Pfizer Canada and Colorectal Cancer Canada

Research and Quality Improvement Initiative:

Accelerating biomarker testing for optimized metastatic colorectal cancer treatment planning across Canada

Introduction & Background

Colorectal Cancer (CRC) is the second most fatal form of cancer for men and third most fatal form of cancer for women in Canada (Brenner, Darren R., et al. "Projected estimates of cancer in Canada in 2024." CMAJ May 13, 2024. 196 (18) E615-E623). In recent years, the systemic therapy management of metastatic colorectal cancer (mCRC) has evolved from primarily cytotoxic chemotherapies to now include precision medicine where the molecular profiling of the disease can alter treatment strategies and can improve clinical outcomes for certain patients.

Canadian Consensus Practice Guidelines for mCRC Tumor Biomarker testing have clearly identified minimum standard biomarkers that should be available prior to initiation of first line therapy (Yu *et al*, Ther. Adv. Med. Oncol. 2022, Vol. 14: 1–29): these include extended RAS testing (including *KRAS* and *NRAS*), *BRAF* V600 and mismatch repair deficiency/microsatellite instability testing. Last year, INESSS published a comprehensive “Etat de connaissances” expert clinical literature review concluding predictive value in the management of mCRC for KRAS, NRAS, BRAF, NTRK, HER2, RET, high microsatellite instability (MSI-H), mismatch repair defects (dMMR) and high tumor mutational burden (TMB-H) (INESSS (2024). While rapid progress is being made towards achieving timely access to biomarker testing for mCRC across Canada, a recent expanded quality assurance program has identified important disparities in pre-analytical and post-analytical processes in mCRC biomarker testing (Bisson *et al*, J. Mol. Pathol. 2024, 5: 1–10), leading to substantial differences in turnaround time, analytic accuracy and reporting quality amongst Canadian centres. These observations suggest the need for continued quality improvement in mCRC biomarker testing addressing both analytical and non-analytical parameters.

In addition, there is no single uniform approach to mCRC biomarker testing that meets the needs of every Canadian cancer care ecosystem: biomarker test licensing and reimbursement models, diverse and rapidly evolving testing technologies, sample throughput and local expertise & training, to name just a few pertinent factors, all contribute to shaping a strategy yielding an optimal solution for healthcare teams and the patients they serve. For example, it may be logical, in some instances, to establish highly centralized and specialized regional referral testing centres that serve the needs of several, or even many, other sites. In other settings, there may be a need to develop and maintain expert local laboratory capacities to carry out testing at, or very near, the point(s) of care. Hybrid solutions may be appropriate in yet other instances, with some laboratory services carried out in-house and others outsourced, or with redundant strategies that can be deployed depending on the needs at the time testing is ordered. Regardless, expert stakeholders are best poised to identify deficiencies or challenges in their jurisdictions and develop strategies that ultimately best meet the needs of the patient.

Pfizer Canada and Colorectal Cancer Canada are collaborating to offer a new funding opportunity seeking proposals for initiatives in either of the two streams, Research or Quality Improvement

(QI), focusing on empowering Canadian centres to optimize molecular testing for patients with mCRC.

Quality Improvement: Quality improvement (QI) projects are systematic, data-guided, sustainable activities designed to bring about immediate, positive changes in the delivery of healthcare in particular settings[1,2]. Quality improvement seeks to standardize structure and processes to reduce variation, achieve predictable results, and improve outcomes for patients, healthcare systems, and organizations. Structure includes things like technology, culture, leadership, and physical capital. Process includes knowledge capital (e.g., standard operating procedures) or human capital (e.g., education and training) [3].

QI projects systematically apply what is already known into the local practice, intended to quickly improve patient care within a specific setting. The goal of QI projects is to close a gap in performance at a specific health care system. The "performance" is a standard in health care that is not efficiently/appropriately/ consistently being done[4]. For these reasons, QI focuses on translating existing knowledge into programs or practices to immediately improve the quality of services to individuals and populations within a local institution or setting[5]. The risk of participation in QI is the same as the risk of receiving standard clinical care[6] since the standard of care remains the same for all patients.

Research: In contrast, research projects use a systematic approach to discover something that is unknown. Research projects add new knowledge to what was previously unknown in literature through testing of a hypothesis or a scientific question[4]. Research aims to generate knowledge with broad applications, often through controlled studies. The subjects may or may not benefit directly from the knowledge gained. Research studies aim to evaluate an innovation, study something new, or analyze a process not yet rigorously studied[6].

1) Baily MA, et al., Hastings Cent Rep 2006. *2)* Lynn J, et al., Ann Intern Med 2007. *3)* Centers for Medicare & Medicaid Services, Page Last Modified: 09/10/2024. *4)* Jackson C, Research Quality Manager, Office of Research and Scholarship University of Maryland, Baltimore School of Nursing. *5)* COLUMBIA UNIVERSITY INSTIUTIONAL REVIEW BOARD GUIDANCE FOR THE CLASSIFICATION OF QUALITY IMPROVEMENT ACTIVITIES VERSUS RESEARCH WITH HUMAN SUBJECTS. Effective Date: December 1, 2023. *6)* Newhouse et al., J Nurs Adm. 2006.

In this Request for Proposals (RFP), applicants are encouraged to review and consider the **Funding Opportunities** described below to support and develop their innovative Research or QI project ideas aimed at streamlining molecular testing processes for metastatic colorectal cancer. Projects meeting the definition of either Research or QI, as described above, will receive equal consideration. Applicants are encouraged to showcase how their ideas can have sustainable and measurable impact on molecular testing, and by extension on cancer care for patients in Canada.

> **Pfizer's Global Medical Grants & Partnerships (GMGP)** supports the global healthcare community's independent initiatives, e.g., research, quality improvement or education, to improve patient outcomes in areas of unmet medical need that are aligned with Pfizer's medical and/or scientific strategies.
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> **Colorectal Cancer Canada (CCC)** is Canada's patient led not-for-profit patient association dedicated to colorectal cancer awareness and education, support for patients and their caregivers, and advocacy on their behalf and aspires to reduce the

incidence and mortality of colorectal cancer in Canada while improving the quality of life of patients, their families and their caregivers. Founded in 1998, CCC has been an advocate for Canadian CRC patients for over twenty-five years. Through the Get Personal project and numerous other educational initiatives, CCC has prioritized the improvement of timely access to molecular testing for Canadian mCRC patients among its many important objectives.

Pfizer and CCC ('the collaborators') are jointly issuing this RFP. This program aims to support access to Research or QI project funding described in '**Funding Opportunities**' below. The goal is to enable applicants to pursue innovative approaches to optimize molecular testing strategies at the applicants' centre. Funding and general oversight of the funded projects will be provided directly from Pfizer on behalf of the collaborator.

For all Research and QI proposals, the grant requester and ultimately, the grantee, is responsible for the design, implementation, sponsorship and conduct of the independent initiative supported by the grant, including compliance with any regulatory requirements. **As the commercial supporter, Pfizer colleagues must not be involved in any aspect of project development or implementation.**

Grants will be awarded in support of organizations/institutions working to improve the competence and performance of both the healthcare providers and healthcare systems in which they work with the goal of optimizing the care and outcomes of cancer patients.

Funding Opportunities:

The intent of this RFP is to encourage the applicant Canadian organizations and institutions to pursue innovative approaches for Research **or** QI projects that aim to optimize molecular testing for patients in metastatic CRC at the applicants' centre. Applicants are invited to implement innovative ideas with the goal of creating a path for sustainable molecular testing for cancer patients in Canada.

- Applicants must submit a Research or QI project budget for a maximum of C$100,000.

Geographic Scope:

- Canada

Eligibility and Applicant Criteria:

Applicants are strongly encouraged to use a multidisciplinary care model (e.g., pathologist, medical oncologist, surgeon, researcher. etc.). All partners must have a relevant role, and the requesting organization must have a key role in the project.

- Only organizations are eligible to receive grants, not individuals or medical practice groups.
- The following may apply: medical schools; healthcare institutions (both large and small); professional associations; government agencies; and other entities with a mission related to healthcare improvement.
- Projects should start in 2025 with duration of up to 24 months.

Clinical Area:

Metastatic colorectal cancer (mCRC)

- All projects, whether Research or QI, must include a component that addresses mCRC patients.
- In addition to mCRC, applicants may submit project proposals that also encompass biomarker testing in earlier stages of CRC, where clinically relevant, or in other tumour types (for example, projects assessing implementation of tumor agnostic or multi-tumour NGS panels).

Specific Area of Interest for this RFP#:

Applicants should include in their Research or QI proposals their dissemination plan for their project outcomes, for example: conference abstract submission, publication in a peer-reviewed journal.

Topics of highlighted interest include, but are not limited to:

- Projects addressing effectiveness and/or quality of pre- and/or post-analytical steps of established assays (including, but not limited to, sample processing and transport; laboratory information systems and healthcare provider tools; and molecular testing report delivery and interpretation).
- Innovative approaches to molecular testing with a focus on actionability and sustainability, with endpoints including, but not limited to:
  - Yields
  - False positive/negative rates
  - Analytical validity
  - Clinical pertinence
  - Feasibility
  - Cost-effectiveness
- Achieving rapid turnaround time for molecular testing for metastatic colorectal cancer patients (projects proposals may also encompass other tumour types as described above in **Clinical Area**).
- Projects that aim to achieve access to in-house molecular testing in non-academic or community centres.
- Creating a sustainable workflow and operation based on the applicant institutional needs (e.g. training, instrument implementation, validation etc.)
- Improving health equity in access to timely molecular testing in CRC and other tumour types by addressing disparities for patients marginalized due to age, ancestry, disability, gender expression, gender identity, race, religion, sexual orientation, geography, income or other factors.
- Projects that address biomarker testing with endpoints including, but not limited to:
  - Turnaround times
  - System level efficiencies and Data sharing
  - Social determinants
  - Impact on patient outcomes, clinical outcomes, clinical trial access, etc.

#It is not the intent of this RFP to support clinical research projects. Projects evaluating the efficacy of therapeutic agents will not be considered.

Budget

- Individual projects requesting up to a maximum of $100,000 (CAD) will be considered.
- The total available budget related to this RFP is $300,000 (CAD).

Project evaluation: Expert Review Panel (ERP)

The ERP will be comprised of patient advocates and health economics, clinical and molecular pathology experts in Canada. The amount of the grant Pfizer will fund for any project will depend upon the ERP's evaluation of the proposal and costs involved and will be stated clearly in the approval notification.

Key Dates

- RFP Release Date: 22 Jan 2025
- Proposal Due Date: 17 April 2025
  - Please note the deadline is 23:59 Eastern Time, i.e., New York, GMT – 5.
- Review of proposals by review panel: May 2025
- Anticipated award notification date: 30 June 2025
- Grants will be distributed following a fully executed agreement and submission of final protocol, documentation of IRB/IEC approval, regulatory approval (if applicable), exemption or waiver.

Agreements

Review and Approval Process

- This grant program RFP uses an ERP to make final grant decisions.
- The panel is comprised of and/or will consult with professionals from the medical community with advanced degrees and expertise in particular clinical areas, or specific needs of a geographic region/learner group, or expertise in continuing professional development, research and quality improvement. The ERP will include a CCC representative who will ensure that the projects selected for funding embrace a patient-centred model of care.

Application Process

How to Submit:

Note: Please read this section carefully since applications submitted not following these instructions will not be accepted.

- To submit a **Research** project, please go to www.cybergrants.com/pfizer/Research and sign in.
- To submit a **QI** project, please go to www.cybergrants.com/pfizer/QI and sign in.
- Note that the Pfizer Grant Officer retains the right to reclassify a proposal based on an internal assessment of the project scope (i.e. if a project submitted as QI is deemed to be Research, it will be reclassified as Research and vice versa. All projects, whether Research

or QI, will receive equal consideration by the external review panel based on the ERP's expert evaluation.

- Click the "Start a New Application" option.
- In the application:
  - For the question "Competitive Grant?" select Yes
  - Select the following Competitive Grant Program Name: **2025 CAN Oncology Precision Medicine RFP in CRC**
  - Select the following Primary Area of Interest: Oncology - Gastrointestinal
- Requirements for submission:
  - Complete all required sections of the online application and upload your project proposal (see **Appendix**) in the Full Proposal Submission field.
- If you encounter any technical difficulties with the website, please click the "Technical Questions" link at the bottom of the page.

IMPORTANT: Be advised applications submitted after the due date will not be reviewed.

Questions:

- If you have questions regarding this RFP, please direct them in writing to the Grant Officer, Don Rodriguez (Don.Rodriguez@Pfizer.com) with the subject line "Canada **2025 Oncology Precision Medicine Research and QI in mCRC**"

Grant Agreements:

- If your grant is approved, your institution will be required to enter into a written grant agreement with Pfizer. Please click here to view the core terms of the agreement.
- Under Pfizer's competitive grant program, modifications to grant agreements will not be reviewed unless a genuine conflict exists as between applicable law and the terms of the relevant grant agreement. Applicant is encouraged to share the core terms with counsel for approval prior to application submission.
- Except where prohibited by applicable law and, in any case, subject to review by Pfizer Legal, payment of grant funding may only be paid to the grantee organization.

Mechanism by which Applicants will be Notified:

- All applicants will be notified via email by the dates noted above.
- Applicants may be asked for additional clarification during the review period.

Appendix

Assessment of Need for the Project

- Please include a quantitative baseline data summary, initial metrics (e.g., quality measures), or a project starting point (please cite data on gap analyses or relevant patient-level data that informs the stated objectives) in your target area. Describe the source and method used to collect the data. Describe how the data was analyzed to determine that a gap existed. If a full analysis has not yet been conducted, please include a description of your plan to obtain this information.

Target Audience

- Describe the primary audience(s) targeted for this project. Also indicate who you believe will directly benefit from the project outcomes. Describe the overall population size as well as the size of your sample population.

Project Design and Methods

- Describe the planned project and the way it addresses the established need.
- If your methods include educational activities, please describe succinctly the topic(s) and format of those activities.

Innovation

- Explain what measures you have taken to ensure that this project idea is original and does not duplicate other projects or materials already developed.
- Describe how this project builds upon existing work, pilot projects, or ongoing projects developed either by your institution or other institutions related to this project.

Evaluation and Outcomes

- In terms of the metrics used for the needs assessment, describe how you will determine if the practice gap was addressed for the target group. Describe how you expect to collect and analyze the data.
- Quantify the amount of change expected from this project in terms of your target audience.
- Describe how the project outcomes will be broadly disseminated.

Anticipated Project Timeline

- Provide an anticipated timeline for your project including project start/end dates.

Additional Information

- If there is any additional information you feel Pfizer should be aware of concerning the importance of this project, please summarize here.

Organization Detail

- Describe the attributes of the institutions / organizations that will support and facilitate the execution of the project and the leadership of the proposed project. Articulate the specific role of each partner in the proposed project.

Budget Detail

- The budget amount requested must be in Canadian dollars (CAD).
- While estimating your budget please keep the following items in mind:
    - General organizational running costs such as legal fees, insurance, heating, and lighting etc. should be included. These costs are not specific to a grant request and therefore, should not appear as line items in budgets. However, costs that are specific to the study (e.g., some countries require insurance to be taken out on a per-study basis for clinical research) would be acceptable to be included as line items.
        - The inclusion of these costs cannot cause the amount requested to exceed the budget limit set forth in the RFP.
    - Pfizer does not provide funding for capital purchases (infrastructure expenses such as equipment, purchases of software or software licenses, technology or bricks and mortar).
    - Reagents, consumables, equipment hire/leasing is acceptable and may be included in the project budget.
- It should be noted that grants awarded through GMG cannot be used to purchase Pfizer therapeutic agents (prescription or non-prescription).
- Pfizer maintains a company-wide, maximum allowed overhead rate of 28% for independent studies and projects. Please click here for details.