



Chemoprevention for those at an increased risk of familial breast cancer

Patient Information

Breast Cancer Risk

Everyone has a risk of developing breast cancer but this risk is increased if you have a family history of the disease. Having a high risk of developing breast cancer means a lifetime risk which is 1 in 3 (approximately 30%) or higher. If you have an increased risk of developing breast there are a number of options available to you. This includes the use of chemoprevention medication.

Chemoprevention and Breast Cancer Risk

Chemoprevention describes drugs that are used to reduce the risk of cancer developing. This is different from chemotherapy, which are drugs that are used in the treatment of cancer.

Guidelines produced by the National Institute for Health and Care Excellence (NICE) for familial breast cancer recommend that women at an increased risk of breast cancer should be offered medication to reduce their risk.

It is recommended that chemoprevention does not start prior to the age of 35 and should be taken for five years.

Who is this leaflet for?

This leaflet is for women who have been told that they have a high risk of breast cancer because of their family history and wish to discuss the use of chemoprevention.

Types of Chemoprevention

NICE guidance recommends the use of three drugs; anastrozole, tamoxifen and raloxifene.

Many breast cancers rely on oestrogen to grow. These cancers are known as oestrogen-receptor positive (ER+ positive) breast cancers. Tamoxifen and raloxifene can block the effect of oestrogen on the breast tissue and anastrozole lowers the amount of oestrogen in the body. These drugs can make a breast cancer either grow more slowly or stop growing altogether and have been used for many years in the treatment of people with breast cancer.

Studies have shown that chemoprevention reduces the risk of breast cancer developing in people with a high risk. Your actual reduction in risk will depend on several factors including which chemoprevention drug is taken and your individual risk of breast cancer.

Cancers not sensitive to oestrogen are called oestrogen-receptor negative (ER negative), and the medications have not shown an effect on these cancers.

Possible side effects of chemoprevention

There are both major and minor side effects to consider alongside the potential benefits of chemoprevention. Common side effects can include;

- Menopausal symptoms such as hot flushes
- Vaginal discharge or dryness
- Mild Nausea
- Weight gain
- Muscle and joint pains

Many find that the side effects of chemoprevention are significant enough to stop taking the medication (studies have shown that about one in five will stop taking chemoprevention due to the side effects).

Major side effects can include;

- Small increased risk of cancer of the womb (endometrial cancer) with tamoxifen
- Small increased risk of blood clots (venous thromboembolism) with tamoxifen and raloxifene
- Slight increase in risk of bone fracture with anastrozole (not known for certain)

Medical reasons why chemoprevention should not be taken?

- If you have a personal or family history of blood clots you should not take tamoxifen or raloxifene
- If you have a family history of womb cancer, you should not take tamoxifen
- If you have fragile bones (osteoporosis), you should not take anastrozole
- If you are on HRT (Hormone Replacement Therapy), or on the contraceptive pill or are trying to conceive
- If you have had a bilateral mastectomy to reduce your risk of breast cancer

Making the decision to commence chemoprevention

The decision to commence chemoprevention is a personal one and should be made following consideration of both the benefits and potential risks. Decision aids to help women, along with the healthcare professional, make a more informed decision on the choice of medication which is right for them are available at: www.nice.org.uk/cg164/resources

Your doctor can tell you more about your risk of breast cancer and ways you can help to reduce your risk. Although having a family history of breast cancer is a significant risk factor. It is important to lead a healthy lifestyle. A healthy diet and regular exercise can help to reduce your breast cancer risk as well as your risk of other diseases, such as diabetes, heart disease and stroke.

This information leaflet has been produced by the NICaN Breast Family History Subgroup which represents an accumulation of expert opinion and professional interpretation.

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