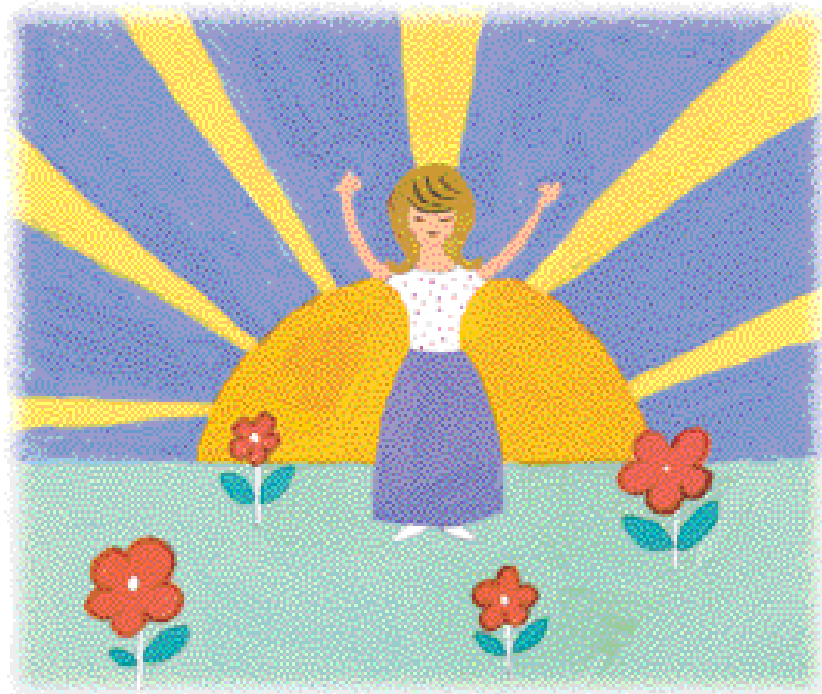


# Breast Cancer



Inspired by Hope. Committed to Care



National Cancer  
Centre Singapore

SingHealth

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## Acknowledgement

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# Introduction



breast cancer is the most common type of cancer among women in Singapore today. 1 out of every 17 women in Singapore is likely to be afflicted by breast cancer, with more than 1,000 new cases diagnosed every year.

With more reliable early detection methods as well as the trend towards less invasive surgery, there is hope that even more women with breast cancer will be treated successfully and will go on to resume their normal lives.

This booklet has been developed to help you learn more about breast cancer. It discusses breast cancer screening, early detection methods, signs and symptoms, how a diagnosis is made, treatment options and rehabilitation measures. Please understand that there is no single treatment that is “right” for all women, and how a woman reacts to the treatment is largely due to her physical and psychological make-up.

It is our hope that this booklet will demystify breast cancer by providing you with relevant information and coping techniques. This booklet serves only as a guide and its contents are not to be taken as medical advice. You will still need to discuss with your doctor the best treatment option for you. If you have any questions about the contents of this book, or if there is any information that you are seeking and is not covered here, please do not hesitate to contact us.

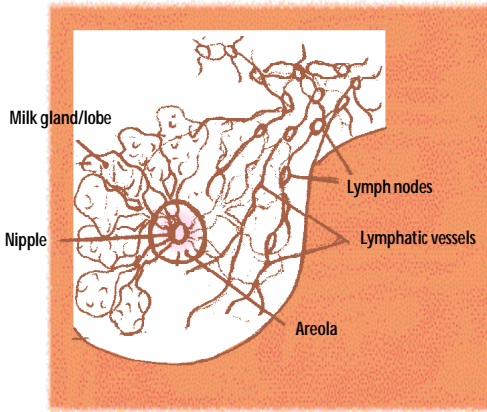
If you find this booklet useful, please share it with someone whom you think will benefit from it.

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For more information about breast cancer, please call the Cancer Helpline on 6225 5655 and speak with a nurse counsellor or email: [cancerhelpline@nccs.com.sg](mailto:cancerhelpline@nccs.com.sg)

For the electronic version of this booklet, please visit National Cancer Centre Singapore's website: [www.nccs.com.sg](http://www.nccs.com.sg)

## The normal female breast



Female breasts are designed to produce milk. Each breast has many milk-producing glands arranged in 15 to 20 sections called lobes. These glands and lobes are linked by milk ducts that lead to the nipple located in the centre of a dark area of skin called the areola. Fibrous tissue and fat surround these lobes and help give the breasts their structure and shape.

Each breast also contains blood vessels, lymph vessels, lymph nodes and nerves. The lymph vessels carry colourless fluid called lymph and lead to small bean-shaped glands called lymph nodes. Clusters of lymph nodes are found in the axilla, above the collarbone and in the chest. These vessels and lymph nodes are part of the lymphatic system, which help the body to fight infection.

The female breasts go through many changes after puberty. They grow and develop under the influence of hormones oestrogen and progesterone. To learn more about breast lumps and other breast changes, read National Cancer Centre's booklet on Common Breast Problems. For a free copy, call the Cancer Helpline on telephone 6225 5655 or email [cancerhelpline@nccs.com.sg](mailto:cancerhelpline@nccs.com.sg)

## What is breast cancer?

Normal cells divide and reproduce in an orderly manner. Your body relies on this orderly activity to repair injuries and replace worn-out tissue. Sometimes this orderly process is disrupted. Cells grow and divide out of control producing extra tissue to form a mass or lump called a tumour. A tumour can be benign or malignant.

**Benign tumours** are not cancers. They may grow slowly but do not spread to other parts of the body.

**Malignant tumours** are cancerous growths and have the potential to spread to other parts of the body.

Breast cancer is a malignant tumour. It occurs when breast cells become abnormal and divide without control or order. The majority of breast cancers start in the milk ducts. A

small number start in the milk sacs or lobules. Within these two groups, some grow very slowly while others develop more rapidly. Breast cancer can spread to the lymph nodes and to other parts of the body such as the bones and liver.

## Who is at risk?

Being a woman puts you at risk of getting breast cancer. This risk increases as you grow older. Several factors further increase your risk. A woman is at a higher than average risk for breast cancer if one or more of the following applies to her:

- ❁ Family history of breast cancer, especially in a first-degree relative (mother, sister or daughter), or two or more close relatives such as cousins.
- ❁ Genetic alterations in certain genes such as BRCA1 and BRCA2.
- ❁ Benign conditions such as atypical ductal hyperplasia, atypical lobular hyperplasia or lobular carcinoma in-situ diagnosed on breast biopsy.
- ❁ Early menarche (onset of menstruation) before the age of 12.
- ❁ Late menopause (after the age of 55).
- ❁ Never had children.
- ❁ Late childbearing (after the age of 30).
- ❁ Personal history of breast cancer.
- ❁ Excessive weight gain in postmenopausal women.
- ❁ Excessive alcohol consumption over a long period of time.
- ❁ Use of combined hormonal replacement therapy (HRT) for a long period of time.

However, most women who have breast cancer have none of the above risk factors. Likewise, not possessing any of these risk factors does not mean that you will not get breast cancer. There are ongoing research to learn more about these factors as well as ways to prevent breast cancer.

## Signs & symptoms

Breast cancer is painless especially during the early stage. In fact, there may be no symptoms at all when breast cancer first develops. So watch out for changes in the breast. These are often the first signs that cancer is present:

- ❁ A persistent lump or thickening in the breast or in the axilla.
- ❁ A change in the size or shape of the breast.
- ❁ A change in the colour or appearance of the skin of the breast such as redness, puckering or dimpling.

- ❁ Bloody discharge from the nipple.
- ❁ A change in the nipple or areola, such as scaliness, persistent rash or nipple retraction (nipple pulled into the breast).

If you notice any of these changes, you should see a doctor immediately. Most often, they are not due to cancer, but only a doctor can tell for sure.

## Early detection & screening

When breast cancer is found and treated early, the woman has more treatment choices and a good chance of complete recovery. So it is important to detect breast cancer as early as possible through regular breast screening even if you have no symptoms. "Screening" simply means performing a preliminary test or procedure to detect the most characteristic signs of a disorder that may require further investigation. There are several ways to screen for breast cancer besides watching out for the symptoms mentioned earlier. These are:

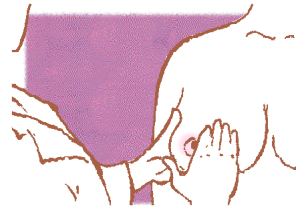
### a. Breast Self-Examination (BSE)

Perform Breast Self-Examination (BSE) **on a monthly basis** about 7 to 10 days from the first day of your menses. If you no longer menstruate, choose a date each month that is easy to remember. Report to your doctor any breast changes such as redness, swelling, presence of a lump, skin changes or discharge from the nipple.



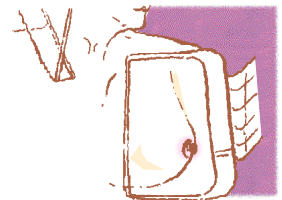
### b. Clinical Breast Examination

Get a doctor or breast specialist nurse to examine your breast **once every year if you are 40 years and above**. This procedure includes visual examination and feeling of the entire breast and underarm area for changes. These changes may or may not be due to cancer. With the help of further confirmatory tests, your doctor will be able to let you know.



### c. Mammogram Screening

A mammogram can detect cancer in the breast before it can be felt. Go for a screening mammogram (X-rays of the breast) once a year, even if you do not have any symptoms, if you are **40 years old and above**. All women have an increased risk of developing breast cancer as they grow older. Breast tissue in



younger women is denser, making it difficult for small changes to be detected. For this reason, screening mammography is not recommended for women below age 40. However, if you have risk factors, you should discuss with their doctor when you should start regular screening.

For more information about breast cancer screening or if you have concerns about changes in your breast, you can do one of the following:

- talk to your doctor,
- contact the nearest polyclinic,
- contact your Breast Specialist Nurse or
- call the Cancer Helpline on 6225 5655.

## Types of breast cancer

### Non-Invasive Breast Cancer

Non-invasive breast cancers are confined to the breast ducts. It is known as Ductal carcinoma-in-situ (DCIS) where the cancer cells stay within the ducts.

### Invasive Breast Cancer

**Invasive breast cancer** occurs when cancer cells spread beyond the ducts or lobules. Cancer cells first spread to surrounding breast tissue and subsequently to the lymph nodes in the armpit (axillary lymph nodes). Cancer cells can also travel to other parts of the body such as the lungs, liver or bones. When this happens, it is known as metastatic breast cancer.

## Making a diagnosis

If you notice any lump or unusual changes in your breasts, you should see a doctor. Try to pinpoint the area accurately as this will assist your doctor with the examination. Your doctor may advise you to undergo some tests so that a definite diagnosis can be made. These tests may include one or more of the following:



Having a mammogram done

### Mammogram

If you have breast symptoms, you may need to have a mammogram to help with the diagnosis. The mammogram checks for the presence and position of the abnormality. To do

this, more detailed X-rays may be needed as compared to those taken for a screening mammogram. Sometimes a lump that can be felt is not seen on a mammogram. Other tests are often necessary to determine whether the lump is cancerous or not. If you have recently had a mammogram, remember to bring with you the X-rays (and report if available) when you see the specialist.

## Ultrasound

Another test you may have is an ultrasound. This test uses high-frequency sound waves to scan your breasts. The vibrations from these sound waves are reflected off your breast tissue and transformed into electrical signals that show up as an image on a television screen. Ultrasound does not use radiation. The doctor or radiographer does the scanning. A probe that looks like a microphone will be moved across your breast. This test can differentiate a fluid-filled cyst from a solid lump.

## Fine needle aspiration

For this test, your doctor uses a syringe with a very fine needle to withdraw fluid or cells from a breast lump. This can be uncomfortable but is usually not painful. If the lump is just a cyst, withdrawing fluid in this manner will usually make the cyst disappear. However, if the lump is solid, your doctor may use this procedure to withdraw some cells from it. The cells will then be sent to a laboratory for examination.

## Core needle biopsy

This method obtains a few slivers of tissue from an area of abnormality with a wide bore needle. Local anaesthetic is used to numb the breast area first, followed by a small incision in the skin to allow easy insertion of the needle. If the abnormality is non-palpable, the procedure can be performed with ultrasound or x-ray guidance.

## Large core needle breast biopsy (Mammotome®)

Mammotome® Breast Biopsy uses a vacuum-assisted device to obtain tissue samples from non-palpable lesions. Small samples of tissue are removed from the breast using a large bore needle which is guided precisely to the suspicious lesion via X-ray or ultrasound. This procedure is minimally invasive as compared to an open surgical biopsy. It is performed as a day surgery procedure. It has the ability to sample tiny abnormalities called microcalcifications, making early diagnosis of breast cancer possible. It is done under local anaesthetic and takes about 30 to 45 minutes to complete. The procedure is usually not painful but you may experience some discomfort.

## Excision biopsy

An excision biopsy involves the surgical removal of a lump or sample of suspicious tissue for examination under a microscope. It will give a definite diagnosis of your problem. Biopsies can be performed either under local or general anaesthesia, depending on the size and position of the lump. You can leave the hospital on the same day.

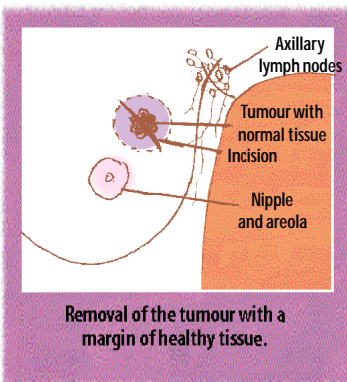
If you are unsure of how the biopsy will be done, ask the surgeon to explain what it involves. You may want to ask the size and position of the scar, whether you will feel any pain or discomfort and how long you will need to be away from work.

## Treatments

Treatment of breast cancer may include various methods, such as surgery with or without breast reconstruction, chemotherapy, radiation therapy and hormonal therapy. Treatment options offered depend on a number of factors, such as the stage of cancer and likelihood of cure, your general health, and your preference. Being diagnosed with breast cancer and having to decide on the treatment option is one of the most difficult decisions you will ever have to make. Have someone close to accompany you when visiting the doctor to discuss the result of your tests and treatment options.

### a. Surgery

A lumpectomy or mastectomy, is one of the most common treatments for breast cancer. The type of surgical treatment depends on the stage of the cancer and your feelings about the options.



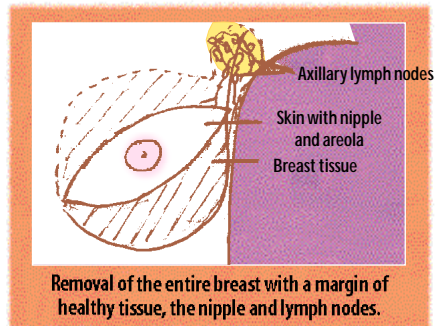
**Lumpectomy** is a breast conserving surgery and only performed for early breast cancer. In lumpectomy, the cancerous part of the breast with a margin of normal breast tissue around the cancer is removed as well. Removal of some lymph nodes in the armpit via a separate incision is necessary for invasive breast cancer. The aim is to remove all the cancer, leaving you with a breast looking much the same as before the surgery. Women who choose a lumpectomy will require radiation therapy to destroy any cancer cells that may remain in the area.

**Mastectomy** is the surgical removal of the breast. It can be either a:

- ❁ **Total or Simple Mastectomy**, which removes the whole breast, some of the overlying skin and the nipple. The lymph nodes under the arm are not removed.
- ❁ **Modified Radical Mastectomy** which removes the whole breast, as much breast tissue as possible, some overlying skin, the nipple and some lymph nodes in the armpit.

**A mastectomy is required when:**

- ❁ Cancer is found in more than one area of the breast.
- ❁ The cancerous area is large and little normal breast tissue is left. Performing a lumpectomy will result in an unacceptable cosmetic result.
- ❁ The woman does not want to have radiation therapy. However, in some cases, radiation may still be required after a mastectomy if the tumour is larger or lymph nodes in the armpit are involved by cancer.

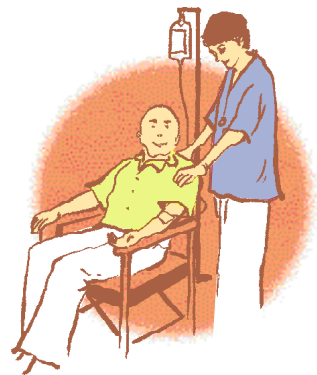


## Breast Care Nurse

Most hospitals have a Breast Care Nurse service where a Breast Specialist Nurse talks to patients about their concerns before and after surgery.

### b. Chemotherapy

This treatment method uses anti-cancer drugs to kill cancer cells. They stop cancer cells from growing and reproducing themselves. These drugs can be given orally (by mouth) or by injection where it enters the blood stream and travels throughout the body. It may be used alone, before or after surgery, or together with radiation therapy to increase the effectiveness of treatment, depending on the stage of cancer.



Chemotherapy is given in cycles. Each cycle consists of a treatment period followed by a resting (recovery) period. As cancer drugs also affect normal cells, the resting period is to allow the body to recover before the next treatment cycle starts. There are side effects associated with chemotherapy such as hair loss, nausea and vomiting, loss of appetite, mouth ulcers and risk for infection. However, these are temporary and steps can be taken to prevent or reduce them.

### c. Radiation Therapy

High-energy rays are used to kill cancer cells or stop them from growing further. Although radiation therapy can affect both cancer cells as well as normal cells, the aim of radiation is to destroy more cancer cells and spare as many normal cells as possible. Radiation therapy is given to the affected breast after a lumpectomy. In some circumstances, it may be given to the chest wall after a mastectomy. It is given 5 days a week on weekdays, over a period of 6 weeks. Radiation therapy can cause some side effects which vary among individuals.

The most common side effect is “sunburn” on the skin. The degree and intensity of the skin reaction is greater in patients receiving a large standard dose and in patients who have fair skin. Skin texture also becomes darker and thicker. The breast may swell, and increase or decrease in sensitivity. Usually, these effects are temporary and are manageable.



**A patient undergoing radiation therapy**

### d. Hormone Therapy

Some breast cancers grow with the influence of hormones. Hormone therapy in breast cancer is aimed at affecting oestrogen, a hormone that is required for the cancer to grow. For some women with early breast cancer, anti-cancer hormone treatment may be used as an additional treatment to reduce the chances of breast cancer recurrence. Hormone therapy can cause some side effects. These are dependent on the type of drugs taken and can vary from one patient to another.

### Tamoxifen

Tamoxifen is the most common drug used in this treatment. This drug blocks the action of oestrogen on the body but does not stop oestrogen from being produced. Tamoxifen may cause hot flashes, depression or mood swings, vaginal discharge or irritation, irregular menstrual periods and sometimes menopause. Any unusual bleeding should be reported to the doctor.

Serious side effects from tamoxifen are rare but tamoxifen can cause the formation of blood clots in the veins, especially in the legs. In a very small number of women, tamoxifen can cause cancer in the lining of the uterus. You may be referred to a gynaecologist to evaluate any unusual bleeding.

## Aromatase Inhibitors (AI)

For postmenopausal women, another group of drugs called aromatase inhibitors (AI) is also used in breast cancer hormonal treatment. Aromatase inhibitors work by blocking an enzyme called aromatase that the body uses to produce oestrogen. The current AI such as anastrozole, letrozole and exemestane, are well tolerated and have been used to treat advanced breast cancer. Side effects of AI include hot flashes, mood changes, nausea, vagina dryness, joint pain/stiffness, tiredness, lethargy and osteoporosis (including a higher risk of fractures compared to tamoxifen). The role of AI in early breast cancer is evolving and for post-menopausal patients who cannot tolerate tamoxifen, there is a role to use AI as an alternative.

You can discuss with your doctor, Breast Care Nurse or pharmacist on what to expect and how to care for yourself during treatment. If there are more concerns, you can also contact the Cancer Helpline on tel: 6225 5655 or email [cancerhelpline@nccs.com.sg](mailto:cancerhelpline@nccs.com.sg).

## e. Immunotherapy in breast cancer

Immunotherapy is a form of cancer treatment that involves the use of antibodies to bind to cancer cells in order to prevent cell growth and division. The aim of the treatment is to reduce and hopefully eliminate existing cancer cells in the human body.

Trastuzumab, also known as Herceptin, a humanized monoclonal antibody is the currently approved immunotherapy for breast cancer. It is effective in about 25 to 30% of breast cancer patients who have HER2 (Human Epidermal Growth Factor Receptor) positive disease; the presence of which can be confirmed by laboratory tests performed on the biopsy specimen.

Herceptin, has been shown to prolong survival in breast cancer patients with advanced disease (Stage 4) when used in combination with chemotherapy. Recently, data from several large international clinical studies has reported a significant reduction in relapse risk in patients with early breast cancer. Unlike chemotherapy, immunotherapy is more specifically targeted at the cancer cells. Thus, there are generally fewer side effects. Patients who receive Herceptin, may complained of infusion-related reactions such as fever and chills. Rarely, weakening of the heart muscles (also known as cardiomyopathy) has been observed in some patients.

As Herceptin, is a relatively new drug, the cost of treatment is substantially higher than most types of chemotherapy.

# Staging of breast cancer

## Stage 0

- ☼ Very early breast cancer or pre-invasive cancer. This type of cancer is confined within the milk ducts and has not acquired any ability to spread beyond the breast. This is also called ductal carcinoma-in-situ.

## Stage 1

- ☼ Tumour is 2 cm or less in greatest dimension. No cancer cell is found in the lymph nodes under the armpit or outside the breast.

## Stage II A

- ☼ Tumour is 2 cm or less in greatest dimension with cancer cells found in 1 to 3 lymph nodes under the armpit.  
or
- ☼ Tumour is between 2 and 5 cm. No cancer cells is found in the lymph nodes under the armpit.

## Stage II B

- ☼ Tumour is between 2 and 5 cm. Cancer cells found in 1 to 3 lymph nodes under the armpit.  
or
- ☼ Tumour is larger than 5 cm. Cancer cells are not found in the lymph nodes under the armpit.

## Stage III

- ☼ Tumour is up to 5 cm with cancer cells also found in more than 3 lymph nodes in the armpit.  
or
- ☼ Tumour is larger than 5 cm with cancer cells found in any lymph node under the armpit.  
or
- ☼ Tumour of any size with cancer cells in more than 9 lymph nodes in the armpit or in any of the supraclavicular lymph nodes (area just above the collar bone).  
or
- ☼ Tumour is attached to other parts of the breast area including the underlying ribs and muscles, or the overlying skin.  
or
- ☼ Inflammatory breast cancer. In this rare type of cancer, the skin of the breast is red and swollen.

## Stage IV

- ☼ Cancer has spread to other parts of the body such as the bones, lungs, liver or brain.

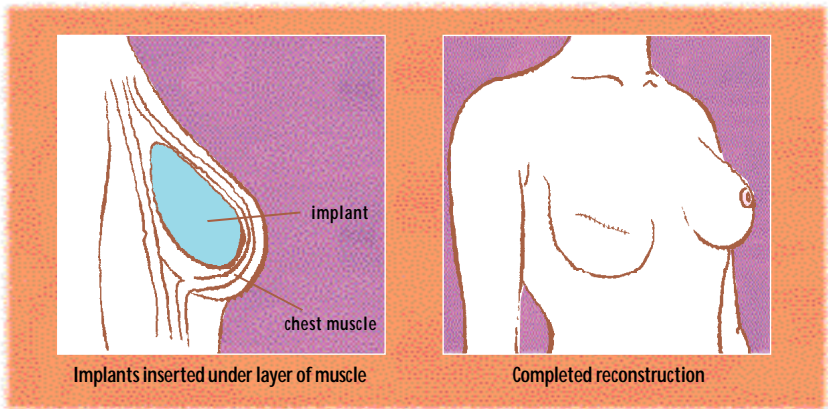
# Breast Reconstruction

Breast reconstruction is surgery to “re-create” a breast using an implant and/or one’s own body tissue. This option is offered to some women who have lost a breast because of cancer. The surgical result will provide the breast with shape, but no natural feeling. Additional steps to improve the look of the breast may include:

- ✿ Adding a nipple.
- ✿ Surgery to the opposite breast to create a good match.
- ✿ Refining the shape of the re-created breast.

## Reconstruction with implants

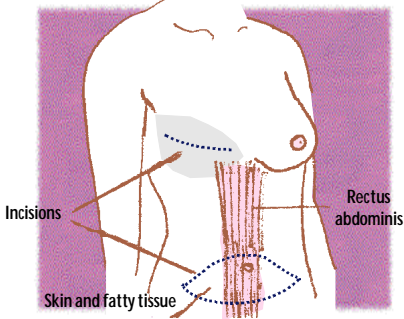
Implants are sacs filled with silicone or saline (salt water). The sacs are placed under the skin behind the chest muscle.



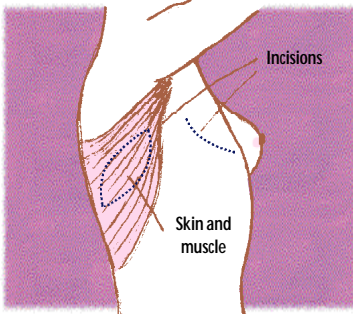
## Reconstruction with tissue flaps

Tissue flap which consists of muscle, fat and skin from another part of the body can be moved to the chest area, where it is shaped to form a breast. Tissue flap can be taken from the lower abdomen, back or buttocks. The nipple and areola are created at a later date.

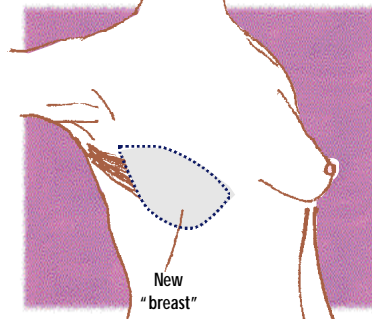
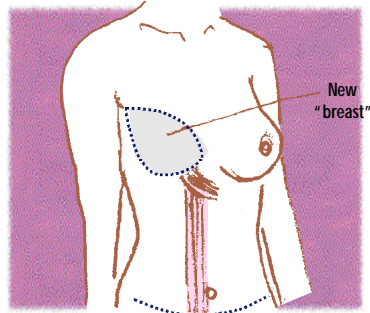
## Tram Flap



Tissue from the abdomen is used to create a breast mound



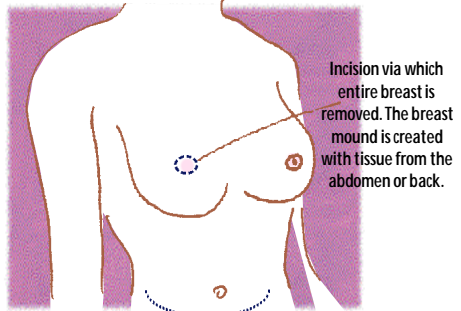
## Dorsi Flap



A flap from the back is brought forward underneath the skin to complete the reconstruction

## Skin Sparing Mastectomy

For some women, it is possible to preserve almost all of the skin of the breast while completely removing the underlying breast tissue. This "skin-sparing mastectomy" will achieve better aesthetic results with reconstruction because the scars on the breast are minimal.



If you are thinking of breast reconstruction, discuss this with your surgeon before your mastectomy. You may be referred to a plastic surgeon for the reconstructive surgery. Some women undergo reconstructive immediately after mastectomy while others wait several months or even years. Your body type, age and cancer treatment will determine the best method and timing for reconstruction to give you the best possible result.

# Post-operative care

## Wide Local Excision / Mastectomy with Axillary Clearance

If you are going for an operation called Wide Local Excision or Mastectomy with Removal of Axillary Lymph Nodes, your stay in the hospital after surgery is usually about 1 to 2 days. Therefore, it is important for you to learn how to take care of yourself at home after you are discharged from the hospital.

### Care of your incision wound

On the first two days after the operation, keep the outer dressing dry by covering it with a protective sheet before taking a shower. Thereafter, the outer dressing can be removed and you can shower as usual.

### Wound Closure

If your wound is closed with staples:

- ✿ After a shower, keep the wound dry by dabbing lightly with a towel and leave to air.
- ✿ For the removal of staples, visit your treating doctor, the polyclinic or family practitioner on the date that you are instructed to do so.

If your wound is closed with absorbable sutures:

- ✿ Steri-strips may be placed across the wound to assist with external wound healing. The steri-strips can be removed on the 10th post-operative day after your shower.

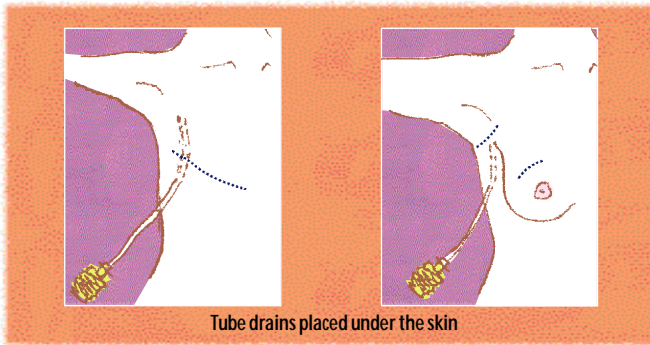
See a doctor:

- ✿ if you have a temperature of 38°C and above,
- ✿ if you experience redness/ swelling around the incision site,
- ✿ if you have discharge from the wound or around the drain site,
- ✿ if you have increased pain at the incision site.
- ✿ if your skin separates at the incision site.

Contact the Breast Care Nurse or your doctor if you are in doubt.

## Drain care

Soft flexible tube drains are placed under the skin at the time of surgery. These help to remove blood and other fluids that accumulate at the site of surgery. You may be discharged from the hospital with the tube drain in-situ. The nurse in the ward will teach you how to take care of it at home and to keep a record of the drainage. It will be removed in the clinic when the drainage is minimal. This usually takes 5 to 7 days.



## Medication

Do continue with your routine medication as prescribed by the doctor.

## Diet

There are no restrictions to your diet unless advised by your doctor.

## Activity and Exercise

On the first or second day after surgery, you need to perform certain exercises to maintain optimal movement to prevent stiffness of the affected shoulder. All patients will attend a group exercise programme facilitated by an Occupational Therapist before they are discharged from the hospital. During the program, you will be given a pamphlet on a set of arm exercises to perform. Avoid strenuous exercises and activities that may leave you tired during the first few weeks after your discharge from the hospital. Your Breast Care Nurse will discuss with you the types of exercises you can and should perform.

## Rehabilitation

You may experience stiffness and tightness around the chest and armpit areas after surgery. This may restrict the full range of movement of your arm. Hand and arm exercises are important in helping you regain full motion and strength.

Your hand and arm on the same side of the operation may swell slightly if your surgery involves removal of the lymph nodes. The swelling does not mean that cancer has recurred. Lymph nodes drain fluid from the arm and their removal may cause fluid to collect in the armpit and the arm on the operated side. This condition is known as lymphoedema. In some patients, the swelling of the arm is persistent but usually does not affect the function of the arm.

You may be referred to a physiotherapist or occupational therapist who is specially trained in treating lymphoedema. Programmes may include exercise, manual lymphatic drainage (a special massage technique), skin care and compression bandaging to help reduce the swelling.

Lymph nodes also contain cells which fight infection. Your arm on the operated side is also more prone to infection as a result of lymph node removal. Therefore, you have to take extra care to protect the hand and arm on the operated side from injury.

## Caring for your arm and hand

- ☼ Use sun block to decrease your risk of sunburn.
- ☼ Avoid taking blood, measuring of blood pressure or having injections on the affected arm.
- ☼ Avoid wearing tight-fitting jewellery, watch and clothing.
- ☼ Use alcohol-free moisturizer to prevent chapped skin.
- ☼ Avoid accidental cuts when trimming or cutting fingernails.
- ☼ When you have a minor cut or burn on your arm or hand on the operated side:
  - Wash the area thoroughly with soap and water to keep it clean.
  - Apply antibacterial cream and cover with a clean dressing.
  - Change the dressing once or twice a day.
  - See a doctor if the wound does not improve within 3 days.
  - See a doctor or call the Breast Care Nurse immediately if there is redness, pain or increased swelling.
- ☼ Avoid extreme temperature changes when bathing or washing dishes.

## Physical appearance

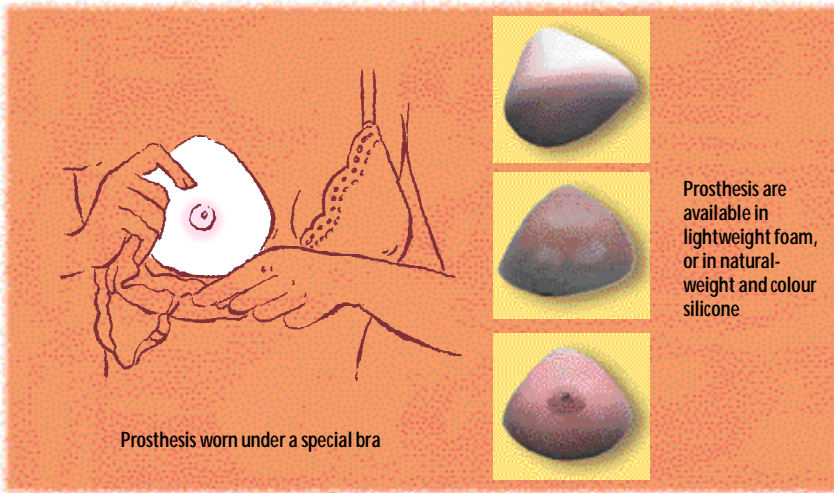
After a mastectomy, you can maintain your physical appearance either by wearing a prosthesis (called a breast form), or undergoing breast reconstruction. Discuss with your doctor or Breast Care Nurse the many options available.

## Breast forms and mastectomy bras

Many women choose not to have breast reconstruction after mastectomy. Some make this decision because they want to avoid extra surgery. Others, because they are comfortable with their appearance and body image.

Breast forms or prostheses are used to maintain appearance and sense of balance and to relieve the strain on posture that may occur after a mastectomy. They are available in a variety of sizes, shapes and colours. Some are designed to fit into a special bra. Others can be attached securely to your chest using a special adhesive.

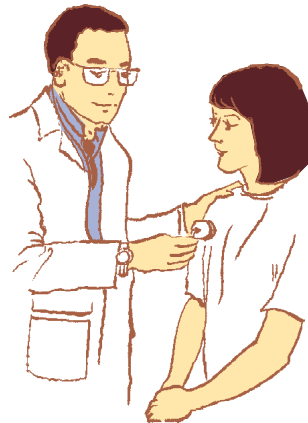
The Breast Care Nurse will give you an appointment for prosthesis fitting about 6 weeks after the surgery. In the meantime, you may use soft padding underneath your bra while your wound heals. When choosing a breast form, it is important that it has the same size and weight as your other breast. This will help maintain your posture and prevent back strain.



## Follow-up care

You will need to go for regular follow-up by the doctor after your treatment. Because you are at an increased risk of developing breast cancer again, the doctor will monitor you closely. This will include physical examination of the chest, underarm, neck, and the other breast. You may also need periodic mammograms and blood tests. Inform your doctor if you discover the following:

- ✿ Changes in your surgical scar and treated area
- ✿ Any unusual changes in the treated or other breast
- ✿ Swollen lymph glands
- ✿ Bone pain
- ✿ Persistent cough
- ✿ Difficulty in breathing
- ✿ Jaundice



# Frequently asked questions

## Hormone therapy for breast cancer

### 01 Why do I need hormone therapy?

Normal female hormones like oestrogen may promote growth of normal healthy breast tissue, but may also accelerate the growth and recurrence of certain breast cancers. Drugs that slow breast cancer growth by interfering with normal female hormone action are generically called hormone therapy. Some breast cancers need the hormone oestrogen to grow. Hormone therapy can prevent your body's natural hormones from activating growth or spread of cancer cells.

### 02 What drug will I be given? What does it do?

The most common drug used for hormone therapy for breast cancer is the oral tablet tamoxifen, which stops the action of oestrogen.

### 03 Will I have any side-effects? What can I do about them?

You may experience any of the following common side-effects:

- Hot flushes/sweats  
Wear a thin layer of clothing to keep cool when hot flushes occur.
- Vaginal irritation  
Some women experience vaginal dryness or discharge. Notify your doctor who can recommend a non-oestrogen cream or lubricant.
- Irregular menstrual periods  
Some pre-menopausal women experience irregular periods. Some women may find that once they stop taking tamoxifen, their menstrual cycle becomes regular again.

Other less common side-effects are depression, mood swings and a slightly increased chance of developing cancer of the uterus and deep vein thrombosis. Regular gynaecological checkups are recommended.

### 04 How long will I be on hormonal treatment?

When used to treat early breast cancer, Tamoxifen is most often prescribed for 5 years. Patients with advanced disease may take it for varying lengths of time depending on their response to treatment.

### 05 Why do some women need hormonal treatment while others do not?

Many breast cancers have 'receptors' for oestrogen and progesterone. Receptors are proteins on the surface of the cancer cells to which specific hormones (eg. oestrogen or progesterone) attach themselves. If the cancer has oestrogen or progesterone receptors, it is likely that hormonal treatment would benefit this group of women.

### 06 Would I lose my libido after treatment?

Some women will continue with their usual sexual activity while others find their libido (sexual drive) decreased. If you experience a loss of interest in sex, do not be alarmed, as this is not unusual. Talk about your fears and worries with your partner. Your doctor or the nurse can also refer you to trained counsellors and therapists to help you overcome such fears and worries.

## Sexuality

### 07 Would my doctor or nurse be able to help me with my concerns of sexual relationship?

You can discuss your concerns with your doctor or nurse. If they are unable to help you, they can refer you to someone who can.

### 08 Can I become pregnant when I have breast cancer?

The belief is that changing levels of female hormones during pregnancy could encourage the recurrence of breast cancer. However there is no data to show that this is so. Some doctors will advise you to wait one or two years after completion of treatment before attempting to conceive. Nevertheless, do discuss with your doctor before planning to conceive.

### 09 Will I still have my menstrual periods after breast cancer treatment?

Treatment with chemotherapy and hormonal therapy may cause changes in your menstrual cycle, resulting in irregular menstruation or early menopause. If you are already reaching menopause, your menstrual periods may not return.

## Complementary or Alternative Therapy

### 10 What are complementary and alternative therapies for cancer?

Complementary therapy is therapy used in addition to conventional treatments such as surgery, chemotherapy and radiation therapy. It is called alternative when it is used instead of conventional cancer treatment.

### 11 Can I use complementary therapy while I am undergoing conventional treatment?

Many people use complementary therapy while they are having conventional treatment and this usually does not cause problems. However, it is important to tell your doctor what you are doing or intending to do. This way, you can ensure that whatever therapy you are undergoing or considering will not interfere with your conventional treatment.

### 12 What should I do if I am considering alternative therapy instead of conventional medical treatment?

You have the right to choose your treatment. However, do consider the risk of losing the benefits that conventional treatment offers. Do not make hasty decisions. Always discuss with your doctor and consider the pros and cons of each treatment before making a decision.

### 13 I read that alternative therapy can cure cancer. Is it true?

You may have read or heard of people who claimed that their cancer was cured by an alternative therapy. To date there is no scientific evidence to show that alternative therapy alone can cure cancer. Most of these people may have had conventional treatment as well, often shortly before or at the same time as they were using alternative therapy. Conventional treatment can sometimes take weeks or months to work fully.

Sometimes, the cancer is not cured but is still present or progressing although the person feels well in the short term. Most cancers show no symptoms during much of their course, but this does not mean that the cancer is under control. This is the reason doctors wait many years before saying that a cancer is cured.

It is important to remember that people promoting unproven or alternative treatments do not publicise their failures, ie., the many people for whom the treatment did not work, or the ones who never returned to the practitioners.

## Prostheses

### 14 What choice of prostheses (breast forms) do I have?

There is a wide range available. The type of breast form you require will depend on your needs. It should closely simulate the weight and shape of a natural breast and your other breast. If you need advice, speak with your Breast Care Nurse.

### 15 Can the prosthesis be washed? How do I take care of it?

Yes, the prosthesis can be washed. Instructions on care of the prosthesis can be found in the box when you purchase one. You should also remember to replace the prosthesis in the box when you are not using it.

## Arm Exercises

### 16 Why do I need to exercise?

You are encouraged to exercise your affected arm soon after your operation to prevent stiffness of the shoulder joint.

### 17 When do I start arm exercises?

It is normal to feel tired for a few days after an operation. You can start the exercises as soon as you feel strong enough. This can be as early as the first day after your operation. The sooner you start, the faster you regain your shoulder movements.

## Recurrence

### 18 How would I know if I have a recurrence?

If you find an unusual lump or notice a new symptom, make an appointment to see your doctor. Usually you will still be on regular follow-up with your doctor. It is important that your doctor continues to support you but not every woman will need to be monitored closely. Your doctor will be the best person to tell you how often you need to be reviewed.

## Breast Reconstruction

### 19 When can breast reconstruction be done?

There are different opinions on this. It can be done at the time of mastectomy, some months afterwards or even years later. The timing may depend upon the type of breast cancer you have, whether you need further treatment (eg. chemotherapy), how you feel about the loss of your breast or breasts, your general health, and other concerns such as costs. Talk over these issues with your breast surgeon and plastic surgeon. Ask for a second opinion if you would like one.

### 20 Can I exercise after breast reconstruction?

It will be helpful to stay active and to exercise regularly if you can. Light exercise, such as walking after surgery, can assist in the recovery process. The amount and type of exercise will depend on what you are used to and how well you feel. It is best to discuss with your doctor your concerns.

**21 Do I need to go for regular breast screening after a reconstruction?**

It is important to have regular scheduled mammograms on the opposite breast. BSE should continue. Check both the remaining and the reconstructed breast at the same time each month. You will learn what is normal for you since the breast reconstruction. The reconstructed breast will feel different and the other breast may have changed too.

## Breastfeeding

**22 After being diagnosed with breast cancer, can I still breastfeed my baby?**

You can still breastfeed your baby from the unaffected breast. It is not advisable to breastfeed your baby on the breast that is affected by cancer, as it will not be able to produce adequate milk.

**23 Can I breastfeed after lumpectomy and radiation therapy?**

Yes, you can. Lumpectomy is not so extensive that it will affect your breastfeeding capacity, but radiation will. The breast treated with radiation may go through the same changes as the normal one during pregnancy, but it will produce little or no milk. You can, however, breastfeed your baby with the other breast.

**24 Can I breastfeed after mastectomy?**

Yes, you can still breastfeed your baby with the other breast. Frequent nursing will be necessary at first so as to build up a good supply of milk.

## General

**25 Can an injury to the breast cause cancer?**

An injury to the breast does not cause cancer. When the body tries to heal the bruise, it can develop scar tissue. This scar tissue can be mistaken as cancer on a mammogram. However, symptoms of injury should resolve within a month. If you are worried, seek confirmation from your doctor.

# Cancer Support Services

## Counselling and Support

### **National Cancer Centre**

11 Hospital Drive, Singapore 169610  
Tel: 6436 8000 (general line)  
Website: [www.nccs.com.sg](http://www.nccs.com.sg)

Psychosocial Oncology Department conducts the following programmes on coping with cancer:

- Living Your Best Program (Support)
- STEER Program
- Patient Orientation Program

Tel: 6436 8117

Email: [nsstbc@nccs.com.sg](mailto:nsstbc@nccs.com.sg)

Cancer Helpline provides information, emotional and psychological support to anyone affected by cancer through phone, email and face-to-face counselling. This service is free.

Tel: 6225 5655 Fax: 6324 5664

Email: [cancerhelpline@nccs.com.sg](mailto:cancerhelpline@nccs.com.sg)

### **Breast Cancer Foundation**

26 Dunearn Road, Singapore 309423

Tel: 6352 6560

Helpline: 6356 0123

Expat Helpline: 6352 5400

E-mail: [enquiries@bcf.org.sg](mailto:enquiries@bcf.org.sg)

Website: [www.bcf.org.sg](http://www.bcf.org.sg)

### **Singapore Cancer Society**

15 Enggor Street, #04-1 to 04, Realty Centre, Singapore 079716

Tel: 6221 9577 Fax: 6221 9575

Email: [enquiry@singaporecancersociety.org.sg](mailto:enquiry@singaporecancersociety.org.sg)

Website: [www.singaporecancersociety.org.sg](http://www.singaporecancersociety.org.sg)

SCS conducts the following programmes:

- Reach to Recovery - for Breast Cancer Support
- Oncology Support Group - for cancer patients undergoing treatment

## Pain Management and Palliative Care

### **Assisi Home & Hospice**

820 Thomson Road, Singapore 574623  
Hotline: 6347 6446 Fax: 6253 5312  
Email: [assisi@mtalvernia-hospital.org](mailto:assisi@mtalvernia-hospital.org)  
Website: [www.assisihospice.org](http://www.assisihospice.org)

### **Dover Park Hospice**

10 Jalan Tan Tock Seng, Singapore 308436  
Tel: 6355 8200 Fax: 6258 9007  
Email: [dover@mbox2.singnet.com.sg](mailto:dover@mbox2.singnet.com.sg)  
Website: [www.doverpark.org.sg](http://www.doverpark.org.sg)

### **Hospice Care Association**

12 Jalan Tan Tock Seng, Singapore 308437  
Tel: 6251 2561  
Fax: 6352 2030 (Home Care)  
6251-9318 (Day Care)  
Email: [info@hca.org.sg](mailto:info@hca.org.sg) (General Enquiries)  
[homecare@hca.org.sg](mailto:homecare@hca.org.sg) (Home Care Service)  
[daycare@hca.org.sg](mailto:daycare@hca.org.sg) (Day Care Centre)  
[volunteercoordinator@hca.org.sg](mailto:volunteercoordinator@hca.org.sg) (Volunteers)  
[socialworker@hca.org.sg](mailto:socialworker@hca.org.sg) (Social Worker)  
Website: [www.hca.org.sg](http://www.hca.org.sg)

### **Singapore Cancer Society**

15 Enggor Street, #04-1 to 04, Realty Centre, Singapore 079716  
Tel: 6221 9578 Fax: 6221 9575  
Email: [enquiry@singaporecancersociety.org.sg](mailto:enquiry@singaporecancersociety.org.sg)  
Website: [www.singaporecancersociety.org.sg](http://www.singaporecancersociety.org.sg)

### **St Joseph's Home & Hospice**

921 Jurong Road, Singapore 649649  
Tel: 6268 0482 Fax: 6268 4787  
E-mail: [stjoseph@stjh.org.sg](mailto:stjoseph@stjh.org.sg)  
Website: [www.stjh.org.sg](http://www.stjh.org.sg)

## Other Cancer Resources on the Internet:

American Cancer Society  
[www.cancer.org](http://www.cancer.org)

Cancer Care, Inc.  
[www.cancercares.org](http://www.cancercares.org)

Cancer Information Service (National Cancer Institute, USA)  
[www.nci.nih.gov](http://www.nci.nih.gov)

CancerNet (National Cancer Institute, USA)  
[www.cancernet.nci.nih.gov](http://www.cancernet.nci.nih.gov)

National Alliance of Breast Cancer Organization (NABCO)  
[www.nabco.org](http://www.nabco.org)

National Lymphedema Network  
[www.lymphnet.org](http://www.lymphnet.org)

Oncolink  
<http://www.oncolink.upenn.edu/disease/breast>

Susan G. Komen Breast Cancer Foundation  
[www.breastcancerinfo.com](http://www.breastcancerinfo.com)

Y-me National Breast Cancer Organization  
[www.yme.org](http://www.yme.org)

### References

1. 'What you Need to Know About Breast Cancer' by the National Institute of Health, National Cancer Institute, USA.
2. 'A Woman's Guide to Breast Cancer Diagnosis and Treatment' by the California Department of Health Services, USA.
3. 'All About Early Breast Cancer' by the National Health Medical Research Cancer Centre, National Breast Cancer Centre, Australia.
4. 'Be a Survivor - Your Guide to Breast Cancer Treatment' by Vladimir Lange, M.D.
5. 'Common Breast Problems' by Cancer Education & Information Service, National Cancer Centre Singapore.
6. 'Take Charge! Older Women and Breast Health' by the Susan G Komen Breast Cancer Foundation.

For more information on cancer, call the  
Cancer Helpline on 6225 5655 or  
email [cancerhelpline@nccs.com.sg](mailto:cancerhelpline@nccs.com.sg)

MONDAYS - FRIDAYS	8.30am to 5.30pm
SATURDAYS , SUNDAYS & PUBLIC HOLIDAYS	CLOSED

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**Cancer Education & Information Service**  
**Division of Medical Affairs**  
**National Cancer Centre**  
**11 Hospital Drive**  
**Singapore 169610**

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