CCRAN
Colorectal Cancer Resource & Action Network

RISCC
Réseau d'informations et soutien pour le cancer colorectal

A PATIENT-FOCUSED ORGANIZATION

COLORECTAL CANCER TREATMENT & CLINICAL RESEARCH UPDATES

Month Ending January 15th 2026

The following colorectal cancer treatment and research updates extend from November 14th, 2025, to January 15th, 2026, inclusive and are intended for informational purposes only.

This content is not intended to be a substitute for professional medical advice. Always consult your treating physician or guidance of a qualified health professional with any questions you may have regarding your health or medical condition. Never disregard the advice of a medical professional or delay in seeking it because of something you have read on this website.

Drug / Systemic Therapies

6. **Access to Fruquintinib (FRUZAQLA) for Previously Treated mCRC**
20. **The Impact of Metformin Use on Survival Outcomes in Colorectal Cancer: A Systematic Review and Meta-Analysis**

Other

30. **Precision in Practice: Costs and Benefits of Comprehensive Genomic Profiling for Five Stage 4 Cancers**
31. **Diverging Global Incidence Trends of Early-Onset Cancers: Comparisons with Incidence Trends of Later-Onset Cancers and Mortality Trends of Early-Onset Cancers**

Drug / Systemic Therapies

1. **PERIOP-06 Study at Sunnybrook Hospital to Treat Liver Metastases**
2. **AZUR-1 and AZUR-2 Dostarlimab Trials Open in Canada**
3. **MOUNTAINEER-O3: A Study of Tucatinib with Trastuzumab and mFOLFOX6 Versus Standard of Care Treatment in First-Line HER2+ mCRC**
4. **CARMA BROS: CAnadian CAncers with Rare Molecular Alterations (CARMA) - Basket Real-world Observational Study (BROS)**
5. **CRC.10: Colon Cancer Adjuvant Chemotherapy Based on Evaluation of Residual Disease (ctDNA)**
6. **Access to Fruquintinib (FRUZAQLA) for Previously Treated mCRC**
7. **Intermittent or Continuous Panitumumab Plus Fluorouracil, Leucovorin, and Irinotecan for First-Line Treatment of RAS and BRAF Wild-Type Metastatic Colorectal Cancer: The IMPROVE Trial**
8. **Guardant Health Launches Guardant360 Tissue, First Tissue Molecular Profiling Test with Comprehensive Multiomic Analysis to Provide a More Complete View of Cancer**
9. **Investigating the Effects of Atezolizumab in People Whose Tumour DNA or RNA Indicates Possible Sensitivity (CAPTIV-8)**
10. **Encorafenib, Cetuximab, and mFOLFOX6 in *BRAF*-Mutated Colorectal Cancer (BREAKWATER)**
11. **Clinical Trials in Canada: Insights and Implications- Innovative Medicines Canada**
12. **Patient Support Program Offered by Bristol Myers Squibb Canada - OPDIVO + YERVOY for the First-Line Treatment of Adult Patients with Unresectable or Metastatic Colorectal Cancer**
13. **Comprehensive Genomic/Biomarker Testing in Canada – OncoHelix**
14. **Botensilimab + Balstilimab vs Best Supportive Care as Therapy in Chemo-refractory, Unresectable, Colorectal Adenocarcinoma (BATTMAN)**
15. **Agnostic Biomarkers and Molecular Signatures in Colorectal Cancer—Guiding Chemotherapy and Predicting Response**
16. **Lymph Node-Targeted, mKRAS-Specific Amphiphile Vaccine in Pancreatic and Colorectal Cancer: Phase 1 AMPLIFY-201 Trial Final Results**
17. **Merck Patient Resource: Clinical Trials Site**
18. **DYNAMIC-III Trial at ESMO 2025 Presidential: ctDNA-guided Adjuvant Chemotherapy in Stage III Colon Cancer**
19. **STELLAR-303 Trial at ESMO 2025: Zanzalintinib Plus Atezolizumab in MSS Metastatic Colorectal Cancer**
20. **The Impact of Metformin Use on Survival Outcomes in Colorectal Cancer: A Systematic Review and Meta-Analysis**

Surgical Therapies

21. **Hepatic Artery Infusion Pump (HAIP) Chemotherapy Program – Sunnybrook Hospital**
22. **In Vivo Lung Perfusion (IVLP) for CRC Metastatic to Lung**
23. **Does Surgical Intervention Contribute to Survival for Patients with Para-Aortic Lymph Node Metastasis from Colorectal Cancer?**

Radiation Therapies / Interventional Radiation

24. Ultra-high Dose Radiation for Liver Metastasis Using MR-guided Treatment with Stereotactic Ablative Single-fraction (ULTRAS)

Screening

25. Modeling The Economic and Health Impact of Lowering the Recommended Colorectal Cancer Screening Age in Canada Using Fecal Immunochemical Test Versus Colonoscopy
26. Early FIT Screening Tied to Big Reduction in CRC Mortality
27. National guideline for Lynch Syndrome Aims to Prevent Cancers and Save Lives

Other

28. Young Adult CRC Clinic Available at Sunnybrook Hospital
29. Adolescents and Young Adults (AYA) Program Available at The Ottawa Hospital
30. Precision in Practice: Costs and Benefits of Comprehensive Genomic Profiling for Five Stage 4 Cancers
31. Diverging Global Incidence Trends of Early-Onset Cancers: Comparisons with Incidence Trends of Later-Onset Cancers and Mortality Trends of Early-Onset Cancers
32. COVID-19 Vaccines in People with Cancer

Nutrition / Healthy Lifestyle

33. EXercise for Cancer to Enhance Living Well (EXCEL) Study
34. A Randomized Phase III Trial of the Impact of a Structured Exercise Program on Disease-Free Survival (DFS) in Stage 3 or High-Risk Stage 2 Colon Cancer: Canadian Cancer Trials Group (CCTG) CO.21 (CHALLENGE)
35. Sexual Health Outcomes After Colorectal Cancer Diagnosis in Females: A Population-Based Cohort Study
36. Eating More Ultra-Processed Foods Tied to Increased Risk of Early-Onset Colorectal Cancer

Drug / Systemic Therapies

1. PERIOP-06 Study at Sunnybrook Hospital to Treat Liver Metastases (Dec 30/24)

We are inviting you to take part in a voluntary research study | PERIOP-06

Why are we doing this study?

The purpose of the PERIOP-06 clinical trial is to see how effective a new medication is. This new medication is called QBECO and is made by a Canadian company called Qu Biologics. We want to see if QBECO can prevent or slow colorectal cancer from coming back in patients who have had surgery to remove cancer that has spread to the liver. To do this, you will be randomly assigned to receive either QBECO or a placebo (a drug that looks like the study drug but contains no medication) so we can compare QBECO to the usual care. Both you and your study doctor will not know if you are receiving the study drug or placebo.

What are the possible benefits of taking part in this study?

- The QBECO medication may benefit you more than the usual care for your cancer.
- There is evidence that QBECO may be effective in preventing the growth of colorectal cancer in humans from a previous Phase I clinical trial.
- The information learned from this study might help other patients in the future.
- You will have close follow ups for 5 years after surgery.

What are the possible disadvantages & risks of taking part in this study?

- QBECO may not benefit you more than the usual care for your cancer.
- You may experience side effects from the QBECO medication.
- You can find more information below and in Section 13: "What risks can I expect from taking part in this study?" of the informed consent document.

Do I have to take part in this study?

Your participation is voluntary. You may choose not to participate. If you choose to participate, you may change your mind at any time. Regardless of your choice, your medical team will continue to take care of you.

Common Side Effects of QBECO

In 100 people receiving QBECO more than 5 and up to 15 may have the following side effects:

- Tenderness at the injection site. This typically gets better in 2 days. If the redness or swelling is bigger than 7 cm, please contact a member of the study team.
- Temporary mild fatigue following the first few doses of QBECO
- Temporary nausea
- Temporary fever
- Temporary headache
- Increased General Inflammation

Additional Drug Risks

QBECO is not known to interact with other drugs.

Rare And Serious Side Effects of QBECO

In 100 people receiving QBECO, 3 or fewer may have:

- Pancreatitis
  - Symptoms include: Abdominal or back pain, nausea, vomiting
- Hepatitis [inflammation of the liver]
- Electrolyte abnormalities [determined with lab test]
- Kidney failure

These serious side effects have only been reported in patients who were given QBECO to treat Crohn's disease and ulcerative colitis. No serious side effects were reported in 109 patients who received QBECO for advanced cancer.

What should I do if I am experiencing symptoms?

If you are experiencing these or any symptoms that you think are related to the study treatment, you should contact your cancer surgeon or the study coordinator to discuss. If the symptoms are serious and require emergency medical attention, then you should present to the emergency room and inform the medical team that you are participating in this study.

Visual Summary of Trial Activities

Day Relative to Surgery	Details	Trial Activities				Notes
		Blood Sample	QBECO Therapy or Placebo	MRI/CT scan	Other Assessments	
Eligibility Screening	The research team will confirm eligibility. Routine bloodwork will be done.	✓		✓	Survey and pregnancy test (if appropriate)	
-11 to -1 days	You will give yourself a subcutaneous injection (QBECO therapy or placebo) every 2 days before surgery for at least 11 days.		✓			If your surgery is delayed, you can take QBECO (or placebo) up to 120 days before surgery
Day of Surgery	You will have your surgery following the usual care procedures. Additionally, a sample of tumor tissue will be collected.	✓			Compliance and side effect assessment	The compliance and side effect assessment may be collected over the phone the day before the surgery
+1 and +4 (±1) Day(s)	You will be monitored in the hospital following your surgery. QBECO or placebo will be taken every 2 days.	✓	✓		Survey on day 4 (±1) only	
+7 to 41 Days	You will continue to give yourself a subcutaneous injection of QBECO therapy or placebo every 2 days after your surgery for 41 days.		✓			
+6 (±10 d) weeks	Once your injections are complete, you will have a follow-up appointment.	✓			Survey and side effect assessment	
+3, 6, 9, 12, 15, 18, 21, and 24 Months	To check for the progression of cancer, imaging and blood samples will be done every three months for 2 years after surgery.	✓		✓	Compliance and side effect assessment will be at 3 months only	There will be a range of ± 14 days for your 3 month visit and a range of ± 28 days for all remaining visits.
+2.5 to 5 Years	To check for the progression of cancer, imaging and a blood sample will be done every 6 months until 5 years after your surgery.	✓		✓		There will be a range of ± 28 days for all visits

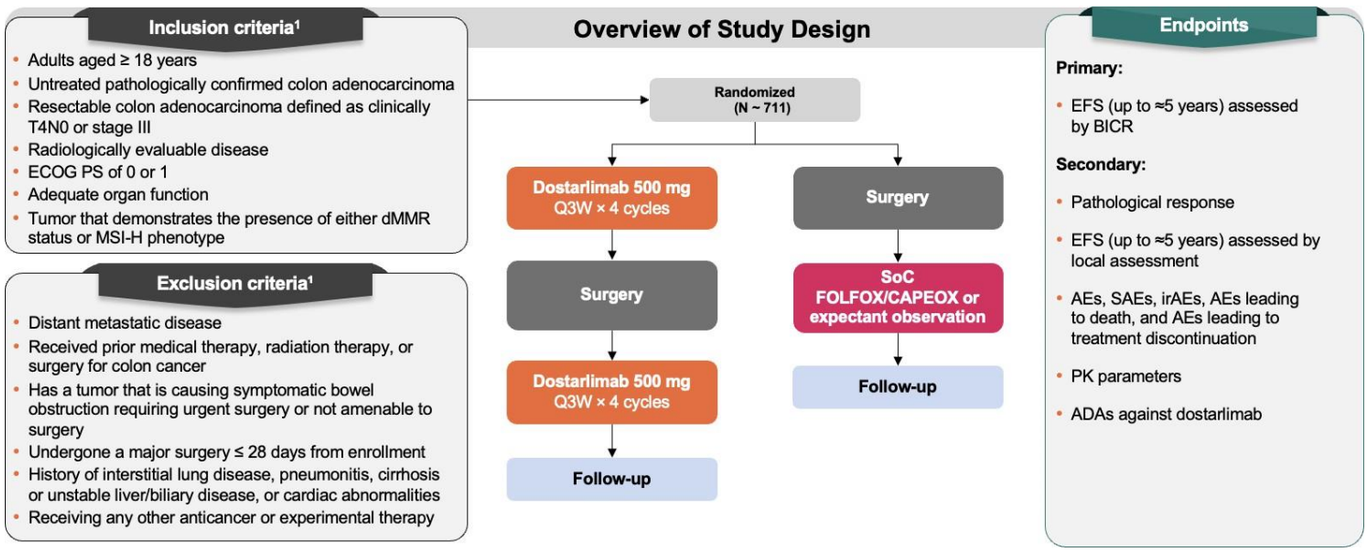
Legend: Approximately half-day hospital visit; Overnight hospital visit; At your house

To learn more about this study, click here.

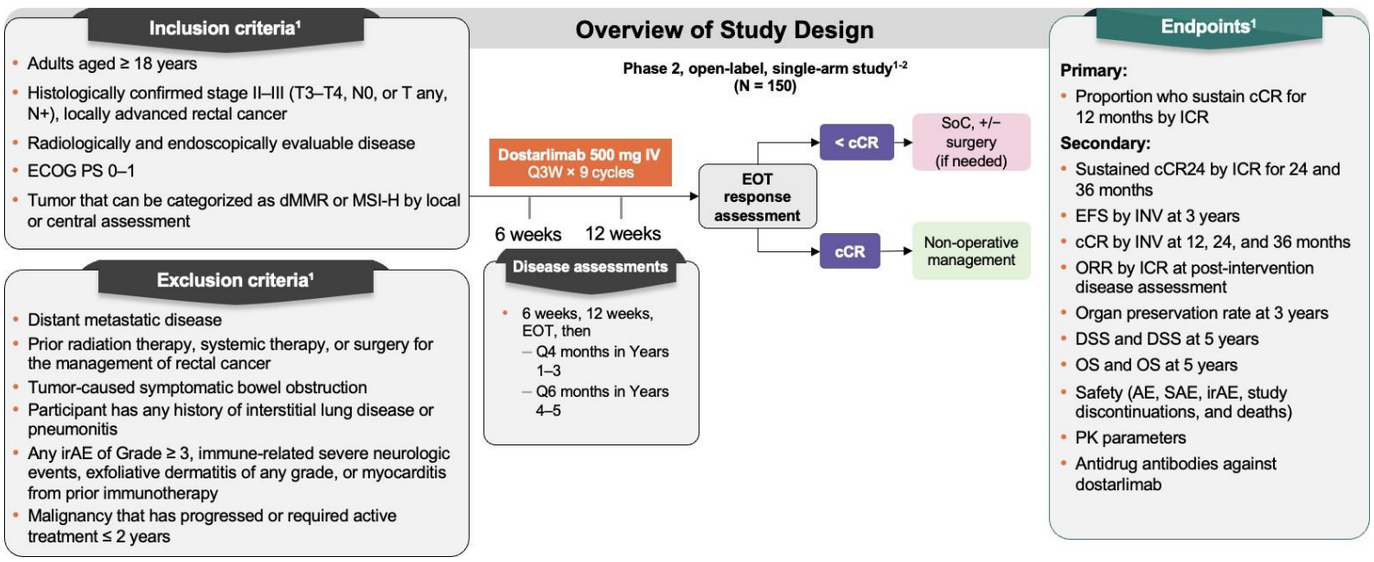
2. AZUR-1 and AZUR-2 Dostarlimab Trials Open in Canada (Jan 13/25)

Dostarlimab is an IgG 4 isotype humanized monoclonal antibody meaning it is made in a lab to serve as substitute antibodies that can restore, enhance, modify or mimic the immune system's attack on unwanted cells. In this case, dostarlimab blocks the interaction of PD-1 to its ligands PD-L1 and PD-L2 found on tumour cells. By blocking PD-1 activity, dostarlimab activates T cells allowing them to attack cancer cells by detecting and killing them. Dostarlimab has been approved for adult patients with mismatch repair-deficient (MMR-D) recurrent or advanced endometrial cancer (EC) in the US, and for MMR-D/microsatellite instability-high (MSI-H) recurrent or advanced EC in the EU. The drug is being investigated in multiple tumour types and in combination with other anticancer agents.

AZUR-1: Phase 2 Study
A single-arm, open label study of dostarlimab monotherapy in participants with untreated stage 2/3 MMR-D/MSI-H locally advanced rectal cancer.



AZUR-2: Phase 3 Study
An open-label, randomized study of peri-operative dostarlimab monotherapy vs standard of care in participants with untreated T4N0 or stage 3 MMR-D/MSI-H resectable colon cancer.



Please connect with CCRAN to receive a list of participating clinical trial sites in Canada.

3. MOUNTAINEER-03: A Study of Tucatinib with Trastuzumab and mFOLFOX6 Versus Standard of Care Treatment in First-line HER2+ mCRC (Jan 11/25)

This study is being done to find out if tucatinib with other cancer drugs works better than standard of care to treat participants with HER2 positive colorectal cancer. This study will also determine what side effects happen when participants take this combination of drugs. A side effect is anything a drug does to the body besides treating your disease.

Participants in this study have colorectal cancer that has spread through the body (metastatic) and/or cannot be removed with surgery (unresectable).

Participants will be assigned randomly to the tucatinib group or standard of care group. The tucatinib group will get

tucatinib, trastuzumab, and mFOLFOX6. The standard of care group will get either:

- mFOLFOX6 alone,
- mFOLFOX6 with bevacizumab, or
- mFOLFOX6 with cetuximab mFOLFOX6 is a combination of multiple drugs. All of the drugs given in this study are used to treat this type of cancer.

To learn more about this trial, as well as the inclusion/exclusion criteria, click here.

4. CARMA BROS: Canadian Cancers with Rare Molecular Alterations (CARMA) - Basket Real-world Observational Study (BROS) (Dec 31/24)

This study will collect data on Canadian cancer patients that have uncommon/rare changes in their tumours, such as alterations/rearrangements in the genetic material inside cells - known as deoxyribonucleic acid, or DNA, which acts as a map and gives directions to the cells on how to make other substances the body needs - because some of these changes have been found to respond to different drugs that help to stop the cancer. These rare changes occur in genes such as but not limited to ALK, EGFR, ROS1, BRAF, and NTRK which have targeted drugs in a family known as tyrosine kinase inhibitors (TKIs), and KRAS G12C mutation, which now has a targeted inhibitor drug therapy for patients with non-small cell lung cancer (NSCLC). The goals for the study are to compare the natural history of such cancers and the treatment outcomes, including toxicities and patient-reported outcomes, for the different therapies.

Primary outcome measures include composite of progression free survival (PFS) or overall survival (OS). The secondary outcome measures include brain metastasis/other metastatic tumours, EORTC quality of life questionnaires (QLQ) - cancer patient-reported health related quality of life, EQ-5D-5L - patient-reported health related quality of life measure, and patient-reported economic impact. The estimated primary completion date is December 2025.

To learn more about this study, click here.

5. CRC.10: Colon Cancer Adjuvant Chemotherapy Based on Evaluation of Residual Disease (ctDNA) (Dec 30/24)

CRC.10 is a Phase II/III which trial will evaluate what kind of chemotherapy to recommend based on evaluation of residual disease. Circulating tumour DNA (ctDNA) shed into the bloodstream represents a highly specific and sensitive approach (especially with serial monitoring) for identifying microscopic or residual tumour cells in colon cancer patients. Colon cancer patients who do not have detectable ctDNA (ctDNA-) are at a much lower risk of recurrence and may not need adjuvant chemotherapy. Furthermore, for colon cancer patients with detectable ctDNA (ctDNA+) who are at a very high risk of recurrence, the optimal adjuvant chemotherapy regimen has not been established. This study evaluates what adjuvant chemotherapy is recommended to patients based on the presence or absences of circulating tumour DNA (ctDNA) after surgery for early-stage colon cancer.

Inclusion Criteria:
- No radiographic evidence of overt metastatic disease within 45 days prior to study entry
- Must have had an en bloc complete gross resection of tumour
- Distal extent of the tumour must be ≥ 12 cm from the anal verge on colonoscopy

Exclusion Criteria:
- Colon cancer histology other than adenocarcinoma
- Tumour-related bowel perforation
- History of bone marrow or solid organ transplantation

Contacts for trial:
Roshni Ravindranathan/ Noelle Crasto/ Yinmin Ou Ext. 67336/ 62036/ 67868
roshni.ravindranathan@sunnybrook.ca / noelle.crasto@sunnybrook.ca / yinmin.ou@sunnybrook.ca

To learn more about this study, click here

Please connect with CCRAN to receive a list of other participating clinical trial sites in Canada.

6. Access to Fruquintinib (FRUZAQLA) for Previously Treated mCRC (Jan 14 /26)

FRUZAQLA™ (fruquintinib capsules) is indicated for the treatment of adult patients with mCRC who have been previously treated with or are not considered candidates for available standard therapies, including fluoropyrimidine-, oxaliplatin-, and irinotecan-based chemotherapy, an anti-VEGF agent, an anti-EGFR agent (if RAS wild- type), and either trifluridine- tipiracil or regorafenib.

Takeda is offering a program to support eligible patients in accessing FRUZAQLA through its OnePath® Patient Support

Program. This program is designed to address different aspects of patient needs, from drug navigation to financial assistance and support to provide ongoing access to medication during the transition to broader public and private insurance coverage. Takeda understands the urgency in treating late stage mCRC when no other approved therapeutic option exists, and they expect public and private insurers to act quickly to ensure all patients who can benefit from this treatment get access as soon as possible.

To learn more about OnePath® Patient Support Program, click here.

*For **Ontario Residents-** Fruquintinib is now reimbursed by **Ontario Drug Benefit (ODB) via the Exceptional Access Program (EAP).** You can find Fruquintinib's coverage status using ODB medication coverage search box here.
Image Source: https://www.empr.com/drug/fruzaqla/

7. Intermittent or Continuous Panitumumab Plus Fluorouracil, Leucovorin, and Irinotecan for First-Line Treatment of RAS and BRAF Wild-Type Metastatic Colorectal Cancer: The IMPROVE Trial (Mar 21/25)

IMPROVE (ClinicalTrials.gov identifier: NCT04425239) was an open-label, multicenter, randomized phase II noncomparative trial. Patients with unresectable *RAS*/*BRAF* wild-type (no mutation in *RAS* or *BRAF* genes) mCRC were randomly assigned (1:1) to receive FOLFIRI plus panitumumab continuously until progression (arm A) or intermittently, with treatment-free intervals (arm B) until progression on treatment, toxicity, or death. The primary end point was progression-free survival on treatment (PFSot) at 12 months. At a median follow-up of 43.2 months (IQR, 35.0-50.5), median PFSot was 11.2 and 17.5 months with 12-month PFSot rates of 45.7% and 58.5%, for arms A and B, respectively. The overall response rates were 68.1% and 61.2%, and median overall survival rates were 36.3 and 35.1 months in arms A and B, respectively. The overall rate of grade >2 skin panitumumab-related adverse events was 30.3% in arm A and 17.9% in arm B.

Intermittent FOLFIRI plus panitumumab after the induction phase was feasible, and results in reduced toxicity while allowing patients more time off treatment.

To learn more about this study, click here

8. Guardant Health Launches Guardant360 Tissue, First Tissue Molecular Profiling Test with Comprehensive Multiomic Analysis to Provide a More Complete View of Cancer (May 21/25)

Guardant Health, Inc. announced the launch of Guardant360® Tissue, the first molecular profiling test for tumour tissue that incorporates comprehensive multiomics analysis—including DNA, RNA, AI-powered PD-L1 and genome-wide methylation data—to provide researchers and cancer care teams with a more comprehensive view of cancer.

- Powered by Guardant Infinity smart liquid biopsy platform, advanced multiomic test evaluates genomic, epigenomic and RNA-based molecular data
- First tissue comprehensive genomic profiling test to offer genome-wide tumour methylation analysis
- Advanced molecular profiling test requires 40% fewer tissue slides than industry norm, allowing researchers and oncologists to test more patients with less precious tissue

For biopharmaceutical partners, the Guardant360 Tissue test offers differentiated molecular profiling by its extensive and unique genomic and epigenomic offering. The test analyzes 742 DNA genes and fusions in 367 RNA genes, with the ability to provide genome-wide analysis of the tumour methylome.

Test results are available in less than two weeks.

See more information about the product January 2026

9. Investigating the Effects of Atezolizumab in People Whose Tumour DNA or RNA Indicates Possible Sensitivity (CAPTIV-8) (June 20/25)

This is a Phase 2 study, which is undertaken after preliminary safety testing on a drug is completed and will involve approximately 200 participants. Participants are assigned to one of 8 cohorts based on their primary tumour type: breast, lung, gastrointestinal (GI), primary unknown, genitourinary (GU), sarcoma, gynecological, and 'other' cancer types. Participants in all cohorts will receive the same dose of atezolizumab (Tecentriq®) (1200 mg every 3 weeks). In the first stage for each cohort, 8 participants will be enrolled and if no participants respond to treatment, enrollment to that cohort will be closed. If 1 or more participants respond to treatment, up to 16 additional participants will be enrolled in that cohort. Participants continue treatment until they no longer may benefit from the treatment, or they decide to stop treatment.

This trial is running in Vancouver, B.C.

To learn more about this study, click here

10. Encorafenib, Cetuximab, and mFOLFOX6 in *BRAF*-Mutated Colorectal Cancer (BREAKWATER) (June 20/25)

In a phase 3, open-label trial, first-line treatment for BRAF V600E–mutated metastatic colorectal cancer, a highly aggressive subtype with poor prognosis, was evaluated. Patients received either encorafenib plus cetuximab (EC) with or without chemotherapy (mFOLFOX6: oxaliplatin, leucovorin, fluorouracil), or standard care (chemotherapy with or without bevacizumab). The trial previously met one primary endpoint, showing a significantly better objective response rate with EC+mFOLFOX6 compared to standard care (odds ratio 2.44, P<0.001), leading to accelerated FDA approval of this combination for first-line treatment of BRAF V600E–mutated metastatic colorectal cancer.

Patients with untreated BRAF V600E–mutated metastatic colorectal cancer were randomized to EC, EC+mFOLFOX6, or standard care. The two primary endpoints were objective response (previously reported) and progression-free survival (PFS) for EC+mFOLFOX6 versus standard care, assessed by blinded independent central review. Overall survival (OS) was a key secondary endpoint.

EC+mFOLFOX6 significantly extended PFS compared to standard care (median 12.8 vs. 7.1 months; hazard ratio for progression or death 0.53, 95% CI 0.41–0.68, P<0.001). An interim analysis also showed significantly longer OS with EC+mFOLFOX6 (median 30.3 vs. 15.1 months; hazard ratio for death 0.49, 95% CI 0.38–0.63, P<0.001). Serious adverse events occurred in 46.1% of EC+mFOLFOX6 patients and 38.9% of standard-care patients, with safety profiles consistent with known risks of each treatment.

CCRAN is thrilled to also share that a Patient Support Program (PSP) has been established to help provide access to encorafenib for mCRC patients with a BRAF V600E mutation being treated in the first line setting with encorafenib in combination with cetuximab and mFOLFOX6.

If you would like further information on this PSP program, please do reach out to christopher.m@ccran.org!*https://www.nejm.org/doi/full/10.1056/NEJMoa2501912*
https://www.sciencedirect.com/science/article/abs/pii/S104084282500335X

11. Clinical Trials in Canada: Insights and Implications - Innovative Medicines Canada (Aug 12/25)

This in-depth report highlights Canada's leadership in clinical trials, with more than 3,100 ongoing trials. The report offers a detailed look at national trends, regional activity, and the strong role of industry sponsorship, particularly in oncology and rare disease research.

Key insights include:

- Nearly 700 clinical trials were initiated in Canada in 2024, with two-thirds of them being industry-sponsored.
- Oncology and rare disease trials continue to dominate new and ongoing trial activity.
- Canada conducts 5.2% of all global clinical trials, with strong participation across Ontario, Quebec, Alberta, and British Columbia.
- Canada outperforms its G7 peers on a per capita basis for trial volume.

The full report can be found, here.

https://innovativemedicines.ca/wp-content/uploads/2025/07/6785_IMC_2025ResearchNote_ClinicalTrialsCanada_eng_final.pdf

12. Patient Support Program Offered by Bristol Myers Squibb Canada – Nivolumab + Ipilimumab (Opdivo ® + Yervoy®) for the First-Line Treatment of Adult Patients with Unresectable or Metastatic Colorectal Cancer (Aug 12/25)

Bristol Myers Squibb Canada Co. (BMS) is pleased to announce a new patient access program designed to provide patients access to nivolumab + ipilimumab (Opdivo ® + Yervoy®) for the first-line treatment of adult patients with unresectable or metastatic MSI-H or dMMR CRC, as approved by Health Canada on July 16th, 2025.

Please reach out to christopher.m@ccran.org for more information!

https://www.newswire.ca/news-releases/health-canada-approves-dual-immunotherapy-opdivo-r-plus-yervoy-r-for-colorectal-and-liver-cancers-816339196.html
https://www.newswire.ca/fr/news-releases/sante-canada-approuve-la-double-immunotherapie-opdivomd-yervoymd-pour-le-traitement-du-cancer-colorectal-et-du-cancer-du-foie-850961471.html
*https://oncodaily.com/oncolibrary/checkmate-8hw-ipi-and-nivo-vs-nivo-esmo25*https://oncodaily.com/oncolibrary/stellar-303-zanza-atezo-mcrc

13. Comprehensive Genomic/Biomarker Testing in Canada - OncoHelix (Aug 12/25)

OncoHelix is a Canadian laboratory located at the University of Calgary, offers comprehensive genomic profiling to help match cancer patients with the most effective treatments.

Testing options include:

OncoHelix-1 – Tumour tissue test (324 genes)

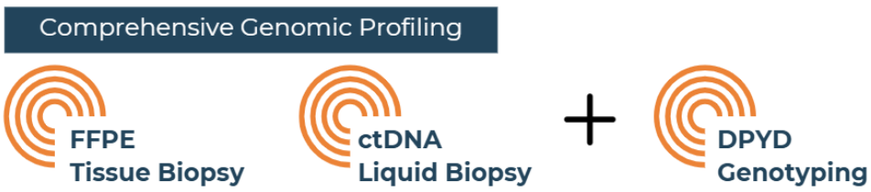
Designed to match the FoundationOne® test, considered a gold standard in cancer genomics. Detects tumour alterations such as SNVs, CNVs, Indels, and fusions. Matches patients with approved therapies, identifies clinical trial opportunities, and provides insights into drug resistance. Includes key colorectal cancer biomarkers: KRAS, NRAS, BRAF, ERBB2 (HER2), EGFR, PIK3CA, RET, VEGF, and TRK fusions. Reports Microsatellite Instability (MSI), Tumour Mutational Burden (TMB), and Homologous Recombination Deficiency (HRD) to help guide immunotherapy decisions.

OncoHelix-2 – Tumour tissue test (DNA+RNA: 170 genes)

Designed to offer the flexibility of detecting genetic alterations in both DNA and RNA of a range of solid tumours. More affordable and reports on all key colorectal cancer biomarkers that is recommended if MSI testing has been completed.

OncoHelix-4 – Liquid biopsy test (146 genes)

Designed in collaboration with Memorial Sloan Kettering's MSK-ACCESS and the SOPHiA GENETICS analysis platform, with a variant allele frequency (VAF) sensitivity of 0.2% to detect tumour-derived genetic material in the blood. Recommended when tissue is unavailable or the cancer is metastatic. Identifies targeted therapy options, clinical trial opportunities, and potential resistance mechanisms.



*Please note that DPYD genotyping is available only in Alberta.

Please reach out to christopher.m@ccran.org for more information or click here!

https://www.oncohelix.org/cancer-genomic-profiling
https://www.oncohelix.org/patient-resources-1

14. Botensilimab + Balstilimab vs Best Supportive Care as Therapy in Chemo-refractory, Unresectable, Colorectal Adenocarcinoma (BATTMAN) (Sept 18/25)

Among a heavily pre-treated **MSS** mCRC patient population without active liver metastases, this study demonstrated meaningful improvements in overall survival in patients treated with the immunotherapeutic combination of botensilimab and balstilimab. The Phase III trial will be coming to Canada, wherein patients who have exhausted standard of care therapies will be randomized to receive botensilimab and balstilimab or best supportive care. Updates will be provided by CCRAN when recruitment opens.

https://clinicaltrials.gov/study/NCT07152821?term=NCT07152821&rank=1
https://www.theglobeandmail.com/investing/markets/stocks/AGEN-Q/pressreleases/33246751/agenus-bot-bal-achieves-42-two-year-survival-in-refractory-mss-crc-advances-toward-registration-with-fda-alignment-on-phase-3/
Agenus' Investigator's Forum 2025: BOT/BAL Advancing Immunotherapy in Solid Tumors - OncoDaily

15. Agnostic Biomarkers and Molecular Signatures in Colorectal Cancer—Guiding Chemotherapy and Predicting Response (Sept 18/25)

The concept of agnostic biomarkers—molecular modifications that guide therapy irrespective of tumour origin- has gained increasing relevance in oncology, including colorectal cancer (CRC). This review looks at their role in colorectal cancer (CRC), focusing on how they can help choose treatments and predict outcomes. This study focused on several biomarkers commonly regarded as agnostic across tumour types, including BRAF V600E mutation, receptor tyrosine kinase (RTK) and PI3K fusions, the CpG island methylator phenotype (CIMP), high tumour mutational burden (TMB), and microsatellite instability (MSI). These markers were inspected for their prevalence in CRC, underlying pathophysiological mechanisms of cancer promotion, and predictive or prognostic implications. Moreover, findings were integrated from broader oncologic studies to contextualize the evolving role of agnostic biomarkers beyond organ-specific paradigms. Emerging evidence suggests that leveraging these molecular signatures may inform the use of targeted and immunotherapeutic agents as first-line options in select CRC populations. Collectively, agnostic biomarkers represent an auspicious avenue for personalizing CRC treatment, particularly in advanced-stage disease where traditional treatment options remain limited.

To learn more about this study, click here

https://www.mdpi.com/2227-9059/13/8/2038

16. Lymph Node-Targeted, mKRAS-Specific Amphiphile Vaccine in Pancreatic and Colorectal Cancer: Phase 1

AMPLIFY-201 Trial Final Results (Sept 18/25)

The immune system, specifically CD4+ and CD8+ T cells that target tumour mutations, is key to successful cancer immunotherapy. In the phase 1 AMPLIFY-201 trial, a vaccine targeting the KRAS mutation was investigating. Early results indicate that the lymph node-targeting amphiphile vaccination induces persistent T cell responses targeting KRAS mutations, alongside personalized, tumour antigen-specific T cells, which may correlate to clinical outcomes in pancreatic and colorectal cancer.

To learn about this study, click here

https://www.nature.com/articles/s41591-025-03876-4
https://www.medicalnewstoday.com/articles/could-a-new-vaccine-help-prevent-colorectal-pancreatic-cancer-recurrence
https://clinicaltrials.gov/study/NCT04853017?term=NCT04853017&rank=1

17. Merck Patient Resource: Clinical Trials Site (Nov 14/25)

Merck now has a new patient resource. They have introduced a Canadian clinical trials site! Within the site you will find lists of all the Merck trials taking place within an easy to navigate website for patients. Check it out, here!

If you have any questions, please do reach out to christopher.m@ccran.org!

18. DYNAMIC-III Trial at ESMO 2025 Presidential: ctDNA-guided Adjuvant Chemotherapy in Stage III Colon Cancer (Nov 14/25)

This multicenter, randomized, phase II/III trial enrolled patients with stage III colon cancer approximately 5–6 weeks post-surgery. Participants underwent tumour-informed ctDNA testing and were randomized 1:1 to either ctDNA-guided management or standard care. In the ctDNA-guided arm, ctDNA-negative patients received de-escalated therapy, which could include shortened chemotherapy duration (6 to 3 months), reduced regimen intensity (from doublet to single-agent fluoropyrimidine), or observation. The DYNAMIC-III trial demonstrated that patients with negative post-surgery ctDNA have a low recurrence risk, supporting ctDNA as a robust biomarker for tailoring adjuvant therapy. Although overall non-inferiority was not established, ctDNA-guided de-escalation markedly reduced oxaliplatin exposure and toxicity, maintaining favorable survival outcomes—especially in clinically low-risk patients. These findings reinforce the feasibility of ctDNA-based personalized adjuvant strategies in stage III colon cancer and pave the way for further precision oncology trials.

To learn about this study, click here

https://oncodaily.com/oncolibrary/dynamic-iii-ctdna-colon-cancer

19. STELLAR-303 Trial at ESMO 2025: Zanzalintinib Plus Atezolizumab in MSS Metastatic Colorectal Cancer (Nov 14/25)

The STELLAR-303 trial marks a major milestone in colorectal cancer research as the first Phase 3 study to demonstrate improved overall survival (OS) with an immune checkpoint inhibitor (ICI)-based combination in metastatic colorectal cancer (mCRC) that is **not** microsatellite instability-high (MSI-H) or mismatch repair-deficient (dMMR). The trial showed that zanzalintinib plus atezolizumab significantly prolonged OS compared with regorafenib in previously treated MSS mCRC, with the OS benefit consistent across key subgroups—including liver involvement, RAS mutation status, geographic region, and prior anti-VEGF therapy. Importantly, this combination represents a novel chemotherapy-free regimen capable of producing a meaningful clinical benefit in a population historically refractory to immunotherapy.

https://oncodaily.com/oncolibrary/stellar-303-zanza-atezo-mcrc
https://dailyreporter.esmo.org/esmo-congress-2025/gastrointestinal-cancers/zanzalintinib-plus-atezolizumab-shows-activity-in-metastatic-colorectal-cancer-with-microsatellite-stable-disease

20. The Impact of Metformin Use on Survival Outcomes in Colorectal Cancer: A Systematic Review and Meta-Analysis (Jan 15/26)

Metformin, an oral drug commonly prescribed to control type 2 diabetes mellitus (T2DM), has been shown to have anti-cancer activity in several cancer types, including colorectal. This systematic review and meta-analysis looked at 31 cohort studies, conducted between 2011 and 2024 and with a total of 167,683 participants, to analyze the relationship between metformin administration and prognostic outcomes among CRC patients. Overall, metformin exposure in colorectal cancer patients led to significant reductions in all-cause mortality (ACM), cancer-specific mortality (CSM), and overall survival (OS), with the most pronounced effects observed in patients with T2DM. No significant relationships of metformin exposure were observed with disease-free survival (DFS) or recurrence-free survival (RFS). The authors warn that while favorable prognostic outcomes are associated with metformin use in colorectal cancer, the outcomes of metformin exposure in colorectal cancer patients varied across the different studies analysed these protective effects may be overestimated. The findings of this paper must be further investigated in prospective randomized controlled trials.

To learn more about this study, click here.

https://www.sciencedirect.com/science/article/pii/S2468294225002096?via%3Dihub#sec0017

Surgical Therapies

21. Hepatic Artery Infusion Pump (HAIP) Chemotherapy Program – Sunnybrook Odette Cancer Centre (Dec 17/24)

The HAIP program is a first-in-Canada for individuals where colon or rectal cancer (colorectal cancer) has spread to the liver and cannot be removed with surgery. The Hepatic Artery Infusion Pump (HAIP) is a small, disc-shaped device that is surgically implanted just below the skin of the patient and is connected via a catheter to the hepatic (main) artery of the liver. About 95 percent of the chemotherapy that is directed through this pump stays in the liver, sparing the rest of the body from side effects. Patients receive HAIP-directed chemotherapy in addition to regular intravenous (IV) chemotherapy (systemic chemotherapy), to reduce the number and size of tumours so that a surgeon can go in and remove what is left. **Drs. Paul Karanicolas and Michael Raphael** are the program leads and happy to see patients who may be eligible for the therapy.

This treatment is best for fit, motivated patients who want to adopt an aggressive treatment philosophy. Patients need to have no or very limited cancer outside the liver and be well enough to undergo an operation. Special testing is done to ensure that the blood flow to the liver is appropriate to allow the treatment to be safely offered. About 105 patients have had the pump implanted at Sunnybrook since HAIP's inception eight years ago. HAIP is such a special program that involves a coordinated, multidisciplinary team approach to care, with close collaboration across surgical oncology, medical oncology (chemotherapy), interventional radiology, nuclear medicine and oncology nursing. A patient's first point of contact is Christina Kim, the nurse practitioner who oversees the program and helps every patient navigate the HAIP journey.

If you believe you may benefit from this therapy and/or would like to learn more about the clinical trial, your medical oncologist or surgeon may fax a referral to **416-480-6179**.

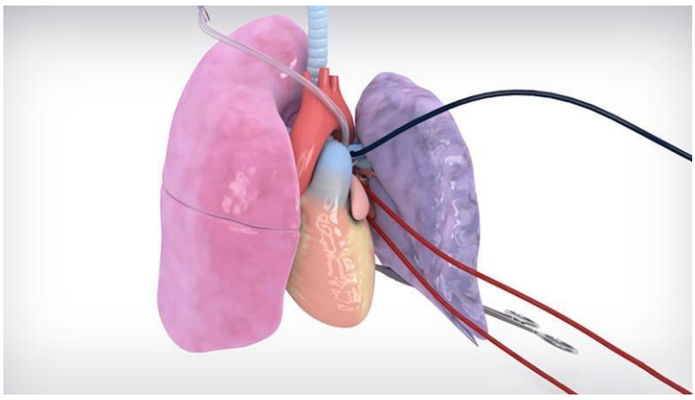
For more information on the HAIP clinical trial, please click here.

22. In Vivo Lung Perfusion (IVLP) for CRC Metastatic to Lung (Jan 9/25)

This study is investigating a technique called In Vivo Lung Perfusion (IVLP) for delivering chemotherapy directly into the lungs at the time of surgery. Delivering chemotherapy directly to the lungs could potentially kill any microscopic cancer cells that are present in the lungs at the time of surgery, while sparing other major organs in the body from the side effects of chemotherapy.

The purpose of this study is to test the safety of the IVLP technique and find the dose that seems right in humans. Participants are given oxaliplatin into one lung via IVLP and are watched very closely to see what side effects they have and to make sure the side effects are not severe. The other lung will not be infused with anything, so that researchers can limit unforeseen toxicity to a single lung and see if one lung does better than the other.

The primary outcome is safety as measured by acute lung injury findings and the estimated primary completion date is January 1, 2027. To learn more, click here.



In Vivo Lung Perfusion Model
Image Source: https://pie.med.utoronto.ca/TVASurg/project/in-vivo-lung-perfusion/

23. Does Surgical Intervention Contribute to Survival for Patients with Para-Aortic Lymph Node Metastasis From Colorectal Cancer? (April 18/25)

Patients diagnosed with para-aortic lymph node metastasis (PALNM) from CRC at the Japanese Society for Cancer of the Colon and Rectum Institutions between January 2011 and December 2015 were analyzed. Those who had received surgical resection and those who did not were matched one-on-one. A total of 77 matched pairs extracted from 347 patients at 36 institutions were compared. Thirty-one (40.3%) patients each in the surgical resection and chemotherapy groups had distant metastasis other than PALNM, and the most dominant organ was the liver in 18 (23.4%) patients in both groups. In the surgical resection group, 56 (72.7%) patients achieved curative resection of all disease lesions. Three- and 5-year relapse-free survival of patients who achieved curative resection were 24.4% and 24.4%, respectively. Three- and 5-year overall survival (OS) of patients in the surgical resection were 68.4% and 40.2%, which were significantly better than that in the chemotherapy groups (40.9% and 27.7%), respectively (Log-rank p= 0.003).

The OS of patients with surgical resection for PALNM was significantly better than those without surgical resection. These results highlight the benefit of surgical intervention to survival for patients with resectable PALNM.

https://onlinelibrary.wiley.com/doi/pdf/10.1002/ags3.70019

Radiation Therapies / Interventional Radiation

24. Ultra-high Dose Radiation for Liver Metastasis Using MR-guided Treatment with Stereotactic Ablative Single-fraction (ULTRAS) (Mar 21/25)

This study is testing a new way to treat liver metastases using high-dose radiation therapy. It compares two types of **stereotactic body radiotherapy (SBRT),** a precise radiation treatment: one that delivers an ultra-high dose in a single session and another that provides the current standard high dose. The goal is to determine whether the ultra-high dose can control tumours more effectively while keeping side effects low.

For many colorectal cancer patients whose cancer has spread to the liver, surgery is not an option. SBRT offers an alternative, but the best radiation dose for treating liver metastases is still uncertain. This trial focuses on patients with colorectal cancer and certain other cancers who have one to three liver lesions that meet specific size and location criteria. Participants must be in good overall health, have well-functioning livers, and not have had previous treatments that could interfere with the study. To learn more about the study, as well as inclusion/exclusion criteria, click here.

https://clinicaltrials.gov/study/NCT06362395

Screening

25. Modeling The Economic and Health Impact of Lowering the Recommended Colorectal Cancer Screening Age in Canada Using Fecal Immunochemical Test Versus Colonoscopy (April 18/25)

Rising rates of early-onset colorectal cancer (CRC) in Canada suggest earlier screening may be warranted. Canadian guidelines recommend biennial screening at age 50 with a fecal immunochemical test (FIT). FIT at age 45 and 40 increased colonoscopy demand by 3.9% and 6.6% over the lifetime of screening. Colonoscopy screening resulted in 89.0%–116.7% more colonoscopies than FIT 50. Screening and total costs increased in all scenarios, but treatment costs decreased. FIT 45 and FIT 40 reduced incidences by 103 and 161, and CRC deaths by 43 and 71 per 100,000. Colonoscopy screening led to 858–954 fewer cases and 260–303 fewer deaths. FIT 45 and FIT 40 had incremental cost-effectiveness

ratios (ICERs) of $5,850 per quality-adjusted life year (QALY) and $7,038 per QALY versus FIT 50. Colonoscopy scenarios had ICERs of $2,743–$7,509 per QALY.

Updated screening can reduce the CRC burden in younger populations. Increasing FIT screening with earlier initiation is more feasible logistically than increasing colonoscopy availability with colonoscopy approaches. Impact: These findings may inform future guideline revisions in Canada addressing early-onset CRC.

To learn more about this study, click here

https://aacrjournals.org/cebp/article-abstract/doi/10.1158/1055-9965.EPI-24-1488/754629/Modeling-the-Economic-and-Health-Impact-of?redirectedFrom=fulltext

26. Early FIT Screening Tied to Big Reduction in CRC Mortality (July 18/25)

A new analysis provided "strong" support for starting fecal immunochemical test (FIT) screening at ages 40-49 rather than at the currently recommended age of 50.

An exploratory initiative that offered FIT screening to residents aged 40-49 years in two Taiwan municipalities gave researchers an opportunity to test whether early screening made a real difference in colorectal cancer (CRC) mortality and incidence. They found that it did.

Both outcomes were "significantly lowered" with early screening compared with regular screening (starting at age 50), the authors found. Those who underwent early screening had lower CRC incidence (26.1 vs 42.6 per 100,000 person-years) and mortality (3.2 vs 7.4 per 100,000 person-years), with similar results after propensity score-matched analyses and in an extended nonadherence adjustment model.

To learn more about this study, click here

https://www.medscape.com/viewarticle/early-fit-screening-tied-big-reduction-crc-mortality-2025a1000fs4?ecd=mkm_ret_250706_mscpmrk_onc_crc_etid7539887&uac=173940BY&impID=7539887

27. National guideline for Lynch Syndrome Aims to Prevent Cancers and Save Lives (Nov 14/25)

Experts in cancer, genetics and medicine came together with patient partners to publish evidence-based guidelines for managing Lynch Syndrome they believe can save lives across Canada. While Lynch Syndrome is the leading inherited cause of colorectal and endometrial cancers, it is not as widely understood as other cancer-causing genes like BRCA1 and BRCA2. This lack of awareness contributes to inconsistent practices around when to test for Lynch Syndrome, and what actions to take once Lynch Syndrome has been diagnosed.

The Canadian Lynch Syndrome Working Group consisted of 37 experts, including geneticists, genetic counsellors, oncologists and patient representatives. After reviewing evidence and conducting a clinical survey, they came to consensus on 18 wide-ranging recommendations that were published in the Journal of Medical Genetics.

Key recommendations include universal Lynch Syndrome screening for people with colorectal and endometrial cancers, genetic testing for family members of people with Lynch Syndrome, and the creation of provincial surveillance protocols for Lynch Syndrome-associated cancers.

To learn more about this study, click here

https://oicr.on.ca/national-guideline-for-lynch-syndrome-aims-to-prevent-cancers-and-save-lives/

Other

28. Young Adult CRC Clinic Available at Sunnybrook (Jan 5/25)

Rates of colorectal cancer (CRC) are rising in the population under the age of 50. The growing CRC rates in young people come after decades of declining rates in people over 50, which have occurred most likely due to increased use of CRC screening (through population-based screening programs) which can identify and remove precancerous polyps. Patients diagnosed under the age of 50 have a unique set of needs, challenges, and worries. To address these unique concerns, Sunnybrook Health Sciences Centre offer the ***Young Adult Colorectal Cancer Clinic***. The clinic brings together a multidisciplinary team who work with young CRC patients, regardless of disease stage, to create an individualized treatment plan to support each patient through their cancer journey. Patients' needs and concerns will be addressed as they relate to:

- Fertility concerns and issues
- Young children at home
- Dating/intimacy issues

- Challenges at work
- Concerns about hereditary cancer
- Relationships with family and friends
- Psychological stress due to any or all the above

The team of experts consists of:
- Oncologists (medical, surgical, radiation)
- Social workers
- Psychologists
- Geneticists
- Nurse navigator

Should a patient wish to be referred to Sunnybrook, they may have their primary care physician, or their specialist **refer them to Sunnybrook via the e-referral form, which can be accessed through the link appearing below.** Once the referral is received, the **Young Adult Colorectal Cancer Clinic** will be notified if the patient is under the age of 50.

An appointment will then be issued wherein the patient will meet with various members of the team to address their specific set of concerns.

https://sunnybrook.ca/content/?page=young-adult-colorectal-cancer-clinic

29. Adolescents and Young Adults (AYA) Program Available at The Ottawa Hospital (Oct 15/25)

30. Precision in Practice: Costs and Benefits of Comprehensive Genomic Profiling for Five Stage 4 Cancers (Jan 15/26)

The Colorectal Cancer Resource & Action Network (CCRAN), in partnership with The Conference Board of Canada, has released a new report entitled Precision in Practice: Exploring the Costs and Benefits of Comprehensive Genomic Profiling for Five Metastatic Cancers. This research examines how broader access to genomic testing can improve patient outcomes, enhance system efficiency, and unlock greater value across Canada's cancer care landscape.

Why this report?

As Canada faces rising cancer rates, mounting system pressures, and growing interest in personalized care, this report provides timely insight into the costs and benefits of expanding access to comprehensive genomic profiling—helping leaders make informed decisions in a rapidly evolving landscape.

What does the evidence tell us?

Comprehensive genomic profiling (CGP) can deliver faster, more precise diagnoses—enabling patients to access therapies that better match their tumour biology.

This new modelling shows that publicly funding CGP for five high-burden de novo metastatic cancers could result in potential healthcare system savings of $87M - $134M, add approximately 3,440 life-years across the patient population, and generate over $180 million in societal value, over a 6-year horizon, from 2025-2030. Yet despite its proven value, access to CGP remains fragmented across Canada, underscoring the need for coordinated, national action.

This new evidence will underpin the next steps of CCRAN's National Collective Biomarker Campaign.

http://ccran.org/cgp-reports

31. Diverging Global Incidence Trends of Early-Onset Cancers: Comparisons with Incidence Trends of Later-Onset Cancers and Mortality Trends of Early-Onset Cancers (Jan 15/26)

Early age onset cancer incidence is rising across cancer types around the globe, but these recent trends are still poorly understood. This study aimed to provide an overview and to better understand incidence and mortality trends in early age onset cancer, and how they compare to those observed in later-onset cancers.

Across North America, the incidence of some early age onset cancer types increased more rapidly than the incidence of corresponding later-onset cancers. In Canada, this patten was observed for early age onset colorectal cancer in males and females, and in early age onset uterine cancer and multiple myeloma in females only. Canada is classified as a very high human development index (HDI) country, a category which includes nations such as Switzerland, Norway, the United Kingdom, and Hong Kong. When analyses were stratified by HDI, in females, a steeper increase in early age onset colorectal cancer incidence relative to later-onset colorectal cancer incidence was primarily seen for this group of countries, with less consistent patterns in countries with lower HDIs. In males, this pattern was observed in colorectal cancer, prostate cancer, and kidney cancer.

The study found a strong positive correlation between an increase in obesity prevalence and the rise in incidence of early age onset obesity related cancers in many countries. In Canadian females, a positive correlation was observed in thyroid cancer, colorectal cancer, uterine cancer, kidney cancer, pancreatic cancer, multiple myeloma, and liver cancer, and in males, a positive correlation was observed in thyroid cancer, kidney cancer, colorectal cancer, multiple myeloma, gallbladder cancers, and pancreatic cancer.

In females in Canada, statistically significant increases in both incidence and mortality were seen in colorectal cancer and liver cancer. In males in Canada, such corresponding increase was only observed in colorectal cancer. These analyses were conducted utilizing data from 2000-2017. When the mortality analysis was extended to 2000-2023, a continued increase in mortality of early age onset colorectal cancer was observed in males in Canada.

The exact mechanism for the increased incidence of early age onset cancers and the divergence between early age onset and late-onset incidence trends is unknown, one possible cause may be a shift of exposure to established and/or emerging risk factors, such as diet, lifestyle, and environment, towards younger generations. The study highlighted the increase in mortality and incidence of early age onset colorectal cancer as a genuine and concerning trend, emphasizing the need for implementation of tailored prevention and early detection strategies to plateau and reverse increasing incidence and rates.

To learn more about this study, click here.

https://link.springer.com/article/10.1186/s40779-025-00670-8

32. COVID-19 Vaccines in People with Cancer (Jan 1/25)

This article discusses some of the questions people with cancer (or with a history of cancer) or the people caring for them might have about the COVID-19 vaccines.

Should cancer patients and survivors get the COVID-19 vaccine?

The CDC and other expert groups generally recommend that all people, including people with cancer and cancer survivors, stay up to date with the most recent COVID-19 vaccines. Even if you've already had COVID-19, it's still important to be vaccinated. While the COVID-19 vaccines are safe for people with cancer, they might not be as protective as they are in people without cancer, especially for those with weakened immune systems. *Some cancer treatments like chemotherapy, radiation, stem cell or bone marrow transplant, or immunotherapy can affect the immune system, which might make the vaccine less effective*. People with certain types of cancers, like leukemias or lymphomas, can also have weakened immune systems, which might make the vaccine less effective. Because of this, there are

different vaccine recommendations for people with weakened immune systems. **Since the situation for every person is different, it's best to discuss the benefits, possible risks, and timing of the COVID-19 vaccines with your cancer doctor.**

Should people with cancer get a specific COVID-19 vaccine?

A major difference between these vaccines is that the Pfizer-BioNTech and Moderna vaccines are mRNA vaccines, and the Novavax vaccine is a protein subunit vaccine. The current versions of all 3 of these vaccines have been updated to help boost the body's immune response against the newest omicron variants, which now account for the vast majority of COVID infections in the US. **The CDC recommends that people (regardless of their immune system status) stay up to date with COVID-19 vaccines, which includes getting one of the updated (2024-2025) vaccines**. The CDC doesn't recommend one vaccine over another. The updated Pfizer-BioNTech and Moderna mRNA vaccines are available for people aged 6 months or older, while the updated Novavax vaccine is available for people 12 and older.

COVID Vaccine Schedules for Immunocompromised Persons

Individuals with immunocompromising conditions, including those receiving immunosuppressive therapy are at increased risk for prolonged infection, serious complications from SARS-CoV-2 infection as well as reduced immune responses to vaccination and reduced vaccine effectiveness. Additional doses may help improve the immune response

and vaccine effectiveness in people who are moderately to severely immunocompromised. They are included in the group of people who should be vaccinated with an updated vaccine (JN.1 or KP.2) beginning in the fall of 2024.

Moderately to severely immunocompromised includes individuals with the following conditions:

- Immunocompromised due to solid tumour or hematologic malignancies or treatments for these conditions
- Solid-organ transplant and taking immunosuppressive therapy.
- Hematopoietic stem cell transplant (within 2 years of transplantation or taking immunosuppression therapy)
- Immunocompromise due to chimeric antigen receptor (CAR) T cell therapy targeting lymphocytes.
- Moderate to severe primary immunodeficiency with associated humoral and/or cell-mediated immunodeficiency or immune dysregulation.
- HIV with AIDS-defining illness or TB diagnosis in last 12 months before starting vaccine series, **or** severe immune compromise with CD4<200 cells/µL **or** CD4%<15%, **or** without HIV viral suppression.
- Recent treatment with the following categories of immunosuppressive therapies: anti-B cell therapies (monoclonal antibodies targeting CD19, CD20 and CD22), high-dose systemic corticosteroids, alkylating agents, antimetabolites, or tumour-necrosis factor (TNF) inhibitors and other biologic agents that are significantly immunosuppressive.
- Chronic kidney disease on dialysis.

The Canadian Immunization Guide for People 12 years of Age and Older:
For previously unvaccinated, immunocompromised individuals starting their vaccination, 2 doses of Moderna Spikevax, Pfizer-BioNTech Comirnaty, or Novavax Nuvaxovid are recommended and a third may be offered with an interval of 4 to 8 weeks between doses. Healthcare providers can use clinical discretion to determine the potential benefit of a third dose for those 5 years of age and over who are moderately to severely immunocompromised. However, new recipients of hematopoietic stem cell transplantation (HSCT) and chimeric antigen receptor (CAR) T cell therapy should be vaccinated with 3 doses beginning at 3 to 6 months post-HSCT/CAR T-cell therapy, regardless of previous vaccination history. *For those previously vaccinated*, the recommended interval is 6 months from the last COVID-19 vaccine dose. However, a shorter interval of at least 3 months may be used.

The CDC recommendations are a bit more complex for those who are moderately or severely immunocompromised.

For people 12 years of age or older:

- Those who have not been vaccinated should get 3 doses of the updated Moderna vaccine **OR** 3 doses of the updated Pfizer-BioNTech vaccine **OR** 2 doses of the updated Novavax vaccine.
- Those who have received 1 dose of a Moderna or Pfizer-BioNTech vaccine should get 2 doses of the updated version of the same vaccine.
- Those who have received 2 doses of a Moderna or Pfizer-BioNTech vaccine should get 1 dose of the updated version of the same vaccine.
- Those who have received 3 or more doses of a Moderna or Pfizer-BioNTech vaccine should get 1 dose of any of the updated vaccines.
- Those who have received 1 dose of the Novavax vaccine should get 1 dose of the updated Novavax vaccine.
- Those who have received 2 or more doses of the Novavax vaccine should get 1 dose of any updated vaccine.
- Those who have received 1 or more doses of the Johnson & Johnson (Janssen) vaccine should get 1 dose of any updated vaccine.

It's important to talk to your doctor about your immune status and if it could affect the best time for you to get the vaccine (and booster shots), as well as what else you can do to help lower your risk of COVID-19 infection.

https://www.cancer.org/cancer/managing-cancer/coronavirus-covid-19-and-cancer/covid-19-vaccines-in-people-with-cancer.html
https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-

covid-19-vaccine.html#a5

Nutrition / Healthy Lifestyle

33. Exercise for Cancer to Enhance Living Well (EXCEL) Study (Dec 29/24)

Exercise for Cancer to Enhance Living Well (EXCEL) is a 5-year Canada-wide project, which offers free, 8-12-week exercise classes designed specifically for individuals undergoing or recovering from cancer treatment. Classes are delivered online through a secure video-conferencing platform, and where possible, in-person. These group classes run for 60 minutes, twice a week for 8-12 weeks. They are offered three times a year: January, April, and September.

Feel free to email wellnesslab@ucalgary.ca to learn more and sign up.

Physical activity can help overcome treatment-related side effects such as fatigue and pain, improve mental health by reducing anxiety and depression, and improve overall quality of life for individuals living with and beyond cancer.

Studies show that physical activity may even reduce the risk of recurrence for some cancers. Many urban centers in Canada offer cancer-specific exercise programs, however, rural and remote areas tend to lack exercise resources to support cancer survivors, resulting in lower activity levels, poorer health, and diminished quality of life. Thus, EXCEL targets cancer survivors living in rural and remote regions across Canada, empowering them to move more and providing opportunities to benefit from physical activity.

To learn more about this study: https://www.clinicaltrials.gov/study/NCT04478851

To learn more about the EXCEL study: https://kinesiology.ucalgary.ca/labs/health-and-wellness/research/research-studies/exercise-cancer-enhance-living-well-excel

To hear about participant experiences: https://www.youtube.com/watch?v=c01oo4Yd3oA

34. A Randomized Phase III Trial of the Impact of a Structured Exercise Program on Disease-Free Survival (DFS) in Stage 3 or High-Risk Stage 2 Colon Cancer: Canadian Cancer Trials Group (CCTG) CO.21 (CHALLENGE) (June 20/25)

From 2009 to 2024, 889 patients with stage 3 or high-risk stage 2 colon cancer were enrolled, split into a structured exercise program (SEP, 445 patients) or health education materials (HEM, 444 patients). The group was 51% female, with a median age of 61, and 90% had stage 3 disease. Compared to HEM, the SEP group significantly improved recreational physical activity, fitness (VO2max), and 6-minute walk distance, sustained over 3 years. After a median follow-up of 7.9 years, there were 224 disease-free survival (DFS) events (93 in SEP, 131 in HEM) and 107 deaths (41 in SEP, 66 in HEM). Five-year DFS was 80% for SEP vs. 74% for HEM (HR 0.72, p=0.017), and 8-year overall survival (OS) was 90% for SEP vs.

83% for HEM (HR 0.63, p=0.022). Physical function (SF-36 scale) improved significantly in SEP at 6 months (mean change 7.42 vs. 1.10, p<0.001) and lasted up to 24 months. Safety data showed 19% of SEP patients (79/428) had musculoskeletal issues vs. 12% in HEM (50/433), with 10% of SEP issues (8/79) linked to the exercise program.

A 3-year structured exercise program post-chemotherapy improved DFS, OS, physical function, and fitness in these patients, and these findings suggest the implementation of a structured exercise program should become a standard of care following treatment for early-stage colorectal cancer.

https://ascopubs.org/doi/10.1200/JCO.2025.43.17_suppl.LBA3510
https://www.theglobeandmail.com/canada/article-exercise-improves-survival-for-colon-cancer-patients-study/
https://www.ctg.queensu.ca/cctg_news/landmark-clinical-trial-shows-exercise-improves-colon-cancer-survival
https://www.mdedge.com/fedprac/avaho/article/272573/oncology/can-lifestyle-changes-save-lives-colon-cancer
https://www.medscape.com/viewarticle/exercise-can-help-protect-against-cancer-fatigue-depression-2025a1000atc?ecd=mkm_ret_250531_mscpmrk_onc-top-content_etid7461756&uac=173940BY&impID=7461756

35. Sexual Health Outcomes After Colorectal Cancer Diagnosis in Females: A Population-Based Cohort Study (June 20/25)

Researchers studied health records from British Columbia (1985–2017) to compare 25,402 women with colorectal cancer (CRC, average age 69) to 254,020 women without cancer, matched by age in a 1:10 ratio. They looked at five sexual health issues: dyspareunia (painful sex), pelvic inflammatory disease, endometriosis, abnormal bleeding, and premature ovarian failure. Women with CRC had higher risks of dyspareunia (67% more likely), pelvic inflammatory disease (3.4 times more likely), and endometriosis (95% more likely) compared to women without cancer. Among women over 40, these risks remained, but for those 39 or younger, endometriosis wasn't linked to CRC, though premature ovarian failure was (75% more likely). Further analysis showed cancer treatments (surgery, chemo, radiation) were also linked to these sexual health issues.

https://academic.oup.com/jnci/advance-article/doi/10.1093/jnci/djaf120/8152734
https://www.medscape.com/viewarticle/colorectal-cancer-linked-adverse-sexual-health-outcomes-2025a1000frf?ecd=mkm_ret_250706_mscpmrk_onc_crc_etid7539887&uac=173940BY&impID=7539887

36. Eating More Ultra-Processed Foods Tied to Increased Risk of Early-Onset Colorectal Cancer (Nov 14/25)

This 24-year study of almost 30,000 female participants in the Harvard-led Nurses' Health Study II has found that those who ate the highest levels of ultra-processed food had about a 1.45-fold higher risk of developing a colorectal polyp — which could be a precursor lesion to cancer, compared to those who consumed the least. Participants self-reported answers on food questionnaires every four years. The highest consumption group ate about 10 servings per day on average, compared with three servings per day on average in the lowest group.

https://www.cbc.ca/news/health/ultra-processed-food-colon-cancer-9.6977320