

### WE'RE HERE WITH YOU. EVERY STEP OF THE WAY.

We understand that a breast cancer diagnosis can be confronting and searching for the answers to your questions can be stressful and confusing.

This guide brings together key information to help you understand your breast cancer diagnosis, the choices available to you about your care, and how to take care of yourself and your loved ones during treatment.

We hope it will bring you some peace of mind and help you feel supported as you navigate your diagnosis.

# THE BEST CARE POSSIBLE, AS CLOSE TO HOME AS POSSIBLE.

At Bowen Icon Cancer Centre, we proudly provide world-class, private cancer treatment in a friendly and supportive environment for our patients and their whanāu. We live our vision every day – to deliver the best possible care, close to home, with no wait list.

It's our goal to help you understand the process and approach each step of your treatment with confidence. If you have questions about becoming a patient at our centre, we're here to help.

Visit boweniconcancercentre.co.nz/ cancer-patients/becoming-a-patient to get started.





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## **UNDERSTANDING YOUR BREAST CANCER DIAGNOSIS**

A breast cancer diagnosis is personal and unique for each and every patient – so it needs to be treated that way.

To gain a better understanding of your cancer [and the course of treatment that's best for you], your doctor may look at factors such as the type of breast cancer you have, your hormone receptor status, and the stage of your cancer.

These are usually determined through a series of tests, including a physical exam, a biopsy, blood and other lab tests or imaging scans (i.e., x-ray, MRI, CT scan or ultrasound) following your diagnosis.

We explain what these terms mean and why they are so important below.

#### TYPES OF BREAST CANCER

Depending on where your cancer originated, it will be classified under one of three subtypes of breast cancer.

- Invasive ductal carcinoma (IDC) IDC is the most common type of breast cancer.
   It begins in the milk ducts and grows through the duct wall to other breast tissue.
- Invasive lobular carcinoma (ILC) ILC originates in the milk glands (known as lobules) and spreads to nearby areas of the breast.
- Inflammatory breast cancer (IBC) IBC is a rare type of breast cancer. It's likely to be advanced when diagnosed as it's harder to find using a mammogram compared to other types of breast cancer. IBC is also unique in that it doesn't involve a lump in the breast. Instead, the skin of the breast may become red, inflamed, thick or pitted (like an orange), the nipple may become inverted, and the breast may become swollen, hard, tender and painful, or itchy.

# DETERMINING YOUR HORMONE RECEPTOR STATUS

Normal breast cells have proteins called 'receptors' on their surface which look for and attach to oestrogen or progesterone hormones in the body in order to grow and spread. Some breast cancer cells also have these receptors.

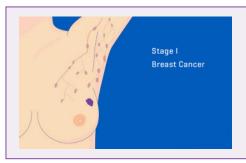
Your breast cancer will be classified according to whether your cancer is 'hormone receptor positive' [meaning the receptors are present] or 'hormone receptor negative' [the hormone receptors are not present], and by subtype. This may determine the type of treatment you receive.

To learn more about breast cancer staging, visit boweniconcancercentre.co.nz/cancer/breast

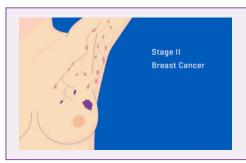
#### **BREAST CANCER STAGING EXPLAINED**

Your doctor will also use information from your tests to determine the stage of your cancer. Cancer staging describes the location of your cancer, whether it has spread to other parts of your body and, if so, which parts of the body it has spread to.

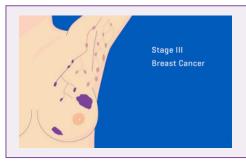
As a type of solid cancer, breast cancer is given a stage between I and IV using the *Tumour, Node, Metastasis* (TNM) system.



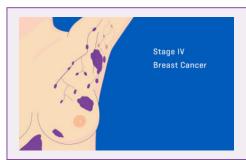
**Stage I** – Cancer is found in the breast tissue and the tumour is less than two centimetres across in size



**Stage II** – The tumour is less than five centimetres across in size and may have spread to the lymph nodes



**Stage III** – At this stage, the tumour is larger than five centimetres across in size and the cancer has spread to the lymph nodes. You may experience dimpling, inflammation, or skin colour change



**Stage IV** – The cancer has spread beyond the breast to other parts of your body

Knowing the type, hormone receptor status and stage of your cancer will help your doctor understand your cancer and determine the most suitable course of treatment for you.

To learn more about cancer staging, visit boweniconcancercentre.co.nz/brochure/cancer-staging-explained

## STARTING TREATMENT

### **COMMON TYPES OF BREAST CANCER TREATMENTS**

The most common approaches to breast cancer treatment include radiation therapy, chemotherapy, targeted therapies, hormone therapy and surgery. The treatment that you receive will depend on a variety of factors, such as the type of breast cancer you have, its stage and location, your overall health and treatment preferences.

Talking with your doctor can help you weigh up the advantages and disadvantages of different treatment options, including possible side effects, to help you make an informed decision about the best treatment for you.



Targeted therapies use specialised drugs to target and destroy the specific proteins in breast cancer cells that tell them to grow and spread. These drugs are particularly effective for HER2 positive breast cancers, where the cancer cells have a higher-than-average amount of HER2 (a growth-promoting protein on the outside of breast cells).



Hormone therapy, or endocrine therapy, focuses on blocking or lowering your body's natural hormones to stop hormone-sensitive cancers from growing or returning. It can be delivered as oral tablets, injections under the skin or injections under the muscle. For many people, hormone therapy is used in combination with chemotherapy or surgery and may be delivered over five to ten years.



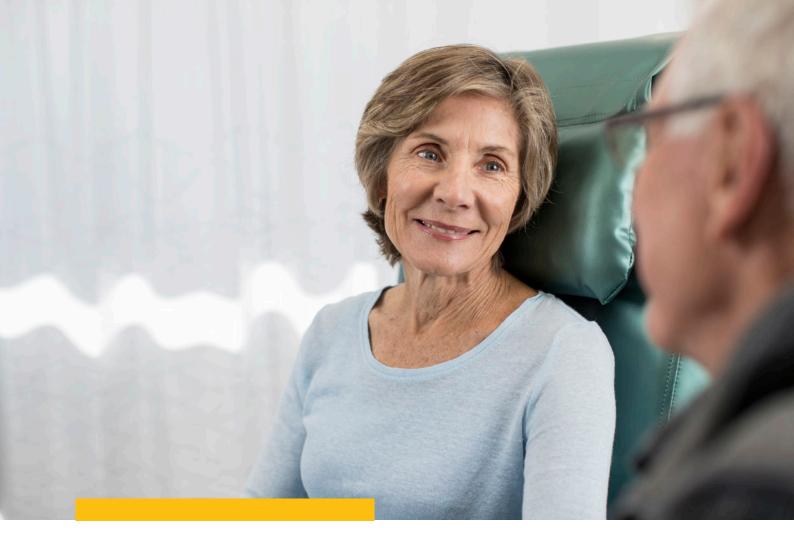
Surgery is commonly performed for people with breast cancer to remove tumours or cancerous tissue, identify whether the cancer has spread to the lymph nodes and, if possible, restore the breast's shape. Depending on the type and stage of cancer, surgery is usually performed in combination with other treatments, like chemotherapy or radiation.



Chemotherapy uses a range of drugs to kill and slow the growth of breast cancer cells. These drugs may be delivered at any stage of your breast cancer treatment, from shrinking large tumours before surgery to destroying potential remaining cancer cells after surgery. The kind of drugs given, and how often they're needed, will depend on your individual needs and how your body and cancer cells respond to treatment.



**Radiation therapy**, or radiotherapy, safely treats and manages cancer through radiation by eradicating or reducing the growth of cancer cells and relieving symptoms. It is usually used after surgery to reduce the risk that the cancer will come back, or in combination with other treatments.



# YOUR CANCER CARE TEAM: WHO'S WHO?

Every person involved in your breast cancer care journey is important. Here are some members of the team and the role they play in your care.

- Medical oncologists specialise in diagnosing and treating cancer using chemotherapy drugs, immunotherapy and hormone therapies.
   They also develop and continually review treatment plans and, in most cases, lead and manage your overall care.
- Radiation oncologists prescribe radiation therapy treatment and oversee the management of patient care.
- **Surgeons** are responsible for the surgical removal of tumours and cancerous tissue.
- **Radiation therapists** are responsible for planning and delivering radiation treatments.

- Oncology nurses support a patient's overall wellbeing throughout their treatment, including administering chemotherapy, monitoring symptoms and managing any side effects.
- Pharmacists are committed to supporting your care and work alongside doctors and nurses to make sure treatment is optimal and safe.
- Medical physicists play an important role in quality assurance to make sure radiation treatment machines are maintained to the highest safety standards.



**TIP:** Allied health professionals, such as dietitians or physiotherapists, can help manage side effects of cancer treatment. See the **Caring for Yourself During Treatment** section in this guide for further information.

## **QUESTIONS TO ASK YOUR DOCTOR**

Cancer treatment can feel overwhelming and there can be a lot to remember. Everyone in your care team is there to help you understand your diagnosis and prepare for your treatment. We encourage you to ask questions as, the more you know about your cancer and treatment, the better prepared you will feel.



**TIP:** Having a family member or friend come with you to your appointments, or dial in on the phone, can be a huge help. They can offer company and support by asking questions and taking notes.

#### Here are some questions you might like to ask your doctor:

- 1. What subtype of breast cancer do I have?
- 2. What is the stage of my breast cancer?
- 3. What is the hormone receptor status of my breast cancer?
- 4. What are my treatment options?
- 5. What type of treatments do you recommend and why?
- 6. If I need more than one type of treatment, what are they and in what order?
- 7. What is the goal of treatment?
- 8. How does this compare with other treatments in terms of outcomes, side effects and limitations?
- 9. How will treatment affect my daily life? Will I be able to work, exercise, etc.?
- 10. How will treatment affect my ability to become pregnant or have children?
- 11. How will cancer affect my sexuality and intimacy with my partner?
- 12. What long-term side effects may be associated with my breast cancer treatment?
- 13. Who can provide me with information about the cost of my treatment?
- 14. Is there a clinical trial I might be eligible for?
- 15. Who can I call if I have questions or problems, or would like a second opinion?
- 16. Are there any medications or therapies I need to stop? [e.g., natural supplements, massages, nails/day spas, etc].
- 17. Are there any other important questions that I haven't asked?

## **CHECKLIST: WHAT TO BRING TO TREATMENT**

Heading to your first consultation or treatment appointment can be daunting, and we understand there may be a lot of things running through your mind in the lead up to it. Trying to figure out what to bring to your treatment doesn't need to be one of them.

Here is a checklist of key items we recommend bringing along to your appointment to ensure you feel comfortable and prepared.

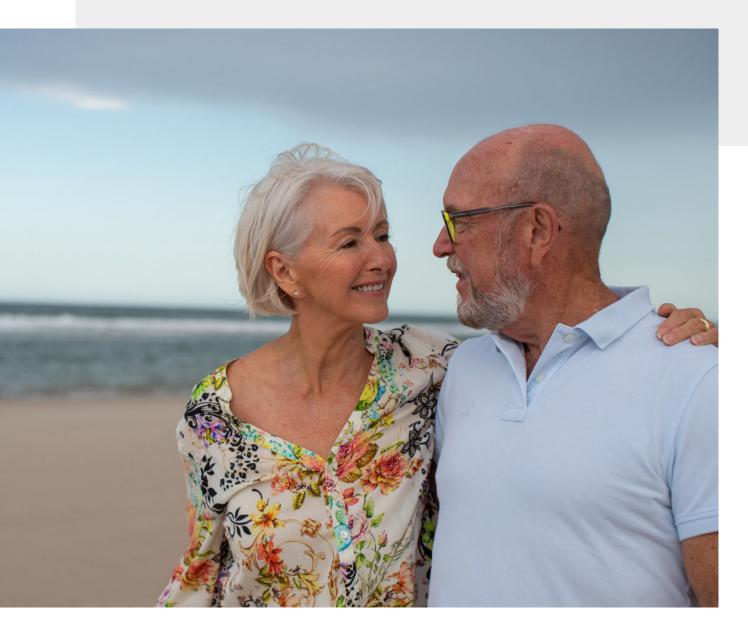
A list of current medications (including names, doses and frequency)	Any relevant healthcare cards	
All X-rays, CTs, MRIs, bone and other	To make your treatment more comfortable, you may also care to bring:	
radiological or nuclear medicine scans/reports obtained during the investigation stage	A book or entertainment device (and its charger)	
Completed registration, medical history and consent to collect information forms	A snack and water bottle	
	A support person	
Current referral letter from your referring practitioner	A blanket	
	A jumper	
Pathology reports for blood and histopathology tests		



## **CARING FOR YOURSELF DURING TREATMENT**

# A BREAST CANCER DIAGNOSIS CAN AFFECT YOU PHYSICALLY AND EMOTIONALLY.

Receiving a breast cancer diagnosis is an emotional time and can affect both your physical and mental wellbeing. This is why it's important to look after yourself. Understanding the changes you may go through during treatment, how to take care of yourself, and knowing how and where to access support are all important aspects of your self-care.



#### SELF-CARE DURING TREATMENT

#### NUTRITION

Maintaining good nutrition during cancer treatment can help you manage side effects, like nausea and weight loss, and keep up your energy throughout the day.



TIP: Family and friends can help with meal preparation ahead of time. It can also be helpful to set reminders to eat at regular mealtimes. You may like to consider meeting with a dietitian to ensure you are meeting your recommended nutritional intake.

#### **DAILY LIFE**

During cancer treatment you may find that your body has difficulty completing some of your usual activities, like performing daily tasks, or you may experience memory loss or fatique. Remember, this is normal! Your body is working hard to battle your cancer, so treat yourself with kindness.



TIP: Consider meeting with an occupational therapist. They can help enhance your quality of life and maintain your independence.

#### **EMOTIONAL HEALTH**

Understandably, a breast cancer diagnosis can be taxing on your emotional and mental wellbeing. In some cases, you may have difficulty concentrating and paying attention, or you may simply find comfort in additional emotional support.



TIP: Lean on family and friends. Be open about how you're feeling and what you need. If you are more comfortable speaking with someone outside your immediate support group, psychologists may be able to help.

#### SEXUALITY & INTIMACY

You may go through physical and emotional changes during cancer treatment. Understandably, these changes can impact your sexuality. Be open with your partner about these changes and, if needed, seek professional advice on ways to develop and maintain your intimate relationships.



TIP: Sexual therapists can assist you to explore any issues you are having and provide practical advice and support.

#### PHYSICAL HEALTH

Keeping up with exercise can help manage certain treatment-related side effects and build strength. Exercise is also great for mental health!



TIP: Participate in a gentle exercise routine a few times per week. Having a friend exercise with you can keep you motivated. You can also meet with a physiotherapist to develop a safe and effective exercise program designed for your fitness level during and after treatment.

#### 10 WAYS FOR CARERS TO SUPPORT SOMEONE WITH CANCER

When someone you know is going through cancer treatment, it can be tricky to know what support might be most appreciated during this difficult time. Below are ten tips that our patient community has shared with us on how you can support someone with cancer.

#### 1. Be there for them and tell them that you care

Phone or reach out with a message to let them know you are here and that you are thinking about them. You may be worried about whether you are intruding or what the right thing to say might be, but it is better to say 'I don't know what to say, but I do care and I want to be there for you' than to avoid someone or say nothing at all.

#### 2. Listen

Let them express their feelings or allow them to be silent if they feel like saying nothing. Don't compare their cancer to others or tell people what they should do to try to cure it.

#### 3. Try to treat them the way you always have

Give them the space to talk about their breast cancer but don't forget to talk about the other common interests that you share too. Don't let their diagnosis define them.

#### 4. Offer to keep them company during treatment

Having someone with you during treatment can be a welcome distraction. Bring a book or puzzle and keep them company. You might like to bring a small gift to lift their spirits or something practical such as warm socks to give them comfort.

#### 5. Provide practical support

Ask whether they would appreciate your help by driving them to and from appointments or to collect prescriptions.

#### 6. Help with meals

Good nutrition is important during breast cancer treatment and some people might experience changes in their taste and smell that can affect their appetite. Send a care package or make a supply of homemade meals to keep in the freezer. You could start a cooking roster with friends and family or do the grocery shopping.

#### 7. Assist with the house cleaning, laundry or gardening

It's common for people with breast cancer to experience fatigue, so helping with household chores and other errands can be a big relief for them and their families.

#### 8. Support their family

Managing breast cancer treatment alongside family commitments can be very difficult. You may like to offer to help with childcare or by picking their children up from school and other activities.

#### 9. Look after their pets

Consider helping to look after the other cherished members of their family – their pets! You can help by feeding or walking their pets, cleaning up the kitty litter or by washing the dog.

#### 10. Continue to check in

Even after their active breast cancer treatment finishes, keep in touch by calling for a chat and let them know you're there or reach out with a message and ask if they are okay.

## **CANCER SUPPORT SERVICES**

Accessing information and support at any time, from when you receive your diagnosis, through to your treatment and beyond can be beneficial for both you and your loved ones. It is important to remember you're not alone, and speaking to people who know what you are going through can be extremely helpful.

The following are just a few of the many exceptional cancer agencies that offer a range of support services.

#### **CANCER SOCIETY NZ**

Offers a wide range of information, support services and groups, advice and practical assistance for those with cancer. They also offer a free telephone information and support service.

0800 226 237 | cancer.org.nz

#### **BREAST CANCER AOTEAROA COALITION**

A national organisation that works to ensure New Zealanders affected by breast cancer receive world-class care, information and support.

breastcancer.org.nz

#### **BREAST CANCER FOUNDATION NZ**

Provides a wide range of support services to people affected by breast cancer. They offer a helpline with specialist breast care nurses, free counselling, breast cancer-specific exercise classes and useful information.

0800 2268 773 | breastcancerfoundation.org.nz

#### **BREAST CANCER FOUNDATION NZ**

A national charity that specialises in providing peer support services for women with breast cancer, offering support groups, individual visits and a 365-day helpline.

0800 273 222 | breastcancersupport.org.nz

### SUPPORT FOR CARERS

The role of a carer or support person is rewarding yet demanding. Whether you're new to the responsibilities of providing care or you've been doing it for some time, it's important to take the time to look after yourself. Just as there are many services available to those with cancer, as a carer you can also access professional services and support programs to help make things a little easier.

#### **CARERS NEW ZEALAND**

0800 777 797 carers.net.nz

National body which provides advocacy and support for individual carers and supporting organisations.

#### YOUNG CARERS NEW ZEALAND

0800 777 797

facebook.com/youngcarersnz

National information and support program for children and young people in caring roles.

## **UNDERSTANDING BREAST CANCER**

## **COMMON QUESTIONS**

We know you may have a million questions right now. So, we've compiled answers to a few of our most common treatment related questions in a hope that they are of some help to you.

### **BREAST CANCER QUESTIONS**

#### Is breast cancer hereditary?

Despite what many people think, breast cancer is rarely hereditary. In only 5-10% of cases, breast cancer is caused by specific gene mutations in the BRCA1 (BReast CAncer gene one) and BRCA2 (BReast CAncer gene two) genes. These genes are responsible for cell repair and growth, as well as healthy function of breast, ovarian and other body tissues. Sometimes, these genes develop mutations which can be passed down through family generations, increasing the chance of a range of cancers.

#### What causes breast cancer?

There's no one cause of breast cancer. Rather, it's a combination of genetic, lifestyle and environmental factors that can increase your risk. Risk factors include being female, having a family history of, or close relative who has had breast cancer, being over the age of 50, drinking alcohol and being overweight.

#### How common is breast cancer? What about breast cancer in men?

Breast cancer is the most prevalent cancer in women in New Zealand.<sup>2</sup> Breast cancer in men is not common, In New Zealand, about 25 men will be diagnosed with breast cancer each year.<sup>2</sup>

#### What is the survival rate for breast cancer?

It's important to remember that most people survive breast cancer, especially when it's been diagnosed early. Breast cancer survival rates in New Zealand are high and they're getting higher every year, but survival rates depend on a number of factors such as the type of breast cancer you have and whether it has spread to other parts of your body. When detected at an early stage, the average five-year relative survival rate for breast cancer is 89%.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. (2021). Hereditary Breast Cancer and BRCA Genes. Retrieved from https://www.cdc.gov/cancer/breast/young\_women/bringyourbrave/hereditary\_breast\_cancer/

<sup>&</sup>lt;sup>2</sup> Breast Cancer Foundation NZ. (2023). Breast cancer in New Zealand. Retrieved from: https://www.breastcancerfoundation.org.nz/breast-awareness/breast-cancer-facts/breast-cancer-in-nz.

<sup>&</sup>lt;sup>3</sup> Te Aho o Te Kahu - Cancer Control Agency. (2021). The State of Cancer in New Zealand 2020. Retrieved from: https://teaho.govt. nz/reports/cancer-state.

#### RADIATION THERAPY QUESTIONS

## Does radiation therapy make you radioactive?

Radiation therapy does not make you radioactive and it is perfectly safe for you to be with and around other people, including children, throughout your treatment.

## What are the side effects of radiation therapy?

People who receive radiation therapy may experience skin dryness, itching, blistering or peeling in the treatment area. These usually resolve a few weeks after treatment has finished. A common side effect is fatigue, a feeling of exhaustion that does not improve with rest. Your level of fatigue will also depend on whether you are undergoing other treatments, such as chemotherapy. Although most side effects go away after radiation therapy has finished, some long-term effects may occur. As radiation therapy is localised to an area of the body, you may only experience side effects in this area.

## Can I miss a radiation therapy treatment appointment?

Your individual radiation therapy treatment plan is carefully calculated, so it's important that you don't miss any appointments. However, if missing an appointment is unavoidable, be sure to discuss this with your radiation therapist as soon as you can.

#### Will radiation therapy affect my fertility?

This depends on where you are having treatment. Radiation treatment to the breast typically has little to no effect on fertility. If you are a woman having radiation therapy to the abdomen or pelvis, the amount of radiation absorbed by the ovaries will determine the potential impact on your fertility. Radiation to the pituitary gland may also influence fertility, as the pituitary gland normally signals the ovaries to ovulate. Please speak with your radiation oncologist should you or your partner wish to become pregnant, or if you have fertility concerns.

#### Does radiation therapy hurt?

Radiation therapy is typically painless. Most patients will feel little to no discomfort during treatment. You will not see or feel the radiation, but you may hear noise from the equipment.

#### Will I lose my hair?

Radiation therapy is a local treatment, meaning it only affects the area of the body where the radiation is targeted. Unless your radiation treatment is targeted at an area where hair grows, such as your scalp or face, you will not lose your hair. People having radiation therapy for breast cancer may find their underarm hair will fall out if it is near the radiated area, however it will grow back in time.

#### Can I drive after treatment?

Yes, it is safe for you to drive after you receive radiation therapy treatment. However, if you feel unfit or unwell to do so, please advise a member of your care team.

#### Does radiation affect pregnancy?

It is important you are not pregnant or become pregnant at any time during radiation therapy, as x-rays for positioning can harm the foetus. If you think you may be pregnant at any time, it is extremely important to discuss this with a member of your radiation therapy team. If you wish to become pregnant after your treatment, please discuss this with your radiation oncologist before commencing treatment.

### How long does radiation therapy treatment take?

Treatment is usually given in daily intervals (Monday to Friday) for several days or weeks. A treatment session may last 15 to 20 minutes.

### **CHEMOTHERAPY QUESTIONS**

#### How does chemotherapy work?

Chemotherapy works by destroying cells that are rapidly dividing, such as cancer cells. However, chemotherapy also destroys normal cells that are rapidly dividing. Unlike cancer cells, normal cells can repair the damage and can recover.

#### Can I exercise during my treatment?

It's recommended you do some light exercise, such as walking, to help manage fatigue and improve wellbeing. Studies have shown that exercising during your treatment is associated with an improved outcome.

## Should I avoid people who are unwell while I'm being treated?

Chemotherapy can affect the production of blood cells in your body, including your white blood cells, which protect against infection. When your white blood cells are low, you are more at risk of developing a cold or infection. During this time, it's important to avoid people who are unwell.

## Will I lose my hair as a result of chemotherapy treatment?

Some people receiving chemotherapy will lose their hair, depending on the type of drugs you receive. There are several things you can do to help reduce your hair loss during treatment, including the use of a cooling or cold cap. Your doctor or nurse will be able to tell you whether your particular treatment can cause hair loss and help you with ways to manage this.

## Can I continue to work while I'm being treated?

Your ability to continue to work will depend on the nature of your work, your type of treatment and how well you feel during your treatment. Please discuss this with your doctor.

## Am I able to take vitamins and complementary medicines?

Some vitamins and medicines can interfere with the effects of chemotherapy. Ensure you provide your doctor with a list of the medicines you are currently taking. This includies over-the-counter medicines.



#### **KEY TERMS**

#### Acute (symptoms)

refers to symptoms that start and worsen quickly but do not last over a long period of time.

#### Adaptive radiation therapy

adjusts daily treatment in real-time based on changes to internal or external anatomy.

#### Benign

refers to a tumour that is not cancer. The tumour does not usually invade nearby tissue or spread to other parts of the body.

#### **Biopsy**

is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis.

#### **Blood transfusion**

you may require a blood transfusion as cancer and cancer treatments, such as chemotherapy, can affect your body's ability to make new red blood cells. Your doctor may recommend a blood transfusion as it will help you manage signs and symptoms that you may experience due to low red blood cell counts.

#### **Bone marrow**

is the soft, spongy tissue found in the centre of large bones where blood cells are formed.

#### Bone scan

is a scan which uses a small amount of radioactive material which produces a map of your bones. This is used to show any changes to their structure or make-up.

#### Cells

are the basic units that make up the human body.

#### Central venous access devices (CVADs)

are intravenous catheters which are inserted into a major vein in the body. CVADs allow for short- or long-term venous access to deliver therapies into the bloodstream safely and effectively.

#### Chemotherapy

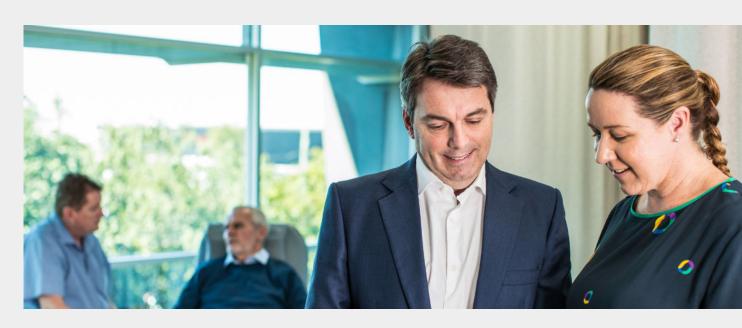
are drugs that kill cancer cells.

#### Chronic

refers to a disease or condition that persists, often slowly, over a long period of time.

#### Computerised tomography (CT) scan

is an x-ray machine that uses a computer to produce pictures of the head or body. It shows the soft tissues and bones in more detail than an ordinary x-ray.



#### Cooling cap

is a tightly fitted cap with a cooling liquid running through it. This can be worn on the head during chemotherapy treatment to help reduce hair loss.

#### Deep inspiration breath hold (DIBH)

is a radiation therapy technique for breast cancer patients that reduces the potential impact of radiation on the heart. The process involves holding your breath for short bursts during treatment which allows the heart to move backwards into the chest and away from the breast while it is exposed to radiation.

#### Echocardiogram (ECHO)

is an ultrasound of your heart.

#### Electrocardiogram (ECG)

is a recording of your heart's electrical activity.

#### External beam radiation therapy (EBRT)

is a type of radiation therapy which is delivered externally from a machine called a linear accelerator. EBRT uses one or more high energy x-ray beams directed towards the tumour or tumour bed. The highly targeted beams of radiation are carefully placed to destroy cancer cells while sparing surrounding healthy tissue.



#### **Fractions**

refers to the total number of treatments you require for your radiation therapy.

#### Image guided radiation therapy (IGRT)

is used to accurately confirm the position of the patient prior to each radiation therapy treatment. Image guidance uses the linear accelerator to produce either plain x-ray images or a set of CT scans to determine the accurate positioning of the radiation beam for treatment delivery.

#### Immobilisation devices

are personalised accessories which assist in keeping you comfortable and in the same position for each treatment session. It is important to be able to reproduce the exact position daily to ensure your radiation therapy treatment is as accurate as possible.

#### Immunotherapy treatment

stimulates or 'releases the brakes' on your own immune system to initiate a response against cancer. Immunotherapy treatment assists the immune system to directly attack the cancer or enhance the immune system to work harder at finding the cancer cells to "mark" them for destruction. Immunotherapy can be used by itself or with other treatments, like chemotherapy.

#### Intensity modulated radiation therapy (IMRT)

is a highly complex external beam radiation therapy (EBRT) treatment technique. IMRT uses advanced computer software to calculate and deliver the radiation at different beam angles.

#### Intravenous cannula (IV)

is a small flexible tube inserted into a peripheral vein that is used for intravenous treatment such as the administration of medications, chemotherapy, fluids and/or blood products. Once inserted, the intravenous cannula can also be utilised to obtain a blood sample.

#### Invasive cancer

refers to cancer that has spread outside the layer of tissue in which it started and has the potential to grow into other parts of the body.

#### Localised cancer

is confined to the area where it started and has not spread to other parts of the body.

#### Lymph nodes

are tiny, bean-shaped organs that help fight infection and are part of the lymphatic system.

#### Lymphatic system

is a network of small vessels, ducts, and organs that carry fluid to and from the bloodstream and body tissues. Through the lymphatic system, cancer can spread to other parts of the body.

#### Malignant

refers to a tumour that is cancerous. It may invade nearby healthy tissue or spread to other parts of the body.

#### Mass

refers to a lump in the body, that can be cancerous or benign.

#### Metastasis

is the spread of cancer from the place where the cancer began to another part of the body. Cancer cells can break away from the primary tumour and travel through the blood or the lymphatic system to the lymph nodes, brain, lungs, bones, liver, or other organs.

#### Magnetic resonance imaging (MRI)

is a scanner which produces cross sectional soft tissue images of any area of your body.



#### Multi gated assessment (MUGA)

is a test of the heart designed to evaluate the function of the right and left ventricles.

#### Platelet transfusion

platelets prevent or stop bleeding. Chemotherapy may reduce the normal levels of functioning platelets. If you have a low platelet count, your doctor may recommend a platelet transfusion to prevent or stop the risk of bleeding.

#### Primary cancer

describes the original cancer.

#### **Prognosis**

refers to the chance of recovery; a prediction of the outcome of a disease.

#### **Radiation marks**

refer to small permanent or temporary marks, about the size of a freckle, that are made on a patient's skin by their radiation therapists. Radiation marks are used as definitive surface points to assist with treatment accuracy.

#### **Radiation planning**

is the process that occurs between your simulation appointment and treatment appointment. The planning process involves your radiation oncologist, radiation therapists and medical physicists. During this process the radiation treatment is personalised for each patient to meet the goals set by the radiation oncologist.

#### Radiation therapy

or radiotherapy, is the use of radiation to destroy malignant cells for the treatment and management of cancer. Radiation therapy may be used alone or in conjunction with other forms of treatment.

#### Secondary cancer

describes either a new primary cancer (a different type of cancer) that develops after treatment from the first type of cancer, or cancer that has spread to other parts of the body from the place where it started.

#### **Simulation**

or CT simulation, refers to the appointment session prior to your first treatment. This simulation session involves getting the patient in the desired treatment position, and in most cases conducting a CT scan so the scan images can be used to accurately plan the radiation beams for treatment delivery.

#### Staging

is a way of describing cancer, such as where it is located, whether or where it has spread, and whether it is affecting the functions of other organs in the body.

## Stereotactic radiation therapy [SRT/SABR/SBRT]

also known as stereotactic body radiation therapy [SBRT] or stereotactic ablative radiation therapy [SABR] is a highly specialised, complex and advanced radiation therapy technique which is used to treat very small tumours.

#### Surface guided radiation therapy (SGRT)

uses advanced camera technology to create 3D image tracking of a patient's skin surface. SGRT can be used to assist with how you are positioned before your treatment delivery, and to monitor any motion during treatment.

#### **Tumour**

is a mass formed when normal cells begin to change and grow uncontrollably. A tumour can be benign (non-cancerous) or malignant (cancerous, meaning it can spread to other parts of the body). Also called a nodule or mass.

#### **Ultrasound**

uses high frequency sound waves and a computer to produce pictures of most parts of the body.

#### **Volumetric modulated arc therapy (VMAT)**

is a highly complex external beam radiation therapy treatment technique. VMAT uses advanced computer software to calculate and deliver the radiation as the linear accelerator rotates around the patient.



## **ABOUT BOWEN ICON CANCER CENTRE**

## WE'RE HERE WITH YOU, EVERY STEP OF THE WAY

At Bowen Icon Cancer Centre, care is more than just a word – it is a belief in a personal approach to cancer care that matches your needs and those of your loved ones in the toughest of times.

From our highly experienced cancer specialists to the latest technology available and a compassionate care team that understands how to support you through your cancer, you can be sure you are accessing the care you deserve.

#### **WE PROUDLY OFFER:**

- Dedicated and experienced medical team local to Wellington
- Access to the same doctor throughout your treatment
- Treatment for cancers and blood disorders
- Intimate and serene six-bed day hospital overlooking Trelissick Park
- · World-class facilities with an experienced clinical team providing consistent care
- No wait list, consultation and treatment in a timely manner
- Free parking for patients visiting the centre





# RECEIVING TREATMENT AT BOWEN ICON CANCER CENTRE

When you or a loved one is diagnosed with cancer, it is normal to feel overwhelmed or just generally unsure how and where to start with your treatment. The following steps are a common pathway for our patients from an initial diagnosis to treatment.

#### 1. GETTING A REFERRAL

All patients require a referral from their GP or specialist to be treated at Bowen Icon Cancer Centre. As a private patient, you have a say in where you are treated and who your specialist is. If you would like to talk to us about gaining a referral or being treated with us, you can contact us directly on 04 896 0200.

#### 2. YOUR FIRST APPOINTMENT

We understand that your family and whānau are an important part of your support network and we encourage you to bring someone with you when you visit our centre. At the first appointment, you will meet with your doctor who will talk you through your diagnosis and treatment plan, and address any concerns and questions you may have. Your doctor will continue to care for you throughout your treatment and beyond.

#### 3. BEFORE STARTING TREATMENT

An experienced member of your care team will also take some time to discuss possible treatment side effects and how to manage them, and any possible anxiety you, your family and whānau might be feeling.

#### **4. STARTING TREATMENT**

The length of your appointment depends on the treatment being given. Throughout your treatment and beyond, your doctor and care team are here to monitor your progress, address your side effects and listen to any concerns or fears you may have. Never be afraid to seek clarity and reassurance to ensure you are confident in your treatment and choices.

Visit boweniconcancercentre.co.nz/ cancer-patients/becoming-a-patient to enquire about becoming a patient.

#### OUR COMMITMENT TO AFFORDABLE CARE

At Bowen Icon Cancer Centre, we are committed to providing you with care that is both exceptional and affordable.

The cost of treatment at our centre depends on what type of treatment you're having and the likely cost of any tests or medications. Rest assured, we will work with you to ensure you're aware of any out-of-pocket expenses and make sure there are no surprises throughout your treatment.

Here are the key things you need to know about the cost of receiving treatment with us.

#### **SELF-FUNDED PATIENTS**

If you have an insurance excess, co-payment, basic cover or no health insurance, our reception team will provide you with a detailed estimate of costs and talk you through all the expected costs of vour treatment.

Payment is required prior to treatment. If you have financial concerns at any time, please discuss these with our administration team.

#### **HEALTH INSURANCE**

Bowen Icon Cancer Centre is an Affiliated Provider to Southern Cross Health Society.

If you are a Southern Cross member or have insurance with NIB, we can apply for your insurance pre-approval and process claims on your behalf. If there is a shortfall, or a co-payment is needed you will be advised and asked to pay that directly to us prior to treatment.

If you have health insurance with another provider, we will provide both you and your insurer with a written cost estimate for the proposed cancer treatment prior to starting any treatment. It is your responsibility to find out from your insurer what parts of the cost estimate will be covered by your policy as well as:

- · your insurance value limit
- any excess that may apply
- any exclusions or parts of the cost estimate that you will need to fund yourself

To understand what you're covered for, please check your individual policy agreement.



## **BECOME A PATIENT**

boweniconcancercentre.co.nz/cancer-patients/becoming-a-patient



