

HOW TO FIND OUT MORE ABOUT HBOC?

If you are concerned about your risk or your family's risk of breast cancer or other types of cancer, consider asking your doctor the following questions:

- What is my risk of developing breast or other types of cancer?



- What can I do to reduce my risk of cancer?



- What are my options for cancer screening?



- Does my family history increase my risk of breast cancer or other types of cancer?



- Do I need to see a genetic counsellor?



- Is genetic testing necessary for me?

REFERRAL INFORMATION

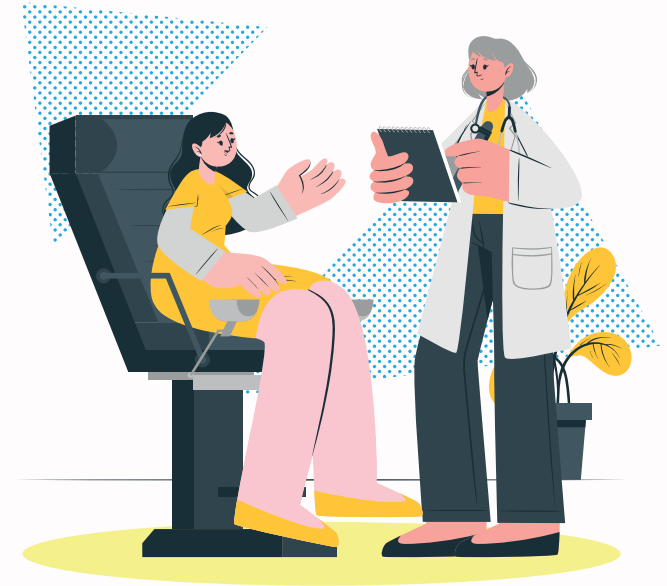


CURIE Genetics (Novena)
Call 6259 5538 for a referral or an appointment.

CURIE Oncology (Farrer)
Call 6442 0160 for a referral or an appointment.

Mondays – Fridays: 8.30am to 5.30pm
Closed on Saturdays, Sundays and Public Holidays

Visit our CURIE Genetics webpage at
www.curiegenetics.sg



HEREDITARY BREAST AND OVARIAN CANCER (HBOC)



CURIE GENETICS

BY CURIE ONCOLOGY

WHAT IS HEREDITARY BREAST AND OVARIAN CANCER (HBOC) SYNDROME?



HBOC is an inherited genetic condition. This means that the cancer risk may be passed from generation to generation in a family.



There are 2 primary genes linked with most families who have HBOC: *BRCA1* and *BRCA2*. *BRCA* stands for Breast Cancer gene. A mutation (a disease-causing change in the gene, like a spelling mistake) in either *BRCA1* or *BRCA2* gives a woman an increased lifetime risk of developing breast and ovarian cancers.

Men with these gene mutations also have an increased risk of breast cancer and prostate cancer. There is a slight increase in the risk of other cancers including pancreatic cancer and melanoma among people with *BRCA1* or *BRCA2* mutations.



Most breast and ovarian cancers are sporadic, meaning they occur by chance with no known cause. Most women who have breast or ovarian cancer **do not** have HBOC.

IS MY FAMILY AT RISK FOR HBOC?



Breast cancer is the leading cause of cancer in women today in Singapore.

Almost 1 in 16 women in Singapore are diagnosed with breast cancer in their lifetime, with around 6 women diagnosing with breast cancer each day, whereas ovarian cancer is less frequent.

About 5-10% of breast cancers and 15-20% of ovarian cancers can be attributed to HBOC.

The chance that a family has HBOC increases in any of these situations:

- 1 or more women are diagnosed with breast and ovarian cancer at age 50 or younger
- 1 or more women are diagnosed with breast cancer before age 50 with an additional family history of cancer, such as prostate cancer, melanoma, and pancreatic cancer
- There are breast and/or ovarian cancers in multiple generations on the same side of the family, such as having both a grandmother and an aunt on the father's side both diagnosed with these cancers
- A woman is diagnosed with a second breast cancer in the same or the other breast or has both breast and ovarian cancers
- A male relative is diagnosed with breast cancer
- There is a history of breast cancer, ovarian cancer, prostate cancer, and/or pancreatic cancer on the same side of the family

WHAT ARE THE SCREENING AND SURVEILLANCES OPTIONS AVAILABLE FOR HBOC?

Intense surveillances such as clinical breast examination, mammogram and MRI. One can also consider risk reducing surgeries such as preventive mastectomy and oophorectomy.



HOW IS GENETIC TESTING DONE?

Mutations in the *BRCA1* or *BRCA2* genes can be identified through a blood or saliva test. Genetic testing is complex; thus, it does not take place without genetic counselling and the process of informed consent. If your family history of cancer suggests HBOC, please talk to your doctor.

A referral to Curie Genetics can help you find out more about HBOC and genetic testing.

