

Breast cancer during and after pregnancy



This booklet is for women who have been diagnosed with breast cancer during pregnancy or within a year of giving birth. This is often referred to as pregnancy-associated breast cancer or pregnancy-related breast cancer.



This information is by Breast Cancer Care.

We are the only specialist UK-wide charity that supports people affected by breast cancer. We've been supporting them, their family and friends and campaigning on their behalf since 1973.

Today, we continue to offer reliable information and personal support, over the phone and online, from nurses and people who've been there. We also offer local support across the UK.

From the moment you notice something isn't right, through to treatment and beyond, we're here to help you feel more in control.

For breast cancer care, support and information, call us free on **0808 800 6000** or visit **breastcancercare.org.uk**



Introduction

Being diagnosed with breast cancer during pregnancy or soon after giving birth is rare and women who are diagnosed at this time can feel very alone. Finding out that you have breast cancer can cause many different emotions, including shock, fear, sadness and anxiety at a time that is usually happy.

We hope this booklet answers some of your questions and helps you to discuss your treatment options and other issues that are important to you and your family with your specialist team. We recommend you read it together with our **Treating primary breast cancer** booklet. You may also find it useful to read our **Breast cancer in younger women** booklet that covers specific issues for premenopausal women with breast cancer.

If you're diagnosed with breast cancer during pregnancy you will usually be able to have effective treatment for your breast cancer and it shouldn't affect your baby's development.

A pregnancy is measured in 'trimesters'. Each trimester represents a number of weeks:

- first trimester – the first 12 weeks
- second trimester – 13–28 weeks
- third trimester – 28 weeks to delivery

How far you are into your pregnancy when your breast cancer is diagnosed will affect the treatment options suitable for you.

How is breast cancer during pregnancy diagnosed?

If you have any of the symptoms of breast cancer, your GP (local doctor) will carry out an examination and decide whether to refer you to a breast clinic for further tests.

Breast cancer is normally diagnosed at a breast clinic using a method known as 'triple assessment'.

The first part of this assessment is a breast examination, which will be carried out by a specialist at the clinic.

You'll usually be offered an ultrasound scan, which uses high-frequency sound waves to produce an image of the breast. This is completely safe and will not affect your baby in any way. You may also be offered a mammogram (breast x-ray). If this is the case, shielding can be used to protect your baby from the radiation used.

Although ultrasound and mammograms are usually the best way of detecting any early changes within the breast, sometimes an MRI (magnetic resonance imaging) scan is used as well.

The safety of using breast MRI during pregnancy has not been established. However, most small studies looking at MRI during pregnancy show it's safe, especially after the first three months (the first trimester).

The final part of the triple assessment includes either taking a sample of breast tissue (core biopsy) or breast cells (fine needle aspiration (FNA)). The sample is then sent to a laboratory to be looked at under a microscope. Core biopsies are more commonly used for pregnant women and may be more reliable in making a diagnosis. Both of these tests are safe for you and your baby. Bruising to the breast is common after a biopsy in pregnant women because of the increased blood supply to the breast at this time.

Occasionally it's not possible to get a diagnosis using a core biopsy. In this case an excision biopsy may be done, which is a procedure to take a larger sample of breast tissue. Your specialist team will advise what would be best for you and your baby.

If you are breastfeeding when you are having these tests you are sometimes advised to stop and you may be given a drug to stop you producing milk.

CT (computerised tomography) scans, also known as CAT scans, and bone scans are usually not recommended during pregnancy due to the risk of radiation to the baby.

Our booklet **Your breast clinic appointment** has more information on the tests you may have and what to expect at your appointment.

Continuing your pregnancy

Terminating the pregnancy isn't usually recommended when breast cancer is diagnosed. Most women will continue their pregnancy while having breast cancer treatment. However, some women choose not to. The decision to terminate a pregnancy is a very personal one. It can be made only by you, or you and your partner if you have one, following a discussion with your specialist team and obstetrician.

There's no evidence to suggest a termination will improve the outcome for women diagnosed with breast cancer during pregnancy. However, a termination may be discussed if chemotherapy is recommended during the first trimester (for example, if the breast cancer is a type that can grow more rapidly or has spread to other parts of the body). Whatever you decide, it's important to take time to make the right choice for you.

Who will care for me during and after my pregnancy?

Your specialist team will include cancer specialists and an obstetrician (a pregnancy and childbirth doctor). You should be referred to a breast cancer specialist with expertise in treating women diagnosed during pregnancy. Your maternity care should be provided by an obstetrician and midwife who have experience in caring for women with cancer in pregnancy. You may be advised to have your baby in an alternative hospital to your closest maternity unit so you can have more specialised care.

Can breast cancer during pregnancy affect the baby?

There's no evidence that having breast cancer during pregnancy affects your baby's development in the womb. You cannot pass cancer on to your baby and there's no evidence that your child will develop cancer in later life as a result of you having breast cancer while pregnant.

Is breast cancer during pregnancy more aggressive?

There's no conclusive evidence that breast cancer during pregnancy is more aggressive than breast cancer occurring at other times. However, because it may be difficult to detect a cancer in the breast during pregnancy there can be a delay in diagnosis, meaning the cancer could be found at a later stage.

Treatment during pregnancy and after the birth

Effective breast cancer treatment can be given during pregnancy and your team will discuss your options. Generally, the treatment you're offered during pregnancy will depend on the type and extent of your breast cancer, your individual circumstances and how far you are into your pregnancy. The aim will be to balance giving you the most effective treatment for your breast cancer and keeping your baby safe.

The following treatments may be given depending on your trimester and whether you have had your baby. If you're near the end of your pregnancy, your specialist team may decide to delay treatment until after the birth. If you're breastfeeding, you'll be advised to stop before receiving any treatment.

Surgery

Surgery can safely be done during all trimesters of pregnancy. You may be offered a choice between a mastectomy and breast-conserving surgery. A mastectomy is the removal of all the breast tissue including the nipple area, while breast-conserving surgery (also known as wide local excision or lumpectomy) is the removal of the cancer along with a margin (border) of normal breast tissue around it.

During the first trimester of pregnancy you're more likely to be offered a mastectomy. This is because not all women who have a mastectomy need radiotherapy whereas radiotherapy is usually needed after breast-conserving surgery. Radiotherapy is generally not recommended at any time during pregnancy because of the small risk of radiation to the baby (see page 10).

If you're diagnosed in your second trimester and will be having chemotherapy after your surgery, breast-conserving surgery may also be considered an option. This is because radiotherapy will be given after your chemotherapy has finished, and after your baby has been born.

If you are in your third trimester, breast-conserving surgery may be considered an option as radiotherapy can then be given after the baby is born.

Whichever type of surgery you have, it will involve having a general anaesthetic. This is generally considered safe while you are pregnant although there's a very slight risk of miscarriage in early pregnancy.

Breast reconstruction

Breast reconstruction at the time of surgery (an immediate reconstruction) is not normally offered during pregnancy, due to changes in the breasts and also to avoid a long time under anaesthetic. However, breast reconstruction will generally be offered at a later date (a delayed reconstruction). You can find out more in our **Breast reconstruction** booklet.

Surgery to the lymph nodes

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

A sentinel lymph node biopsy uses a small amount of radioactive material (radioisotope) that does not affect the baby. However, the blue dye that is used alongside the radioisotope to identify the sentinel node is generally not recommended during pregnancy. Your surgeon will discuss whether a sentinel node biopsy is a suitable option for you. If it is not suitable, or if the first node or nodes are affected, you may be recommended to have further surgery to the remaining lymph nodes.

You can find out more in our [Treating primary breast cancer](#) booklet.

Chemotherapy

Certain combinations of chemotherapy drugs can be given during pregnancy. However, chemotherapy should be avoided during the first trimester as it may affect the development of an unborn baby or cause miscarriage. The anti-sickness and steroid treatments used to control side effects are considered safe for pregnant women. Generally, chemotherapy during the second and third trimesters is safe. Most women treated during this time go on to have healthy babies, although there's some evidence to suggest a small increase in the risk of low birth weight and early delivery. The growth and wellbeing of your baby will be monitored by ultrasound. You'll be advised to stop having chemotherapy three to four weeks before your due date to avoid complications like infection during or after the birth of your baby. Chemotherapy can be continued after your baby is born.

Breastfeeding should be avoided while having chemotherapy as some chemotherapy drugs are passed through the blood stream into the breast milk.

For more general information see our [Chemotherapy for breast cancer](#) booklet.

Radiotherapy

Radiotherapy is not usually recommended at any stage of pregnancy, as even a very low dose may carry a risk to the baby. Your treatment plan during pregnancy may try to avoid radiotherapy or delay it until after the birth (see page 8).

If there is no other option than to have radiotherapy during pregnancy, there are some changes that can be made to protect the baby.

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

Hormone (endocrine) therapy

The hormone oestrogen can stimulate 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. When oestrogen binds to these receptors, it can stimulate the cancer to grow. Invasive breast cancers are tested for oestrogen receptors using tissue from a biopsy or after surgery. Breast cancers diagnosed during pregnancy are less likely to be oestrogen receptor positive compared to non-pregnant women.

The most commonly prescribed hormone therapies for younger women with breast cancer are tamoxifen and goserelin (Zoladex). Some premenopausal women will be given aromatase inhibitors (such as anastrozole, exemestane and letrozole) alongside goserelin. Hormone therapies are not given during pregnancy so if the breast cancer is oestrogen receptor positive you won't begin having hormone therapy until after you baby has been born. If you are having hormone therapy you'll be advised against breastfeeding your baby. See our website or individual booklets for further information on hormone therapy.

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

Targeted therapies are not usually given during pregnancy. Breastfeeding is not recommended while having trastuzumab or for at least seven months after the last dose.

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

Giving birth

When you have your baby will depend on the treatment you need and your expected due date. Many women diagnosed during pregnancy go on to complete the full term of their pregnancy and don't experience any problems during childbirth because of their treatment for breast cancer. If your baby is likely to be born early you'll be offered a course of steroid injections to help with your baby's development and reduce the chance of the baby developing breathing problems. Where possible your specialist team will try to avoid a caesarean section as there can be complications from it, such as infection, which can be more likely if your immune system has been affected by chemotherapy.

Breastfeeding

Many doctors recommend women who are about to be treated for breast cancer should stop (or not start) breastfeeding. There is no evidence that not being able to breastfeed will affect your ability to bond with or care for your baby. Your midwife will be able to support you at this time.

Breastfeeding may be possible for some women after surgery if they don't need chemotherapy, radiotherapy, hormone therapy or targeted therapy.

If you aren't having any drug treatments you can breastfeed from the other (non-treated) breast. Although many women are able to produce milk from the treated breast, the amount of milk is often reduced. Breastfeeding from a breast previously exposed to radiotherapy can cause mastitis (infection) and this can be difficult to treat.

If you have questions about breastfeeding, talk to your breast specialist team and other breastfeeding experts such as your midwife.

Coping during and after pregnancy

Being pregnant or caring for a new baby while having treatment for breast cancer is both physically and emotionally draining.

Talk to people close to you about how you feel and take up any offers of practical support and help. You can also talk to your specialist team if you are feeling overwhelmed or have any concerns.

As breast cancer during pregnancy is not very common, you may feel alone at this time. You might find it helpful to share your feelings with others who have had a similar experience to you. Breast Cancer Care can put you in touch with another woman who was diagnosed with breast cancer during pregnancy through our Someone Like Me service. Call **0345 077 1893** or email **someonelikeme@breastcancercare.org.uk** to find out more.

Further support

Younger Breast Cancer Network

There is a private Facebook group set up by younger women diagnosed with breast cancer called the Younger Breast Cancer Network. You can find it on Facebook by searching 'Younger Breast Cancer Network'. Several members of the group have been diagnosed during pregnancy or soon after giving birth.

Mummy's Star

Mummy's Star (mummysstar.org) is a charity supporting pregnancy through cancer and beyond. Contact them directly for details of how to join their private online forum.

Financial support

If your family is struggling with extra costs, you may be able to get financial support. Macmillan Cancer Support has lots of information on its website macmillan.org.uk or you can call the helpline 0808 808 00 00 for advice.

Turn2us (turn2us.org.uk) is a charity that can help you access any benefits, grants and financial services that are available to you.

Mummy's Star also has a small grants programme. See mummysstar.org for more information.

Further reading

Royal College of Obstetricians and Gynaecologists – Pregnancy and Breast Cancer

Royal College of Obstetricians and Gynaecologists
(March 2011) Pregnancy and Breast Cancer
(Green-top Guideline No 12)

rcog.org.uk/globalassets/documents/guidelines/gtg_12.pdf

This is a resource aimed at healthcare professionals.

Royal College of Obstetricians and Gynaecologists (October 2014) Pregnancy and Breast Cancer: Information for you

rcog.org.uk/en/patients/patient-leaflets/pregnancy-and-breast-cancer

This is a patient information leaflet based on the Green-top Guideline No 12 (above).



Four ways to get support

We hope this information was helpful, but if you have questions, want to talk to someone or read more about breast cancer, here's how you can.



Speak to our nurses or trained experts. Call our free Helpline on **0808 800 6000** (Monday to Friday 9am–4pm and Saturday 9am–1pm). The Helpline can also put you in touch with someone who knows what it's like to have breast cancer.



Chat to other women who understand what you're going through in our friendly community, for support day and night. Look around, share, ask a question or support others at forum.breastcancercare.org.uk



Find trusted information you might need to understand your situation and take control of your diagnosis or order information booklets at breastcancercare.org.uk



See what support we have in your local area. We'll give you the chance to find out more about treatments and side effects as well as meet other people like you. Visit breastcancercare.org.uk/in-your-area

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.

Donate today and together we can ensure that everyone affected by breast cancer has someone to turn to.

Donate online

Donate using your debit or credit card breastcancercare.org.uk/donate

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**

Name _____

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In addition, we'd love to keep you updated about our work and provide you with other opportunities to get involved with Breast Cancer Care. Please tell us how you would like to hear from us (by ticking these boxes you confirm you are 18 or over)

- I'd like to hear from you by email
- I'd like to hear from you by text message or SMS
- Please do not contact me by post
- Please do not contact me by telephone

We never give your information to other organisations to use for their own purposes. To change your preferences, or find out more information on how we use your data, please view our privacy policy at breastcancercare.org.uk or contact supporter services on 0345 092 0800.

Please return this form to Breast Cancer Care, Freepost RRRKZ-ARZY-YCKG, Chester House, 1-3 Brixton Road, London SW9 6DE

Code: LP



About this booklet

Breast cancer during and after pregnancy 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**



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When you have breast cancer, everything changes. At Breast Cancer Care, we understand the emotions, challenges and decisions you face every day, and we know that everyone's experience is different.

For breast cancer care, support and information, call us free on **0808 800 6000** or visit **breastcancercare.org.uk**

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