma science and research initiatives.


UNBREAKABLE


ULTIPLE
YELOMA

Funded *local research*

6
investments in local research

+$162,000
total awarded for 2024

Multiple Myeloma March (MMM) research fund-sharing *partnership program*

Myeloma Canada's collaboration with qualifying Canadian research centres to *advance local myeloma research*

MULTIPLE MYELOMA MARCH

The Multiple Myeloma March (MMM) research fund-sharing partnership program was inaugurated in 2023 to celebrate the 15th anniversary of Myeloma Canada's flagship national fundraising and awareness event, the Multiple Myeloma March. The goal of the new research grant: support myeloma research at the local level.

Charitable organizations associated with a Canadian myeloma treatment centre or university involved with qualifying myeloma research projects are given the opportunity to apply to partner with Myeloma Canada and their closest Multiple Myeloma March. If selected, the qualifying centre or university is eligible to receive a research grant of up to 50% of the net proceeds from that specific March.

For more information on the Multiple Myeloma March (MMM) research fund-sharing partnership program, click here.

In 2024, a total of four MMM research fund-sharing partnership program grants were awarded.

1. *Sarcopenia in multiple myeloma and AL amyloidosis: Impact of treatment and effects of sarcopenia on clinical survival outcomes, a pilot study*

Principal investigator:
Dr Victor Jimenez Zepeda
University of Calgary
Calgary, AB

Research partner: University of Calgary, AB

Partnering MMM: Airdrie, AB

Funding for this project will go toward assessing the impact of sarcopenia (skeletal muscle loss) on survival outcomes, evaluate if sarcopenia in myeloma could be used as a frailty assessment tool, and inform future programs that focus on preventing sarcopenia from progressing.

2. *Comparing outcomes between progression-free survival (PFS) and time to next treatment (TTNT) amongst patients with multiple myeloma*

Principal investigator:
Dr Hira Mian
McMaster University,
Hamilton, ON

Research partner: Hamilton Health Sciences Foundation, Hamilton, ON

Partnering MMM: Hamilton-Niagara, ON

Funding for this project will explore the relationship between time to next treatment (TTNT) and progression-free survival (PFS) in myeloma to help clinicians make informed decisions about treatment selection, management strategies to optimize patient care, and the design of future clinical trials.

3. *Impact of routine Septra prophylaxis in patients receiving an autologous stem cell transplant*

Principal investigator:
Dr Bethany E. Monteith
Kingston Health Sciences Centre,
Queen's University, Kingston, ON

Research partner: University Hospitals Kingston Foundation, Kingston, ON

Partnering MMM: Kingston, ON

Funding for this project will go toward improving the prevention of pneumocystis pneumonia (PCP) infection in patients undergoing an autologous stem cell transplant by evaluating the routine use of two antibiotics.

4. *Use of immunoglobulins in multiple myeloma patients receiving anti-BCMA therapy*

Principal investigator:
Dr Julie Côté
Centre hospitalier universitaire
de Québec, Quebec City, QC;

Research partner: Centre hospitalier universitaire (CHU) de Québec, QC

Partnering MMM: Quebec City, QC

Funding for this project will help clinicians better define the use of immunoglobulin in myeloma, establish the relevance of immunoglobulin prophylaxis based on IgG level, evaluate the impact of Ig administration on patients' quality of life, and define vaccine response in this patient population.

The Ottawa Hospital *myeloma program*

Dr Arleigh McCurdy
Ottawa Hospital Research Institute,
University of Ottawa, Ottawa, ON

"The myeloma program at the Ottawa Hospital is grateful for the support generated by our patient group in support of local myeloma research. The proceeds from the 2024 "Steps to a Cure: The Ottawa-Gatineau WALK for Myeloma" were used for salary support for our research database coordinator. This database allows us to perform observational research locally as well as nationally with collaborators through the Canadian Myeloma Research Group database."
- Dr Arleigh McCurdy, The Ottawa Hospital.

Myeloma Canada Research Chair in Multiple Myeloma at Hôpital Maisonneuve-Rosemont

Improving care. Innovating through research. Disseminating knowledge.

For decades, the Department of Hematology and Oncology at Hôpital Maisonneuve-Rosemont in Montreal, Quebec has been recognized as a leading center in hematology. In 2008, Dr Jean Roy founded a research unit on multiple myeloma. Collaborating with Dr Richard LeBlanc, they created an outpatient clinic exclusively for patients with myeloma and related diseases. In addition, they established a clinical research unit which has accelerated the development of specialized expertise and recruitment for clinical trials.

Myeloma Canada initiated the creation of the Myeloma Canada Research Chair in Multiple Myeloma at Hôpital Maisonneuve-Rosemont, which launched in September 2012.

Today, Drs Roy and LeBlanc and their teams are recognized as leaders in allogeneic hematopoietic stem cell transplantation in the treatment of myeloma. Building on this experience, the focus of their research program is on developing cellular therapies for myeloma.

Dr Jean Roy

Dr Richard LeBlanc

Developing Patient-reported Outcome Measures (PROMs) in multiple myeloma

An observational study on *quality of life*

The burden of multiple myeloma on patients and caregivers' quality of life: A Canadian real-world study (NCT06610045)

Collaborators: Myeloma Canada and the PROxy Network

Funding: Provided by AbbVie

Over the years, we have seen the rise of new therapies and treatment approaches which have significantly improved overall survival for people living with multiple myeloma. Myeloma Canada, along with one of our valued partners, the PROxy Network, conducted an important study to evaluate how myeloma impacts the quality of life (QoL) of people living with the disease, as well as those who care for them.

What are PROMs?

QoL studies play a crucial role in clinical research and trials which is why patient-reported outcome measures (PROMs) are so important. PROMs are surveys that enable patients, and in this case, caregivers as well, to share how they're feeling at a given time. These validated tools track and measure things like general health, quality of life, symptoms, physical or mental well-being, as well as their ability to carry out daily activities.

PROMs reflect what matters most to people living with the disease, and as such, should be prioritized by healthcare teams when determining care paths.

Myeloma Canada's impact *on science*

Andrew R Belch MEET grants

Standardizing myeloma diagnosis, treatment, and management across Canada

- Canadian Consensus Guideline Consortium: Myeloma consensus guidelines
- Minimal Residual Disease (MRD) testing infrastructure guidelines

Myeloma Canada Scientific Roundtable

Learnings: Myeloma within Indigenous populations

Quebec Plasma Cell Dyscrasia Group

The Dr Andrew R Belch *Myeloma Education and Enriched Training (MEET) grant*

Investing in our future: In recognition of Dr Andrew Belch's outstanding lifetime achievements and mentoring of *young researchers*

5
MEET grants awarded

$20,000
total awarded for 2024

In 2019, Myeloma Canada created The Dr Andrew R Belch Myeloma Education and Enriched Training (MEET) Grant to foster the development and participation of qualified young Canadian myeloma investigators at national and international medical/scientific meetings or conferences.

MEET grants are intended to support recipients' conference registration/participation fees, travel costs, and per diem expenses. By investing in young researchers to attend and present at international conferences, we are investing in the future of Canadian myeloma research.

A total of five Dr Andrew R Belch MEET grants were awarded in 2024.

Dory Abelman
Pugh/Trudel Lab, University of Toronto, Toronto, ON

"Cell-Free DNA Whole Genome Sequencing for Non-Invasive MRD Detection in Multiple Myeloma"

Poster presented at the 21st International Myeloma Society Annual Meeting & Exposition (September 25-28, 2024)

"Receiving the Dr Andrew R Belch MEET Grant is a profound honor which I am deeply grateful to receive. This generous support enables me to share my research on non-invasive detection of minimal residual disease in multiple myeloma, accelerating our efforts to provide patients with more accessible and accurate monitoring options. Thank you for supporting my passion to improve multiple myeloma treatment."

Afsaneh Panahi
Kuchenbauer-Rouhi Lab, Terry Fox Laboratory, Vancouver, BC

"Exploiting APOBEC3B-induced Vulnerabilities for Risk-adapted Treatment in Multiple Myeloma Patients with Del(17p)"

Poster presented at the EHA2024 Hybrid Congress (June 13-16, 2024)

"I am grateful to Myeloma Canada and the Dr Andrew R Belch MEET Grant for supporting my research. Presenting my work at EHA 2024 in Madrid was an invaluable opportunity to share findings, receive expert feedback, and foster collaborations, contributing to advancements in multiple myeloma research and patient care."

Dr Steven Shih
Princess Margaret Cancer Centre, Toronto, ON

"Handgrip Strength – Finetuning an objective measure of frailty in transplant-eligible patients with multiple myeloma"

Poster presented at the 66th American Society of Hematology (ASH) Annual Meeting & Exposition (December 7-10, 2024).

"I am honoured to be awarded the Dr Andrew R. Belch MEET Grant in support of my attendance at the 66th American Society of Hematology conference. Here we present the redefined thresholds for handgrip strength testing which may better identify less-fit transplant-eligible myeloma patients. We hope this will generate interest and collaborative efforts to develop validated frailty tools that can assist with risk counselling and personalization of supportive care for patients with multiple myeloma who are about to undergo autologous stem cell transplant."

Dr Rintu Sharma
Princess Margaret Cancer Centre, Toronto, ON

"Outcomes of Relapsed/refractory Multiple Myeloma Patients Receiving Sequential Therapies After Exposure to T-Cell Redirected or BCMA-Targeted Novel Immunotherapies"

Poster presented at the 66th American Society of Hematology (ASH) Annual Meeting & Exposition (December 7-10, 2024).

"Our research project empowers clinicians to consider the use of novel immunotherapeutic agents as a more effective treatment option for heavily pretreated myeloma patients. I am deeply grateful to Myeloma Canada for recognising the potential of my project. This encourages me to advance meaningful contributions in the evolving myeloma therapeutics and deliver impactful outcomes."

Melika Bakharzi
Kuchenbauer-Rouhi Lab,
Terry Fox Laboratory,
Vancouver, BC

"Heterogeneity of Osteoclasts in Multiple Myeloma Revealed by Single-nucleus RNA Sequencing"

Poster presented at the 21st International Myeloma Society Annual Meeting & Exposition (September 25-28, 2024)

"Being awarded the 2024 MEET grant to attend the International Myeloma Society meeting is an incredible honor and a meaningful opportunity. This support not only recognizes the importance of my research in advancing our understanding of myeloma but also enables me to engage directly with experts, expand my knowledge, and gain insights into the latest advancements in the field. Attending this conference will allow me to share my work, receive valuable feedback, and form connections with leading researchers and clinicians, which will be instrumental for my future career and scientific contributions. I am deeply grateful for this support, as it affirms the value of my research and empowers me to continue pursuing impactful science."

Standardizing myeloma diagnosis, treatment, and management across Canada

Canadian Consensus Guideline Consortium: *Myeloma consensus guidelines*

Evidence-based treatment guidelines
led by Myeloma Canada

Recognizing the need for medical consensus on the diagnosis, treatment, and management of myeloma in Canada across all provinces, Myeloma Canada led the development of the first Canadian evidence-based treatment guidelines in collaboration with a team of Canadian myeloma experts.

Although some provinces do have their own guidelines, these peer-reviewed national guidelines take provincial variations in access and funding into consideration. The overarching goal is to provide Canadian clinicians with concise diagnostic recommendations upon which therapeutic decisions can be made. The focus is on relevance, applicability, and the use of the various tests available in routine Canadian practice.

1st consensus guideline
Consensus Guidelines on the Diagnosis of Multiple Myeloma and Related Disorders
Published Feb 2020 - Clinical Lymphoma, Myeloma & Leukemia

2nd consensus guideline
Management of Myeloma Manifestations & Complications: The Cornerstone of Supportive Care
Published Jan 2022 - Clinical Lymphoma, Myeloma & Leukemia

3rd consensus guideline
First Line Treatment of Newly Diagnosed Transplant Ineligible Multiple Myeloma
Published Feb 2023 - Clinical Lymphoma, Myeloma & Leukemia

4th consensus guideline
First Line Treatment of Newly Diagnosed Transplant Eligible Multiple Myeloma Recommendations from a Canadian Consensus Guideline Consortium
Published Oct 2024 - Clinical Lymphoma, Myeloma & Leukemia

5th consensus guideline
Treatment of Relapsed/Refractory Multiple Myeloma: First and Second Relapse
In development, 2024

Minimal Residual Disease (MRD) *testing infrastructure guidelines*

Evidence-based testing guidelines
led by Myeloma Canada

Minimal Residual Disease (MRD) is recognized as the strongest prognostic factor for survival in multiple myeloma. Measuring MRD helps identify deeper treatment responses and detect myeloma relapse earlier than standard tests, potentially improving outcomes for thousands of Canadians living with the disease.

Myeloma Canada, in partnership with leading Canadian myeloma specialists, formed an MRD Working Group to develop practical, evidence-based guidelines that aim to make MRD testing a standard of care for all myeloma patients and a routine part of academic clinical trials.

MRD testing infrastructure guidelines
Minimal Residual Disease (MRD) testing infrastructure in multiple myeloma: Guidance for clinical trial and Routine Practice Use in Canada
Completed in 2024

15th annual
Myeloma Canada
Scientific Roundtable

MYELOMA CANADA
SCIENTIFIC ROUNDTABLE
MAKING MYELOMA MATTER

A unique and collaborative meeting of the most *innovative minds in myeloma*

October 25 – 26, 2024 (Montreal, Qc)

Myeloma Canada was the first, and remains the only, Canadian organization to bring together top myeloma experts (doctors, researchers, clinicians, and nurses) from the major myeloma treatment and research centres across Canada, with international myeloma specialists, industry partners, and patient representatives, on an annual basis to:

- **discuss the state of clinical trials in Canada** and develop high-impact made-in-Canada clinical trials for patients across the country;
- **exchange highlights of recent myeloma research** and treatment development work;
- **review new myeloma therapies** in the research pipeline;
- **facilitate planning and collaboration** of future Canadian myeloma research.

Prominent myeloma clinicians and researchers from treatment and research centres across Canada, internationally renowned researchers from the United States and Europe, nurses, industry partners, and patient representatives convened to discuss the 2024 theme, “How to best sequence T-cell based therapies in multiple myeloma”.

Co-chairs :

Dr Annette Hay
Queen’s University, Kingston Health Sciences Centre, Kingston, ON

Dr Hira Mian
McMaster University, Juravinski Cancer Centre, Hamilton, ON

Dr Paola Neri
University of Calgary, Arnie Charbonneau Cancer Institute, Calgary, AB

Dr Vincent Rajkumar
Mayo Clinic, Rochester, Minnesota, USA

SCIENTIFIC ROUNDTABLE

MAKING MYELOMA MATTER

100+ attendees

10 provinces

16 representatives from 12 industry partners

9 internationally renowned researchers

65 myeloma clinicians, researchers, and other healthcare professionals

12 plenary presentations

6 presentations from industry

8 trial update presentations

Update from Myeloma Canada

Myeloma Canada Patient Advisor Council, patient contributors, Myeloma Canada professional team

Promoting Equity, Diversity and Inclusion in *clinical trial accruals*

A change management workshop **in operationalizing implementation**

April 2024 (Toronto, ON)

Objective: Workshop solutions for operationalizing EDI in clinical trial accruals.

Logistical barriers in clinical trial enrollment, both in Canada and globally, have impacted equitable and diverse representation, leading to possible effects on real-world outcomes and access to life-saving treatments for patients. Despite growing recognition of the issue, efforts to improve Equity, Diversity, and Inclusion (EDI) in trial participation have not resulted in systemic change due to rigid structures and siloed operations.

In April 2024, Myeloma Canada organized a two-day conference and workshop that brought together a cross section of interested parties – patient advocates, researchers, nurses, pharmaceutical companies and research organizations – from various disease spaces. The conference was structured around the Human-Centered Design (HCD problem-solving methodology that puts end-users (patients) at the centre of solution development.

Solution determined by the end of the workshop:

Develop a pre-clinical trial support navigation service to help identify and resolve non-medical barriers impeding trial enrollment. The service would be offered at the institutional level (via social workers, patient partners, or navigators) or through external/third-party programs with the goal of meeting the needs of patients before formal trial screening begins. Suggested key features of the service include personalized assistance for patients and healthcare providers, and the ability to source support programs and resources for logistical, financial, and psychosocial challenges.

To determine the best course of action and initiate a pilot project, a follow up Phase 0 meeting will take place in March 2025.

Learnings: Myeloma within *Indigenous populations*

Insights and learnings **on living with myeloma as an Indigenous person**

June 1, 2024 (Saskatoon, SK)

Myeloma Canada and Dr Julie Stakiw hosted a meaningful gathering with 14 First Nations individuals living with myeloma and their caregivers, six myeloma healthcare professionals, as well as industry partners. Participants from Indigenous communities across Alberta, Saskatchewan, and Ontario shared their experiences and challenges in accessing care and managing myeloma.

This important meeting builds on our ongoing study to better serve the needs of Indigenous myeloma patients in Saskatchewan. As a key outcome, a consultant has been engaged at the Saskatoon Cancer Centre to develop an educational resource package for Indigenous peoples.

Dr Julie Stakiw
Saskatoon Cancer Centre, SK

The Quebec Plasma Cell *Dyscrasia Group* (GMPQ)

GMPQ
Groupe des maladies plasmocytaires du Québec

Partnering for a more informed *Quebec medical community*

Myeloma Canada is proud to continue our partnership with the Quebec Plasma Cell Dyscrasia Group (GMPQ), a Quebec-based non-profit organization that brings together physicians who specialize in plasma cell diseases in the province. The GMPQ is focused on sharing the most current information on plasma cell diseases (e.g., monoclonal gammopathy of undetermined significance (MGUS) smouldering multiple myeloma (SMM), amyloid light-chain (AL) amyloidosis, and myeloma) by providing therapeutic guidelines, training, and publications to the medical community.

The GMPQ's mission is to promote excellence in myeloma care in Quebec by encouraging the dissemination of knowledge and clinical research. They fulfill their mission by:

1. providing guidelines on the treatment of plasma cell diseases to healthcare personnel in Quebec;
2. providing training to healthcare professionals who treat plasma cell diseases in Quebec;
3. playing a role in advancing research on plasma cell diseases.

In 2024, Myeloma Canada was a sponsor of the GMPQ's 2nd annual scientific conference for medical specialists and pharmacists. In 2023, we were a sponsor of this inaugural scientific conference and also partnered with them to help develop their GMPQ guidelines on the treatment of relapsed/refractory myeloma and update their GMPQ guidelines on the diagnosis and first line treatment of myeloma.

Your support **enables our impact**

If it were not for the generosity, loyalty and support of our loyal donors and community, the tremendous initiatives we were able – and continue – to advance would not be possible.

Thank you for taking the time to learn more about Myeloma Canada, our Myeloma Canada Research Initiative, and the important science and research projects that shaped our investments for 2024.

With your support, we look forward to growing our funded investments to improve the quality and length of life for all Canadians whose lives have been, are, or will be affected by myeloma.

For more information, or to make a donation, please visit myeloma.ca, email us at contact@myeloma.ca, or call our toll-free number: 1-888-798-5771.

Thank you,
Myeloma Canada

MYÉLOME CANADA
MISSION : MAÎTRISER LE MYÉLOME

MYELOMA CANADA
MAKING MYELOMA MATTER

Myeloma Canada research and science *impact report*

2024

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