

# Treatment for breast cancer

## Contents

- [Treatment](#)
- [Surgery](#)
- [What to expect after surgery](#)
- [Radiotherapy](#)
- [Chemotherapy](#)
- [Targeted therapies](#)
- [Hormone therapy](#)
- [Aromatase inhibitors](#)
- [Ovarian treatments](#)
- [Information reviewed by](#)

## Treatment

Treatment for early breast cancer aims to remove the cancer and reduce the risk of the cancer spreading or coming back.

Treatment may include surgery, radiotherapy, chemotherapy, hormone therapy and targeted therapies. Usually more than one treatment is used.

Your doctors will consider the following factors to recommend the best treatment for you. The choice of treatment will depend on:

- your test results
- where the cancer is in the breast
- if the cancer has spread
- whether the cancer has the oestrogen, progesterone or HER2 receptor protein
- your age and general health
- your preferences.

As there are different categories of breast cancer, the most suitable treatment varies from person to person.

## Surgery

Surgery for breast cancer will involve one of the following:

- breast conserving surgery – removes part of the breast
- mastectomy – removes the whole breast.

In most cases breast surgery also involves removing one or more lymph nodes from the armpit.

## Which surgery should I have?

Some women are offered a choice between breast conserving surgery and a mastectomy. In this situation, it can feel like a difficult decision to make.

Research has shown that breast conserving surgery, with sentinel lymph node biopsy followed by radiotherapy, is as effective as mastectomy for most women with early breast cancer. The chance of the cancer coming back (recurrence) is the same regardless of which surgery you choose.

The operations have different benefits, side effects and risks. Talk to your doctor or breast care nurse about the best option for you.

## Breast conserving surgery

Surgery to remove the breast cancer and some surrounding healthy tissue is called breast conserving surgery. It is also called lumpectomy or wide local excision. Breast conserving surgery is offered if the cancer is small compared to the size of your breast.

The surgeon removes the smallest amount of breast tissue as possible. This will leave a scar and will change the size and, potentially, the shape of the breast, as well as the position of the nipple.

The removed breast tissue is sent to a laboratory for examination by a pathologist, who looks at the tissue to see if there is an area of healthy cells around the cancer – this is known as a clear margin. The pathologist will create a report, which will include information about the size and grade of the cancer, whether lymph nodes are involved and if the cells are hormone and HER2 receptor positive or negative.

If cancer cells are found at the edge of the removed tissue, this increases the chance of cancer returning. You may need more tissue removed (re-excision or wider excision), or a mastectomy may be recommended.

After surgery, radiotherapy to the whole breast is usually recommended to destroy any undetected cancer cells that may be left in the breast or armpit and to keep the cancer from coming back (recurrence). Some women also need chemotherapy, hormone therapy or targeted therapy. This will depend on the grade and stage of the cancer.

## Mastectomy

Surgery to remove the whole breast is called a mastectomy. You may be offered a mastectomy if:

- there is more than one cancer in different areas of the breast
- the cancer is large compared to the size of the breast
- you have had radiotherapy before to treat another cancer
- clear margins cannot be obtained after one or two breast conserving procedures.

Some people may feel more comfortable having a mastectomy, particularly if they are unable to have radiotherapy.

During a mastectomy, the nipple is also usually removed. The chest muscles are not removed. Some or all of the lymph nodes in the armpit closest to your affected breast may also be taken out.

While your surgical wound heals, you can wear a soft temporary breast prosthesis (form) inside your bra. The surgical wound heals in about 3–6 weeks, and then you can be fitted for a breast form. Some women may choose to have a surgical breast reconstruction.

In some cases, the surgeon may be able to perform a skin-sparing or nipple-sparing mastectomy. This means that more of the normal skin – with or without the nipple – is kept. This allows the surgeon to do an immediate breast reconstruction with either a temporary implant (tissue expander), permanent implant or using tissue from another part of your body.

# Breast reconstruction

A breast reconstruction is a type of surgery in which a breast shape is created using a silicone or saline implant, tissue from another part of your body, or a combination of both.

Some women have the reconstruction at the same time as the mastectomy (immediate reconstruction). Others are advised to, or prefer to wait for several months or longer (delayed reconstruction). If you're not having an immediate reconstruction but think you might consider it in the future, mention this to your surgeon as it help them plan the surgery.

Refer to [Breast Prostheses and Reconstruction](#) for more information.

## Removing lymph nodes

Lymph nodes (glands) are found throughout the body, including the armpit. They are small, bean-shaped collections of lymph cells that protect the body against disease and infection. The lymph nodes are part of the lymphatic system.

The lymph nodes in the armpit are often the first place breast cancer cells spread to outside the breast. To check if breast cancer has spread to the lymph nodes, some or all of them are removed. Removing the lymph nodes helps get rid of any cancerous cells in the lymph nodes and gives information about the stage of the cancer.

There are different types of lymph node surgery:

### Sentinel lymph node biopsy

The sentinel node is the first lymph node that breast cancer cells may spread to outside the breast. There can be more than one sentinel node. Usually it is in the armpit but it can also be found near the breast bone (sternum). Removing only the sentinel node/s will cause fewer side effects than axillary surgery. To find the sentinel node, a small amount of radioactive substance is injected around the nipple and areola area before surgery. A scan is taken to show which node the substance flows to first. During surgery, a blue dye is injected around the nipple and areola area. The dye moves into the lymphatic vessels. The nodes that are radioactive or become blue first are known as the sentinel lymph nodes. The surgeon will remove these so they can be tested for cancer cells. If the sentinel nodes are clear of cancer cells, no further surgery is needed. If the sentinel node/s contain cancer cells, axillary surgery is needed.

### Axillary (lymph node) surgery

This may be done at the same time as the breast surgery or as a separate operation. It is known as axillary clearance or axillary dissection. The doctor will remove between 10–20 lymph nodes and send them to a pathologist for examination. The pathologist will provide a report showing the number of nodes removed and how many contain cancer cells. These results help your doctor recommend further treatment.

## What to expect after surgery

The length of your hospital stay will depend on the type of breast surgery you've had and how well you are recovering. Most people are able to walk around and shower the day after surgery. If you have any questions, ask the doctors and nurses caring for you. Many people are referred to a breast care nurse for information and support.

**Tubes** – You may have several tubes in place after a lumpectomy, mastectomy, reconstruction or axillary surgery, and a dressing will cover the wound to keep it clean. An intravenous drip will give you fluid as well as medication. There may also be a drain in your breast to take fluid from the

surgical site. The drains are usually taken out 1–3 days after surgery and the dressing is usually removed after about a week.

If you have had axillary surgery you may also have a drain from this site, which is usually removed in 3–7 days.

Some people are discharged with drains still in place, but this will depend on your situation and your doctor's advice. The nurse will teach you how to manage the drains at home.

**Blood clots** – While you are in hospital, it's important to move your legs when you are in bed, and when you are able, get up and walk around. You may be required to wear graduated compression stockings or use other devices. This helps prevent blood clots. Your doctor might also prescribe you medication to lower the risk of clots.

**Pain** – You will be given pain relief by injection or tablets, and you will also be given pain medication when you go home. Any bruising and swelling at the surgery site will usually settle down in 2–3 weeks.

**Sense of loss** – Breast surgery may change the appearance of your breast, and this can affect how you feel about yourself (self-esteem). You may feel a sense of loss if you've had a mastectomy. It is normal to grieve over the loss of your breast. Talking to someone who has also had breast surgery might be helpful. [Cancer Connect](#) may be able to link you to someone who has also had a similar experience to you. Call Cancer Council [13 11 20](#) for more information.

**Arm exercises** – After the drains are removed you can slowly begin to exercise your arm. This will help it feel better and get back to normal faster.

For more information see [Exercises after surgery - A guide for people who have had breast cancer surgery](#) or call [13 11 20](#).

## Side effects of surgery

After surgery, you will find that the swelling will go down, bruising will fade and scars will gradually become less obvious.

**Fatigue** – Feeling tired and having no energy is common. Treatment and the emotional impact of the diagnosis can be tiring. Fatigue may continue for months or, in some cases, for years.

**Shoulder stiffness** – Gentle exercises can help prevent or manage shoulder stiffness. Some people regain shoulder movement quickly, others may require further physiotherapy. Ask your breast care nurse, a physiotherapist or occupational therapist about suitable exercises.

**Numbness of the arm** – Surgery can cause bruising or injury to nerves, which may cause numbness and tingling in the chest and arm area. The numbness often improves within a few weeks but may take longer or, for some people, not go away completely. Shoulder exercises will help improve movement.

**Seroma** – Fluid may collect in, or around, the scar in the breast or lymph nodes. The breast care nurse, your specialist or GP, or a radiologist can drain the fluid using a fine needle and syringe.

**Change in breast, nipple or arm feeling** – This is usually temporary, but may be permanent for some people.

**Lymphoedema** – The arm may swell due to fluid build up following lymph node surgery. This may happen shortly after surgery or in some cases months or years later.

Most side effects can be managed. Talk to your doctor or breast care nurse about ways to deal with any of the side effects you experience.

## What to expect when you get home

### Resuming activities

- Recovery time varies.
- Most people start to feel better about two weeks after surgery. Get plenty of rest in the first few days after coming home from hospital.
- Take it easy and only do what is comfortable.
- Check with your surgeon and/ or breast care nurse about when you can start doing your regular activities. For example, some surgeons tell you to avoid driving until the stitches come out or for a few weeks until your arm is more agile.

### Wound care

- Talk to your surgeon and breast care nurse about the best way to look after your wound.
- Keep the wound clean and dry. Shower carefully and pat the wound dry.
- Bruising and swelling will improve with time.
- Gently massage the area with a moisturiser such as sorbelene once the stitches have been removed.
- Use roll on deodorant, if necessary, but avoid spray-on deodorant.
- Wear a bra or soft crop top when it is comfortable to do so.
- Report any redness, pain, swelling or wound discharge to your surgeon or breast care nurse.

## Radiotherapy

Radiotherapy uses high-energy x-rays to kill cancer cells or stop them growing. This treatment is recommended:

- after breast conserving surgery to help destroy any undetected cancer cells that may be left behind in the breast and reduce the risk of the cancer coming back (adjuvant treatment)
- sometimes after a mastectomy, depending on the risk of the cancer coming back in the chest area
- if lymph nodes from under the arm were removed and the risk of the cancer coming back in this area is thought to be high.

You will usually start radiotherapy four weeks after surgery. If you're having chemotherapy after surgery, radiotherapy treatment will begin when chemotherapy has finished.

## Planning treatment

Treatment is carefully planned to have the greatest effect on the cancer cells and to limit the damage as much as possible to your surrounding healthy body tissues. Planning consists of several steps, which may occur over a few appointments.

Before you start treatment, you will have a planning session at the radiotherapy centre. During this visit, x-rays are taken to pinpoint the area to be treated and marks will be put on your skin so that the radiation therapist treats the same area each time. These marks are small dots (tattoos) and may be temporary or, in some cases, permanent. Talk to your radiation oncologist if you are uncomfortable with having a permanent tattoo.

## Having treatment

Once treatment starts, you will probably have radiotherapy once a day from Monday to Friday for 5–6 weeks. Usually you can have outpatient treatment and go to the radiotherapy centre each day.

Each radiotherapy session will be in a treatment room. Although you will only get radiation for 1–5 minutes, you might be in the treatment room for 10–30 minutes. Most of the time is spent positioning you and the treatment machine. You will lie on a table under the radiotherapy machine. The radiation

therapist will leave the room then turn on the machine, but you can talk to staff through an intercom. Radiotherapy is not painful but you need to lie still while the treatment is given.

A new and effective technique known as Deep Inspiration Breath Hold is available at some radiotherapy centres for women with left-sided breast cancer. It is a technique that delivers radiation whilst the patient holds their breath. A breath hold moves the heart away from the chest wall sparing the heart from radiation dose. Contact your radiation treatment centre for more information.

## Travel assistance for country patients

If you qualify some assistance is available if you need to travel to Adelaide for radiotherapy treatment.

For more information visit the [Patient Assistance Transport Scheme](#), talk to the hospital social worker or call Cancer Council [13 11 20](tel:131120).

## Side effects of radiotherapy

Radiotherapy may cause the following side effects:

**Fatigue** – You may feel tired or fatigued 1–2 weeks after radiotherapy starts and during treatment. This usually eases a few weeks after treatment finishes.

**Red and dry skin** – The skin near the treatment site may become red and dry after a few weeks of treatment. The skin usually returns to normal 4–6 weeks after treatment ends. Radiotherapy nurses will show you how to care for your skin. Sorbolene cream applied twice a day can be helpful.

**Inflammation & blistering** – Less commonly, your skin may become very irritated. This will be closely monitored by the treatment team.

**Aches and swelling** – You may feel minor aches or shooting pains that last for a few moments. Some women develop fluid in the breast (breast oedema). These changes to the breast may be ongoing for up to 12 months, but can occasionally last up to five years. This treatment may also increase the chance of developing lymphoedema. Always talk to your doctor about any changes you experience.

Radiotherapy to the breast does not cause hair loss. It also does not make you radioactive – it is safe to spend time with friends and family.

For more information on radiotherapy call Cancer Council [13 11 20](tel:131120) or see [Understanding Radiotherapy](#).

## Chemotherapy

Chemotherapy uses drugs to kill or slow the growth of cancer cells. Chemotherapy is usually given before radiotherapy and may be used if:

- the cancer needs to be shrunk or controlled before surgery (neoadjuvant chemotherapy)
- the risk of the cancer returning is high, to try to prevent the breast cancer coming back or spreading to other parts of the body
- the cancer isn't sensitive to hormone therapy
- cancer returns after surgery or radiotherapy, to gain control of the cancer and to relieve symptoms.

There are several different types of chemotherapy drugs used to treat breast cancer. The drug combination you are given will depend on the type of breast cancer you have and what other treatments you are having. Common drugs include doxorubicin, cyclophosphamide, fluorouracil, docetaxel, paclitaxel and carboplatin. Your medical team may also refer to the drugs by their brand (trade) names.

Chemotherapy is usually given through a vein (intravenously). You will usually be treated as a day patient but occasionally an overnight stay may be recommended. The number of chemotherapy sessions can vary depending on the combination of drugs prescribed by your oncologist. Commonly, chemotherapy is given one day every three weeks for 3–6 months. The recovery time after each treatment session is called a cycle. This gives your body time to recover before the next session.

## Side effects of chemotherapy

The side effects caused by chemotherapy depend on the drugs used. Most side effects are temporary and they often can be prevented or reduced.

Side effects may include fatigue, mouth ulcers or weight changes. Most people who have chemotherapy for breast cancer lose their head and body hair. Some treatment centres provide cold caps, which often prevent total head hair loss. The chemotherapy medications used today are less likely to cause nausea or vomiting. Let your treatment team know about the side effects you experience so they can help you manage them.

For some women their periods can become irregular or stop during chemotherapy, but return to normal after treatment. For others, chemotherapy may cause periods to stop permanently (menopause).

For more information on chemotherapy call Cancer Council [13 11 20](tel:131120) or see [Understanding Chemotherapy](#).

## Targeted therapies

Also known as biological therapies, these stop the growth of cancer cells that have a higher than normal level of a protein known as HER2, which stimulate cancer cells to grow.

### Herceptin®

Trastuzumab (known as Herceptin®) is a common type of targeted therapy for breast cancer. It works by attaching itself to HER2 positive breast cancer cell receptors. This can destroy cells and reduce their ability to divide and grow. Herceptin® also encourages the body's own immune cells to help destroy the cancer cells.

Herceptin® also increases the effect of chemotherapy drugs on breast cancer. Several trials have shown that Herceptin® used in combination with chemotherapy for women with HER2 positive early breast cancer works better than chemotherapy alone.

You will receive this drug via an infusion into a vein. You will usually have treatment weekly or every three weeks. The first infusion may take up to 90 minutes. The following infusions are over 30 minutes, and will continue for up to 12 months.

Your medical team will monitor you for side effects. The most common side effects include fever, runny nose, diarrhoea, headache and a rash. Herceptin® can affect the way your heart works. You will have tests to check your normal heart function before starting with Herceptin®, and at regular intervals during treatment. Talk to your doctor about what to expect.

## Hormone therapy

Hormone therapy, also called endocrine therapy, is for people who have hormone receptors (ER or PR) on their breast cancer cells. The aim of hormone therapy is to slow or stop the growth of hormone receptor positive cancer cells.

Ask your doctor if hormone therapy is suitable for you. There are different ways of reducing the level of female hormones in the body. This will depend on your age, the type of breast cancer you have and whether you have reached menopause.

## Tamoxifen

Tamoxifen is known as an anti-oestrogen drug. It works by stopping cancer cells responding to oestrogen. Tamoxifen is usually started after surgery or following radiotherapy or chemotherapy treatment. It is taken as a daily tablet over five years. This drug can be given to women of any age, regardless of whether they have reached menopause, but it is usually given to pre-menopausal women.

Tamoxifen does not cause menopause but the side effects are similar. The most common side effects include hot flushes, trouble sleeping, vaginal dryness or discharge, low mood, weight gain and irregular periods. Tamoxifen may also increase the risk of blood clots – see your doctor immediately if you have any swelling, soreness or warmth in your arm or leg. If you are having other surgery or travelling long distances, you may need to stop taking tamoxifen beforehand to lower the risk of blood clots. You can resume taking it when surgery or travel is completed.

Any side effects you experience will usually improve as treatment continues and when it ends. Your doctor and breast care nurse can give you information about ways to manage these side effects.

A rare side effect of tamoxifen is increased risk of uterine cancer in post-menopausal women. See your doctor if you notice any unusual bleeding. If you're taking tamoxifen for more than five years, you should have annual gynaecological examinations.

## Aromatase inhibitors

Aromatase inhibitors help prevent the growth of oestrogen-dependent cancer cells by reducing the amount of oestrogen made in the body. They are used only in post-menopausal women.

Examples of aromatase inhibitors include anastrozole (Arimidex®), exemestane (Aromasin®) and letrozole (Femara®). They are taken daily, usually for five years.

Side effects may include loss of bone density, vaginal dryness, joint and muscle pain, low mood, hot flushes and weight gain. For people with arthritis, the joint pain can be quite debilitating.

## Ovarian treatments

For women who have not reached menopause, treatments that stop the ovaries from producing oestrogen, temporarily or permanently, may be recommended.

**Temporary ovarian treatment** – These treatments include the drug goserelin (Zoladex®), which stops oestrogen production. This drug is suitable for women who have breast cancer that is sensitive to oestrogen. Zoladex® is injected into the body to bring on a temporary menopause.

You may experience side effects such as low sex drive, hot flushes, mood swings, trouble sleeping, vaginal dryness and headaches. Ask your doctor for ways to best manage these side effects.

**Permanent ovarian treatment** – Ovarian ablation can stop the ovaries from producing oestrogen permanently. Ovarian ablation is done by having surgery to remove the ovaries (oophorectomy) or having radiotherapy to the ovaries.

These treatments will bring on permanent menopause. This means you will no longer be able to become pregnant. You may have some menopausal symptoms, including hot flushes and vaginal dryness, and your risk of osteoporosis may increase.

*This website page was last reviewed and updated February 2016.*

**Information last reviewed August 2014 by:** Dr Carolyn Cho, Breast and General Surgeon, Surgical Oncology, Deakin, ACT; Lynn Buglar, Breast Physician, BreastScreen, NSW; Mena Crew, Consumer; Elizabeth Jacobson, Consumer; Jane Marsh, Clinical Manager, Breast Centre, Brian Fricker Oncology Centre and Burnside War Memorial Hospital, SA; Marie Murdoch, Breast Care Nurse,

Cancer Council Queensland, QLD; and Marion Strong, Clinical Nurse Consultant Breast Care Nurse and Cancer Care Coordinator, Toowoomba Hospital, QLD.

Content printed from <https://www.cancersa.org.au/information/a-z-index/treatment-for-breast-cancer>

This website is made possible by the generous support of South Australians.  
Copyright © 2010-2018 Cancer Council SA