BREAST CANCER DIAGNOSIS

Invasive breast cancer (no special type)

About this booklet

This booklet explains what invasive breast cancer (no special type or NST) is, the symptoms, how it's diagnosed and available treatment options. We use the name invasive breast cancer (NST) in this booklet, but it may also be called:

- Invasive ductal carcinoma of the breast (IDC)
- Breast cancer not otherwise specified (NOS)

This booklet will help you discuss any questions you have with your treatment team. You may find it useful to read our **Treating primary breast cancer** booklet too.

What is invasive breast cancer (NST)?

Invasive breast cancer (NST) is the most common type of breast cancer.

"Invasive" means the cancer cells have spread outside the ducts into the surrounding breast tissue. Invasive breast cancer has the potential to spread to other areas of the body. Treatments aim to reduce the risk of this happening.

NST stands for "no special type". It's called "no special type" because the cancer cells have no features that class them as a special type of breast cancer when examined under a microscope. Sometimes invasive breast cancer (NST) is found mixed with other types of breast cancer.

Both primary and metastatic (secondary) breast cancer can be invasive breast cancer (NST).

Although it's rare, men can get breast cancer. Invasive breast cancer (NST) is also the most common type of breast cancer in men.

Symptoms of invasive breast cancer (NST)

Symptoms of invasive breast cancer (NST) include:

- A lump or thickening of the breast tissue, upper chest or armpit
- A change in the size or shape of the breast
- A change of skin texture, such as puckering or dimpling of the skin
- A change in colour of the breast – the breast may look red, darker or inflamed
- Changes to the nipple, for example it has become pulled in (inverted)
- Discharge from the nipple
- A rash involving the nipple

Routine breast screening can often pick up cancer before you notice any symptoms. Some people will be diagnosed with invasive breast cancer (NST) after attending breast screening without having any of the symptoms above.

Diagnosing invasive breast cancer (NST)

Invasive breast cancer (NST) is diagnosed using a range of tests. These may include:

- A mammogram (breast x-ray)
- An ultrasound scan (using sound waves to produce an image)
- A core biopsy of the breast and sometimes lymph nodes (using a hollow needle to take a sample of tissue to be looked at under a microscope – several tissue samples may be taken at the same time)
- A fine needle aspiration (FNA) of the breast and sometimes lymph nodes (using a fine needle and syringe to take a sample of cells to be looked at under a microscope)

You can read more about these and other tests which may be used in our booklet **Your breast clinic appointment**.

Treatment

Treatment for primary breast cancer aims to remove the cancer and reduce the risk of it coming back or spreading to other parts of the body.

For metastatic (secondary) breast cancer, the aim of treatment is to control and slow down the spread of the cancer and relieve symptoms.

The treatment you're offered will depend on the features of your cancer. This includes the:

- Size
- Grade
- Stage
- Hormone receptor status
- HER2 status

You can read more about these in our booklet **Understanding your pathology results**.

Surgery

The first treatment for invasive breast cancer (NST) is usually surgery.

The type of surgery recommended depends on:

- Where the cancer is in the breast
- The size of the cancer in relation to the size of your breast
- Whether more than 1 area in the breast is affected

Your breast surgeon will discuss these options with you.

Types of breast surgery

Breast-conserving surgery

Also known as wide local excision or lumpectomy, this is removal of the cancer with a margin (border) of normal breast tissue around it.

Sometimes you might need further operations after having breast-conserving surgery if the margin of normal tissue surrounding the cancer that was removed is not clear. This is to make sure all the cancer has been removed. In some cases, this second operation will be a mastectomy.

Mastectomy

This is removal of all the breast tissue, usually including the nipple area.

Most people who have a mastectomy will have the option of breast reconstruction. This can be done at the same time as your mastectomy (immediate reconstruction) or months or years later (delayed reconstruction). If you would like more information, see our **Breast reconstruction** booklet.

Some people who have a mastectomy and do not have a reconstruction choose to wear a prosthesis (an artificial breast form that fits inside the bra). Some people choose not to have reconstruction and not to wear a prosthesis after their mastectomy. There's more information on the options available in our booklet **Breast prostheses, bras and clothes after surgery**.

Surgery to the lymph nodes under the arm

If you have invasive breast cancer, your treatment team will want to check if any cancer cells have spread to the lymph nodes (glands) under your arm.

Along with other information about your breast cancer, this helps them decide if you'll benefit from any other treatment after surgery.

Sentinel lymph node biopsy

You may have a sentinel lymph node biopsy. The sentinel lymph node is the first lymph node cancer cells are likely to spread to. There may be more than one sentinel lymph node.

Sentinel lymph node biopsy is often done if tests before your surgery show no evidence the lymph nodes contain cancer cells.

The procedure is usually done at the same time as your cancer surgery but may be done before.

If the results show the sentinel lymph node is clear of cancer cells, the other nodes are usually clear too, and no more will need to be removed.

If the results show the first node or nodes contain cancer cells, you may be offered more surgery or radiotherapy to the remaining lymph nodes.

Lymph node clearance

If tests before your operation show your lymph nodes contain cancer cells, your surgeon is likely to recommend an axillary lymph node clearance. This is when all the lymph nodes under the arm (axilla) are removed.

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

Other treatments

After surgery, you will usually need other treatments. These can include:

- Chemotherapy
- Radiotherapy
- Hormone (endocrine) therapy
- Targeted therapy
- Bisphosphonates

These treatments aim to reduce the risk of breast cancer returning in the same breast or spreading somewhere else in the body (metastatic breast cancer). The treatments you are recommended will depend on the features of your breast cancer and your individual situation.

Treatments given after surgery are called adjuvant treatments.

Some of these treatments can be given before surgery. This is known as neo-adjuvant or primary treatment.

Chemotherapy

Chemotherapy destroys cancer cells by affecting their ability to divide and grow. It's given to reduce the risk of breast cancer returning or spreading.

Whether chemotherapy is recommended will depend on the features of the cancer and whether the lymph nodes are affected.

See page 8 for more information.

Before surgery

Chemotherapy may be used before surgery to slow the growth of breast cancer. It might also be given to shrink a larger breast cancer before surgery, which may mean you can have breast-conserving surgery rather than a mastectomy.

Chemotherapy given before surgery is called primary or neo-adjuvant chemotherapy.

After surgery

Chemotherapy may be used after surgery for primary breast cancer to reduce the risk of cancer returning or spreading. This is called adjuvant chemotherapy. You may be given chemotherapy in combination with other treatments.

Genomic assays

When the benefit of chemotherapy is less certain, your treatment team may suggest a test called a genomic assay. You may hear it called gene expression profiling or gene assays.

These tests look at groups of genes found in the breast cancer cells. They help identify who is most likely to benefit from chemotherapy and how likely the cancer is to return (recurrence).

The tests are carried out on breast tissue removed during surgery, usually in a laboratory away from your hospital.

Genomic assays are not suitable for everyone and sometimes do not provide a clear answer. Your treatment team will discuss whether these tests are suitable for you.

For more information about chemotherapy, see our **Chemotherapy for breast cancer** booklet.

Metastatic (secondary) breast cancer

Chemotherapy can be used to treat metastatic (secondary) breast cancer. Chemotherapy can control or slow the growth of metastatic breast cancer. It can also help relieve some symptoms. Different chemotherapy drugs are used to treat metastatic breast cancer. You may be given them alone or in combination with other treatments.

See our **Secondary breast cancer information pack** for more information.

Radiotherapy

Radiotherapy uses high energy x-rays to destroy cancer cells. If you have breast-conserving surgery, you will usually be offered radiotherapy to the breast. This is to reduce the risk of the breast cancer coming back in the same breast.

You may also have radiotherapy to the lymph nodes under the arm or above the collarbone.

Radiotherapy is sometimes given to the chest wall after a mastectomy, for example if the lymph nodes under the arm are affected.

For more information see our **Radiotherapy for primary breast cancer** booklet.

Metastatic breast cancer

Radiotherapy can also be used to treat metastatic breast cancer. It can be used to control the cancer or relieve symptoms.

Hormone (endocrine) therapy

Oestrogen receptor positive (ER-positive)

Some breast cancers use oestrogen in the body to help them to grow. These are known as oestrogen receptor positive or ER-positive breast cancers.

Hormone therapies block or stop the effect of oestrogen on breast cancer cells. Different hormone therapy drugs do this in different ways.

Hormone therapy will only be prescribed if your breast cancer is ER-positive.

See our individual hormone drug booklets for more information.

INFO

How do I know if my breast cancer is ER-positive?

Breast cancers are tested to see if they are ER-positive using tissue from a biopsy or after surgery.

If your cancer is ER-positive, your treatment team will discuss with you which hormone therapy they think is most appropriate.

If oestrogen is not helping your breast cancer grow, it's ER-negative and hormone therapy will not be of benefit.

You may also have tests to see if a hormone called progesterone is helping your breast cancer grow. If it is, it's called progesterone receptor positive or PR-positive.

The benefits of hormone therapy are less clear for people whose breast cancer is PR-positive but ER-negative. Very few breast cancers fall into this category. Your treatment team will discuss if hormone therapy is suitable if this is the case.

Targeted therapies

Targeted therapies are drugs that block the growth and spread of cancer. They target and interfere with processes in the cells that help cancer to grow.

Whether you have targeted therapy, and the type of targeted therapy you may have, will depend on the features of your breast cancer.

For information about different types of targeted therapies, see **breastcancernow.org/targeted-therapy**

Bisphosphonates

Bisphosphonates are a group of drugs that can reduce the risk of breast cancer spreading in women who have been through the menopause. They can be used if the menopause happened naturally or because of breast cancer treatment.

They can also slow down or prevent bone damage. They are often given to people who have, or are at risk of, osteoporosis (when bones lose their strength and are more likely to break).

Bisphosphonates are usually given into a vein (intravenously).

Your treatment team can tell you if bisphosphonates would be suitable for you.

For more information about bisphosphonates, see our website **breastcancernow.org**

After treatment

Follow-up

You will continue to be monitored after your hospital-based treatments (such as surgery, chemotherapy or radiotherapy) finish. This is known as follow-up.

If you had breast-conserving surgery, follow-up will include regular mammograms to both breasts.

If you had a mastectomy, you'll have a mammogram on your other breast.

To find out more information about what happens after your hospital-based treatments end, see our booklet **After breast cancer treatment: what now?**

Checking for changes

It's important to be aware of any changes to the breast, chest or surrounding area, whether you had breast-conserving surgery or a mastectomy (with or without reconstruction).

It can be difficult to know how your breast or scar area should feel. The area around the scar may feel lumpy, numb or sensitive.

This means you will need to get to know how it looks and feels so you know what's normal for you. This will help you to feel more confident about noticing changes and reporting them early to your GP or breast care nurse.

Having breast cancer in one breast means the risk of developing cancer in the other breast (a new primary breast cancer) is slightly higher than in someone who has never had breast cancer. Therefore, it's important to be aware of any new changes in your other breast and to report these as soon as possible.

For more information, see our booklet **After breast cancer treatment: what now?**

If you have any concerns, speak with your GP or breast care nurse.

Metastatic invasive breast cancer (NST)

Metastatic breast cancer occurs when the breast cancer cells spread from the primary (first) cancer in the breast to other parts of the body.

Metastatic invasive breast cancer (NST) can affect the:

- Bones
- Lungs
- Liver
- Brain
- Skin

It's important to be aware of the signs and symptoms of metastatic breast cancer. You can find these on our webpage **breastcancernow.org/secondary-symptoms**

Further support

Being diagnosed with breast cancer can be a difficult and frightening time. There may be times when you feel alone or isolated.

Some people find it helpful to discuss their feelings and concerns with their breast care nurse or specialist. If you'd like to talk through how you are feeling in more depth, you may want to see a counsellor or psychologist. Your breast care nurse, specialist or GP can help arrange this.

You might want to speak to someone who knows what it's like. If you've had a primary breast cancer diagnosis, our Someone Like Me service can put you in touch with someone who's had a similar experience to you, so you can talk through your worries and share experiences over the phone or by email. Visit our website at **breastcancernow.org** to find out more.

Our Living with Secondary Breast Cancer service is available in person and online for anyone who's been diagnosed with metastatic breast cancer. Our groups are a chance to explore wellbeing, side effects, exercise – or just share what's on your mind. And it's all facilitated by qualified counsellors.

Whatever you choose, you'll be able to talk, listen and learn with people who understand what it's really like to live with metastatic breast cancer. Find out more on our website.

You can also visit our online forum and join one of the ongoing discussions at **forum.breastcancernow.org**

Or call our helpline on **0808 800 6000** and talk through your diagnosis, treatment and how you are feeling with one of our nurses.

We're the UK's leading breast cancer charity. And we're combining the power of science and support to change breast cancer.

Life-saving science
Uncovering how breast cancer develops and spreads. New and better treatments that can find and destroy cancer cells. And one day, cures that can stop it in its tracks entirely.

Life-changing support
Expert information on everything from signs and symptoms to chemotherapy. Help so you can live well. Meeting people who are going through the same thing – people who just get it.

Change-making campaigns
Making sure everyone knows the importance of checking their breasts and chests, and the signs to look out for. Pushing for better diagnosis and care. Making sure everyone can get the drugs they need.

We don't get any government or NHS funding for our information or support. We rely on our supporters to make change happen.

So if you've found this information helpful and you'd like to support us, go to: **breastcancernow.org/give**

About this information

Invasive breast cancer (no special type) was written by Breast Cancer Now'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:
Email **health-info@breastcancernow.org**

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Whatever breast cancer brings, we're here.

Information on everything from symptoms to treatment and beyond. Support to help you live well. Meet people going through the same thing – people who just get it.

We're here with life-changing information and support now. Whatever you're going through. However you need it.

Call **0808 800 6000** to talk to one of our nurses.

Visit **breastcancernow.org** now for breast cancer information you can trust.

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