IMMUNOTHERAPY & I

AM I ELIGIBLE FOR IMMUNOTHERAPY?

COLORECTAL CANCER CANADA | MERCK

Immunotherapy is a type of cancer treatment that helps your own immune system find and attack cancer cells. *But it's not for everyone.* In colorectal cancer (CRC), immunotherapy may be an option if you meet the following criteria:

You've Had Biomarker Testing

1

To know if immunotherapy might work for you, your cancer needs to be tested for certain biomarkers (called **MSI-H or dMMR**). If you haven't already, ask your doctor about **biomarker testing**.

Your Cancer Needs to Be the Right Type or Stage

2

Immunotherapy is usually used for **stage 4 (metastatic)** colorectal cancer, or for patients who cannot have surgery. It may not be offered if your cancer is earlier stage, unless you're part of a **clinical trial**.

Your Previous Treatments Matter

3

Some patients can get immunotherapy **first (known as first-line therapy)**, while others may need to try chemotherapy or radiation before it's an option. Your doctor will decide based on your treatment history.

You Must Be Well Enough for Treatment

4

Most patients need to be active and able to care for themselves (this is called "ECOG 0 or 1"). If you have serious health issues, your doctor may suggest other options.

Your Province Must Approve It

5

Coverage can vary depending on the drug and where you live. Currently Pembrolizumab is approved by Health Canada and covered by all provincial health care plans.

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COMMON SIDE EFFECTS OF IMMUNOTHERAPY

Side Effect	Symptoms	How Common?
Fatigue	Feeling very tired or weak	Very common
Diarrhea or Colitis	Loose stools, stomach cramps, blood in stool	Common
Skin rash or itchiness	Redness, dry skin, itchy patches	Common
Fever or flu-like symptoms	Chills, body aches, high temperature	Common
Hormone changes (thyroid problems)	Weight changes, feeling cold, mood swings, hair loss	Common
Cough or shortness of breath (Pneumonitis)	New or worse cough, trouble breathing, chest pain	Less common but serious
Liver problems	Yellow skin/eyes, dark urine, stomach pain	Rare but serious

I'm experiencing symptoms: Now what?

Immunotherapy can cause side effects because it makes your immune system more active. This may lead to inflammation in your bowel, thyroid, lungs, or liver, and less commonly your eyes, nerves, brain, or heart. Some immunotherapy side effects, such as diarrhea, colitis, or pneumonitis can be serious. If you notice any new symptoms or changes in how you feel, even if you're not sure if it's serious:

Call your healthcare team right away!

They can help you figure out if it's related to your treatment or something else, and tell you what to do next.

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FREQUENTLY ASKED QUESTIONS

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FAQs

1. **How will I get my immunotherapy treatment?**
   Most immunotherapy treatments are given using an IV. You may get a temporary IV for each treatment or an IV that lasts until your treatment is finished.

2. **How long will my appointments be and how often will I get my treatment?**
   Appointments can last a few minutes to a few hours, and usually take place in either 2, 3, or 4 week cycles.

3. **Is immunotherapy treatment painful?**
   There is usually no pain other than a needle prick to insert an IV at the beginning of treatment. If you experience any pain during your treatment, please tell the medical staff right away.

4. **Can I work, go to school, or take vacation while on immunotherapy?**
   Yes, many people can. But you might feel tired, so talk to your care team about what works for you.

5. **Can I get vaccinated while on treatment?**
   Maybe. Some vaccines (like the flu shot) may be safe, but live vaccines (like the chickenpox vaccine) are usually not recommended. Always check with your doctor first.

6. **Can I take over-the-counter medicine or supplements?**
   Check with your healthcare provider (e.g., oncologist or cancer pharmacist) before taking anything new, even vitamins or herbal products.

7. **Can I exercise or go to the gym?**
   Yes. Light to moderate activity is often encouraged, but listen to your body and rest when needed.

8. **Can I drink alcohol?**
   It depends. Alcohol can affect your liver and might interact with treatment. Ask your healthcare provider.

9. **Will I lose my hair or look different?**
   Unlike chemotherapy, immunotherapy usually does not cause hair loss. Although, skin rashes, fatigue, and changes in weight can occur.

10. **Can I still get pregnant or father a child?**
    You should avoid becoming pregnant or conceiving during and shortly after treatment. Ask your team about birth control or fertility options.

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CONCLUSION

Other questions to ask your healthcare team

- Can I get biomarker testing?
- Am I eligible for immunotherapy?
- What type of immunotherapy will I be getting? (e.g., Pembrolizumab, Nivolumab or Ipilimumab)
- How will we know if the treatment is working?
- What if I live far from a cancer centre? Can I get support locally?
- If i'm not eligible for immunotherapy, are there clinical trials I can participate in?
- How will I finance immunotherapy treatment? Are there compassionate care programs available if my province doesn't cover the treatment?

Accessing Clinical Trials

Clinical trials are research studies that test new treatments, like immunotherapy, to see how well they work. If you have colorectal cancer, a clinical trial might give you access to new treatment options. When joining a trial, most medical costs are covered, but patients may have to pay for travel or other personal expenses. Always check with the trial organizers about any available financial assistance or reimbursement programs.

To learn more about what trials are available please scan the QR code above or visit:
Clinical Trials - Colorectal Cancer Canada

Wrapping Up

Understanding immunotherapy allows you to:

Advocate for biomarker testing

Discover new treatment options

Make informed choices about your treatment with your doctors

Every colorectal cancer journey is unique. If you have questions or need help navigating options, Colorectal Cancer Canada is here to support you with resources and guidance.

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GLOSSARY

Glossary

- **Biomarker:** Any cellular, molecular, chemical or physical change that can be measured and used to study a normal or abnormal process in the body. Biomarkers are used to check the risk for, presence of or progress of a disease or the effects of treatment.

- **Biomarker Testing:** A laboratory method that uses a sample of tissue, blood, or other body fluid to check for certain genes, proteins, or other molecules that may be a sign of a disease or condition, such as cancer.

- **Checkpoint Inhibitor:** Checkpoints are proteins that stop our immune system from killing cancer cells. Checkpoint inhibitor drugs block these proteins so that the immune system can still attack and kill the cancer cells.

- **Clinical Trial:** A research study that tests new ways to prevent, find, treat or manage a disease (such as cancer) on eligible, informed and willing human participants. Also called clinical study.

- **ECOG:** (Eastern Cooperative Oncology Group) performance status is a widely used scale to assess a cancer patient's functional status and ability to perform daily activities. The scale ranges from 0 to 5, with 0 indicating fully active and 5 indicating death.

- **First-Line Therapy:** The first, most common or preferred (standard) treatment given for a condition or disease (such as cancer).

- **Ipilimumab (Yervoy®):** An immunotherapy drug that binds to the protein CTLA-4 to help immune cells kill cancer cells better and is used to treat many different types of cancer. Ipilimumab is used alone or with other drugs to treat certain types of colorectal cancer. It is a type of monoclonal antibody and a type of immune checkpoint inhibitor. Also called MDX-010 and Yervoy.

- **Live Vaccines:** A vaccine made from a virus that has been weakened so it does not cause the disease the virus usually causes. A live virus vaccine helps the body's immune system recognize and fight infections caused by the non-weakened form of the virus. Examples of live virus vaccines are the chickenpox vaccine and the measles, mumps, and rubella (MMR) vaccine. It is not safe for pregnant women or people with weak immune systems to receive a live virus vaccine.

- **Pembrolizumab (Keytruda®):** A drug that binds to the protein PD-1 to help immune cells kill cancer cells better and is used to treat many different types of cancer. Pembrolizumab may block PD-1 and help the immune system kill cancer cells. It is a type of monoclonal antibody and a type of immune checkpoint inhibitor. Also called Keytruda.

- **Nivolumab (Opdivo®):** An immunotherapy drug that binds to the protein PD-1 to help immune cells kill cancer cells better and is used to treat many different types of cancer. Nivolumab may block PD-1 and help the immune system kill cancer cells. It is a type of monoclonal antibody and a type of immune checkpoint inhibitor. Also called Opdivo.

- **Second Line Therapy:** Treatment given for a condition or disease (such as cancer) when the first-line therapy (the first or standard treatment) does not work or stops working.

- **Third Line Therapy:** Treatment given for a condition or disease (such as cancer) when both the first-line therapy (the first or standard treatment) and second-line therapy (subsequent treatment) do not work or stop working.

Definitions provided by the *National Cancer Institute* Dictionary of Cancer Terms

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