Important information about your data

Your genomic data and samples will be stored as part of your health record. DNA samples may be used anonymously for quality control. All data is kept securely and confidentially in line with UK law and NHS policy. More information can be found at www.england.nhs.uk/contact-us/privacy-notice

Information in this guide should be used to supplement professional advice specific to your circumstances. If you have any questions, it is important to ask your medical team or contact

Name.....
.....

Telephone Number/Email.....
.....
.....

INSERT TRUST LOGO HERE

Genomic testing in inherited Ovarian Cancer (Test Code R207)

Patient Information Leaflet

NHS
South West
Genomic Laboratory Hub

V1 Review date February 2025

Why have I been offered an inherited ovarian cancer genetic test (R207)?

You are being offered this test because of your ovarian cancer diagnosis. The test may give us information about why you developed ovarian cancer. In some cases, the results can influence what medicines you are offered during your cancer treatment.

As this is a genomic test, it may tell us about your chance of developing new cancers in the future. Because it is genomic, the results may also have implications for your relatives.

What happens if I have this genetic test?

Genomic testing in inherited Ovarian Cancer (Test Code R207) is carried out on a blood sample.

If you decide to have the R207 genetic test, your healthcare professional will discuss this with you. There is a form to complete which records your choices. Your blood sample will be sent for analysis. Results usually takes around 6 weeks.

The R207 test looks at a panel of genes. Only genes with a proven influence on ovarian cancer risk are looked at. If you have specific questions about the genes currently included in the R207 test, please discuss these with your healthcare professional. If required, you have the option to speak to a genetic specialist before making your decision about testing. Everyone who tests positive, or has a significant family history, will be offered a referral to a genetic specialist.

This section is for any notes you'd like to make during your appointment

Result 2: What does it mean if no variants are found on my genetic test?

This is the most common result. This result means it is unlikely that your ovarian cancer was caused by an inherited gene variant. The risk of future cancers (in you or your relatives) is unlikely to be raised unless you have a significant family history of cancer.

If you have a significant family history of cancer you will be referred to Clinical Genetics for further discussion.

Result 3: What does it mean if genetic variation is found on my test, but is of uncertain significance?

We are all different and there is a lot of variation within our genes. Some gene variants have no effect on how a gene functions. If a new or rare variant is picked up, it can hard to predict whether it affects cancer risk, or whether it is just harmless variation.

If the scientists cannot be sure of a variant's effect, they will report it as an uncertain finding. (In technical terms this is called a "variant of uncertain significance", or "VUS"). If an uncertain variant is found, you will be referred to Clinical Genetics so that they can assess this for you and your family.

Do I have to have a genetic test?

Please take the time to ask all the questions that you need to. If you don't feel ready to have a test right now, your team can store a DNA sample and revisit this with you at a later date. If you decide not to have a genomic test you will still get the best possible health care.

Is ovarian cancer inherited?

Most ovarian cancer is not inherited. Only a small number of ovarian cancers, around 5-10%, are strongly influenced by a genetic variant (a genetic change).

There are a number of genes associated with ovarian cancer. Some of these genes only affect ovarian cancer risk, while others are linked to broader cancer syndromes. For example:

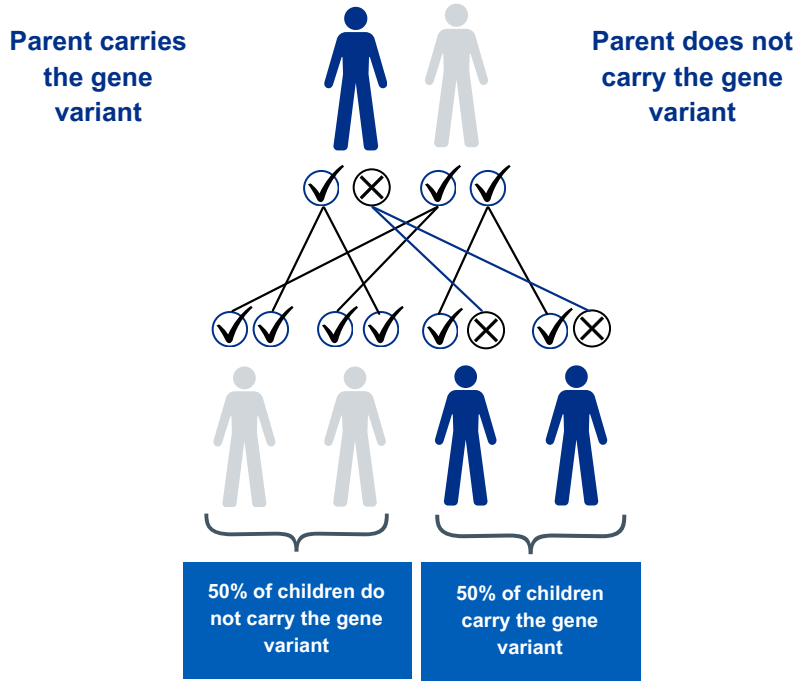
- The BRCA1 and BRCA2 genes are associated with a high risk of breast and ovarian cancer. There may be some increased risk of other cancers, depending on the family history.

- The MMR genes cause a condition called Lynch Syndrome. This is associated with an increased risk of bowel, womb and ovarian cancers.

Inheritance

If a parent has a gene variant, there is a 50% chance of passing it on each time they have a child. This is not influenced by sex; we all have these genes and either parent can pass them on to any child. Importantly, these genes only influence cancer risks in adulthood.

Autosomal dominant inheritance pattern



What results might I get?

Once your sample has been taken the results are returned to your healthcare professional who will share them with you. There are three outcomes to this genetic test:

1. A variant has been found in an ovarian cancer gene.
2. No variants were found in the genes tested.
3. Some genetic variation was found but it is of uncertain significance.

Result 1: What does it mean if a variant is found on my genetic test?

1

This is likely to explain why you developed ovarian cancer. Your cancer care team will inform you of the result and consider this information when planning your treatment.

You will be referred to Clinical Genetics so that you can discuss your result in more detail. Clinical Genetics will explain what the test result means for your future risk of cancer, your options for cancer screening and measures to reduce these risks.

Clinical Genetics will support you in sharing the information with family members, so that everyone gets the care they need. A test will be available for your relatives to assess their genetic cancer risk.