

## Breast cancer

This information is about breast cancer and treatments for breast cancer.

Any words that are underlined are explained in the word list at the end.

If you have any questions, ask your doctor or nurse at the hospital where you are having your treatment.

If you have any questions or want to talk to someone, you can call Macmillan Cancer Support on **0808 808 00 00**, Monday to Friday, 9am to 8pm. We have interpreters, so you can speak to us in your own language. Just tell us, in English, the language you want to use.

We have more information in [language] about different cancers, treatments and living with cancer.

Visit [macmillan.org.uk/translations](https://www.macmillan.org.uk/translations) or call us on **0808 808 00 00**.

### In this fact sheet:

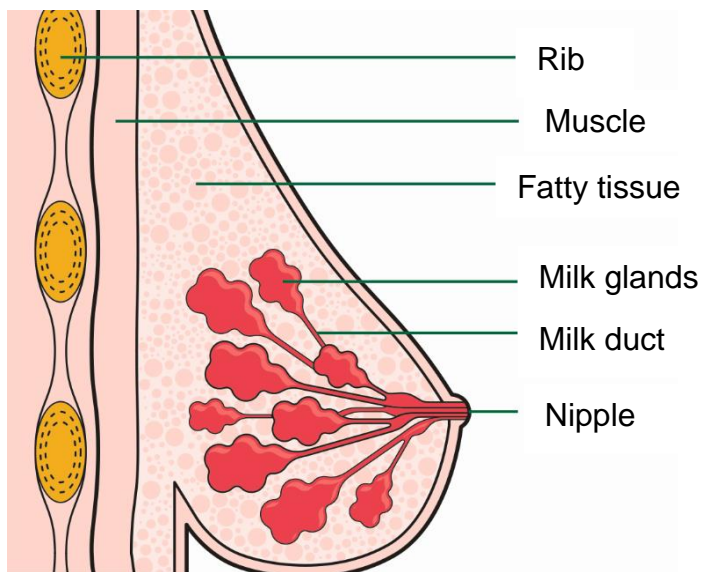
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## The breasts

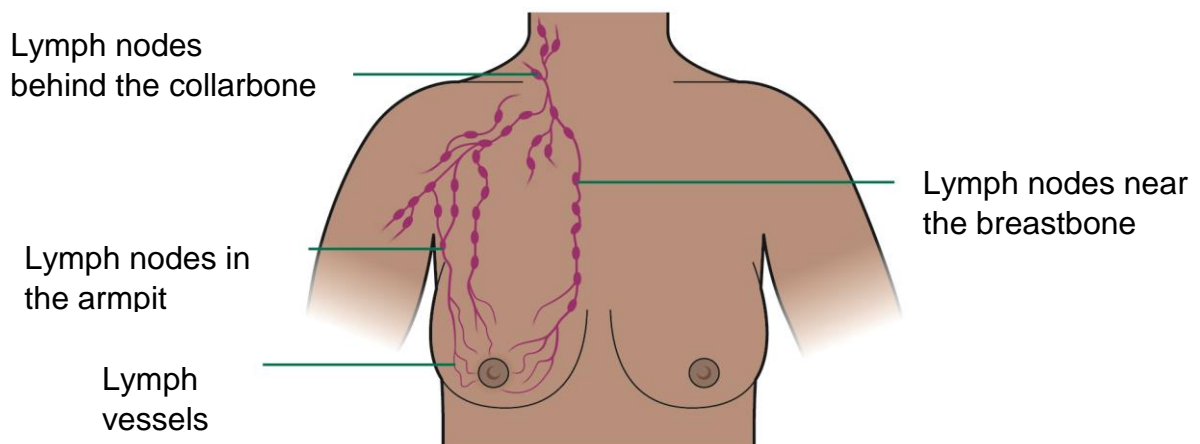
The breasts are made of fat and tissue. They also have glands where breast milk is made. The glands are connected to the nipple by fine tubes called milk ducts. Men have a small amount of breast tissue behind the nipple.

There is breast tissue and lymph nodes (glands) in the armpits. The lymph nodes are part of the lymphatic system. There are also lymph nodes near the breastbone and behind the collarbones.

### Side view of the breast



### The lymph nodes near the breasts



## Breast cancer

Body tissue is made up of tiny cells. Breast cancer happens when cells in the breast grow in an uncontrolled way and form a lump called a tumour (primary cancer). Sometimes, cancer cells spread to other parts of the body through the blood and lymphatic system. This is called secondary cancer.

There are different types of breast cancer, but they are treated in similar ways. Breast cancer mainly affects women. Men can also have it, but this is rare.

Breast cancer is not infectious and cannot be passed on to other people.

### Stages and grades of breast cancer

- The stage of a cancer means how big it is and if it has spread.
- The grade of a cancer is how quickly the cancer may grow.

### Receptors

Some breast cancer cells have receptors that hormones or proteins can attach to. These can make the cancer grow.

- **Hormones** – some breast cancers have receptors for the hormone oestrogen. These are called oestrogen-receptor positive (ER positive) breast cancers. Hormonal therapies work well for ER positive breast cancer.
- **Proteins** – some breast cancers have receptors for the protein HER2. They are called HER2 positive breast cancers. Your doctor may give you trastuzumab for this type of cancer. This belongs to a group of drugs called targeted therapies.

### Triple negative breast cancer

Breast cancer that does not have receptors for hormones or proteins is called triple negative breast cancer.

1 in 5 women with breast cancer (20%) will have triple negative breast cancer. It is more common in younger women and in black women. Your doctor or nurse can tell you more about this.

### How treatment is planned

Your healthcare team will meet to plan the best treatment for you. Your doctor or nurse will then talk to you about:

- the stage and grade of the cancer
- if the cancer has hormone or protein receptors
- your general health
- the treatments and possible side effects
- what you think about the available treatments.

## Talking to your healthcare team

It is important to talk about any treatment with your doctor, so that you understand what it means. After talking with you, your doctor will usually ask you to sign a form to show that you understand and agree to the treatment. This is called giving your consent. You will not be given treatment unless you have agreed to it.

It is a good idea to take someone with you who can speak both [language] and English. Or your hospital can arrange an interpreter for you. Let your nurse know if you need one.

## Questions to ask about your treatment

- What does my diagnosis mean?
- What is the stage and grade of the cancer?
- What will my treatment be?
- What are the benefits, risks and side effects of each treatment?
- Will the treatment affect my daily life?
- Who can I talk to about how I am feeling?

We have more information in your language about being diagnosed with cancer.

## Treatments for breast cancer

Treatments for breast cancer include:

- an operation (surgery)
- drugs (chemotherapy, hormonal therapy, targeted therapy)
- radiotherapy.

Many people have more than one type of treatment, such as an operation and then radiotherapy. Or you may have chemotherapy before or after an operation.

## **An operation**

An operation (surgery) to remove the cancer is a common treatment for breast cancer. The doctor removes the cancer and some healthy tissue around it. The operation you have depends on the size of the cancer and where it is in the breast.

The doctor may remove:

- the cancer (wide local excision)
- the whole breast (mastectomy).

Some people who have the whole breast removed (mastectomy) can have breast reconstruction. It can be done at the same time or later. You can speak to your doctor about this and the different ways of doing it. If you do not have reconstruction, your nurse can give you an artificial breast (prosthesis) to put inside your bra.

## **Checking the lymph nodes**

During the operation, the surgeon will usually remove some lymph nodes. They remove them from under your arm on the side of the cancer. This is to check if there is cancer in the lymph nodes. This helps the doctor decide if you need more treatment.

If any of the nodes contain cancer, you may need an operation to remove all the lymph nodes. Some women may have radiotherapy to the lymph nodes instead of surgery.

We have more information in [language] about how surgery is planned and what to expect after the operation.

## **Radiotherapy**

Radiotherapy uses high-energy x-rays to destroy the cancer cells. It can damage normal cells too, but these usually repair when treatment ends.

You often have radiotherapy after an operation once the wound has healed. This can reduce the risk of the cancer coming back. After a wide local excision, you usually have radiotherapy to the remaining breast tissue. Occasionally, you may have radiotherapy after a mastectomy.

You may also have radiotherapy to the armpit to treat any remaining lymph nodes.

We have more information in [language] about radiotherapy and some of the side effects you may have.

## Chemotherapy

Chemotherapy uses anti-cancer drugs to destroy cancer cells. The drugs are usually given into a vein or taken as a tablet. Having chemotherapy can reduce the risk of breast cancer coming back. Some people may also have it before surgery to shrink a cancer. This usually means a smaller operation is needed.

Chemotherapy drugs can cause side effects that make you feel unwell.

Different drugs can cause different side effects, including:

- being more likely to get an infection
- feeling tired
- feeling sick or being sick
- diarrhoea or constipation
- a sore mouth
- hair loss.

Your doctor can talk to you about the side effects you may have and how to manage them. Most side effects can be controlled with drugs. Most side effects go away when chemotherapy is over.

We have more information in [language] about chemotherapy and some of the side effects you may have.

## Hormonal therapy

If you have an oestrogen-receptor positive (ER positive) cancer you will usually have hormonal therapy. Hormonal therapies lower the level of oestrogen or stop it attaching to the cancer cells. You usually start hormonal therapy after surgery or chemotherapy and have it for 5 to 10 years.

You may have hormonal therapy:

- before surgery to shrink a cancer
- after surgery to reduce the risk of breast cancer coming back.

You may have different drugs, such as tamoxifen, letrozole or anastrozole.

This depends on:

- whether you have been through the menopause
- the risk of the cancer coming back
- how the side effects are likely to affect you.

Side effects of hormonal therapy include:

- hot flushes and sweats
- joint pain
- low sex drive.

## **Stopping the ovaries from working (ovarian ablation)**

Another way to lower oestrogen levels is to stop the ovaries working. This is called ovarian ablation. Drugs or an operation can stop the ovaries making oestrogen. Very rarely, radiotherapy may be used.

This will cause a permanent menopause. It can be difficult to deal with the menopause when you are already dealing with breast cancer. We have information about getting support on page 10.

If you are worried about your fertility, talk with your doctor before you start treatment.

## **Trastuzumab (Herceptin®)**

If the cancer is HER2 positive, your doctor may give you trastuzumab (Herceptin®). This belongs to a group of drugs called targeted therapies. Trastuzumab stops the HER2 protein from making the cancer cells grow. You usually have trastuzumab every three weeks for a year.

The side effects are usually mild, but can include:

- a headache
- a high temperature (fever) and chills
- feeling sick.

Some people may also have a drug called pertuzumab (Perjeta®) with trastuzumab. These drugs may be given before an operation to shrink a cancer.

Occasionally, trastuzumab can affect the heart. You will have tests to check your heart before and during treatment.

## **Possible side effects of your treatment**

We have more information in [language] about common side effects of cancer treatments.

Here are some other side effects that you may have during and after breast cancer treatment.

## Changes to the breast

Surgery and radiotherapy to the breast can cause changes, including:

- how the breast looks and feels
- pain in the breast and under the arm
- how much you can move the arm and shoulder on the treated side.

After an operation, there will be a scar. This will usually become less obvious over time. Stretching and massaging the scar can improve this.

After radiotherapy, the skin of your breast may be darker and more sensitive. It is important to cover the area and use sunscreen with a high Sun Protection Factor (SPF) (at least SPF 30). Ask your nurse or doctor for further advice.

## Lymphoedema

Lymphoedema is a swelling caused by fluid building up in the body. Some people may have this after an operation for breast cancer. It is most likely to affect an arm. The swelling can be reduced by exercise, special bandages and massage. If you have swelling in your arm or hand, tell your nurse. The earlier lymphoedema is diagnosed, the easier it is to treat.

To reduce the risk of lymphoedema:

- Look after your skin. Use a skin cream and avoid cuts or scratches.
- Keep active and exercise. This helps lymph fluid move around the body.
- Keep to a healthy weight.

## Bone changes

Some hormonal therapies can thin the bones. Your doctor may use a scan to check your bones. After this, you may be given treatment to protect your bones.

## Concentration and memory problems

After breast cancer treatment, you may find it harder to concentrate and remember things. This is usually mild and often gets better within a year of finishing treatment. Talk to your doctor or nurse if you are worried about this.

## Weight gain

After breast cancer treatment, you might gain weight. This may be because of treatments like hormonal therapy or steroids. Some treatments can start the menopause which can also cause weight gain. Your nurse or doctor can give you advice about healthy eating and exercise.



## Other information

### Contraception

You may be advised to avoid getting pregnant for 2 years after breast cancer treatment. Your doctor will advise you not to use contraception that contains hormones, including the pill and some coils.

You can use coils that do not contain hormones and barrier contraception such as condoms or the cap. Your nurse can give you advice about this.

### Hormone replacement therapy

Doctors do not recommend hormone replacement therapy (HRT) after having breast cancer. HRT contains oestrogen which could encourage breast cancer cells to grow.

But if you have severe symptoms of the menopause and nothing else has helped, your doctor may prescribe it. Your doctor will talk to you about the possible risks.

### Follow up

After your treatment has finished, you may have regular check-ups and mammograms. These will be every few months at first. Eventually you may only have them once a year. Sometimes, instead of routine appointments, you will be asked to contact your specialist if there is anything you are worried about.

### Your feelings

You may feel overwhelmed when you are told you have cancer. You may have many different emotions. There is no right or wrong way to feel. There are many ways to cope with this. Talking to a close friend or relative may help. Your doctor or nurse can help too.

## How Macmillan can help

Macmillan is here to help you and your family. There are different ways you can get support:

- **The Macmillan Support Line (0808 808 00 00).** We have interpreters, so you can speak to us in your language. Just tell us, in English, the language you want to use. We can answer medical questions, give you information about financial support, or talk to you about your feelings. The phone line is open Monday to Friday, 9am to 8pm.
- **The Macmillan website ([macmillan.org.uk](http://macmillan.org.uk)).** Our site has lots of English information about cancer and living with cancer. There is more information in other languages at [macmillan.org.uk/translations](http://macmillan.org.uk/translations)
- **Information centres.** At an information centre, you can talk to a cancer support specialist and get written information. Find your nearest centre at [macmillan.org.uk/informationcentres](http://macmillan.org.uk/informationcentres) or call us. Your hospital might have a centre.
- **Local support groups.** Find a group near you at [macmillan.org.uk/supportgroups](http://macmillan.org.uk/supportgroups) or call us.
- **Macmillan Online Community.** You can talk to other people in similar situations at [macmillan.org.uk/community](http://macmillan.org.uk/community)

## Word list

Word	Meaning	English	Transliteration
	When doctors rebuild the shape of the breast	<b>Breast reconstruction</b>	
	The tiny building blocks that make up the organs and tissues of our body.	<b>Cells</b>	
	A cancer treatment that uses drugs to kill cancer cells.	<b>Chemotherapy</b>	
	Drugs or devices that prevent pregnancy.	<b>Contraception</b>	
	Finding out whether you have an illness or not.	<b>Diagnosis</b>	
	An organ that makes substances that help the body work properly, such as hormones, sweat or milk.	<b>Gland</b>	
	Treatment that changes the production or activity of hormones in the body	<b>Hormonal therapies</b>	
	Substance made by the body that controls how organs work.	<b>Hormone</b>	
	Treatment that replaces natural hormones when the body does not make enough.	<b>Hormone replacement therapy (HRT)</b>	
	A gland that is part of the <u>lymphatic system</u> .	<b>Lymph node</b>	
	A network of vessels and glands throughout the body that helps to fight infection.	<b>Lymphatic system</b>	
	An x-ray of the breast.	<b>Mammogram</b>	
	When a woman's body stops producing hormones and her <u>menstrual periods</u> stop.	<b>Menopause</b>	

	Monthly discharge of blood and tissue from the womb.	<b>Menstrual period</b>	
	Glands where oestrogen is made.	<b>Ovaries</b>	
	The first tumour to grow in the body.	<b>Primary cancer</b>	
	Substance that is made by the body. Proteins can make cells grow, including cancer cells.	<b>Protein</b>	
	A cancer treatment that uses high-energy x-rays to kill cancer cells.	<b>Radiotherapy</b>	
	Substance on a cell that allows <u>proteins</u> or <u>hormones</u> to affect the cell.	<b>Receptor</b>	
	A picture of the inside of your body.	<b>Scan</b>	
	Problem caused by the cancer treatment, such as sickness or tiredness.	<b>Side effects</b>	
	Drugs that can help chemotherapy work better and control side effects.	<b>Steroids</b>	
	The level of protection in sunscreen products.	<b>Sun Protection Factor (SPF)</b>	
	Having an operation.	<b>Surgery</b>	
	Drugs that attack cancer cells and do less harm to normal cells.	<b>Targeted therapy</b>	
	A group of cells that are growing in an abnormal way. The abnormal cells keep multiplying and form a lump.	<b>Tumour</b>	

## More information in [language]

We have information in [language] about these topics:

<p><b>Types of cancer</b></p> <ul style="list-style-type: none"><li>• Breast cancer</li><li>• Bowel cancer</li><li>• Lung cancer</li><li>• Prostate cancer</li></ul> <p><b>Treatments</b></p> <ul style="list-style-type: none"><li>• Chemotherapy</li><li>• Radiotherapy</li><li>• Surgery</li></ul>	<p><b>Coping with cancer</b></p> <ul style="list-style-type: none"><li>• If you're diagnosed with cancer – A quick guide</li><li>• Eating problems and cancer</li><li>• End of life</li><li>• Financial support - benefits</li><li>• Healthy eating</li><li>• Tiredness (fatigue) and cancer</li><li>• Side effects of cancer treatment</li><li>• What you can do to help yourself</li></ul>
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To see this information, go to [macmillan.org.uk/translations](http://macmillan.org.uk/translations)

## Speak to us in [language]

You can call Macmillan free on **0808 808 00 00** and speak to us in your own language through an interpreter. You can talk to us about your worries and medical questions. Just tell us, in English, the language you want to use.

We are open Monday to Friday, 9am to 8pm.

## References and thanks

This information has been written and edited by Macmillan Cancer Support's Cancer Information Development team.

This fact sheet is based on more detailed Macmillan information which we can send you or you can read online. The more detailed information is only available in English.

This information has been reviewed by relevant experts and approved by our Chief Medical Editor, Dr Tim Iveson, Macmillan Consultant Medical Oncologist.

With thanks to Morven Angus, Lead Breast Nurse, Colchester Hospital University NHS Foundation Trust, Rachel King, Breast Care Specialist CNS Worcester Breast Unit, Joanna Rowley, Lead Macmillan Breast Specialist Nurse, Cambridge Breast Unit. Thanks also to the people affected by cancer who reviewed this edition.

All our information is based on the best evidence available. For more information about the sources we use, please contact us at **cancerinformationteam@macmillan.org.uk**

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We make every effort to ensure that the information we provide is accurate but it should not be relied upon to reflect the current state of medical research, which is constantly changing. If you are concerned about your health, you should consult your doctor. Macmillan cannot accept liability for any loss or damage resulting from any inaccuracy in this information or third-party information such as information on websites to which we link.

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