

Colorectal Cancer and Biomarker Testing

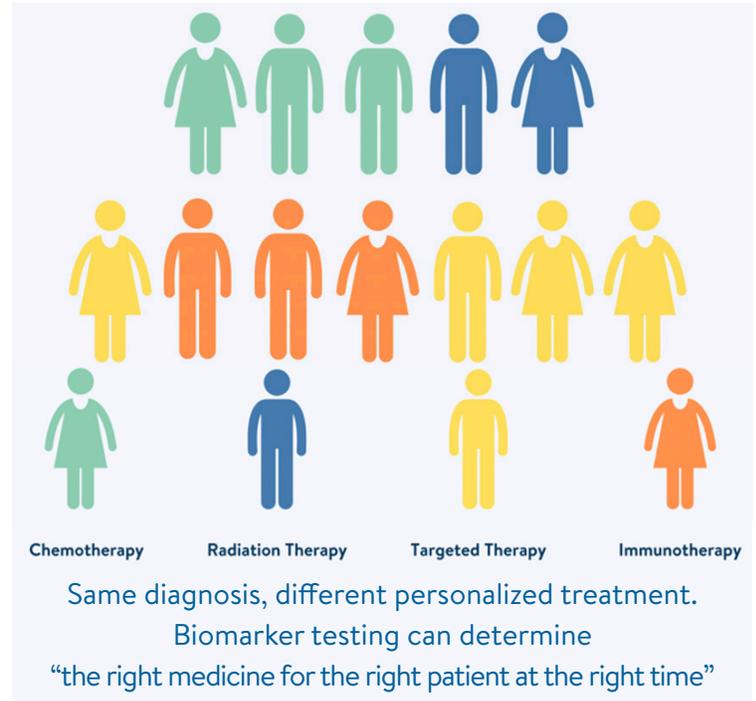
What Patients Need to Know

What is the right care for you?

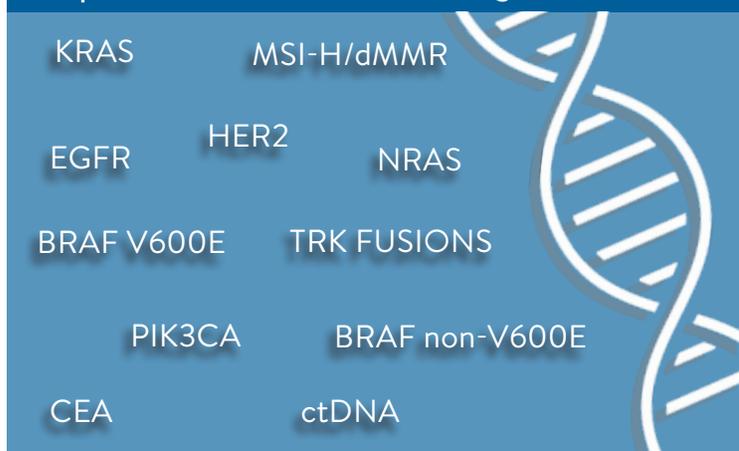
Treating colorectal cancer today is different than it was a few decades ago. In the past if you had colorectal cancer, you might have received the standard therapy used for all people with colorectal cancer. We now understand that two people with colorectal cancer may have very different kinds of tumors.

Today, biomarker testing allows health care providers to uncover your genetic information which can help them refine your cancer diagnosis plan a specific care for you. The genetic information can be used to:

- Match you to more accurate diagnosis
- Match you to a targeted treatment.
- Make decisions about healthy habits, earlier screening tests, and other steps towards prevention.



The genomic guide to improved decision-making:



What are biomarkers?

Biomarkers (short for biological markers) are molecules found in body tissues and fluid, including tumor tissue and blood. Biomarker testing involves the collection of a sample of your tumor, either tissue biopsy or liquid biopsy (blood sample test), that will later be sent to a certified pathologist.

There are different categories of biomarkers that give different information about cancer. Biomarkers in colorectal cancer that drive treatment decisions include genes such as RAS (KRAS and NRAS), BRAF, EGFR, HER2, PIK3CA, PD-L1, NTRK, CEA, TRK fusions, TMB and MSI-H/dMMR.

The ongoing discovery of new gene mutations and corresponding therapies is changing the colorectal cancer molecular testing landscape. The most common biomarker tests include: RAS testing, IHC (ImmunoHistoChemistry) testing, PIK3CA testing, and BRAF testing.

START BY ASKING YOUR DOCTOR TO TEST FOR COMMON BIOMARKERS THAT WILL PROVIDE THEM WITH THE RIGHT INFORMATION ABOUT YOUR CANCER AND HELP PLAN TREATMENT.

When should biomarker testing be done?

The best time to do testing is as early as possible. That is, soon after a colorectal cancer diagnosis and before a treatment plan is chosen. Depending on the biomarkers to be tested, the testing could be done at three different points in your journey:



If you are diagnosed with stage II, III, or IV colorectal cancer, your doctor should test certain prognostic biomarkers such as CEA during routine follow-up visits. This will confirm whether the cancer has returned, or can offer insight into treatment effectiveness, and guide further treatment decisions.



If you are diagnosed with stage IV metastatic colorectal cancer, you should be tested for at least four predictive biomarkers: KRAS, NRAS, BRAF, and HER2. Information about these specific biomarkers will guide treatment decisions and offer insight into how effective treatments will be for you.



You should be tested for treatment predictive biomarkers upon two conditions. If you were with no evidence of disease (complete remission) and routine testing shows that cancer has returned and spread to other parts of your body, or if you were diagnosed with locally advanced colorectal cancer and the tumor continued to grow and spread to other parts of the body during chemotherapy.

What treatment is best for me?

The type (colon and/or rectal), location, stage of your cancer, the biomarkers expressed in your tumour and your general health will determine which treatment is best for you. Understanding your treatment options is important so that you can participate in making informed decisions together with your doctors.

Planning cancer treatment can take time. It is always recommended to get a second or even third opinion before embarking on any treatment plan.

The most common treatment options currently available in Canada for colorectal cancer are surgery, chemotherapy, radiation therapy, targeted therapy, and immunotherapy.

You will need to find out:

- The treatment choices available to you at diagnosis
- How cancer and your specific treatment may impact your daily life and that of your family
- The side effects of your treatment and how to eliminate or reduce their impact
- The possibilities of cancer recurrence and how to minimize those possibilities

FOR MORE INFORMATION ON BIOMARKER TESTING, PLEASE VISIT:

colorectalcancercanada.com