

Invasive ductal breast cancer (IDC)

Invasive breast cancer of no special type (NST)

Breast cancer not otherwise specified (NOS)

This booklet describes what invasive ductal breast cancer is, the symptoms, how a diagnosis is made and possible treatments.

In this booklet we use the term invasive ductal breast cancer although this type of breast cancer is also known as:

- Invasive ductal carcinoma of the breast (IDC)
- Invasive breast cancer of no special type (NST)
- Breast cancer not otherwise specified (NOS)

We hope that this information helps you to discuss any questions you may have with your specialist team. You may also find it useful to read our **Treating breast cancer** booklet.

What is invasive ductal breast cancer?

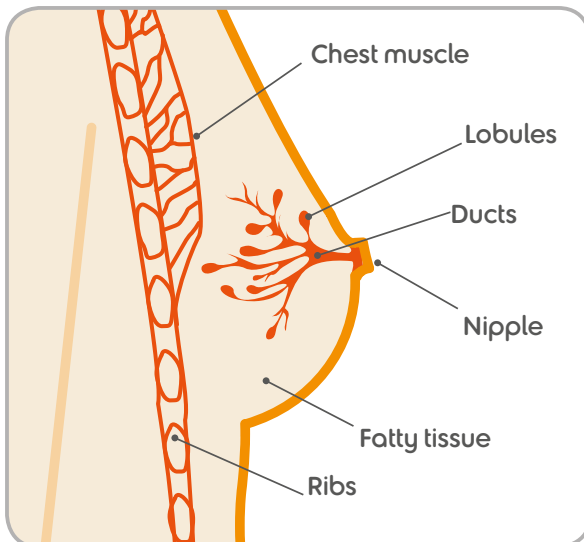
Invasive ductal breast cancer is the most common type of breast cancer in both women and men and accounts for about 75% of all breast cancers.

The reason why it's sometimes referred to as 'no special type' or 'not otherwise specified' is because the cells have no particular features that class them as a specific type of breast cancer when examined under the microscope.

There are other types of breast cancer which are classed as special types such as invasive lobular breast cancer and some other rarer types of breast cancer.

The breasts are made up of lobules (milk-producing glands) and milk ducts (tubes that carry milk to the nipple), which are surrounded by glandular, fibrous and fatty tissue.

The breast



Invasive ductal breast cancer starts when cells within the milk ducts begin to divide and grow in an abnormal way. Invasive ductal breast cancer means the cancer cells are no longer only in the breast ducts. They have spread outside the ducts to the surrounding breast tissue and have the potential to spread to lymph nodes and other parts of the body.

Cancer cells are given a grade according to how different they are to normal breast cells and how quickly they are growing. Invasive ductal breast cancer is graded 1, 2 or 3. In general, a lower grade (1) indicates a slower-growing cancer within the breast while a higher grade (3) indicates a faster-growing cancer.

Our **Understanding your pathology report** booklet has more information about this.

Sometimes invasive ductal breast cancer is found mixed with other types of breast cancer such as DCIS (ductal carcinoma in situ) or invasive lobular breast cancer. We have booklets on both these types of breast cancer.

What are the symptoms?

There are a number of possible symptoms of invasive ductal breast cancer. These include:

- a lump or thickening of the breast tissue
- a change of skin texture such as puckering or dimpling of the skin
- a lump or swelling under the arm
- changes to the nipple
- a discharge from the nipple
- a change in the size or shape of the breast
- constant pain in the breast or armpit
- less commonly, a type of rash involving the nipple known as Paget's disease of the breast.

Routine breast screening with mammograms can often pick up cancer before a woman notices any symptoms. Therefore, some women will be diagnosed with invasive ductal breast cancer after attending breast screening without having any of the symptoms described above.

How is a diagnosis made?

When you visit the breast clinic, you will have an assessment which usually includes a breast examination and one or more investigations to help to make the diagnosis. These can include:

- a mammogram (breast x-ray)
- an ultrasound scan (uses high frequency sound waves to produce an image) of the breast and under the arm (axilla)
- a core biopsy of the breast and/or lymph nodes or possibly a fine needle aspiration (FNA) of the breast and/or lymph nodes.

When there is a change to the skin or nipple a punch biopsy may be performed.

If you'd like more information about these tests see our **Your breast clinic appointment** booklet.

What are the treatments?

Treatment may involve surgery, chemotherapy, radiotherapy, hormone therapy or targeted therapy, in any combination or order.

Surgery to the breast

Surgery tends to be the first treatment for invasive ductal breast cancer. The treatment aims to remove the cancer from the breast. This may be breast-conserving surgery or a mastectomy. Breast-conserving surgery is usually referred to as wide local excision or lumpectomy, and is the removal of the cancer with a margin (border) of normal breast tissue around it. A mastectomy is the removal of all the breast tissue usually including the nipple area. The type of surgery recommended will depend on factors such as where in the breast the cancer is, the size of the cancer and whether there is more than one area in the breast affected.

Some people are offered a choice between breast-conserving surgery and a mastectomy. Studies have shown that long-term survival is the same for breast-conserving surgery followed by radiotherapy as for mastectomy. You may find it helpful to talk through your options with your specialist team. There's also an online, interactive decision-making aid called Option Grid that may help you make your choice. Go to www.optiongrid.org

If you are going to have a mastectomy, you'll usually be offered a breast reconstruction. This can be done at the same time as your mastectomy (immediate reconstruction) or months or years later (delayed reconstruction). This decision may also depend on any treatments which are likely to follow after surgery. If you would like more information, see our **Breast reconstruction** booklet.

Some women who have a mastectomy choose to wear a prosthesis – an artificial breast form that fits inside the bra – while others do not. For more information on the options available, see our booklet **Breast prostheses, bras and clothes after surgery**.

Surgery to lymph nodes under the arm

If you have invasive breast cancer, your specialist team will want to check if any of the lymph nodes (glands) under the arm (the axilla) contain cancer cells. This helps them decide whether or not you will benefit from any additional treatment after surgery. To do this, your surgeon is likely to recommend an operation to remove either some of the lymph nodes (a lymph node sample or biopsy) or all of them (a lymph node clearance).

Sentinel lymph node biopsy is widely used if tests before surgery show no evidence of the lymph nodes containing cancer cells. It identifies whether or not the first lymph node (or nodes) is clear of cancer cells. If it is, this usually means the other nodes are clear too, so no more will need to be removed.

If the results of the sentinel lymph node biopsy show that the first node or nodes are affected you may be recommended to have further surgery or radiotherapy to the remaining lymph nodes.

Sentinel lymph node biopsy is not suitable if tests before your operation show that your lymph nodes contain cancer cells. In this case it is likely that your surgeon will recommend a lymph node clearance.

For more information, see our **Treating breast cancer** booklet.

What are the adjuvant (additional) treatments?

After surgery you may need further medical treatment. The results from any tests and your surgery will help your specialist team decide which treatment(s) to recommend. This is called adjuvant (additional) therapy. It includes radiotherapy (known as a local treatment because it treats one or more areas); and chemotherapy, hormone therapy and targeted therapies (known as systemic therapies because the whole body is treated). The aim of treatment is to reduce the risk of breast cancer cells returning in the same breast or spreading elsewhere in the body, or a new primary breast cancer developing in either breast. The type of breast surgery you have will not affect which type(s) of systemic therapy your specialist team will recommend following your operation.

These treatments can also be given before surgery when they are called neo-adjuvant therapies. Your specialist will discuss with you if they think neo-adjuvant treatments are needed.

Chemotherapy

Chemotherapy is a treatment using anti-cancer (also called cytotoxic) drugs which aims to destroy cancer cells. Whether it's recommended will depend on various features of the cancer, such as its size, its grade (how quickly the cells are dividing and how different they are to normal breast cells) and whether the lymph nodes are affected. Chemotherapy can also be given before surgery. This is known as primary or neo-adjuvant chemotherapy. For more information see our **Chemotherapy for breast cancer** booklet.

Radiotherapy

Radiotherapy is the use of high energy x-rays to destroy cancer cells. If you have breast-conserving surgery you will usually be given radiotherapy to reduce the risk of the breast cancer returning in the same breast. If you have a mastectomy you may be given radiotherapy to your chest in the area where you had your surgery. This is more likely if there is a high risk that cancer cells may return around the mastectomy scar or if cancer cells are found in the lymph nodes under the arm (axilla). For more information see our **Radiotherapy for primary (early) breast cancer** booklet.

Hormone (endocrine) therapy

As the hormone oestrogen can play a part in stimulating some breast cancers to grow, a number of hormone therapies work in different ways to block the effect of oestrogen on cancer cells.

Hormone therapy will only be prescribed if your breast cancer has receptors within the cell that bind to the hormone oestrogen, known as oestrogen receptor positive or ER+ breast cancer. All breast cancers are tested for oestrogen receptors using tissue from a biopsy or after surgery. When oestrogen binds to these receptors, it can stimulate the cancer to grow.

If your cancer is oestrogen receptor positive, your specialist will discuss with you which hormone therapy they think is most appropriate.

When oestrogen receptors are not found (oestrogen receptor negative or ER-) tests may be done for progesterone (another hormone) receptors. The benefits of hormone therapy are less clear for people whose breast cancer is only progesterone receptor positive (PR+ and ER-). Very few breast cancers fall into this category. However, if this is the case for you your specialist will discuss with you whether hormone therapy is appropriate.

If your cancer is found to be hormone receptor negative, then hormone therapy will not be of any benefit.

See our **Treating breast cancer** booklet or our individual hormone drug booklets for more information.

Targeted therapies

This is a group of drugs that block the growth and spread of cancer. They target and interfere with processes in the cells that cause cancer to grow.

The most widely used targeted therapy is trastuzumab (Herceptin). Only people whose cancer has high levels of HER2 (called HER2 positive) will benefit from having trastuzumab. HER2 is a protein that makes cancer cells grow.

There are various tests to measure HER2 levels which are done on breast tissue removed during a biopsy or surgery. If your cancer is found to be HER2 negative, then trastuzumab will not help you. For more information see our **Trastuzumab (Herceptin)** booklet.

Helping you face breast cancer

If you've been diagnosed with breast cancer there's a lot to take in. It can be an emotional time for you, your family and friends. Our free information and support services are here to help – on the phone, or online 24 hours a day.

Ask us

Calls to our free Helpline are answered by specialist nurses and trained staff with personal experience of breast cancer. They'll understand the issues you're facing and can answer your questions. Or you can Ask the Nurse by email instead via our website.

Free Helpline **0808 800 6000** (Text Relay 18001)
Monday–Friday 9am–5pm, Saturday 9am–1pm
www.breastcancercare.org.uk/ATN

Expert information

Written and reviewed by healthcare professionals and people affected by breast cancer, our free booklets and other information resources cover all aspects of living with breast cancer. Download or order booklets from our website or call the Helpline.

Talk to someone who understands

Our Someone Like Me service puts you in contact with someone else who's had breast cancer and who's been fully trained to help. This can be over the phone or by email.

You can also chat to other people going through breast cancer on our online discussion Forum. It's easy to use, professionally moderated and available to read any time of day.

Find out more about all of our services for people with breast cancer at www.breastcancercare.org.uk/services or phone the Helpline.

We're here for you: help us to be there for other people too

If you found this booklet helpful, please use this form to send us a donation. Our information resources and other services are only free because of support from people such as you.

We want to be there for every person facing the emotional and physical trauma of a breast cancer diagnosis. Donate today and together we can ensure that everyone affected by breast cancer has someone to turn to.

Donate by post

Please accept my donation of **£10/£20/my own choice of £**

I enclose a cheque/PO/CAF voucher made payable to
Breast Cancer Care

Donate online

You can give using a debit or credit card at
www.breastcancercare.org.uk/donate

My details

Name _____

Address _____

_____ Postcode _____

Email address _____

We might occasionally want to send you more information about our services and activities

- Please tick if you're happy to receive email from us
- Please tick if you don't want to receive post from us

We won't pass on your details to any other organisation or third parties.

Please return this form to Breast Cancer Care, Freepost RRRKZ-ARZY-YCKG,
5-13 Great Suffolk Street, London SE1 0NS



About this booklet

Invasive ductal breast cancer was written by Breast Cancer Care's clinical specialists, and reviewed by healthcare professionals and people affected by breast cancer.



**For a full list of the sources
we used to research it:**

Phone 0345 092 0808

Email publications@breastcancercare.org.uk



You can order or download more copies from
www.breastcancercare.org.uk/publications



**For a large print, Braille, DAISY
format or audio CD version:**

Phone 0345 092 0808

Email publications@breastcancercare.org.uk





the breast cancer
support charity

Breast Cancer Care is the only UK-wide charity providing specialist support and tailored information for anyone affected by breast cancer.

Our clinical expertise and emotional support network help thousands of people find a way to live with, through and beyond breast cancer.

Visit www.breastcancercare.org.uk or call us free on **0808 800 6000** (Text Relay 18001).

Central Office

Breast Cancer Care
5–13 Great Suffolk Street
London SE1 0NS
Phone: 0345 092 0800
Email: info@breastcancercare.org.uk

Registered charity in England and Wales 1017658
Registered charity in Scotland SC038104
Registered company in England 2447182

Diagnosed with breast cancer