

# Benefits and limits of breast screening

## What is breast cancer?

Breast cancer occurs when normal breast cells begin to divide and grow in an abnormal way.

Breast screening can show breast cancers at an early stage, when they are too small for you or your doctor to see or feel.

## Facts about breast cancer

- Breast cancer is one of the most common cancers among women in Ireland. About one in 12 women will get breast cancer in their lifetime.
- Women of any age can get breast cancer, but the risk increases as you get older.
- Research shows that women aged 50 and over are at a higher risk of getting breast cancer.
- If breast cancer is found early, it is likely to be easier to treat.

## What is breast screening?

Breast screening means taking a mammogram (x-ray) of your breasts to look for breast cancer.

## Facts about breast screening

- Screening is for women without symptoms.
- Breast screening helps find breast cancers at an early stage.
- Not all breast cancers can be found by a mammogram.
- Some non-invasive cancers, known as DCIS, are found by screening.
- About one in 20 women will be called back for more tests after their first mammogram. After more tests, most of these women will be found not to have cancer. But being called back for more tests can cause a woman a lot of worry and anxiety.
- About 99% of women who have a BreastCheck mammogram get a normal result.

## How much radiation is used in a mammogram?

The dose of radiation used in a mammogram is very small and is within recommended limits, so the risk to your health is very low.

## Does a mammogram hurt or harm the breasts?

A mammogram takes a few minutes and pressure is applied for a few seconds to each breast. There is no evidence that this harms your breasts. Some women might find this uncomfortable or painful, but normally just for the short time their breasts are being pressed.

## Does screening prevent breast cancer?

Screening does not prevent breast cancer, but it helps to find it early. Cancer can occur at any time, including the time between your mammograms.

## Does screening find all breast cancers?

No screening test is perfect. There are a small number of breast cancers that are not found by a mammogram, but if you go for regular screening, any changes will be found as early as possible. At this early stage, breast cancer is easier to treat and you have a higher chance of a good recovery.

## What is non-invasive cancer (DCIS)?

Non-invasive cancer is known as ductal carcinoma in situ or DCIS for short. DCIS is an early form of breast cancer. It can also be described as pre-cancerous, pre-invasive, non-invasive or intraductal.

When you have DCIS, the milk ducts (channels in your breast that carry milk to the nipple) are cancerous. This means the cancer cells are inside the milk ducts ('in situ') and have not spread within or outside your breast.

DCIS may affect just one area of your breast, but it can sometimes be more widespread and affect different areas at the same time.

## What are the symptoms of DCIS?

Most women with DCIS have no symptoms. Some women may have a lump, a thickening of tissue, a discharge from their nipple or, rarely, a type of rash on or near their nipple.

## How is DCIS diagnosed?

As DCIS does not usually have any symptoms, most cases are diagnosed from a mammogram.

To confirm a diagnosis of DCIS, you would need to have a biopsy, where a piece of breast tissue is taken from your breast. The type of biopsy you would need can be either a stereotactic core biopsy or an ultrasound core biopsy.

If you have symptoms such as a lump or nipple discharge, you will get a range of tests. These may include a mammogram and or an ultrasound, and if necessary a sample of breast tissue may be taken for analysis.

## Are there different types of DCIS?

Yes, they can be divided into high-, intermediate- and low-grade DCIS. This grading is based on what the cells look like under the microscope.

If DCIS is not treated, the cells may spread from the ducts into the surrounding breast tissue and become an invasive cancer (one that can spread to other parts of the body). It is thought that low-grade DCIS is less likely to become an invasive cancer than high-grade DCIS.

Not every woman with DCIS will develop invasive cancer, even if it is not treated. But it is impossible to tell which DCIS will develop into invasive cancer and which will not. As a result, some women will get treatment for a DCIS that would never have become an invasive cancer.

## What types of treatment are offered for DCIS?

DCIS is a very treatable form of breast cancer. The aim of treatment is to prevent the DCIS from becoming invasive cancer. Currently, there is no single approach that is suitable for all women. The treatment you could be offered will depend on factors such as the extent of DCIS and its grade.

## 1. Surgery

Surgery is offered as the first treatment for most types of breast cancer. The type of surgery offered could range from wide local excision, which involves removing the area of DCIS and an area of normal tissue around it, to mastectomy (removing all of the breast) with or without breast reconstruction.

Mastectomy is usually recommended if the DCIS affects a large area of the breast. It is also recommended if it is not possible to get a clear area of normal tissue around the DCIS by wide local excision or if there is more than one area of DCIS.

If the pathologist (the specialist in the laboratory who assesses the tissue) finds an area of invasive cancer alongside the DCIS, this will affect the treatment you are offered.

Usually the lymph nodes in your armpit do not need to be removed if DCIS is diagnosed, but a sample may need to be taken.

## 2. Adjuvant treatments

Adjuvant treatments are treatments that you could get as well as surgery to reduce the risk of DCIS coming back or an invasive cancer developing. These include radiotherapy and hormone therapy.

Chemotherapy is not used for DCIS. Instead, a wide local excision is likely to be followed up with radiotherapy, unless the area of DCIS was very small and/or the DCIS was low grade.

You might be offered hormone therapy if the type of DCIS diagnosed depends on the hormone oestrogen to grow. This will also depend on other factors, including the grade of the DCIS.

## What is an open benign biopsy?

About one in 20 women will be called back for more tests after their first mammogram. One of these tests might include an open biopsy, which is carried out by a surgeon and might find that the change in the breast is benign (shows no sign of cancer).

In a small number of cases where the test produced a benign result, some women may get a biopsy that was not necessary. However, it is not possible to rule out cancer without having this biopsy.