



Breast Cancer  
Foundation NZ

# Breast cancer What happens after surgery?



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**For more information**

**0800 BC NURSE (0800 226 8773)**

**[www.breastcancerfoundation.org.nz](http://www.breastcancerfoundation.org.nz)**

# Breast cancer

## What happens after surgery?

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## 1

### Planning further treatment

**If your breast cancer has high-risk features or has spread to the lymph nodes, you may benefit from further treatment after surgery, to reduce the risk of the cancer returning. This treatment may be local to the area where the cancer has been removed (e.g. radiotherapy), or systemic (drugs), or both.**

After the surgical specimen has been examined in the laboratory and the specialist team has met to review your case, they will discuss their recommended treatment plan with you.

Breast cancer is a complex disease and it's important to understand that your treatment plan is specific to your type, grade and stage of breast cancer.

After surgery, your laboratory report will contain the following information:

- The type of breast cancer – whether it is invasive/ infiltrating (has spread outside the breast ducts into surrounding breast tissue) or in-situ (still contained within the breast ducts). Invasive cancer will be further classified e.g. ductal, lobular or other special types. In-situ disease is called ductal carcinoma in-situ, or DCIS.
- The size of the cancer.
- The number of tumours in the breast.
- The grade of the cancer (how fast the cells are dividing) usually expressed as Grade 1 (low grade), Grade 2 (intermediate) or Grade 3 (high grade).
- Whether there are cancer cells in any of the lymph nodes.
- HER2 receptor status (positive or negative) – this determines the need for treatment with trastuzumab (Herceptin) or Pertuzumab (Perjeta).
- ER & PR (oestrogen and progesterone) receptor status. While this is reported as either positive or negative, your specialist will discuss the percentage and intensity

of the receptor status. This result will indicate whether hormone blocking therapy will help reduce your recurrence risk.

- Whether the surgical margins (the edges of the area removed during surgery) are clear of cancer cells. If the margins are not clear, further surgery may be required to ensure the tumour has been completely removed.

Taking all of this information into account, you will be advised if there is a need for more local treatment (e.g. further surgery and/or radiation therapy) or systemic treatment such as chemotherapy, hormone-blocking therapy or targeted biological therapy such as Herceptin. These decisions are made in partnership with you, your whānau and specialists.

Sometimes, further imaging such as a CT, bone scan, or PET-CT may be used to investigate whether the cancer has spread beyond the breast to other parts of the body.

A more recent option in the medical management of breast cancer is gene-expression profiling. Multigene tests, for example Oncotype DX, MammaPrint, Prosigna, or Endopredict can help predict the risk of a breast cancer coming back after initial treatments. In some cases, the results may help doctors decide if chemotherapy might be needed (or avoided). These tests are expensive and are not currently government-funded in New Zealand, but may be covered by medical insurance. You should discuss with your doctor whether or not these tests might be useful for you.



Your specialist will discuss any expected side effects before you start treatment.

## Medical management of breast cancer

### Chemotherapy

**Chemotherapy is the use of anticancer drugs, usually given by intravenous infusion. These drugs are toxic to the cancer cells and travel in the bloodstream throughout the body. Chemotherapy is given as “adjuvant” treatment (after surgery) or sometimes “neo-adjuvant” (before surgery). The aim of chemotherapy is to kill any cancer cells that may have spread beyond the breast.**

#### What to expect

Chemotherapy is associated with a number of side effects, including temporary hair loss, fatigue, nausea and lowering of immunity. Many side effects can be controlled, making treatment easier to cope with. You may be given a medication to boost your immunity. Your medical oncologist will discuss any expected side effects with you before you start treatment. Ask your specialist team for help if the side effects are difficult to cope with, or if you are feeling uncomfortable or unwell. Sometimes you might hear, “It’s just part of the treatment,” but in fact, many side effects require attention and steps can be taken to help alleviate them. You must report symptoms promptly to your nurse or oncologist.

#### Types of chemotherapy

Various chemotherapy drugs can be used, depending on the type of breast cancer, the risk of recurrence, your age, and your general health and wellbeing. Usually a combination of drugs will be used to increase the effectiveness of the treatment. Combinations offered may differ from centre to centre around NZ. Your oncologist will encourage you to ask questions about the treatment you have been recommended.

### These are some of the drugs which may be included in your chemotherapy plan:

- Doxorubicin (Adriamycin)
- Cyclophosphamide
- Epirubicin
- Fluorouracil (5FU)
- Paclitaxel (Taxol)
- Docetaxel (Taxotere)

Chemotherapy treatment is usually given every 14 or 21 days for four to six cycles, although paclitaxel may be given weekly. Some regimens follow the initial combination with additional cycles of another drug. This means chemotherapy treatment can last from three to five months.

The length of treatment will depend on which regimen your oncologist recommends. It is important to achieve a balance between effectiveness of treatment and side effects.

## Targeted biological therapy

**The most common targeted therapy for early breast cancer is a biological agent called trastuzumab (Herceptin). This is used to treat HER2-positive breast cancer (15-20% of breast cancers) and works by attaching to HER2 receptors (proteins) on the surface of breast cancer cells.**

The aim of Herceptin treatment is to stop the cancer cells dividing and growing, allowing the immune system to kill cancer cells. Herceptin is given in combination with chemotherapy and then continued every three weeks to complete 12 months of treatment.

Another targeted therapy that works for HER2 positive breast cancer is pertuzumab (Perjeta). This may be an option for some people but is not funded in the adjuvant setting.

## Radiation therapy (radiotherapy)

**Radiation therapy is a localised treatment targeting the breast with high-dose x-rays. Sometimes the adjacent lymph node region is also treated. The aim of radiation therapy is to kill any remaining cancer cells, reducing the chance of the cancer returning in the breast.**

### External beam radiation therapy (EBRT)

EBRT involves the use of high energy x-rays directed towards the whole breast and/or the lymph node region.

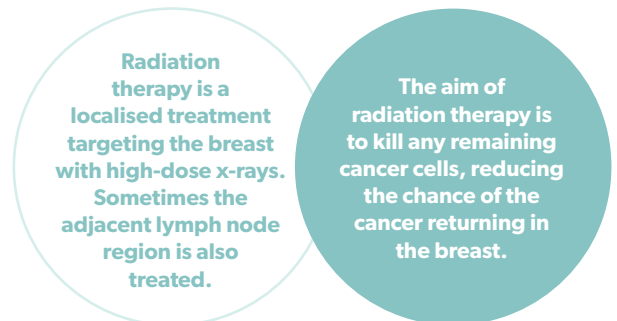
You are asked to lie on a treatment bed during the radiation therapy. The treatment is tailored to the individual, with daily treatments, usually Monday to Friday over a period of three to five weeks. Some low risk patients may be recommended only one week of radiation treatment, based on new, international evidence. The daily treatment time is usually very short and you can expect to be at the hospital for approximately 30 minutes each day.

### What to expect

Your radiation oncologist will discuss the risks and benefits of radiation therapy plus any expected side effects before you start treatment. Common side effects include some skin changes and fatigue.

### Hints for treatment

It is best to wear loose, light clothing over the area being treated to reduce skin irritation. You should avoid hot water, talcum powder or perfumes on the treated area. Avoid sunburn. You will be given detailed instructions about skin care before starting your course of radiation therapy.



## Hormone-blocking /endocrine therapy

**Hormones are a natural part of the body's chemistry. Many breast cancers respond to the female hormones oestrogen and progesterone, which can cause them to grow. These are called hormone receptor positive cancers.**

Treatment involves preventing the release of these hormones or blocking the receptors so that the cancer cells are starved of oestrogen. The aim of hormone-blocking therapy is to reduce the risk of the cancer recurring in the future.

### Tamoxifen

Tamoxifen is a commonly used hormone-blocking, oral medication. It can be prescribed for both pre- and postmenopausal women and for men. It is also called an anti-oestrogen drug because it works by attaching to the hormone receptors on cancer cells so that oestrogen cannot feed them. It reduces the risk of the cancer returning and also reduces the risk of a second cancer developing in the other breast. Tamoxifen is taken daily for five years or longer. Studies show the benefits of this treatment continue beyond the treatment period.

### Aromatase inhibitors

These drugs (anastrozole, letrozole and exemestane) are also used to treat breast cancers that rely on oestrogen for growth. They are oral medications that work by preventing the aromatase enzyme from changing other hormones into oestrogen.

Aromatase inhibitors are suitable only for women whose ovaries are no longer producing oestrogen, this may be due to menopause or taking medication (e.g. Zoladex) that stops oestrogen production. They may be prescribed as initial therapy or after completing two to three or sometimes five years of tamoxifen.

### Goserelin

Goserelin (Teva or Zoladex) is a drug given by four-weekly injection, which temporarily stops the ovaries producing oestrogen. This can help reduce the growth of hormone-sensitive cancers. It may be used for women with hormone-sensitive early breast cancer and also in more advanced disease. Women may experience a return of their menstrual cycle after stopping the treatment.

### Surgical removal of the ovaries (oophorectomy)

This is often done for pre-menopausal women to negate the need for ongoing Zoladex injections and for women with known BRCA1 or BRCA2 gene mutations to reduce their ovarian cancer risk.

### What to expect

There are common side effects associated with hormone-blocking and endocrine therapies, including hot flushes, vaginal dryness and joint pain. You should discuss these symptoms and how to manage them with your oncologist.

Hormone-blocking and endocrine therapies can cause decreased bone density while you are having this treatment. Your oncologist will discuss your risk and may arrange a DEXA scan to assess your bone density. There are some things you can do to minimise bone density loss, including regular weight-bearing exercise and an adequate dietary intake of calcium and vitamin D.

It is important to note that tamoxifen has a protective effect on bone density in post-menopausal women.

## Treatment summary

Treatment	What is it?	Frequency	Possible side effects
<b>Chemotherapy</b>	Anti-cancer drugs to kill or slow the growth of remaining cancer cells that may have spread beyond the breast.	Treatment cycles usually given every <b>14 or 21 days</b> . <b>4-6 cycles</b> are usually given. Treatment can last from <b>3-5 months</b> .	Temporary hair loss, tiredness, lowering of immunity and nausea. But many side effects can be controlled.
<b>Radiation therapy</b>	Targeted radiation to destroy any remaining breast cancer cells after surgery.	Short, painless daily treatments for <b>3-5 weeks</b> excluding weekends (1 week for some low risk patients).	Skin reactions (redness, peeling), fatigue.
<b>Hormone-blocking therapy</b>	Drugs which block or prevent production of naturally occurring hormones that can stimulate breast cancer growth.	Differs by drug - may be tablets or injection. Discuss with your specialist the duration of therapy (10 years of therapy has been shown to be superior to 5 years).	Hot flushes, vaginal dryness, painful joints.
<b>Targeted biological therapy</b>	Trastuzumab (Herceptin) is used to treat HER2 positive breast cancer.	By infusion <b>every 3 weeks</b> . Treatment may continue for 1 year.	Nausea, diarrhoea and flu-like symptoms.
<b>Bisphosphonate therapy</b>	Bone strengthening medications given to reduce risk of recurrence for post-menopausal women. These medicines may also be used to reduce the risk of osteoporosis; or to treat secondary breast cancer in the bone.	<b>6 monthly</b> infusion for a total of <b>4 treatments</b> . For advanced breast cancer, treatment is ongoing.	Nausea, muscle aches and flu-like symptoms.



### Find out more

Further information on medical treatment of breast cancer is provided at [www.breastcancerfoundation.org.nz/breast-cancer/treatment-options](http://www.breastcancerfoundation.org.nz/breast-cancer/treatment-options)

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## Information and support

You may require support at different times during your treatment. It is important to surround yourself with people who can offer you support when you are feeling down, if you feel you're not coping, or when you need to talk to someone. These people could be whānau, friends, counsellors, medical professionals, work colleagues or your minister.

Check out the Breast Cancer Services directory on the Breast Cancer Foundation NZ website to find your nearest support services and products:

[www.breastcancerfoundation.org.nz/breast-cancer-services-directory](http://www.breastcancerfoundation.org.nz/breast-cancer-services-directory)

Phone our advice line on  
**0800 BC NURSE** (0800 226 8773)

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## Follow-up

Follow-up appointments will be arranged by your specialist team until you are advised that your care can be transferred to your GP. Mammograms will be required yearly as part of your follow up.

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## Questions to ask your surgeon or oncologist

- 1. What do my pathology results mean?**  
(meaning: what kind of breast cancer do I have, and how aggressive is it?)
- 2. How extensive is my cancer?**  
(meaning: how big is it, in how many places in my breast, and has it spread anywhere?)
- 3. How long will the treatment take?**
- 4. Are there any new treatments or clinical trials that I should consider?**
- 5. Who will be following my case and managing my overall care?**
- 6. Who do I phone if I am having bad side effects or feeling particularly unwell?**
- 7. I need to travel a long way for treatment, is there support for travel and accommodation?**
- 8. Can I have children after the treatment?**
- 9. Can I still work, drive, and what exercises can I do?**
- 10. What support services are available to me?**

## Notes

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# How we can help you



## Counselling

Wherever you are in your breast cancer journey counselling can help. We fund free sessions for you and your family\*; either face to face, over the phone or online.

You can apply at [breastcancerfoundation.org.nz/counselling](https://breastcancerfoundation.org.nz/counselling) or call **0800 BC NURSE** (0800 226 8773)



## Ask our breast care nurses

If you need breast health advice or support around your breast cancer diagnosis or treatment, call or email our nurse team.

This service is also available to family and friends but is not meant to replace the advice of your specialist team.



Email questions to [breastnurse@bcf.org.nz](mailto:breastnurse@bcf.org.nz)



Call our advice line **0800 BC NURSE** (0800 226 8773)



## Connect with others

mybc is an online community for New Zealanders like you affected by breast cancer – a place to connect and share experiences with others, to ask questions and get support from a breast nurse.

Sign up at [www.mybc.care](https://www.mybc.care) or download the app on your phone



## Rehab after surgery

Certain forms of exercise can help you regain upper body strength and mobility after breast cancer surgery. We fund both individual treatment and group-based exercise sessions with qualified physiotherapists to assist recovery.

Find out more [breastcancerfoundation.org.nz/rehab](https://breastcancerfoundation.org.nz/rehab)



## Lymphoedema therapy

If you have breast cancer-related lymphoedema or are at risk of developing this, we can help fund treatment.\*

Find out more [breastcancerfoundation.org.nz/lymphoedema](https://breastcancerfoundation.org.nz/lymphoedema)



## Active clinical trials

Our clinical trials database keeps you up-to-date with breast cancer trials which are currently open to patients in NZ and Australia.

Find out more [breastcancerfoundation.org.nz/clinical-trials](https://breastcancerfoundation.org.nz/clinical-trials)



## Breast cancer information

For comprehensive and up-to-date information about breast health, breast cancer and support visit our website. You can also read personal stories, watch videos, and order or download free resources.

Find out more [breastcancerfoundation.org.nz/resources](https://breastcancerfoundation.org.nz/resources)

\*Terms and conditions apply





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## Need advice?

**0800 BC NURSE** (0800 226 8773)

**breastnurse@bcf.org.nz**

**www.breastcancerfoundation.org.nz**

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# We're here to help



**Breast Cancer Foundation NZ's vision is zero deaths from breast cancer. Our mission is to push for new frontiers in early detection, treatment and support.**

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