

Understanding your early breast cancer treatment pathway:

A simple guide to treatment steps for HR+/HER2- early breast cancer patients

Introduction

- This guide is for people who have been diagnosed with HR+/HER2- early breast cancer
- The guide is intended to be useful at all stages of the treatment pathway
- This document shows treatment steps you may need to take or have already taken to remove the cancer and lower the risk that it could return
- There are blank spaces in the guide where you can write down useful information and any questions you may have about your treatment
 - Ask your healthcare team to help you fill this in. They may also give you other documents to help explain what will happen at each treatment step
- You can bring this guide to each appointment to help you talk about your treatment steps
- This guide can also be used to help explain your treatment steps to your family and friends to help you prepare for the treatment ahead

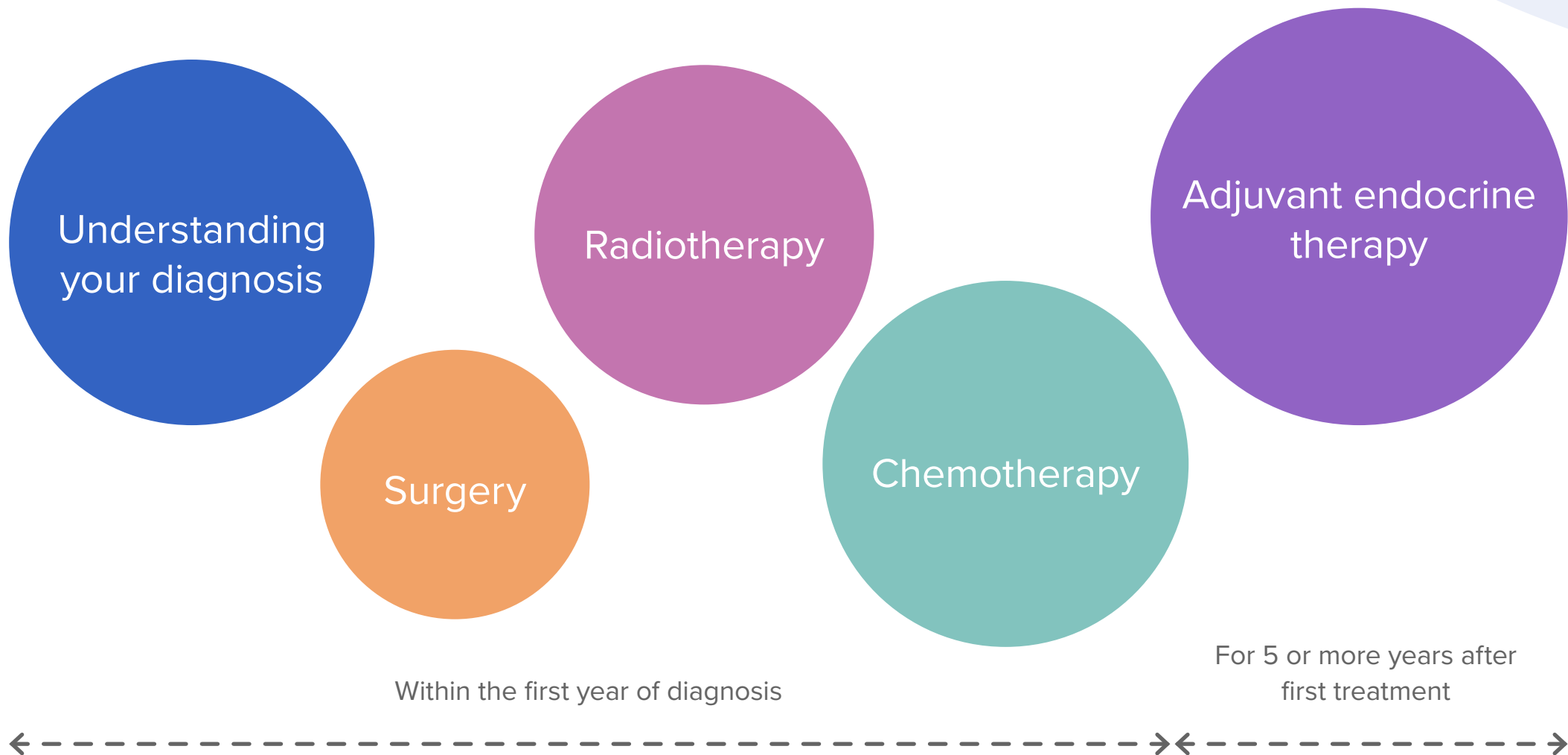


The early breast cancer treatment pathway

This treatment pathway shows the steps that may be needed for treatment of early breast cancer. Your doctor will decide which treatment steps are needed and when these will happen. You may be treated by different doctors and nurses at each step of the pathway¹

EARLY BREAST CANCER TREATMENT STEPS

Click on the circles to learn more about each step



The treatment you need will be specific to you. Each cancer is different, which means that the steps taken for treating the cancer in your breast might be different to someone else's²

Understanding your HR+/HER2- diagnosis

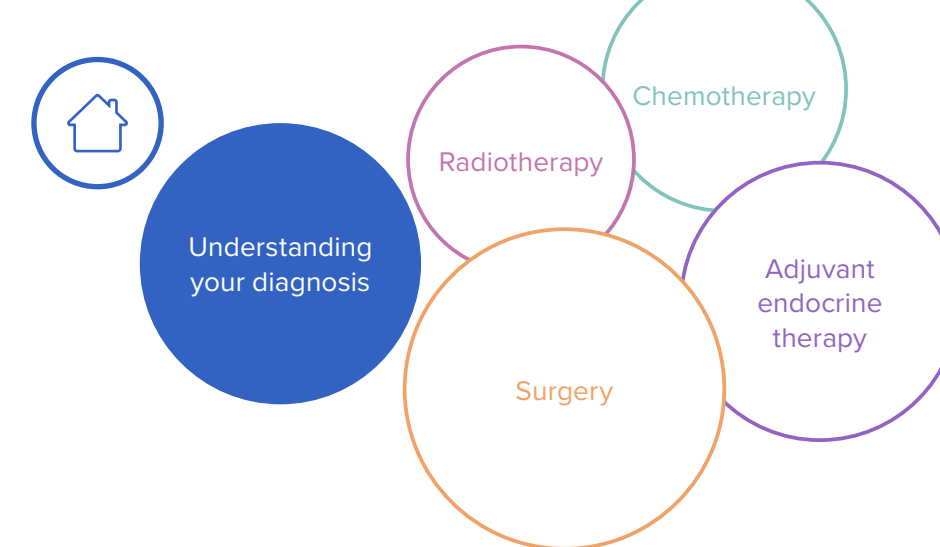
Every person is different and your doctor considers different information to make a treatment recommendation. Knowing more about the cancer in your breast can help you understand why certain treatments are needed. The next two pages explain some of the routine information your doctor will discuss with you when making treatment decisions:

- Breast cancer **grade**
- The types of **receptors** the breast cancer has, also called **receptor status**
- Breast cancer **stage**
- The pathology report following any surgery taking place



You can ask your doctor to help you fill in the boxes on the “Understanding my diagnosis” page

Click on the '**Home**' button to return to the main treatment pathway page





Understanding your HR+/HER2- diagnosis

Cancer grade

Cancer grade is used to estimate how quickly the cancer will grow and spread. There are three grades of breast cancer:³

- **Grade 1 (low-grade cancer):**
The cancer cells are growing slowly and look very similar to normal cells, the risk that the cancer will spread is low
- **Grade 2 (moderate or intermediate-grade cancer):**
The cells are growing more quickly than Grade 1 and don't look like normal cells
- **Grade 3 (high-grade cancer):**
The cancer cells are growing more quickly than Grade 2 and look very abnormal. High grade cancers are more likely to spread and have a higher risk of returning

Breast cancer grade:

Receptor status

Some cancer cells have receptors that detect substances in the body and cause them to grow. Two common types of receptor in breast cancer are hormone receptors and HER2 receptors:^{4,5}

- Breast cancers with a significant number of hormone receptors are called hormone-receptor positive, or HR+, breast cancer. HR+ breast cancers are more likely to respond to hormone therapy than HR- breast cancers, as HR- breast cancers do not have a high number of hormone receptors.⁵
 - Many HR+ cancers have receptors for the hormone estrogen (ER+). Many treatments for HR+ breast cancer work by blocking estrogen, so knowing if the breast cancer is ER+ is important for making treatment decisions⁴
 - HR+ breast cancers may also have receptors for the hormone progesterone (PR+). Whether you are PR+ or not, you may still receive hormone therapy^{4,5}
- Breast cancer that has no or very few receptors for the protein HER2 is called HER2-negative (HER2-) breast cancer⁶

Breast cancer receptor status: HR+/HER2-

This means that the cancer does have hormone receptors and does not have HER2 receptors. Approximately 65% of breast cancers are HR+/HER2-⁷

Other information about my diagnosis:

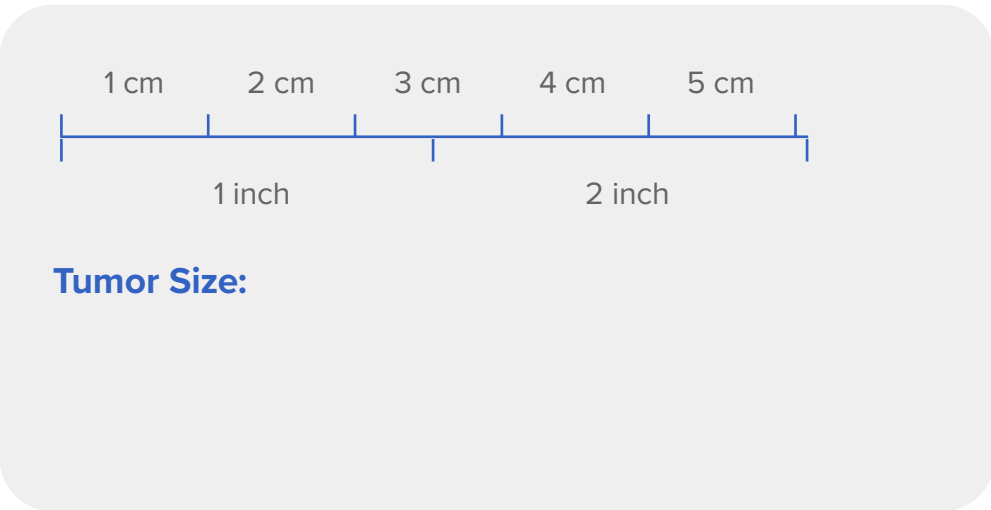


Understanding your HR+/HER2- diagnosis

TNM scoring

The TNM score is based on three pieces of information. The score is given as the letters T, N and M followed by a number, or the letter X if the score isn't known. A higher number indicates a more advanced disease state. Your doctor will explain what each of these mean:⁸

- T: Describes the size of the main cancer lump (called a tumor). The score will be "T" plus a number from 0 to 4⁸
- N: Describes if the cancer has spread to the lymph nodes, and if so, where. The score will be "N" plus a number from 0 to 3. The score represents how much the cancer has spread and does not give the actual number of nodes⁸
- M: Describes whether the cancer has spread to other parts of the body (called metastasis). The score will be "M" plus a number from 0-1⁸



How stage is determined

Breast cancers can be grouped into different stages, depending on a number of different things:

- Tumor grade
- Receptor status
- TNM score
- Tumor marker test results

Breast cancer stage

Breast cancer stage gives an idea of prognosis (the likely outcome of the disease) and what the best treatment options are for the cancer. There are 5 stages of breast cancer, numbered 0, I, II, III and IV. A brief description of each is given below:⁹

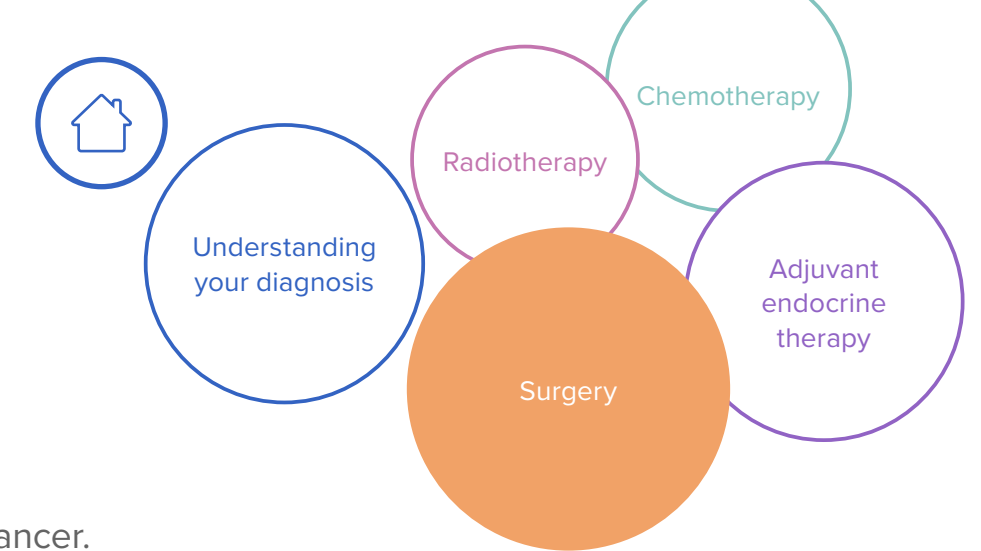
- **Stage 0:** The cancer is in the same part of the breast as it started. Sometimes called ‘non-invasive’ breast cancer
- **Stage I:** The cancer is small and may have spread in small amounts to one or two lymph nodes
- **Stage II:** The cancer is either a little larger and/or has spread to more lymph nodes than Stage I cancer
- **Stage III:** The cancer is larger, has spread to a number of lymph nodes near the breast and there may be several lumps within the breast. Stage III breast cancers tend to be higher grade and might cause the skin around the breast to become red and inflamed. Stage III is also called locally advanced breast cancer
- **Stage IV:** The cancer has spread from the breast to other areas of the body, such as the liver, lungs or bones. This is also called advanced, or metastatic breast cancer

Surgery

THE GOAL OF SURGERY FOR HR+/HER2- EARLY BREAST CANCER

The goal of surgery is to remove as much of the cancer as possible. Surgery is a common option for treating breast cancer, though not every person will need it. You may have some treatment before surgery to make the cancer easier to operate on. Doctors will use information about the cancer in your breast to decide if and when you need surgery¹⁰

While surgeons will be able to remove most of the breast cancer, sometimes cancer cells in harder to reach places may be left over. This means that more treatment might be needed, for example radiotherapy and/or chemotherapy¹⁰



TYPES OF SURGERY

There are two types of surgery for breast cancer. Your surgeon may recommend one of these two options based on the information about your cancer

Lumpectomy¹¹

- A lumpectomy is when the area of your breast that contains the cancer is removed. The surgeon will leave behind as much healthy breast as possible
- Your surgeon may recommend this operation if the breast cancer is small compared with the size of your breast, only in one place and easily accessible

Mastectomy¹²

- A mastectomy is when the whole breast is removed
- The surgeon will recommend this operation if:
 - The lump is large in size
 - The cancer is in more than one area of your breast, or in a central location
- Your surgeon may talk to you before the operation if breast reconstruction is possible and available to you. Breast reconstruction means a new breast shape is built using tissue from another part of your body or an implant, or both



My surgery appointment

Your doctor and nurse will help you fill out this section

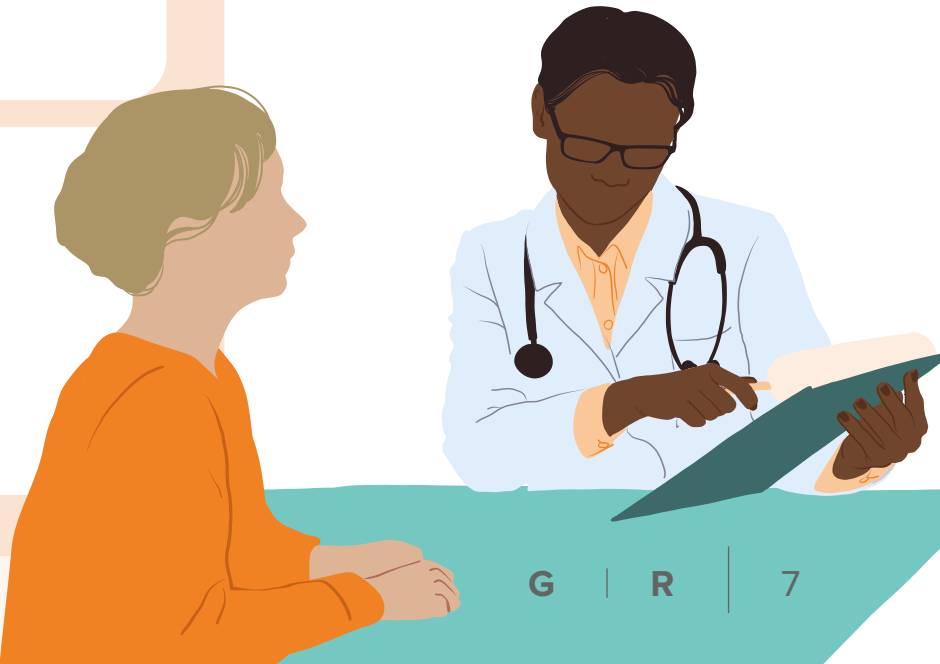
Type of surgery

Length of surgery and expected time to recover

Questions for my doctor or nurse

For example:

What can I do to prepare for my surgery? What should I wear to my appointment?



Radiotherapy

THE GOAL OF RADIOTHERAPY FOR HR+/HER2- EARLY BREAST CANCER

Radiotherapy is normally used after surgery to treat any cancer that is leftover in the breast¹³

WHAT IS RADIOTHERAPY

- Radiotherapy is used to kill any cancer cells in the breast with controlled doses of radiation. The high energy radiation destroys the breast cancer cells in the treated area by damaging the DNA of these cells¹³
- Radiotherapy happens in a number of short sessions, several times a week for several weeks¹³
- Radiotherapy aims to give as low a dose as possible to the healthy surrounding cells. Although this is safe, this is why radiotherapy may cause side effects¹³



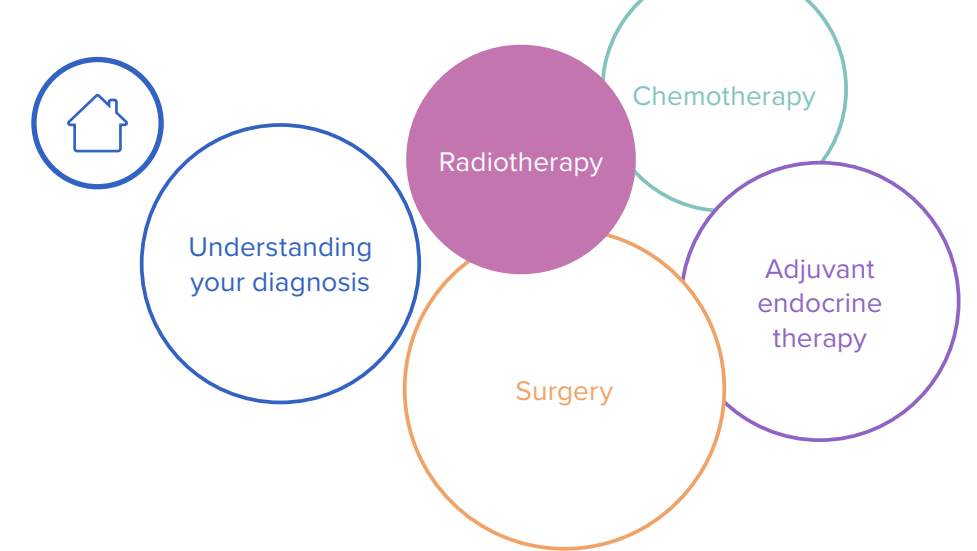
Ask your doctor how often you will need radiotherapy appointments as this may be different for each person

Radiation also affects normal cells and can cause side effects. You might experience some of the following :¹⁴

- Tiredness and fatigue
- Swelling of the breast
- Pain in the breast or chest area
- Hair loss under the arm
- Sore throat
- Lymphedema (swelling caused by a build-up of fluid)
- Change in breast shape, size and colour
- Tenderness over the ribs



There are many things you can do to help manage side effects. Ask your care team for advice about this during your appointments





My radiotherapy appointments

Your doctor and nurse will help you fill out this section

Number of sessions per week

Number of weeks

Notes

Questions for my doctor or nurse

For example:
What can I do to prepare for my radiotherapy? Is there anything I need to bring to the appointment?

After radiotherapy

After radiotherapy, you might feel more tired than usual. You might need to plan your work and activities around your sessions and get help from your friends and family to travel to and from treatment appointments.

Chemotherapy

Systemic chemotherapy involves the use of drugs to destroy cancer cells. Chemotherapy is given over a number of treatment sessions, called a cycle. A course of chemotherapy usually lasts 3 months or more and includes at least 6 cycles, usually with a gap of several weeks in between each one¹⁵

THE GOAL OF CHEMOTHERAPY FOR HR+/HER2- EARLY BREAST CANCER

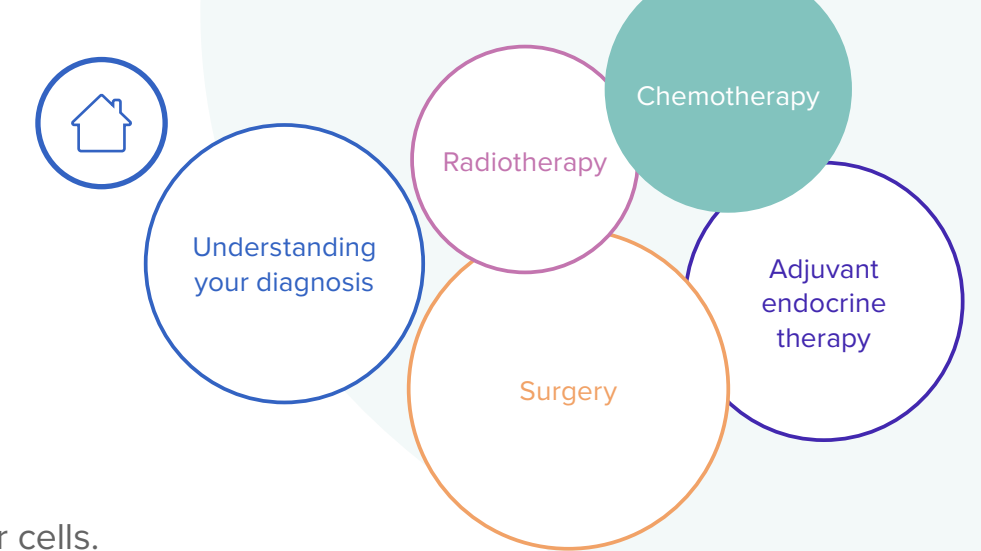
The goals of chemotherapy will depend on the type of breast cancer being treated and how far it has spread

- **Neoadjuvant** chemotherapy is given before surgery to shrink the breast cancer. This makes it easier to remove and helps the surgeon to remove as little breast tissue as possible¹⁵
- **Adjuvant** chemotherapy is given after surgery or radiotherapy to kill any remaining cancer cells in the body¹⁵

The overall goal of treatment is to get rid of all the breast cancer and keep it from coming back. If this is not possible, you might receive chemotherapy to delay or slow breast cancer growth¹⁵

What chemotherapy does

- Chemotherapy uses drugs to kill cancer cells. They work by keeping the breast cancer from growing or making more breast cancer cells. While the drugs affect cancer cells the most, they also have an effect on normal cells, which can cause side effects¹⁵
- Lots of different drugs can be used for chemotherapy. The drugs, dose, and treatment plan your doctor recommends will be based on information about the breast cancer, for example cancer stage, your age, and any other medical conditions you may have¹⁵





What happens during a chemotherapy session

Intravenous chemotherapy¹⁵

Some chemotherapy drugs require injection directly into a vein. This is called **intravenous** or IV chemotherapy

This kind of treatment happens at the clinic, doctor's office, or hospital and can take up to a few hours

In most cases, intravenous chemotherapy is given as an outpatient treatment, which means you will not have to stay in hospital overnight



You can ask your care team to provide help when managing any side effects you may be experiencing

Oral chemotherapy¹⁵

Some chemotherapy drugs can be a tablet, capsule, or liquid that you swallow

This means that you may be able to pick up your medication at a pharmacy and take it at home

Chemotherapy can cause side effects, including:¹⁶

- Tiredness and fatigue
- Nausea
- Vomiting
- Loss of appetite
- Hair loss
- Sore mouth
- Anemia (low number of red blood cells. This can leave you feeling weak and tired)
- Skin and nail changes
- Infections or sickness
- Bruising and bleeding
- Memory and concentration problems
- Sleep problems
- Sex and fertility issues
- Diarrhea and constipation
- Changing emotions



My chemotherapy appointments

Your doctor and nurse will help you fill out this section

Type of chemotherapy

Number of cycles

Notes

Questions for my doctor or nurse

For example:
What can I do to prepare for my chemotherapy? Is there anything I need to bring to the appointment?

After chemotherapy

After each chemotherapy cycle, you might feel more tired than usual. You might need to plan your work and activities around your sessions and get help from your friends and family to travel to and from treatment appointments

Adjuvant endocrine therapy

THE GOAL OF ENDOCRINE THERAPY FOR HR+/HER2- EARLY BREAST CANCER

The goal of endocrine therapy will depend on when it is given:

- **Adjuvant endocrine therapy** is given after surgery to reduce the risk of the breast cancer returning.^{17,18}
Ask your doctor about adjuvant endocrine therapy and how it can reduce the risk of recurrence.
- **Neoadjuvant endocrine therapy** is given before surgery to shrink the breast cancer to allow as little of the breast tissue to be removed as possible¹⁹



Ask your doctor about the "Understanding risk of recurrence for patients with HR+/HER2- early breast cancer leaflet" to learn more about risk of recurrence

There are many things you can do to help manage your side effects, your care team will explain these to you during your appointments

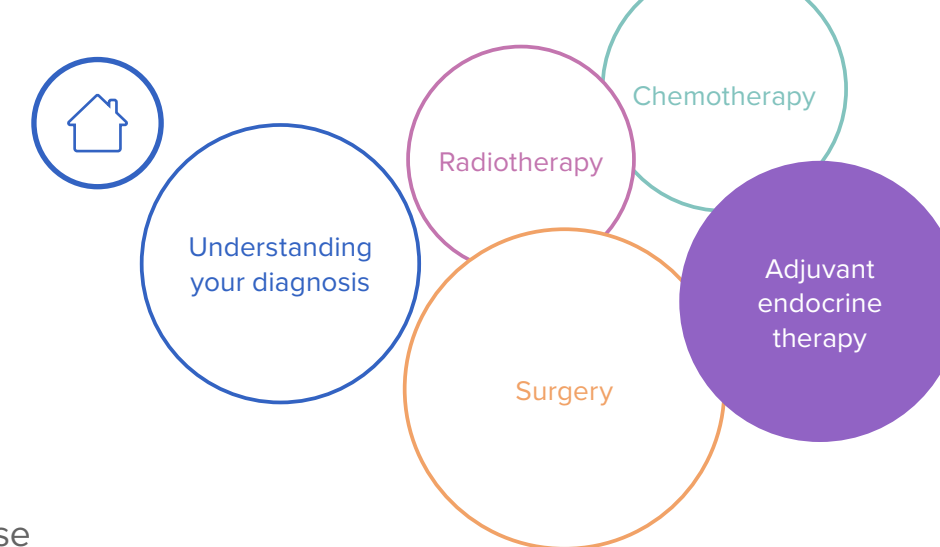
What endocrine therapy does

The body produces hormones that can cause breast cancer cells to grow. Endocrine therapy stops the body from making hormones or blocks them from working. This can slow the breast cancer's growth or shrink the cancer^{4,20}

Endocrine therapy can be given as one of several different drugs. Your doctor will recommend a particular drug based on the breast cancer and the treatment you have had so far²¹

What to expect when taking adjuvant endocrine therapy?

- Adjuvant endocrine therapy is usually a pill you swallow once per day²²
- The normal length of treatment is 5–10 years^{22,23}





My adjuvant endocrine therapy regimen

Your doctor and nurse will help you fill out this section

My adjuvant treatment

How often I need to take it

Notes

Questions for my doctor or nurse
*For example:
What can I do to manage any side effects?*

During adjuvant endocrine therapy

Adjuvant endocrine therapy can cause a number of side effects which can be different for each person. The most common side effects are menopausal symptoms, but these are normally more intense than when they occur naturally. These include:⁴

- Hot flushes
- Night sweats
- Vaginal dryness
- Reduced libido (sex drive)
- Mood changes

Other common side effects include:

- Effects on the bones (osteoporosis)
- Joint/muscle pain and stiffness
- Headaches
- Nausea
- Tiredness or fatigue (extreme tiredness)

If you experience any of the above, do not hesitate to mention this to your doctor or nurse



Adapting to living with HR+ early breast cancer

Beginning adjuvant endocrine therapy can be difficult, but it is also a positive step to moving forwards with life. It is normal to experience some challenges while adapting to living with early breast cancer and talking to your healthcare team can help

Some common things that your doctor or nurse can help with include:²⁴

- Depression, anxiety, or low mood
- Fatigue, feeling tired, lack of energy, or general pain
- Unhappiness with body image or relationship difficulties
- Sexual issues, concerns over fertility, or early menopause
- Difficulties with memory or concentration
- Concerns over bone health, including osteoporosis, or heart health

Some lifestyle choices can help with adapting to living with early breast cancer:²⁴

- Gain and maintain a healthy weight
- Eat a balanced diet that is high in vegetables, fruits and whole grains, and low in alcohol
- Exercise or engage in physical activity several times a week
- Give up smoking

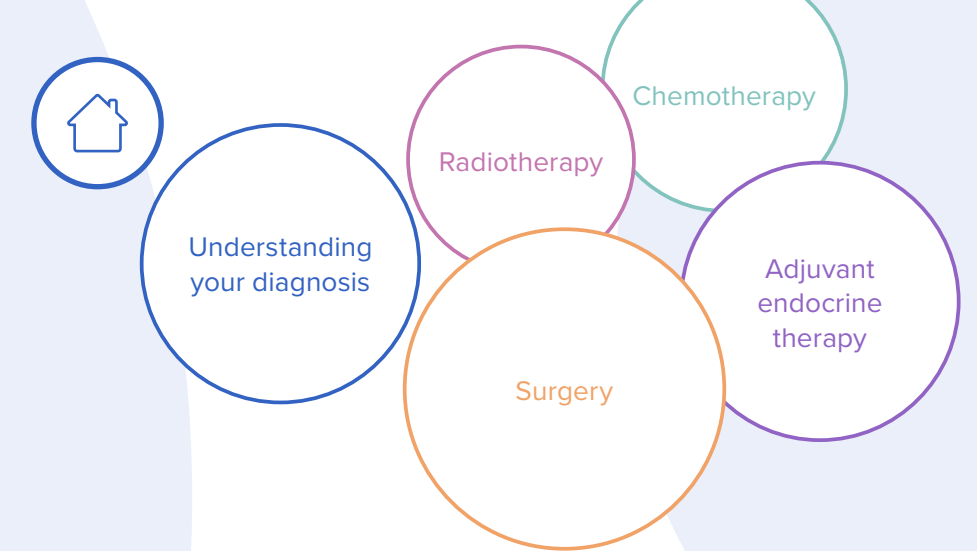


It is very important to take your adjuvant treatment exactly as prescribed by your doctor.

You can ask your care team to provide ways to help you take your treatment and assist with any side effects you may be experiencing

Glossary²⁵

- **Adjuvant:** treatment given after surgery
- **Cancer stage:** The size of the cancer and how far it has spread
- **Chemotherapy:** Treatment aimed at destroying cancer cells using anti-cancer drugs
- **Endocrine therapy:** Drugs that work in different ways to block the effect of hormones on cancer cells
- **Hormone:** Chemical messengers produced in various organs of the body that control growth and reproduction
- **Intravenous (IV):** Injected into a vein
- **Lumpectomy:** An operation to remove an area of breast tissue. In breast cancer may also be called wide local excision or breast-conserving surgery
- **Lymph Nodes:** Also known as lymph glands. Small oval-shaped structures found in clusters throughout the body, for example under the arm. The lymphatic system acts as a draining system for the body, helping to get rid of waste and fight infection
- **Mastectomy:** This is a type of surgery in which all of the breast tissue is removed, including the nipple
- **Metastasis:** Breast cancer that has spread to other parts of the body such as the bones, lungs, liver or brain. Also called advanced breast cancer, secondaries or stage IV breast cancer
- **Neoadjuvant:** treatment given before surgery
- **Radiotherapy:** The use of high energy x-rays to destroy cancer cells
- **Tumor:** An overgrowth of cells forming a lump. May be benign (not cancer) or cancer
- **Tumor Markers:** Substances produced by cancer, or by the body as a response to cancer





References

- 1 NHS England. "Clinical Guidelines for the Management of Breast Cancer: West Midlands Expert Advisory Group for Breast Cancer" (2019). PDF file retrieved at: <https://www.england.nhs.uk/mids-east/wp-content/uploads/sites/7/2018/02/guidelines-for-the-management-of-breast-cancer-v1.pdf>. Accessed September 2020
- 2 Susan G. Komen. "Susan G. Komen: Types of Tumours". Available at: <https://www.skgomen.org/AboutBreastCancer/DiagnosingBreastCancer/UnderstandingaDiagnosis/TumorTypesSizesGrades.html>. Accessed September 2020
- 3 Cancer Research UK. "Common grading systems". Available at: <https://www.cancerresearchuk.org/about-cancer/what-is-cancer/cancer-grading>. Accessed September 2020
- 4 Breast Cancer Now. "Breast Cancer Now: Hormone Therapy". Available at: <https://breastcancernow.org/information-support/facing-breast-cancer/going-through-treatment-breast-cancer/hormone-therapy>. Accessed September 2020
- 5 Cancer.org. "Breast Cancer Hormone Receptor Status". Available at: <https://www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-hormone-receptor-status.html>. Accessed September 2020
- 6 Cancer.org. "Breast Cancer HER2 Status". Available at: <https://www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-her2-status.html>. Accessed September 2020
- 7 Howlander N, et al. Cancer Epidemiol Biomarkers Prev. 2018;27(6):19-26.
- 8 Cancer.Net. "Breast Cancer Guide: Breast Cancer Stages". Available at: <https://www.cancer.net/cancer-types/breast-cancer/stages>. Accessed September 2020
- 9 Breastcancer.org. "Breast Cancer Stages". Available at: <https://www.breastcancer.org/symptoms/diagnosis/staging#stage1>. Accessed September 2020
- 10 Mayo Clinic. "6"Breast Cancer Surgery". Available at: <https://www.mayoclinic.org/tests-procedures/breast-cancer-surgery/about/pac-20385255#:~:text=Breast%20cancer%20surgery%20is%20a,targeted%20therapy%20and%20radiation%20therapy>. Accessed September 2020
- 11 Cancer Research UK. "Surgery to remove breast cancer (lumpectomy)". Available at: <https://www.cancerresearchuk.org/about-cancer/breast-cancer/treatment/surgery/remove-just-area-cancer>. Accessed September 2020
- 12 Cancer Research UK. "Surgery to remove your breast (mastectomy)". Available at: <https://www.cancerresearchuk.org/about-cancer/breast-cancer/treatment/surgery/remove-whole-breast>. Accessed September 2020
- 13 Cancer Research. "Treatment for Cancer: Radiotherapy". Available at: <https://www.cancerresearchuk.org/about-cancer/cancer-in-general/treatment/radiotherapy/about>. Accessed September 2020
- 14 Breast Cancer Now. "Side effects of radiotherapy". Available at: <https://breastcancernow.org/information-support/facing-breast-cancer/going-through-breast-cancer-treatment/side-effects/side-effects-radiotherapy#lymphoedema>. Accessed September 2020

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References

- 15 Cancer.Net. “Understanding Chemotherapy”. Available at: <https://www.cancer.net/navigating-cancer-care/how-cancer-treated/chemotherapy/understanding-chemotherapy#:~:text=Chemotherapy%20is%20the%20use%20of,an%20effect%20on%20cancer%20cells>. Accessed September 2020
- 16 NHS England. “Side Effects: Chemotherapy”. Available at: <https://www.nhs.uk/conditions/chemotherapy/side-effects/>. Accessed September 2020
- 17 Breastcancer.org. “Recurrent Breast Cancer”. Available at: <https://www.breastcancer.org/symptoms/diagnosis/recurrent>. Accessed September 2020
- 18 Breast Cancer Now. “Recurrence: When Your Primary Cancer Comes Back”. Available at: <https://breastcancer.org/information-support/facing-breastcancer/diagnosed-breast-cancer/your-primary-cancer-has-come-backrecurrence>. Accessed September 2020
- 19 Breastcancer.org. "Hormonal Therapy Before Surgery Seems Just as Effective as Chemotherapy Before Surgery for Early-Stage, Hormone-Receptor-Positive Disease". Available at: <https://www.breastcancer.org/research-news/neoadjuvant-hormonal-tx-vs-neoadjuvant-chemo>. Accessed September 2020
- 20 NCCN Guidelines for Patients. “Breast Cancer Metastatic”. Available at: https://www.nccn.org/patients/guidelines/content/PDF/stage_iv_breast-patient.pdf. Accessed September 2020
- 21 Breast Cancer Now. “Hormone Therapy”. Available at: <https://breastcancer.org/information-support/facing-breast-cancer/going-through-treatment-breastcancer/hormone-therapy>. Accessed September 2020
- 22 Oncology Nurse Advisor. "Adjuvant and Neoadjuvant Therapy for Breast Cancer (Fact Sheet)". Available at: <https://www.oncologynurseadvisor.com/home/for-patients/fact-sheets/adjuvant-and-neoadjuvant-therapy-for-breast-cancer-fact-sheet/>. Accessed September 2020
- 23 Guideline for Clinical Practice. “Early Breast Cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up”. Available at: <https://www.esmo.org/content/download/284512/5623447/1>. Accessed September 2020
- 24 Runowicz CD, et al. *J Clin Oncol*. 2016;34(6):611-635.
- 25 Breast Cancer Now. “Glossary of breast cancer terms”. Available at: <https://breastcancer.org/information-support/glossary#secondary%20breast%20cancer>. Accessed September 2020

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