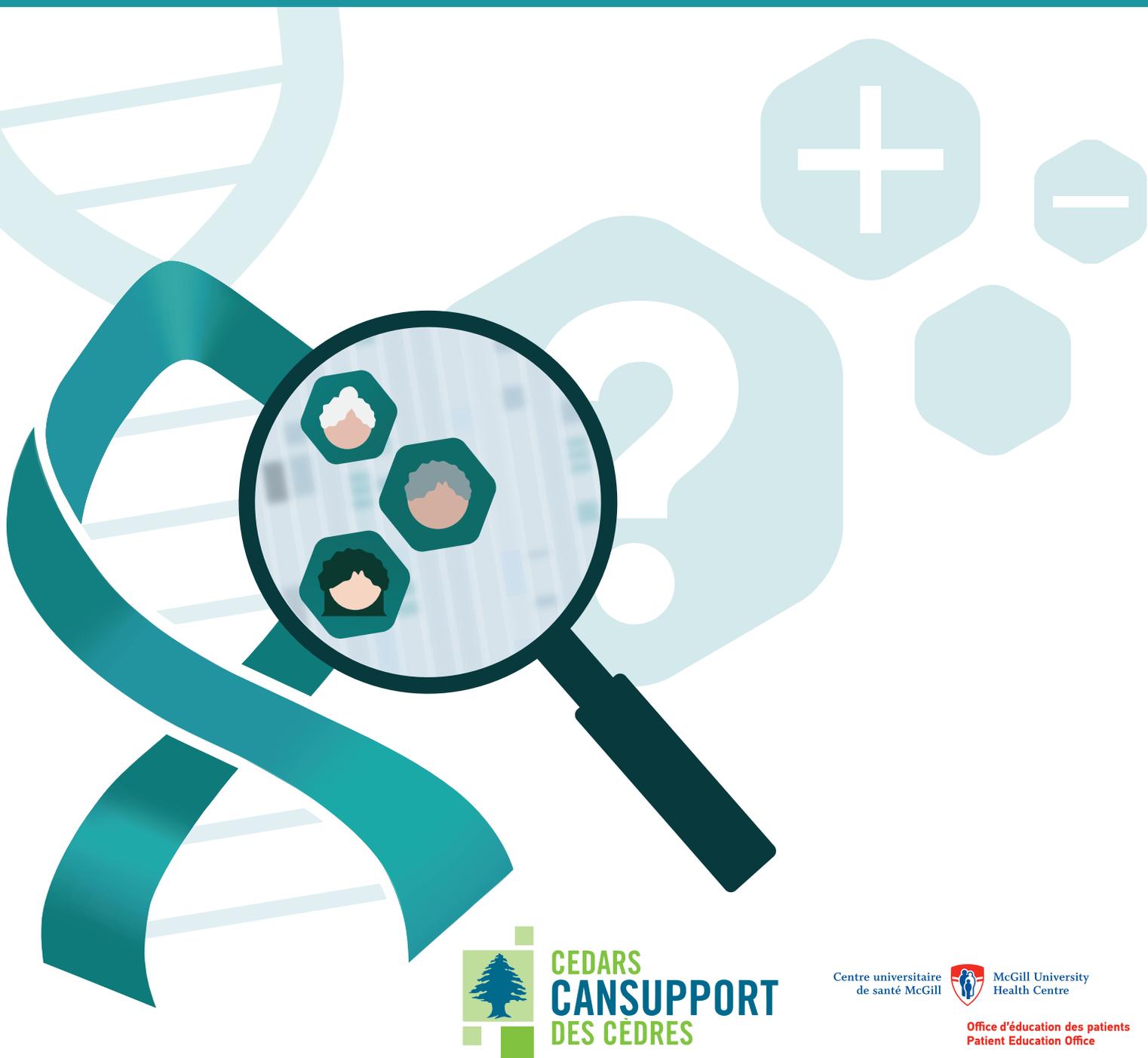


# Genetic Testing for Ovarian Cancer Patients

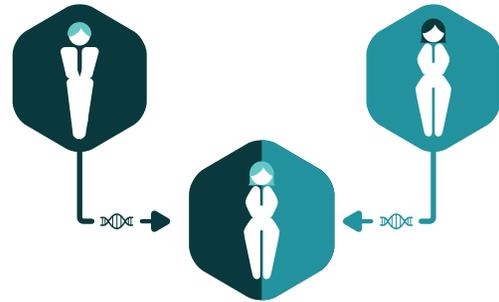
You have been diagnosed with ovarian cancer, and your doctor is recommending genetic testing.

This information pamphlet will help you understand what's involved in genetic testing and what this test could mean for you and your family.



## What are genes?

- **Genes** are units of information that tell your body how to work. Some genes affect basic features like your eye color or your height, other genes affect your risk for health problems like cancer.
- Genes are passed down from parents to their children and then their grandchildren, so we say they are **'inherited.'** Sometimes, changes occur in our genes that stop our genes from working properly. These changes, also called **'mutations'**, can be passed down. Cancer due to inherited mutations in our genes is called **'hereditary cancer.'**
- You get your genes from both of your parents. Half of your genes come from your mother and the other half come from your father. If you have children, you give them half of your genes. In this way, genes from both you and your parents can get passed along to your children.

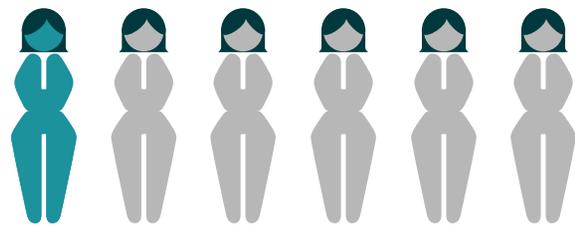


## What is genetic testing and genetic counselling?

- Genetic testing is a blood test that looks for **'mutations'** in your genes.
- By looking to see if you have any gene mutations, we can learn more about your risk to develop other types of cancer, your family members' risks of getting cancer, and how best to treat your cancer.
- A **genetic counsellor** is a health professional that can explain your genetic test results and what it means for you and your family.

## Why am I being offered genetic testing?

- You are being offered genetic testing because you have been diagnosed with ovarian cancer.
- About 1 out of every 6 women with ovarian cancer has hereditary ovarian cancer because of inherited gene mutations.
- The genetic test will look for mutations in a **group of genes** that are linked to ovarian cancer and other cancers. Two of the genes that we test for are **BRCA1** and **BRCA 2**.
- Some inherited gene mutations can increase the chance for developing **other types** of cancers, such as breast cancer or prostate cancer in men.



## What can I learn from genetic testing?

### The test results may:

- Help your healthcare team plan the best treatment options for you.
- Tell you if you have a higher risk of developing other cancers so that you can take steps to manage this risk.
- Help your family learn about their risks of developing cancer and what to do about it. If a mutation is found in your test, your related family members (parents, siblings, children) will be offered genetic testing.

# What are the possible results of your genetic testing?



## Negative result

Most women with ovarian cancer will have a negative result. This means the genetic test did not find a mutation in any of the genes that were tested.

### This means that:

- The chance that your ovarian cancer is hereditary is much smaller. Knowing this may be reassuring for you and your family members.
- Your medical follow-up is unlikely to change. It will continue to be based on your personal and family history of cancer.
- In most cases, your family members do not need to be tested based on these results.



## Positive result

A positive result means that a gene mutation was found. If this is the case, you may see the term “**pathogenic variant**” on your report, which is another term for mutation.

### This means that:

- Your cancer is hereditary. You may have an increased risk for other cancer types.
- A genetic counsellor will meet with you to discuss these results in detail. Together, you can discuss options for cancer screening, treatment, and ways to manage your risk.
- Your medical team can use this result to determine the best treatment plan for you.
- Other family members may be at risk to have the same mutation. Genetic counselling for them is therefore, strongly encouraged. You can talk to the genetic counsellor about this.



## Inconclusive result (VUS)

A genetic change was found in one of the genes tested for, but the testing laboratory cannot say for sure if this is the type of change that can cause cancer or if it is harmless. If this is the case, you may see the term ‘**VUS**’ on your report which stands for ‘**variant of uncertain significance**.’

### This means that:

- You will meet with a genetic counsellor who will explain this result in detail.
- Your cancer screening or treatment is unlikely to change. The risk for you and your family members to develop new cancers depends, as before, on your personal risk factors and your family history of cancer.
- You should remain in contact with Medical Genetics, as we might learn more about this result over time. You can talk to the genetic counsellor about this.

## What are the next steps?

- If you wish to have genetic testing, your **gynecologic oncologist** will order the blood test for you.
- A genetic counsellor from **Medical Genetics** will contact you with the results of your genetic test in about one month.

## Questions you may have:

### Will having this test affect my health insurance?

For people who have already had cancer, genetic testing is not likely to make a difference in their insurance. For people who have not had cancer and would like genetic testing, this will be discussed with them at their appointment.

### Do I have to pay for genetic testing and counselling?

Because of your ovarian cancer, genetic testing and counselling is covered by the provincial health insurance plan (RAMQ).

### Do you have other questions?

If you have any questions or concerns, please call **Medical Genetics** to speak with a **genetic counsellor** from the **Hereditary Cancer team** at **514 - 412 - 4427**.

