

# Mucinous breast cancer

This booklet is for people who would like more information about mucinous breast cancer. It describes what mucinous breast cancer is, its symptoms, how a diagnosis is made and possible treatments.

We hope that this booklet helps you to discuss any questions you may have with your specialist or breast care nurse and to be involved in any decisions about your treatment.

We recommend that you read this publication with our booklet **Treating breast cancer**.

## What is mucinous breast cancer?

Mucinous breast cancer (sometimes called colloid breast cancer) is so-called because when it is viewed under a microscope the cancer cells are surrounded by mucus.

Mucinous breast cancer can occur at any age but is more commonly found in women over the age of 60. It's often found alongside other types of breast cancer such as invasive ductal breast cancer (often called 'no special type' or NST) and may then be referred to as 'mixed'. Pure mucinous breast cancer (when no other type of breast cancer is present) accounts for less than 2% of all breast cancers.

Pure mucinous breast cancer is an invasive breast cancer which means it has the potential to spread outside the breast ducts or lobules. It generally has a better prognosis (outlook) than most other types of invasive breast cancer because it's more likely to be low grade, which means it tends to be slower growing. The spread of cancer cells to the lymph nodes (glands) under the arm (the axilla) is also less common with pure mucinous breast cancer – another reason that this type of breast cancer generally has a better prognosis.

## How is mucinous breast cancer diagnosed?

Mucinous breast cancer is diagnosed in the same way as other breast cancers. People will usually have a mammogram (breast x-ray) and/or an ultrasound scan at a breast clinic. The diagnosis is confirmed by sampling a small area of the tissue either by fine needle aspiration (FNA) or core biopsy.

For more information about these tests, see our **Your breast clinic appointment** booklet.

## How is mucinous breast cancer treated?

Surgery is usually the first treatment for mucinous breast cancer. This may be breast-conserving surgery, 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 or mastectomy (removal of all the breast tissue including the nipple area).

The type of surgery recommended depends on the position of the area affected, the size of the cancer relative to the size of your breast and whether there is more than one area in the breast affected. Your breast surgeon will discuss this with you.

Sometimes further surgery is needed if the margin of normal tissue (surrounding the cancer) removed during the first operation is not clear. This is to ensure that all the cancer has been removed. In some cases this second operation will be a mastectomy.

If a mastectomy is recommended, or if you choose to have a mastectomy, your breast surgeon will discuss the option of breast reconstruction with you. This can often be done at the same time as your mastectomy (immediate reconstruction) or months or years later (delayed reconstruction).

For more information see our **Breast reconstruction** booklet.

Pure mucinous breast cancer is less likely to spread to the lymph nodes (glands) under the arm than most other types of breast cancer, particularly if the cancer is small. However, your specialist team will want to check this as it 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 (a lymph node sample or biopsy) or all of the lymph nodes (a lymph node clearance).

Sentinel lymph node biopsy is widely used for people with breast cancer whose 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 to remove some or all of 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's likely that your surgeon will recommend a lymph node clearance.

For more information, see our [Treating breast cancer](#) booklet.

## What are the additional (adjuvant) treatments?

After surgery you may need other treatment. This is called additional (adjuvant) therapy and includes chemotherapy, radiotherapy, hormone therapy and targeted therapy. The aim of these treatments is to reduce the risk of breast cancer cells returning in the same breast or the opposite breast or spreading somewhere else in the body.

### Radiotherapy

Radiotherapy uses high energy x-rays to try to destroy any cancer cells that may be left behind in the breast area after surgery. If you have breast-conserving surgery you will usually be given radiotherapy to reduce the risk of breast cancer cells returning in the same breast. Radiotherapy may also be given following a mastectomy in certain circumstances, such as if several lymph nodes under the arm contain cancer cells.

For more information about radiotherapy please see our [Radiotherapy for primary \(early\) breast cancer](#) booklet.

### Hormone (endocrine) therapy

As the female hormone oestrogen can play a part in stimulating some breast cancers to grow, there are several hormone therapies that 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 oestrogen and stimulate the cancer to grow (known as oestrogen receptor positive or ER+ breast cancer). All breast cancers are tested for oestrogen receptors using tissue from a biopsy or surgery. Mucinous breast cancer is usually oestrogen receptor positive.

Hormone therapy drugs commonly used to treat breast cancer include tamoxifen, anastrozole (Arimidex), letrozole (Femara), exemestane (Aromasin) and goserelin (Zoladex). These are all tablets taken daily over several years (apart from goserelin which is an injection). Your

doctors will discuss with you which drug they think is the most suitable. If you'd like more information about hormone therapies please see our factsheets on individual hormone therapy drugs.

When oestrogen receptors are not found (oestrogen receptor negative or ER- breast cancer) tests may be done for progesterone receptors. As oestrogen receptors play a more important role than progesterone 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 whether hormone therapy is appropriate.

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

## Chemotherapy

Chemotherapy treatment uses anti-cancer (also called cytotoxic) drugs which aim to destroy cancer cells. To help doctors decide whether to recommend chemotherapy, various factors are taken into consideration such as the size of the cancer, its grade (how different the cancer cells are from normal breast cells and how quickly they are growing) and whether the lymph nodes contain cancer cells.

As pure mucinous breast cancer is less likely to spread to the lymph nodes, and more likely to be a lower grade, chemotherapy is less likely to be recommended. However, if it's thought you would benefit from chemotherapy, your specialist will discuss this with you.

If you'd like more general information on chemotherapy, see our booklet [Chemotherapy for breast cancer](#).

## Targeted therapies

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

The most well-known targeted therapy is trastuzumab (Herceptin). Only people whose cancer has high levels of HER2 (HER2 positive), a protein that makes cancer cells grow, will benefit from trastuzumab. There are various tests to measure HER2 levels which are done on breast tissue removed during a biopsy or surgery.

Pure mucinous breast cancer is likely to be HER2 negative. If your cancer is found to be HER2 negative, then trastuzumab will not be of benefit to you.

For more information see our **Trastuzumab (Herceptin)** factsheet.

## Living with breast cancer

Being told you have breast cancer can be a very anxious time. Mucinous breast cancer is a rare type of breast cancer so you might not meet many other people with the same diagnosis, and some people feel isolated because of this. However, mucinous breast cancer is treated in the same way as other, more common types of breast cancer so you may also find it helpful to talk to others who have had similar treatments to you.

The discussion Forum on our website is a good place to look if you want to find someone in a similar situation. Our Someone Like Me service can help put you in touch by phone or email with someone who's been there, whatever your concerns. Call **0845 077 1893** for more information.

Whatever type of cancer you have had, it's natural to worry that it may return at some time in the future. There are people who can support you so don't be afraid to ask for help if you need it. You can let other people know how you are feeling, particularly your family and friends, so they can be more supportive. 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 your feelings and concerns in more depth over a period of time, a counsellor or psychologist may be more appropriate. Your breast care nurse, specialist or GP (local doctor) can arrange this.

You may find it easier to share your feelings with someone who has had a similar experience to you. You can do this either one to one or in a support group. For more information on individual support or support groups in your area call the Helpline at Breast Cancer Care on **0808 800 6000** (Text Relay 18001).

## 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 10am–2pm

[www.breastcancercare.org.uk/ATN](http://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](http://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

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### Donate online

You can give using a debit or credit card at

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\_\_\_\_\_

\_\_\_\_\_ 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 RRKZ-ARZY-YCKG,  
5-13 Great Suffolk Street, London SE1 0NS



# About this booklet

**Mucinous 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** 0845 092 0808

**Email** [publications@breastcancercare.org.uk](mailto:publications@breastcancercare.org.uk)



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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](http://www.breastcancercare.org.uk) or call our free Helpline on 0808 800 6000 (Text Relay 18001).**

## Central Office

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