Familial Risk Assessment FRA-BOC

What is FRA-BOC?

Familial Risk Assessment – Breast and Ovarian Cancer (FRA-BOC) is an on-line tool designed for use by health professionals such as general practitioners and nurses.

FRA-BOC:

- provides an estimation of the risk of developing breast or ovarian cancer, based on family history, for unaffected women i.e. those who have not had a diagnosis of breast cancer or epithelial ovarian cancer
- assists health professionals to reassure the majority of women who are at population risk, based on their family history
- identifies women who should be referred to a family cancer clinic for further assessment and advice
- covers most family history scenarios although it should be noted that not every scenario is able to be covered, for example, families where the family history of breast and ovarian cancer is unknown, families that are very small, or families which are predominantly male. For these women, a further individualised risk assessment may be appropriate.

Assess a family history

Family history of breast and/or ovarian cancer

Family history of breast and/or ovarian cancer can be used to estimate:

- A woman’s risk of developing these cancers
- The probability of having an inherited mutation in a known cancer-predisposing gene

Breast cancer is fairly common. One in eight Australian women has a risk of developing breast cancer before the age of 85. Many women have someone in their family who has had breast cancer; this can happen by chance, as the disease is so common. Family history becomes more important when there are more relatives with breast cancer on the same side of the family, especially if the cancer occurs at an early age. Most women will not develop breast cancer, even if they have a close relative with breast cancer.

Rarely, breast cancer can be caused by a fault in a gene that can be passed within families from one
generation to another. These gene faults (mutations) can be inherited from either the mother’s or father’s side of the family. Less than 5% of all breast cancer cases are caused by an inherited gene fault.

Ovarian cancer is less common than breast cancer. One in 78 women will develop invasive epithelial ovarian cancer before the age of 85. Ovarian cancer sometimes has an association with breast cancer. The same inherited genetic faults that make a person more likely to develop breast cancer may also make a person more likely to develop ovarian cancer. Hereditary links appear to account for around 15% of all cases of invasive epithelial ovarian cancer. Women with a family history of breast cancer or ovarian cancer may be at increased risk of developing these cancers, with the risk increasing the more relatives are affected (with breast and/or ovarian cancer) on one side of the family.

Family history of breast cancer is common, but for most families breast cancer is not due to a genetic predisposition. However, rare families have an inherited predisposition to breast cancer. These families tend to have a stronger family history of both breast and ovarian cancer. Such families may be referred to family cancer clinics for further advice and consideration of genetic testing. Genetic testing usually includes testing of the genes currently known to be associated with a genetic predisposition to these cancers (such as BRCA1 and BRCA2) but other genes may be tested in the future.

If a woman reports Jewish ancestry and a family history of breast or ovarian cancer it may be appropriate to refer for assessment at a family cancer clinic.

*In July 2011, National Breast and Ovarian Cancer Centre (NBOCC) amalgamated with Cancer Australia to form a single national agency, Cancer Australia, to provide leadership in cancer control and improve outcomes for Australians affected by cancer.