

COLORECTAL CANCER TREATMENT & CLINICAL RESEARCH UPDATES

Month Ending March 18th, 2024

The following colorectal cancer treatment and research updates extend from February 15th, 2024, to March 18th, 2024, 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 a medical condition. Never disregard the advice of a medical professional or delay in seeking it because of something you have read on this website.

CONTENT



- 1. TRK Fusion Cancer and How to Test for It
- 2. OH-CCO Biomarker Testing Program
- 3. Immunotherapy Combined with Targeted Therapy in Patients with BRAF V600E-Mutated CRC
- 4. Skincare Tips while on Cetuximab or Panitumumab Treatment for CRC
- 5. PERIOP-06 Study at Sunnybrook Hospital to Treat Liver Metastases
- 6. Now Available in Canada: AVENIO 324 Gene CGP Panel Matched to FoundationONE CDx Panel
- 7. AZUR-1 and AZUR-2 Dostarlimab Trials Open in Canada
- 8. A Study of Tucatinib with Trastuzumab and mFOLFOX6 Versus Standard of Care Treatment in First-Line HER2+ mCRC
- 9. CARMA BROS: CAnadian CAncers with Rare Molecular Alterations (CARMA) Basket Real-world Observational Study (BROS)
- 10. Barriers and Unequal Access to Timely Molecular Testing Results: Addressing the Inequities in Cancer Care Delays across Canada
- 11. Comprehensive Molecular Profiling and Genomic Testing Are Essential for Determining Optimal Cancer Treatment Should be Performed Early
- 12. Targeting KRAS G12C Mutations in Colon, Lung, and Other Cancers



- 13. Hepatic Artery Infusion Pump (HAIP) Chemotherapy Program Sunnybrook Hospital
- 14. Living Donor Liver Transplantation for Unresectable CRC Liver Metastases
- 15. In Vivo Lung Perfusion (IVLP) for CRC Metastatic to Lung



16. Study Offered at the Odette Cancer Centre to Treat Recurrent Rectal Cancer



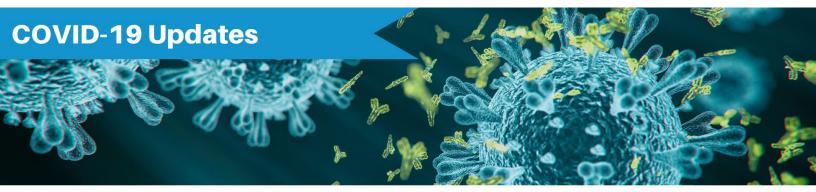
- 17. Trends in the Incidence of Young-Onset CRC with a Focus on Years Approaching Screening Age
- 18. A Cell-free DNA Blood-Based Test for CRC Screening



- 19. Young Adult CRC Clinic Available at Sunnybrook Hospital
- 20. CCRAN's Partnership with "Count Me In"
- 21. CCRAN Has Launched 4 New Information/Support Groups Based on Age and Disease Stage
- 22. LifeLabs Launched Signatera, Offering Canadians an Innovative and Personalized Approach to Managing Cancer
- 23. Natera Announces Publication of Prospective, Multi-Site CIRCULATE Study in Nature Medicine Demonstrating Signatera's Ability to Predict Chemotherapy Benefit in CRC
- 24. The Childhood Cancer Identity Project (CCHIP): Examination of Cancer Identity and Wellbeing in Adult Survivors of Childhood Cancer



- 25. EXercise for Cancer to Enhance Living Well (EXCEL) Study
- 26. Healthy Lifestyle Improves CRC Outcomes



27. Frequently Asked Questions for COVID-19

Drug / Systemic Therapies

1. TRK Fusion Cancer and How to Test for It (Mar.13/24)





What is TRK fusion cancer?

- TRK (pronounced track) fusion cancer is a term used to describe cancers that are caused by a change to the neurotrophic tyrosine receptor kinase (NTRK) gene called a fusion
- During this fusion, an NTRK (pronounced en-track) gene joins together, or fuses, with a different gene
- This joining causes the body to make TRK fusion proteins, which can **cause cancer cells to multiply** and form a tumour
- ullet The presence of TRK fusion proteins may be associated with ullet more aggressive cancer



Having TRK fusion cancer doesn't change your original diagnosis, it just means that your **tumour is driven by an NTRK gene fusion**

Testing is the only way to find out if NTRK gene fusion is driving your cancer



Who should be tested for NTRK gene fusions?



Your doctor may consider testing in people:

- $\ensuremath{\raisebox{.4ex}{\text{\circ}}}$ with solid tumours that are metastatic, and
- who are likely to experience severe complications from surgical resection, and
- when there are no satisfactory treatments options available

It's important to know what's driving your cancer to help your doctor take action



Fast TRK is a clinical testing program for diagnosing NTRK gene fusions

Sponsored by Bayer, this is a complimentary service for healthcare professionals to find out if their patients' cancer has an NTRK gene fusion

Talk to your doctor about which tests are recommended for you





PP-VIT-CA-0085-1 VTV012E-0221 INTRODUCING

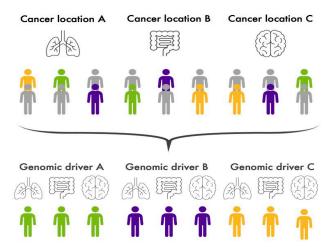
Tumour-Agnostic Therapies

Advances in precision medicine have brought therapies that specifically target what is driving a patient's cancer



Treatment with more traditional cancer therapies is based on where the tumour is located in the body

<u>Tumour agnostic</u> therapies target a specific genomic change in the cancer cells regardless of where the tumour is located in the body





Genomic changes in cancer cells are identified through diagnostic testing of the cancer cells.

The results help clinicians decide on a treatment for each patient.



Patients undergo a biopsy to obtain a sample for testing

Tissue is sent to lab to test for genomic changes

Results sent to clinician to help decide on treatment

Advantages of tumour agnostic therapies



Targets the genomic change that is the root cause of the cancer to suppress tumour growth



Harnesses our growing understanding of cancer biology



Offers an innovative, new and effective approach to treating cancer

Change required to adopt tumour agnostic therapies in Canada



A shift in mindset: this is a new concept that differs from the traditional approach of treating cancer based on tumour location



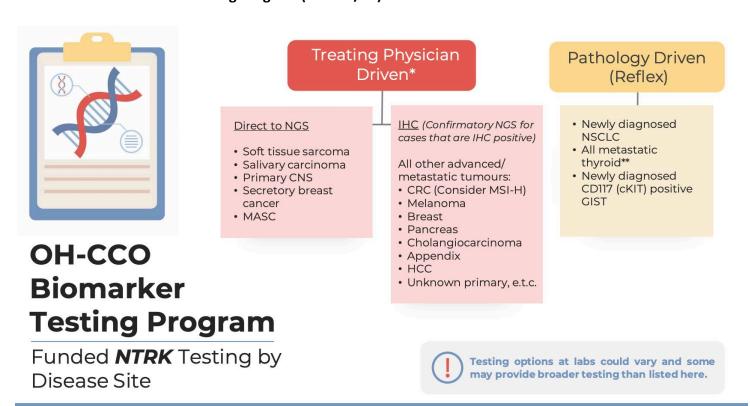
Access to genomic testing: Identifying patients who would benefit from treatments requires a robust testing infrastructure



An evolved, more adaptive assessment of treatments for public coverage is required that includes recognition of smaller patient populations, new clinical trial methods, and ability to examine new data over time

MAC-VIT-CA-0007-1

2. OH-CCO Biomarker Testing Program (Mar.11/24)



Based on <u>Ontario Health Cancer Care Ontario Comprehensive Biomarker</u> <u>Testing Program</u>. As of October 1, 2023, V2324.2.

*Must be ordered by physicians including, but not limited to, medical oncologists **Including sporadic medullary and RAI-refractory well differentiated OH, Ontario Health; CCO, Cancer Care Ontario; NTRK, neurotrophic tyrosine receptor kinase; NGS, next generation sequencing; IHC, immunohistochemistry; NSCLC, nonsmall-cell lung carcinoma; GIST, gastrointestinal stromal tumour; CNS, central nervous system; MASC, mammary analogue secretory carcinoma; CRC, colorectal cancer; MSI-H, high microsatellite instability; HCC, hepatocellular carcinoma; RAI, radioactive iodine.

List of Sites for the program (NTRK on pg.19)



®TM see www.bayer.ca/tm-mc ©2024, Bayer Inc. PP-VIT-CA-0326-1 | ONC-017E



3. Immunotherapy Combined with Targeted Therapy in Patients with BRAF V600E–Mutated CRC (Mar.15/24)

In one of the first clinical trials combining immunotherapy and targeted therapy for patients with BRAF V600E—mutated colorectal cancer (CRC), researchers discovered that a combination regimen of **dabrafenib**, **trametinib**, and **spartalizumab** resulted in long-lasting responses. The study successfully met its primary endpoint and achieved a confirmed response rate of 24.3%, compared with a response rate of 7% in a prior trial where patients were treated with each of the same targeted therapies individually. The researchers also reported improved outcomes in one of the trial's secondary endpoints: durability. Previously, patients with BRAF V600E—mutated CRC have seen only a short-lived clinical benefit after treatment with BRAF or MEK inhibitors. But the combination therapy resulted in an increased durability of response, with a median progression-free survival of <u>5 months</u> compared with <u>3.5 months</u> with BRAF or MEK inhibitors alone. The researchers noted that 57% of the patients continued with the treatment for more than 6 months and 18% continued for more than 1 year.

The findings suggested how targeted therapies in combination with immunotherapies may drive a greater immune response and improve treatment overall. This merits further clinical investigation and preclinical experiments to determine the best targeted approach to increase immune reactivity against [BRAF-mutated] CRC. The researchers acknowledged that the implications of their research may go well beyond CRC.

 $\underline{https://ascopost.com/news/january-2023/immunotherapy-combined-with-targeted-therapy-in-patients-with-braf-v600e-mutated-colorectal-cancer/$

4. Skincare Tips while on Cetuximab or Panitumumab Treatment for CRC (Feb.28/24)

Amgen has collaborated with FUSE Health and Dr. Nathan Lamond (Medical Oncologist, Dalhousie University) to produce a 5-minute video on the importance of good skin hygiene for patients on EGFRi therapy. During this talk, Dr. Lamond discusses the importance of good skin care to help prevent or lessen skin side effects caused by certain cancer treatments such as cetuximab and panitumumab used to treat colorectal cancer (CRC). Dr. Lamond provides tips for protecting the skin and using appropriate soaps, cleansers, moisturizers, sunscreens, and lip balms.

To view the video:

https://www.youtube.com/watch?v=y2KuGAEK8Mc

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

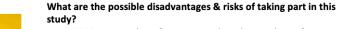
We are inviting you to take part in a voluntary research study | PERIOP-06

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.



- 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				
			Blood Sample	QBECO Therapy or Placebo	MRI/CT scan	Other Assessments	Notes
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.		part .			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.	S			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.		ACCEP		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.		ACCOR			
+6 (±10 d) weeks	#	Once your injections are complete, you will have a follow-up appointment.	S			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.	S		(There will be a range of ± 28 days for all visits
Legend:		Approximately half-day hospital visit		Overnight ho	spital visit	At your ho	ouse

Here is a link to the consent form, containing additional information about the study:



6



6. Now Available in Canada: AVENIO 324 Gene CGP Panel Matched to FoundationONE CDx Panel (Mar.1/24)

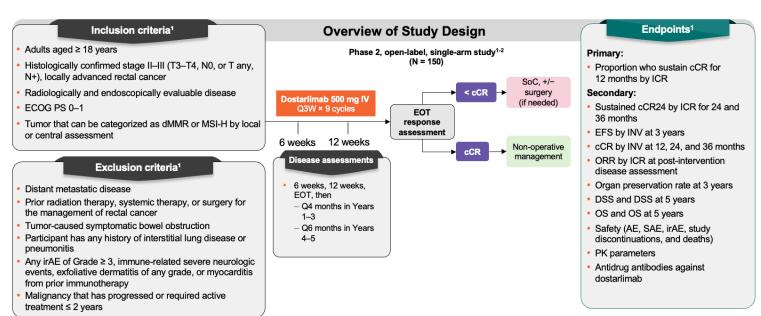


For more information, please visit the OncoHelix website.

7. AZUR-1 and AZUR-2 Dostarlimab Trials Open in Canada (Mar.13/24)

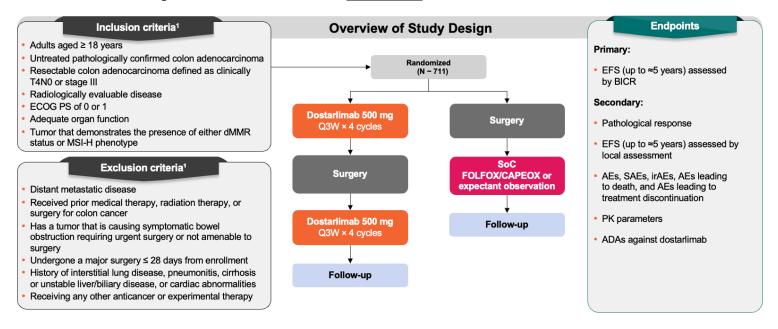
Dostarlimab is an IgG 4 isotype humanized monoclonal antibody meaning it is made in a lab to serve as substitute antibodies that can restore, enhance, modify or mimic the immune system's attack on unwanted cells. In this case, dostarlimab blocks the interaction of PD-1 to its ligands PD-L1 and PD-L2 found on tumor 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 tumor types and in combination with other anticancer agents.

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



AZUR-2: Phase 3 Study

An open-label, randomized study of peri-operative dostarlimab monotherapy vs standard of care in participants with untreated T4NO or stage 3 MMR-D/MSI-H resectable <u>colon cancer</u>.



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

https://www.gsk.com/en-qb/media/press-releases/european-commission-approves-gsk-s-jemperli-dostarlimab-the-first-anti-pd-1-therapy-approved-for-recurrent-or-advanced-endometrial-cancer/

8. A Study of Tucatinib with Trastuzumab and mFOLFOX6 Versus Standard of Care Treatment in First-line HER2+ mCRC (Feb.23/24)

This phase 3 **Mountaineer** 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 (CRC). This study will also test what side effects happen when participants take this combination of drugs.

Participants in this study have CRC 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 the drugs given in this study are used to treat this type of cancer.

The primary outcome measure is progression-free survival (PFS). Some of the secondary outcome measures include overall survival (OS), confirmed objective response rate (cORR), duration of response (DOR). The estimated primary completion date is August 31, 2025. To learn more about this study, you or your doctor may contact the study research staff using the contact information provided by the sponsor within the link below.

https://classic.clinicaltrials.gov/ct2/show/study/NCT05253651?term=MOUNTAINEER-03&draw=2&rank=1

9. CARMA BROS: CAnadian CAncers with Rare Molecular Alterations (CARMA) - Basket Real-world Observational Study (BROS) (Mar.12/24)

This study will collect data on Canadian cancer patients that have uncommon/rare changes in their tumors, 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, you or your doctor may contact the study research staff using the contact information provided by the sponsor within the link below.

10. Barriers and Unequal Access to Timely Molecular Testing Results: Addressing the Inequities in Cancer Care Delays across Canada (Mar.6/24)

Genomic medicine is a powerful tool to improve diagnosis and outcomes for cancer patients by facilitating the delivery of the right drug at the right dose at the right time for the right patient. **CCRAN's 2023 Biomarkers Conference** brought together leaders with expertise in different tumor types. The objective was to identify challenges and opportunities for change in terms of equitable and timely access to biomarker testing and reporting at the education, delivery, laboratory, patient, and health-system levels in Canada.

Presentations by patient advocacy groups highlighted the challenges and barriers to biomarker testing in their respective patient populations. The tumor locations examined were **colorectal**, breast, gastrointestinal stromal tumor (GIST), lung, ovary, skin, pan tumors, pancreas, and stomach. Challenges identified included: limited patient and clinician awareness of genomic medicine options with need for formal education strategies; failure by clinicians to discuss genomic medicine with patients; delays in or no access to hereditary testing; lack of timely reporting of results; intra- and inter-provincial disparities in access; lack of funding for patients to access testing and for laboratories to provide testing; lack of standardized testing; and impact of social determinants of health.

Timely access to biomarker testing and results improves healthcare outcomes and experiences for patients, their care givers, and their healthcare providers, driving value in the healthcare system as a whole. The authors conclude that Canada must standardize its approach to biomarker testing across the country, with a view to addressing current inequities, and prioritize access to advanced molecular testing to ensure systems are in place to quickly bring innovation and evidence-based treatments to Canadian cancer patients, regardless of their place of residence or socioeconomic status.

https://www.mdpi.com/1718-7729/31/3/103/pdf

11. Comprehensive Molecular Profiling and Genomic Testing Are Essential for Determining Optimal Cancer Treatment - Should be Performed Early (Mar.4/24)

Comprehensive Molecular Profiling is the term used to describe a series of laboratory tests used to assess the genetic changes in a cancer cell's DNA, RNA, and the proteins they code for that define an individual's cancer. Once the molecular profile of a cancer is determined precision cancer medicines can be identified to treat the cancer and guide development of new targeted therapies. Genomic testing is different from genetic testing. Genetic tests are typically used to determine whether a healthy individual has an inherited trait (gene) that predisposes them to developing cancer. Genomic tests evaluate the genes in a sample of diseased tissue from a patient who has already been diagnosed with cancer. In this way, genes that have mutated, or have developed abnormal functions, are identified in addition to those that may have been inherited.

Next Generation Sequencing (NGS testing) is a laboratory test in which the DNA obtained from a patient's blood or tissue is sequenced and compared to known normal DNA sequences of genes that are related to cancer. Alterations of the DNA or RNA are called mutations, and two types of mutations exist: Germline mutations and Somatic mutations. Germline or hereditary mutations are inherited across generations from parents by children and play an important role in cancer risk and susceptibility. Somatic mutations occur when there is a spontaneous change in our DNA and affects any cell that isn't a germ cell (egg or sperm cell). Somatic mutations are not inherited and responsible for most cancers. They can be caused by environmental and lifestyle factors such as radiation, chemical exposure, tobacco use and aging. For assessment of germline mutations, NGS testing is performed on blood samples or even by mouth swabs. To assess somatic mutations that exist in the cancer NGS testing is performed on tissue from a biopsied or surgically removed cancer. When tissue is not available a "liquid biopsy" can be performed on a blood sample by identifying circulating tumor DNA. Blood based testing may not be as sensitive-especially in early-stage cancers.



Almost every cancer patient can benefit from NGS testing, and all patients should discuss the role and timing of NGS testing with their doctors. It is especially important to discuss with your surgeon because it is their role to order NGS testing on tissue obtained from biopsy or removal of the cancer. It's much more difficult to have testing done later. Perhaps the greatest promise of genomic testing is its potential for individualizing treatment. This means that patients with more serious conditions can be identified and offered aggressive and innovative therapies that may prolong their lives, while patients who are diagnosed with a less serious condition may be spared unnecessary treatments.

https://news.cancerconnect.com/treatment-care/advances-in-genomic-testing-what-you-need-to-know Image Source: https://www.genomicseducation.hee.nhs.uk/blog/four-types-of-genomic-testing-explained/

12. Targeting KRAS G12C Mutations in Colon, Lung, and Other Cancers (Mar.2/24)

The KRAS G12C inhibitor drug Krazati (adagrasib) joins Lumakras (sotorasib) as an approved treatment for patients with non-small cell lung cancers (NSCLC) harboring KRAS G12C mutations. These drugs are also being evaluated in **colorectal cancer (CRC)**, and other solid tumors.

RAS is an *oncogene* —a gene that encodes proteins that function as switches to turn on various genes for cell growth and division. Mutations in the RAS genes result in permanently "turned on" switches that in turn result in uninhibited cell division, which can lead to cancer. There are three types of RAS oncogenes, designated NRAS, GRAS, and KRAS. Although mutations in all three can cause cancer. KRAS mutations are the most common oncogenic alteration in all of human cancers and there are currently no effective treatments available for patients with KRAS-mutant cancers. KRAS cancer driving mutation are present in 14% of NSCLC adenocarcinomas, **4% of CRCs**, 2% of pancreatic cancers as well as smaller percentages of several other difficult-to-treat cancers.

Adagrasib works by irreversibly and selectively binding to KRAS G12C in its inactive state, blocking its signaling to other cells and preventing cancer cell growth and proliferation; this leads to cancer cell death. Adagrasib is being evaluated in a phase 1/2 trial treating patients with molecularly identified, KRAS G12C-positive advanced solid tumors.

KRYSTAL is a Phase 1/2 clinical trial in patients who have a KRASG12C mutation. The phase 1b portion of the study included patients evaluating krazati alone. The phase 2 part of the trial includes krazati monotherapy in CRC, and other solid tumors.

- Krazati Monotherapy: Of the 45 clinically evaluable patients who received adagrasib monotherapy the response rate was 22% and the median duration of response was 4.2 months.
- Krazati + Cetuximab: The confirmed response rate for the combination was 39%. The median time to response was 1.3 months. At the time of analysis, 71% of patients remain on treatment.
- In both groups therapy was well tolerated with acceptable side effects.

The phase III CodeBreaK 300 clinical trial evaluated the combination of Lumakras plus panitumumab in 160 patients with advanced colon cancer. They were treated with two different dosing schedules of lumakras plus panitumumab or standard of care investigator's choice of chemotherapy. Patients treated with lumakras were significantly more likely to respond to treatment and their cancer progression-free survival averaged 5.6 months compared with only 2.2 months for patients receiving standard-care chemotherapy. Both krazati and lumakras have clinical activity in heavily pretreated patients with CRC harboring a KRASG12C mutation. The addition of a second drug targeting EGFR shows synergistic clinical activity and appears to work better than the KRAS targeting drugs used alone.

 $\underline{https://news.cancerconnect.com/lung-cancer/can-kras-positive-colorectal-and-lung-cancer-finally-be-targeted}$

Surgical Therapies

13. Hepatic Artery Infusion Pump (HAIP) Chemotherapy Program – Sunnybrook Odette Cancer Centre (Mar.1/24)

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 program involves a coordinated, multidisciplinary team approach to care, with close collaboration across surgical oncology, medical oncology (chemotherapy), interventional radiology, nuclear medicine, and oncology nursing. 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. **Drs. Paul Karanicolas and Michael Raphael** are the program leads and happy to see patients who may be eligible for the therapy.





Presently at Sunnybrook Odette Cancer Centre, HAIP is being used in patients with colorectal cancer that has spread to the liver that cannot be removed surgically and has not spread to anywhere else in the body. Patients who have few (1-5) and very small tumors in the lungs may be considered if the lung disease is deemed treatable prior to HAIP. 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 on the link provided below.

http://sunnybrook.ca/content/?page=colorectal-colon-bowel-haip-chemotherapy

14. Living Donor Liver Transplantation for Unresectable CRC Liver Metastases (Mar.2/24)

Approximately half of all colorectal cancer (CRC) patients develop metastases, commonly to the liver and lung. Surgical removal of liver metastases (LM) is the only treatment option, though only 20-40% of patients are candidates for surgical therapy. Surgical therapy adds a significant survival benefit, with 5-year survival after liver resection for LM of 40-50%, compared to 10-20% 5-year survival for chemotherapy alone. Liver transplantation (LT) would remove all evident disease in cases where the colorectal metastases are isolated to the liver but considered unresectable.



Image Source: https://www.slideshare.net/AhmedAdel65/preoperative

While CRC LM is considered a contraindication for LT at most cancer centers, a single center in Oslo, Norway demonstrated a 5-year survival of 56%. A clinical trial sponsored by the University Health Network in Toronto will offer live donor liver transplantation (LDLT) to select patients with unresectable metastases limited to the liver and are non-progressing on standard chemotherapy. Patients will be screened for liver transplant suitability and must also have a healthy living donor come forward for evaluation. Patients who undergo LDLT will be followed for survival, disease-free survival, and quality of life for 5 years and compared to a control group who discontinue the study before transplantation due to reasons other than cancer progression.

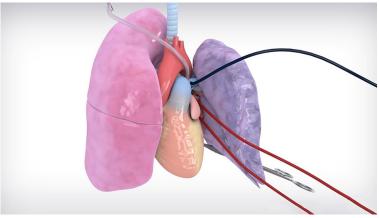
https://clinicaltrials.gov/ct2/show/NCT02864485

15. In Vivo Lung Perfusion (IVLP) for CRC Metastatic to Lung (Mar.9/24)

A new 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.

At the University Health Network, this IVLP technique has been used recently in a Phase I study in patients with sarcoma, and they are now expanding on that experience to include patients with colorectal metastases. 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. If the side effects are not severe, then more participants are asked to join the study and are given a higher dose of oxaliplatin. Participants joining the study later on will get higher doses of oxaliplatin than participants who join earlier. This will continue until a dose is found that causes severe but temporary side effects. 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.



In Vivo Lung Perfusion Model

https://clinicaltrials.gov/ct2/show/NCT05611034?term=ivlp&draw=2&rank=1 Image Source: https://pie.med.utoronto.ca/TVASurg/project/in-vivo-lung-perfusion/

Radiation Therapies / Interventional Radiation

16. Study Offered at the Odette Cancer Centre to Treat Recurrent Rectal Cancer (Mar.9/24)

Magnetic resonance-guided focused ultrasound (MRg-FU) is a less invasive; outpatient modality being investigated for the thermal treatment of cancer. In MRg-FU, a specially designed transducer is used to focus a beam of low-intensity ultrasound energy into a small volume at a specific target site in the body. MR is used to identify and delineate the tumour, focus the ultrasound beam on the target, and provide a real--time thermal mapping to ensure accurate heating of the designated target with minimal affect to the adjacent healthy tissue. The focused ultrasound beam produces therapeutic hyperthermia (40-42°C) in the target field, causing protein denaturation and cell damage. Currently, there is no prospective clinical data reported on the use of MRg-FU in the setting of recurrent rectal cancer. Recurrent rectal cancer is a vexing clinical problem. Current retreatment protocols have limited efficacy. The addition of hyperthermia to radiation and chemotherapy may enhance the therapeutic response. With recent advances in technology, the investigators hypothesize that MRg-FU is technically feasible and can be safely used in combination with concurrent re-irradiation and chemotherapy for the treatment of recurrent rectal cancer without increased side-effects. The study is being offered at the Odette Cancer Centre. Here is the link to the study protocol:

https://clinicaltrials.gov/ct2/show/NCT02528175?term=magnetic+resonance+guided+focused+ultrasound&recr=Open&rank=1



Screening

17. Trends in the Incidence of Young-Onset CRC with a Focus on Years Approaching Screening Age (Mar.10/24)

With recent evidence for the increasing risk of **young-onset colorectal cancer (yCRC)**, the objective of this population-based longitudinal study was to evaluate the incidence of yCRC in one-year age increments, particularly focusing on the screening age of 50 years. The study was conducted using linked administrative health databases in British Columbia, Canada including a provincial cancer registry, inpatient/outpatient visits, and vital statistics from January 1, 1986 to December 31, 2016. Researchers calculated the incidence rates per 100,000 at every age from 20 to 60 years and estimated annual percent change in incidence (APCi) of yCRC using joinpoint regression analysis. 3,614 individuals were identified with yCRC (49.9% women). The incidence of CRC steadily rose from 20 to 60 years, with a marked increase from 49 to 50 years. Furthermore, there was a trend of increased incidence of yCRC among women. Analyses stratified by age yielded APCi's of 2.49% and 0.12% for women aged 30-39 years and 40-49 years, respectively and 2.97% and 1.86% for men. These findings indicate a steady increase over one-year age increments in the risk of yCRC during the years approaching and beyond screening age. These findings highlight the need to raise awareness as well as continue discussions regarding considerations of lowering the screening age.

18. A Cell-free DNA Blood-Based Test for CRC Screening (Mar.14/24)

Early detection could prevent more than 90% of colorectal cancer (CRC) related deaths, yet more than one third of the screening-eligible population is not up to date with screening despite multiple available tests. A blood-based test has the potential to improve screening adherence, detect CRC earlier, and reduce CRC-related mortality.

One of the largest studies of its kind, ECLIPSE (Evaluation of ctDNA LUNAR Assay In an Average Patient Screening Episode) is a 20,000+-patient registrational study to evaluate the performance of Shield blood test compared to a screening colonoscopy. The Shield test detects CRC signals in the bloodstream from DNA that is shed by tumors, called circulating tumor DNA (ctDNA).



A total of 83.1% of the participants with CRC detected by colonoscopy had a positive cfDNA test and 16.9% had a negative test, which indicates a sensitivity of the cfDNA test for detection of CRC of 83.1%. Sensitivity for stage I, II, or III CRC was 87.5%, and sensitivity for advanced precancerous lesions was 13.2%. A total of 89.6% of the participants without any advanced colorectal neoplasia (CRC or advanced precancerous lesions) identified on colonoscopy had a negative cfDNA blood-based test, whereas 10.4% had a positive cfDNA blood-based test, which indicates a specificity for any advanced neoplasia of 89.6%. Specificity for negative colonoscopy (no CRC, advanced precancerous lesions, or nonadvanced precancerous lesions) was 89.9%. These results are on par with the performance of other guideline-recommended non-invasive screening modalities, where overall sensitivity in detecting CRC ranges from 74% to 92%.

One recent study showed that CRC screening rates tripled among adults who had declined prior CRC screening when they were offered Shield. The test's sensitivity in detecting CRC, combined with this real-world adherence, suggests that Shield has the potential to detect more CRCs at a curable stage than traditional screening methods.

The results of the study are a promising step toward developing more convenient tools to detect CRC early while it is more easily treated. The test, which has an accuracy rate for colon cancer detection similar to stool tests used for early detection of cancer, could offer an alternative for patients who may otherwise decline current screening options. Therefore, the use of a blood test as a screening option could help overcome screening barriers and improve CRC screening rates.

https://www.nejm.org/doi/full/10.1056/NEJMoa2304714?query=featured_home https://investors.quardanthealth.com/press-releases/press-releases/2024/Guardant-Health-ECLIPSE-Study-Data-Demonstrating-Efficacy-of-Shield-Blood-based-Test-for-Colorectal-Cancer-Screening-to-be-Published-in-The-New-England-Journal-of-Medicine/default.aspx

Other

19. Young Adult CRC Clinic Available at Sunnybrook (Mar.5/24)

A recent study led by the University of Toronto doctors has observed a rise in colorectal cancer (CRC) rates in patients under the age of 50. The study mirrors findings from the U.S., Australia and Europe. 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. They are unlike those diagnosed over the age of 50. Dr. Shady Ashamalla (colorectal cancer surgical oncologist), along with Dr. Petra Wildgoose (Hepatobiliary and Colorectal Oncology Surgical Assistant), and their team at the Sunnybrook Health Sciences Centre understand the needs of this patient population.



Dr. Shady Ashamalla, Head Young Adult Colorectal Cancer Program



Dr. Petra Wildgoose, Lead Young Adult Colorectal Cancer Program

Both belong to a multidisciplinary team of experts in the **Young Adult Colorectal Cancer Clinic** 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 of 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.

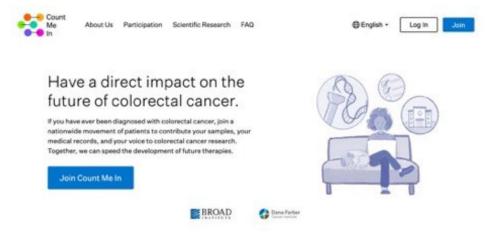
http://sunnybrook.ca/content/?page=young-adult-colorectal-cancer-clinic

20. CCRAN's Partnership with "Count Me In" (Mar.1/24)

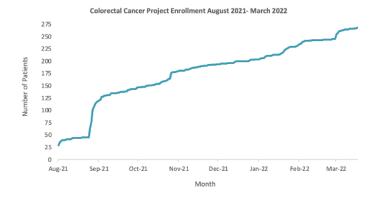
CCRAN is proud to partner with Count Me In, a nonprofit research initiative, on The Colorectal Cancer Project. This new project is open to anyone in the United States or Canada who has ever been diagnosed with colorectal cancer (CRC). Patients can find out more and join at <u>JoinCountMeIn.org/Colorectal</u>.

Through the project, patients are asked to complete surveys to share information about their experience with CRC, to share biological sample(s), and to allow for the research team to request copies of their medical records. The project team then de-identifies and shares data from these with the entire research community.

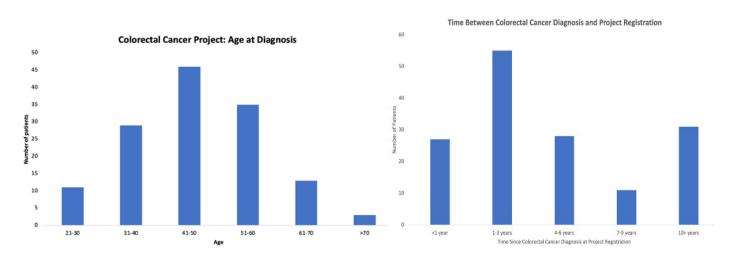
Every patient's story holds a piece of the puzzle that can help us better understand CRC. By discovering more about what drives cancer and sharing this data, CCRAN and the Colorectal Cancer Project believe insights can be gained to develop more effective therapies. One of the aims of the project is to reach populations that have been understudied, including individuals who are diagnosed with CRC at a young age, individuals from marginalized communities who have historically been excluded from research, and patients with metastatic CRC. Together, we can accelerate our understanding of CRC. To learn more or sign up to participate, visit JoinCountMeIn.org/Colorectal.

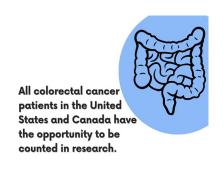


"Count Me In", a nonprofit cancer research initiative, is inviting all patients across the United States and Canada who have ever been diagnosed with colorectal cancer (CRC) to participate in research and help drive new discoveries related to this disease. The Colorectal Cancer Project will enable patients to easily share their samples, health information and personal lived experiences directly with researchers in order to accelerate the pace of research. Patients who have been diagnosed with CRC at any point in their lives can join the project by visiting JoinCountMeIn.org/colorectal. From there, patients will be invited to share information about their experience through surveys and to provide access to medical records as well as saliva samples and optional blood, stool, and/or stored tissue samples for study and analysis. Researchers from the Broad Institute of MIT and Harvard and Dana-Farber Cancer Institute use this information to generate databases of clinical, genomic, molecular, and patientreported data that is then de-identified and shared with researchers everywhere. To date, more than 9,000 patients with different cancers have joined Count Me In and shared their data. "We still do not know why there is an alarming rise in CRC in young adults", said Andrea Cercek, MD Co-Director, Center for Young Onset Colorectal and Gastrointestinal Cancers Memorial Sloan Kettering Cancer Center and co-scientific leader of the Colorectal Cancer Project. "What we do know is that this is a global phenomenon that affects otherwise healthy individuals with no known risk factors. The Colorectal Cancer Project will provide researchers important information that will lead to a better understanding of this disease."



Over 250 patients have joined the Colorectal Cancer Project since the launch in fall 2021. Every patient that joins the Colorectal Cancer Project enables us to learn more about colorectal cancer. Pts diagnosed at any age, whether newly diagnosed or years from their diagnosis, can enroll. If you have ever been diagnosed with colorectal cancer, you can visit <u>JoinCountMeIn.org/Colorectal</u> to enroll and have a direct impact on research and future treatment strategies.





JoinCountMeln.org/Colorectal

Every colorectal cancer patient's story holds a piece of the puzzle that can help us better understand how to treat this disease. Join our partners at @joincountmein to help generate more data for CRC by sharing your medical records, samples, and unique experiences with researchers everywhere.

Learn more at <u>JoinCountMeIn.org/colorectal</u>

https://www.news-medical.net/news/20210914/Colorectal-Cancer-Project-launches-to-improve-understanding-of-the-disease-and-accelerate-research.aspx https://www.medicalnewstoday.com/articles/antibiotic-use-linked-to-increased-risk-of-colorectal-cancer#Use-of-antibiotics-and-an-increased-risk-of-cancer#Use-of-antibiotics-and-an-increased-risk-of-cancer#Use-of-antibiotics-and-an-increased-risk-of-cancer#Use-of-antibiotics-and-an-increased-risk-of-antibiotics-and-an-increased-risk-of-antibiotics-and-an-increased-risk-of-antibiotics-and-an-increased-risk-of-antibiotics-and-an-increased-risk-of-antibiotics-and-an-increa

21. CCRAN Has Launched 4 New Information/Support Groups Based On Age and Disease Stage (Mar.2/24)

CCRAN is pleased to announce a **new format** for monthly information / support group meetings. To ensure peer support is **relevant**, **meaningful and timely** for each participant, CCRAN has stratified the groups according to disease stage and early vs average onset colorectal cancer.

Meetings will begin with a brief presentation on a topic of relevance. Following the presentation, patients and caregivers will be assigned to the support group of relevance to them. Please RSVP to **Cassandra**Macaulay: Cassandra.m@ccran.org. We look forward to hosting you at our monthly information/support group meetings.

22. LifeLabs Has Launched Signatera, Offering Canadians an Innovative and Personalized Approach to Managing Cancer (Feb.1/24)

LifeLabs is pleased to share the launch of Signatera, a highly sensitive, personalized molecular residual disease (MRD) assay developed by Natera for treatment monitoring and molecular residual disease assessment in patients previously diagnosed with cancer. This innovative test uses circulating tumor DNA (ctDNA) and is personalized for each patient to help assess recurrence risk and identify relapse up to two years earlier than the current standard of care tools. The clinical utility of Signatera across cancer types has been validated by multiple studies. In those trials, Signatera demonstrated predictive values such as:



88% sensitivity to relapse

Average lead time 8.7 mos



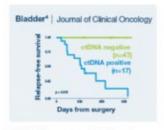
89% sensitivity to relapse

Average lead time 9.5 mos



92% sensitivity to relapse

Average lead time 4.0 mos



100% sensitivity to relapse

Average lead time 2.8 mos

Signatera testing involves two phases with pre-supplied collection kits. The first phase is an initial test that analyzes both a tumour tissue and blood sample, and the second phase involves subsequent blood tests on an as-needed basis. It is a safe, non-invasive way to monitor ctDNA levels to help physicians understand treatment efficacy and detect relapse without the inconvenience of repeated tissue biopsies and/or imaging.

 $\underline{https://www.lifelabs.com/lifelabs-launches-signatera-offering-canadians-an-innovative-and-personalized-approach-to-managing-cancer/$

23. Natera Announces Publication of Prospective, Multi-Site CIRCULATE Study in Nature Medicine Demonstrating Signatera's Ability to Predict Chemotherapy Benefit in CRC (Feb.17/24)

Natera, Inc., a global leader in cell-free DNA testing, announced the publication of a new study in *Nature Medicine*, which demonstrates the ability of the Signatera molecular residual disease (MRD) test to identify patients with stage II-IV colorectal cancer (CRC) who are at an increased risk of recurrence and predict who is likely to benefit from adjuvant chemotherapy (ACT).

The paper describes results from the GALAXY arm of the ongoing CIRCULATE-Japan trial, which is one of the largest and most comprehensive prospective studies of MRD testing in resectable CRC. The data builds on results previously presented at the 2022 ASCO Gastrointestinal Cancers Symposium (ASCO GI), now with median clinical follow-up extended to 16.74 months and DFS assessment at 18 months.

In the study, 1,039 patients with stage II-IV resectable CRC were monitored prospectively using the Signatera MRD test. Key takeaways include:

- Post-surgical MRD status was predictive of chemotherapy benefit
- Post-surgical MRD status was the most significant prognostic risk factor for recurrence, in a multivariate
 analysis that accounted for all clinicopathological risk factors currently used for prognostication (HR 10.82, pvalue <0.001).
- **Pre-surgical detection rate of 95.9%** in patients with pathologic stage II-III disease and 93.1% in patients with stage II-IV disease.
- Signatera dynamics are indicative of treatment response

This study provides strong evidence that Signatera MRD-positive patients will benefit significantly from adjuvant therapy, while MRD-negative patients may be safely observed, regardless of clinical or pathological stage.

https://www.natera.com/company/news/natera-announces-publication-of-prospective-multi-site-circulate-study-in-nature-medicine-demonstrating-signateras-ability-to-predict-chemotherapy-benefit-in-colorectal-cancer/

24. The Childhood Cancer Identity Project (CCHIP): Examination of Cancer Identity and Wellbeing in Adult Survivors of Childhood Cancer (Feb.30/24)

The Childhood Cancer Identity Project (CCHIP) aims to better understand how individuals view themselves after cancer treatment has ended, referred to as cancer identity. The project also intends to understand the impact cancer identity has on mental and physical health. Following completion of this study, the findings will be used to integrate cancer identity into overall care of childhood cancer survivors. Findings may also support the use of patient-preferred terminology in clinical practices, aftercare clinics, research, and among the public.

Adult survivors of childhood cancer are welcome to complete the survey using the following link: https://concordia.yul1.qualtrics.com/jfe/form/SV eRvL6U1F8Yv1BfU

Nutrition / Healthy Lifestyle <

25. EXercise for Cancer to Enhance Living Well (EXCEL) Study (Jan.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. The Spring 2024 program will be running **April 9th – June 27th**. **Sign up TODAY to secure a spot in class!** 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 centres 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 the EXCEL study: https://kinesiology.ucalgary.ca/labs/health-and-wellness/research/research/research/studies/exercise-cancer-enhance-living-well-excel

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



26. Healthy Lifestyle Improves CRC Outcomes (Mar.4/24)

Benefits of Exercise

Clinical trials have evaluated the benefit of exercise in cancer patients, and most have found an association with improved quality of life, reduced risk of cancer recurrence and prolonged survival. In a meta-analysis of 49,000 survivors of colorectal cancer (CRC) physical activity had a dose-related effect on survival. A reduction in mortality risk was observed with increasing exercise and physical activity.3 Similarly, a 16-year longitudinal study found that more physical activity before and after a diagnosis of CRC was associated with lower mortality, whereas more sedentary time was associated with a higher risk.

Nutrition & Weight Management

Maintaining a healthy body weight and specific nutritional factors have also been found to reduce the risk of developing colon cancer and delaying its recurrence. The National Surgical and Adjuvant Bowel Project evaluated the association between Body Mass Index (BMI) and outcomes in two clinical trials of adjuvant chemotherapy involving 4,288 individuals with colon cancer. When compared with normal-weight people (BMI, 18.5-24.9 kg/m2), very obese patients (BMI =35 kg/m2) had a 38% greater risk for colon cancer recurrence or development of a second primary cancer, a 36% increased risk for CRC-related mortality, and a 28% increased risk for death from any cause.

In addition to obesity, certain diets appear to contribute to poor survivorship following treatment for colon cancer. In a study involving 1,000 patients with stage II/III colon cancer patients in the highest quintile of a Western diet (red meat, fat, refined foods, desserts) versus lowest had double or triple the risk for CRC recurrence and CRC-related death. Patients whose diets reflected a high glycemic index also had worse disease-free survival, recurrence-free survival and overall survival. Consumption of "Red Meat" and processed meat has been shown to increase the risk of cancers of the distal colon and the rectum, whereas milk and calcium consumption have shown a protective effect against left-sided tumors in which the rise in incidence was most prominent.

Fruit and Vegetable Intake

Researchers affiliated with the Nurses' Health Study evaluated the link between diet and polyps among more than 34,000 women who had undergone a colonoscopy or sigmoidoscopy between 1980 and 1998. The study suggested that a diet high in fruit may reduce the risk of developing colorectal polyps:

- Compared to women who ate one or fewer servings of fruit per day, women who ate five or more servings of fruit per day were 40% less likely to develop colorectal polyps.
- There was little evidence that high vegetable intake reduced the risk of colorectal polyps.

Another study suggests that regular exercise and a diet that includes fish may help colon cancer patients improve their odds of avoiding a cancer recurrence. The likelihood that patients will suffer a return of colon cancer more than doubles if they eat fish less than twice a week, or if they get less than 60 minutes of moderate exercise a week.

What About Fibre?

Dietary fibre (found in cereals, fruits, and vegetables) could potentially reduce the risk of CRC though a variety of mechanisms: Fibre could dilute cancer-causing agents that pass through the colon and rectum in the feces; it could

speed stool passage through the colon and rectum, minimizing exposure to cancer-causing agents; and it could reduce exposure to bile acids.

While high fibre intake has been hypothesized to reduce the risk of CRC studies have produced mixed results. In a large, pooled analysis of 13 studies, published in the *Journal of the American Medical Association (JAMA)*, researchers found that dietary fibre was not associated with a reduced risk of CRC. There was no evidence to suggest that increasing the dietary intake of total, cereal, fruit, or vegetable fibre is associated with a reduction in risk for colorectal adenomatous polyps or CRC. These researchers concluded that there are many health reasons to eat a diet high in fibre, particularly to help reduce the risk for coronary artery disease; however, such a diet does not appear to help prevent the development of colorectal polyps or CRC.

https://news.cancerconnect.com/colon-cancer/healthy-lifestyle-improves-colorectal-cancer-outcomes

COVID-19 Updates

27. Frequently Asked Questions for COVID-19

Q: What is COVID-19 (or novel Coronavirus Disease - 19)?

A: Coronaviruses are a large family of viruses that can cause illnesses in humans and animals. Coronaviruses can cause illnesses that range in severity from the common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARS) and most recently, COVID-19. COVID-19 or novel coronavirus originated from an outbreak in Wuhan, China in December 2019. The most common symptoms associated with COVID-19 can include fever, fatigue, and a dry cough. Though additional symptoms have now been linked with the disease, which may include aches and pains, nasal congestion, runny nose, sore throat, diarrhea, skin rash and vomiting. It is also possible to become infected with COVID-19 and not experience any symptoms or feeling ill. The spread of COVID-19 is mainly through the transmission of droplets from the nose or mouth when a person coughs, exhales or sneezes. These droplets land on surfaces around a nearby person. COVID-19 can be transmitted to that nearby person who may end up touching the surface contaminated with COVID-19 and then end up touching their nose, mouth, or eyes. A person can also contract COVID-19 through inhaling these droplets from someone with COVID-19. Although research is still ongoing, it is important to note that older populations (over the age of 65), those with a compromised immune system and those with preexisting conditions including heart disease, high blood pressure, lung disease, diabetes or cancer may be at a higher risk of severe illness due to COVID-19.

https://www.who.int/news-room/q-a-detail/q-acoronaviruses

Q: What can I do to avoid getting Coronavirus?

- A: There are various ways in which we can reduce our risk of contracting COVID-19. Below are some measures suggested by the World Health Organization
- 1. Keep at least 2 metres (or 6 feet) between yourself and other people. This will reduce the risk of inhaling droplets from those infected with COVID-19.
- 2. Regularly clean your hands for at least 20 seconds with warm water and soap, or an alcohol-based hand rub. This will kill any viruses on your hands.
- 3. Avoid touching your eyes, nose and mouth. If the virus is on your hands, it can enter the body through these areas.
- 4. Follow good respiratory hygiene by covering your mouth and nose with a tissue or elbow when you cough and sneeze. This prevents the droplets from settling on surfaces or being released into the air around you.
- 5. Stay home as much as possible, especially if you are feeling unwell. If you think you may have the Coronavirus, please see "What should I do if I think I have Coronavirus?" section.
- 6. Please wear a face covering or mask in public when physical distancing is not possible.

 $\underline{https://www.who.int/news-room/q-adetail/q-a-coronaviruses}$

Q: Are there special precautions that people with cancer can take?

A: People with cancer (and other chronic ailments such as heart disease, diabetes, high blood pressure and lung disease) are at a higher risk of severe illness due to COVID-19 as cancer is considered a pre-existing health issue. Some cancer treatments including chemotherapy, radiation and surgery can weaken the immune system, making it harder for the body to fight infections and viruses, such as Coronavirus. It is important to diligently follow the World Health Organization's recommendations above to reduce the risk of contracting COVID-19. If you have any concerns about your risk, it is best to contact your doctor or healthcare team.

Q. Will anything change with regards to my cancer related medical visits?

As each patient and treatment plan is unique, it is always best to contact your health care provider for updated information about your treatment plan. In some cases, it is safe to delay cancer treatment until after the pandemic risk has decreased. In other cases, it may be safe to attend a clinic that is separate from where COVID-19 patients are being treated. Oral treatment options could be prescribed by your care provider virtually, without the need to attend the clinic. Finally, some follow-up appointments or discussions could be held virtually (via skype or zoom for example) or over the phone to minimize your risk. As we know, conditions and protocols are changing daily due to the nature of the COVID-19 outbreak, and vary based on location, therefore, the best first step is to reach out to your care provider for guidance.

https://www.cancer.gov/contact/emergencypreparedness/coronavirus

Should you wish to contact your local public health agency, please see below.

<u>Alberta</u>

COVID-19 info for Albertans

Social media: Instagram @albertahealthservices, Facebook @albertahealthservices, Twitter @GoAHealth

Phone number: 811

British Columbia

British Columbia COVID-19

Social media: Facebook @ImmunizeBC, Twitter @CDCofBC

Phone number: 811

Manitoba

Manitoba COVID-19

Social media: Facebook @manitobagovernment, Twitter @mbgov

Phone number: 1-888-315-9257

New Brunswick

New Brunswick Coronavirus

Social media: Facebook @GovNB, Twitter @Gov_NB, Instagram @gnbca

Phone number: 811

Newfoundland and Labrador

Newfoundland and Labrador COVID-19 information

Social media: Facebook @GovNL, Twitter @GovNL, Instagram @govnlsocial

Phone number: 811 or 1-888-709-2929

Northwest Territories

Northwest Territories coronavirus disease (COVID-19)

Social media: Facebook @NTHSSA

Phone number: 811

Nova Scotia

Nova Scotia novel coronavirus (COVID-19)

Social media: Facebook @NovaScotiaHealthAuthority, Twitter @healthns, Instagram @novascotiahealthauthority

Phone number: 811

<u>Nunavut</u>

Nunavut COVID-19 (novel coronavirus)

Social media: Facebook @GovofNunavut, Twitter @GovofNunavut, Instagram @governmentofnunavut

Phone number: 1-888-975-8601

Ontario

Ontario: The 2019 Novel Coronavirus (COVID-19)

Social media: Facebook @ONThealth, Twitter @ONThealth , Instagram @ongov

Phone number: 1-866-797-0000

Prince Edward Island

Prince Edward Island COVID-19

Social media: Facebook @GovPe, Twitter @InfoPEI,

Quebec

Coronavirus disease (COVID-19) in Québec

Social media: Facebook @GouvQc, Twitter @sante_qc

Phone number: 1-877-644-4545

Saskatchewan

Saskatchewan COVID-19

Social media: Facebook @SKGov, Twitter @SKGov

Phone number: 811

<u>Yukon</u>

Yukon: Find information about coronavirus (COVID-19) Social media: Facebook @yukonhss, Twitter @hssyukon

Phone number: 811