

Talk to your doctor to know more about your risk of cancer

If you are concerned about your risk of breast and ovarian cancer or other types of cancer, talk to your doctor. Consider asking the following questions during your doctor's appointment:

- What is my risk of breast and ovarian cancers?
- What can I do to reduce my risk of cancer?
- What are my options for cancer screening?

If you are concerned about your family history, and you feel that your family may have HBOC, consider asking the following questions:

- Does my family history increase my risk of breast and ovarian cancers?
- Should I meet with a genetic counsellor?
- Should I consider genetic testing?



Up to 25 percent of ovarian cancers may be inherited or passed down

How can I get more information?

Contact the Cancer Genetics Service

Tel: 6436 8088

Email: cgsgroup@nccs.com.sg

Visit the Cancer Genetics Service webpage at <https://www.nccs.com.sg/patient-care/specialties-services/cancer-genetics-service>

or

Scan the QR code below:



For general information about cancer:

Call the Cancer Helpline at 6225 5655
or email cancerhelpline@nccs.com.sg

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Hereditary Breast and Ovarian Syndrome (HBOC)

Does anyone in your family have breast or ovarian cancer?



What is Hereditary Breast and Ovarian Cancer (HBOC) syndrome?

HBOC is an adult-onset, hereditary syndrome which can be passed down and can run in families. This condition increases the risk of developing breast and ovarian cancers in women, breast and prostate cancers in men. It can also increase the risk of pancreatic cancer and melanoma (a form of skin cancer).

Individuals and families with HBOC would benefit from early screening and interventions to prevent and manage their cancer risk.

Up to 10% of female breast cancer and 20% of male breast cancer is caused by HBOC

What causes HBOC syndrome?

A genetic fault (mutation) in the *BRCA1* or *BRCA2* genes is the most common cause of HBOC syndrome. There are other genes (e.g. *ATM*, *PALB2*) associated with an increased risk of breast and other cancers, but these are less common.



Does my family have HBOC syndrome?

Your family history of cancer may give clues if HBOC is present in your family. Having multiple people on the same side of the family (maternal/paternal) with cancer may be suggestive of a hereditary cancer syndrome like HBOC.

If you have the following features in your family, it may mean HBOC is running in the family:

- Breast cancer diagnosed aged 45 or younger
- Male breast cancer
- Multiple breast cancers in the same individual
- Ovarian cancer
- Triple negative breast cancer
- Breast and ovarian cancer in the same individual
- Pancreatic cancer
- Metastatic or high-grade prostate cancer
- 2 or more relatives with breast cancer, one aged under 50
- 3 or more relatives with breast cancer

How is HBOC diagnosed?

HBOC is usually diagnosed by genetic testing. A genetic test is a one-time blood test, that looks at the genes you inherited to identify the presence of faults (if any).

Prior to undergoing genetic testing, you would meet with a genetic counsellor to discuss the benefits, limitations and implications of the genetic test results specific to you.



What can I do if I/my family has HBOC

You would be recommended to begin early and regular screening (clinical breast exams, mammograms, MRIs).

You can also consider risk-reducing procedures like chemoprevention, removal of your breast or ovarian tissue to reduce your risk of cancer.

Finding out you have HBOC can help:

- Guide important treatment and screening options for cancers
- Inform family members who may be at increased cancer risk