

## What does my genetic testing result mean?

Cancer is a very common condition, with 1 in 2 people diagnosed in their lifetime. Around 5-10% of cases have an underlying inherited genetic cause. The other 90-95% are thought to be due to a combination of random chance, age, lifestyle, environmental factors, and genetic risk factors that we cannot currently test for.

A negative result means that the laboratory did not identify any disease-causing changes in the genes that were tested in your blood sample. Therefore, we have not found a genetic explanation for why you have developed cancer.

## Could the test have missed an important gene change?

The information provided from this test is based upon current scientific knowledge and understanding. We do not yet know all of the factors that influence our health, therefore we cannot say with certainty that there is not an inherited cause for your cancer. There may be genes that we do not yet know about that increase cancer risks in some families. There are continuous efforts being made to better understand the genetics of inherited cancer.

If you have a significant cancer family history, it is possible that you could be offered additional genetic testing in the future, for example if we become aware of new cancer-related genes.

If you become aware of any changes to your family history of cancer in the future, please do not hesitate to inform your GP of this. This will help them to assess whether further input from the Clinical Genetics Service is necessary.

## What does this result mean for my blood relatives?

We encourage you to share your genetic testing result with biological relatives.

**Those without a personal history of cancer:** Although the test did not identify any genetic changes to suggest that you have an inherited cancer risk, if you have a significant family history of cancer (in particular, breast ovarian and prostate), your relatives may still have an increased risk of developing cancer. If this is the case, they should speak to their GP who can refer them to their local family history breast clinic for discussions. In addition, all females aged 50-70 are invited for 3-yearly breast mammograms through the national breast screening programme. Breast screening can be accessed earlier by those aged 40-50 through the NI-based charity 'Action Cancer' (more can be found on their website [www.actioncancer.org](http://www.actioncancer.org)).

**Those with a cancer diagnosis:** It is unlikely that other family members who have had breast or ovarian cancer require genetic testing, as we have already completed this through you. However, if any of your relatives are diagnosed with cancer, their doctors will review whether a referral to genetics is appropriate.