

Metaplastic breast cancer

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1. What is metaplastic breast cancer?

Breast cancer starts when cells in the breast begin to divide and grow in an abnormal way.

There are lots of different types of breast cancer. A pathologist (a doctor who examines tissue removed during a biopsy or surgery) looks at the cancer cells under a microscope to see what type of breast cancer it is by how it looks.

Metaplastic breast cancer is a rare type of breast cancer accounting for around 1% of breast cancers.

Metaplastic breast cancer is an invasive cancer, which means it has the potential to spread to other parts of the body.

2. What are the symptoms of metaplastic breast cancer?

As with most types of breast cancer, the symptoms of metaplastic breast cancer can include:

- A change in the size of the breast
- A lump or thickening of the skin
- Changes to the nipple
- Puckering or dimpling of the skin
- Pain in the breast

Routine breast screening can often pick up cancer before there are any symptoms. Therefore, some women will be diagnosed with metaplastic breast cancer after attending breast screening without having any of the symptoms described above.

Find out more about the signs and symptoms of breast cancer and how to check your breasts.

3. How is metaplastic breast cancer diagnosed?

Metaplastic breast cancer 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)

4. How is metaplastic breast cancer treated?

As with all types of breast cancer, the treatments you are offered will depend on the features of your metaplastic breast cancer (such as size, grade, hormone receptor status and HER2 status).

When breast cancers are HER2 negative, oestrogen receptor negative and progesterone receptor negative, the cancer is referred to as being 'triple negative'. Metaplastic breast cancer is more likely to be triple negative, which will also affect the treatment you will have. Find out more about triple negative breast cancer.

Surgery

Breast surgery is often the first treatment for metaplastic breast cancer. If the cancer is triple negative, you may have chemotherapy first. This is known as neo-adjuvant or primary treatment.

The surgery you have may be:

- Breast-conserving surgery, also known as wide local excision or lumpectomy – removal of the cancer with a margin (border) of normal breast tissue around it
- Mastectomy – removal of all the breast tissue often including the nipple area

The amount of tissue removed depends on the area of the breast affected, how big the cancer is in relation to the size of your breast, and whether more than one area in the breast is affected. Your breast surgeon will discuss this with you.

If you have breast-conserving surgery, it's important that a clear margin of tissue is taken from around the cancer. If a clear margin of tissue is not seen when the area removed is examined under the microscope, sometimes a second operation is needed.

If you're going to have a mastectomy, you may be able to have breast reconstruction either at the same time as your mastectomy (immediate reconstruction) or at a later date (delayed reconstruction).

Many women who have a mastectomy without breast reconstruction choose to wear a prosthesis – an artificial breast form that fits inside the bra. Find out more about breast prostheses, bras and clothes after surgery.

Some women choose not to have reconstruction and not to wear a prosthesis after their mastectomy.

Lymph node removal

Metaplastic breast cancer is less likely to spread to the lymph nodes (glands) under the arm (axilla) than other invasive breast cancers. However, your treatment team will want to check if your lymph nodes contain cancer cells. This, along with other information about your breast cancer, 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

Sentinel lymph node biopsy is widely used if tests before surgery show no evidence of the lymph nodes containing cancer cells. It identifies whether the sentinel lymph node (the first lymph node that the cancer cells are most likely to spread to) is clear of cancer cells. There may be more than one sentinel lymph node. If clear, this usually means the other nodes are clear too, so no more will need to be removed.

Sentinel lymph node biopsy is usually carried out at the same time as your cancer surgery but may be done before.

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

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.

[Find out more about surgery to the lymph nodes.](#)

Adjuvant (additional) treatments

After surgery, you may need other treatments. These are called adjuvant treatments and can include:

- [Chemotherapy](#)
- [Radiotherapy](#)
- [Hormone \(endocrine\) therapy](#)
- [Targeted \(biological\) therapies](#)
- [Bisphosphonates](#)

The aim of these treatments is to reduce the risk of [breast cancer returning](#) in the same breast or developing in the other breast or spreading somewhere else in the body.

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

Chemotherapy

[Chemotherapy](#) will be recommended for many people with metaplastic breast cancer. Chemotherapy destroys cancer cells using anti-cancer drugs, and is given to reduce the risk of breast cancer returning or spreading.

Whether or not you're offered chemotherapy depends on various features of the cancer including its [size](#), [grade](#), [hormone receptor status](#) and [HER2 status](#), and whether the lymph nodes are affected.

You may have chemotherapy before or after surgery.

Radiotherapy

If you have breast-conserving surgery you will usually be offered radiotherapy to the breast to reduce the risk of the cancer coming back in the same breast.

Some people may also have radiotherapy to the lymph nodes under the arm or above the collar bone.

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

Hormone (endocrine) therapy

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

Invasive breast cancers are tested to see if they are ER+ using tissue from a biopsy or after surgery. If your cancer is ER+, your specialist will discuss with you which hormone therapy they think is most appropriate.

If your breast cancer is not stimulated by oestrogen it is known as oestrogen receptor negative (ER-), and hormone therapy won't be of benefit. Metaplastic breast cancer is more likely to be oestrogen receptor negative (ER-).

Tests will also be done to see if your breast cancer is progesterone receptor positive (PR+). Progesterone is another hormone. 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 your specialist will discuss with you whether hormone therapy is appropriate.

[Find out more about when hormone therapy is given.](#)

Targeted (biological) 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 help cancer grow.

The type of targeted therapy you are given will depend on the features of your breast cancer.

The most widely used targeted therapies are for HER2 positive breast cancer. HER2 is a protein that helps cancer cells grow.

There are various tests to measure HER2 levels, which are done on breast tissue removed during a biopsy or surgery. Only people whose cancer has high levels of HER2 (HER2 positive) will benefit from this type of treatment.

If your cancer is found to be HER2 negative, then targeted therapies for HER2 positive breast cancer will not be of any benefit. Metaplastic breast cancer is often HER2 negative.

For information about different types of targeted therapies for people with either HER2 positive or HER2 negative breast cancer, see our [targeted therapy information](#).

Bisphosphonates

Bisphosphonates are a group of drugs that can reduce the risk of breast cancer spreading in post-menopausal women. They can be used regardless of whether the menopause happened naturally or because of breast cancer treatment.

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

Bisphosphonates can be given as a tablet or into a vein (intravenously).

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

5. Follow-up after treatment

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

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

It can be difficult to know how your breast or scar should feel. The area around the scar may feel lumpy, numb or sensitive. This means that you'll need to get to know how it looks and feels so you know what is 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's never had breast cancer. Therefore it's important to be aware of any new changes in the other breast and to report these as soon as possible.

6. Further support

Being diagnosed with breast cancer can make you feel lonely and isolated.

Many people find it helps to talk to someone who has been through the same experience as them. Breast Cancer Now's [Someone Like Me](#) service can put you in touch with someone who has had a diagnosis of breast cancer, so you can talk through your worries and share experiences over the phone or by email. You can also visit our confidential online [Forum](#) and join one of the ongoing discussions.

If you would like any further information and support about breast cancer or just want to talk things through, you can speak to one of our experts by calling our free [Helpline](#) on **0808 800 6000**.

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