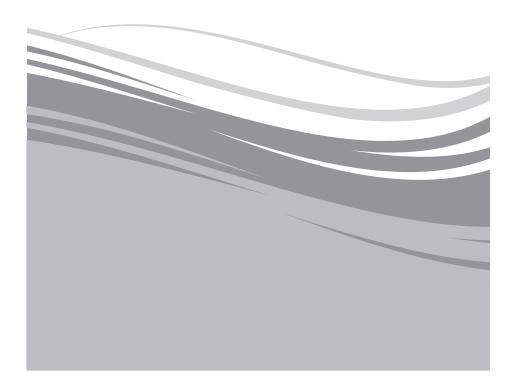




# Radiotherapy to the breast or chest wall



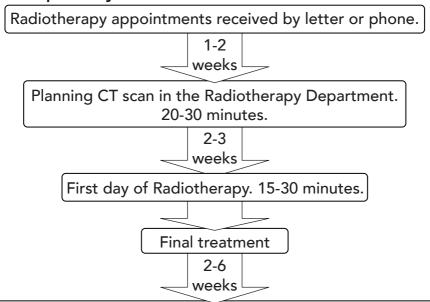
# Radiotherapy to the breast or chest wall

This leaflet is for people with breast cancer who will have a course of radiotherapy treatment to the breast or chest wall. It describes:

- The radiotherapy planning and treatment.
- The effects you may experience during and after treatment.
- How best to cope with these effects.
- Who to contact if you have any questions or worries.

This leaflet is intended to be a guide to highlight important details that you will have discussed with your treatment team. The details and side effects will vary from person to person. If you have any questions or concerns, please ask us. If you are not sure who to speak to there are contact details at the back of this leaflet.

# Patient pathway



End of treatment check (follow up). This will be with one of the clinical team that referred you for radiotherapy.

# What is Radiotherapy?

Radiotherapy uses high energy X-rays in the treatment of cancer. It is painless. It damages the cells and stops them dividing and growing. It is given in several small doses over a certain time. It will not make you radioactive. It is therefore safe to carry out normal activities and be around children and adults.

Therapy Radiographers operate the radiotherapy planning and treatment machines. They will see you at each session. We have male and female staff. They can help answer any questions you may have.

Usually you will receive 5 - 19 treatments given over 1 to 4 weeks. Your treatment team will explain how many treatments you will have when you see them for your consent appointment. You will not normally be treated on a weekend.

# Planning your treatment

When you first arrive in the department, book in at the reception desk. They will explain where you need to go. Your first appointment is for a CT scan. This scan is used to plan your radiotherapy and there will be no results from it. Everyone is a different shape and your planning scan is used to make a personalised treatment plan for you. Radiographers will carry out the scan, explain the procedure to you and answer any questions.

Please visit our website to watch a short video showing what to expect: ## www.beatson.scot.nhs.uk/patients-and-visitors/wards-departments/radiotherapy/

# Picture 1: CT Scanner and breast board



- Your radiographers will ask you to undress to the waist but we will cover you whenever possible.
- They may ask you to remove any items of headwear. This
  may include head scarves, hair accessories etc. This helps
  to ensure you are able to lie comfortably and allows your
  radiographers to check your treatment position. It is
  important to ensure your treatment is accurate and that
  your chin is kept raised and out of the treatment area.
- They will ask you to lie on a board with both of your arms resting above your head on arm rests. Your radiographers will help get you into a suitable position on the board.
- Your radiographers may ask you to lift your chin up and keep it in this position for the duration of your scan.
- This position will be used for both planning and treatment.
   It is therefore important to let us know if you feel you are unable to hold this position for around 20 minutes.
- Your radiographers will put some pen marks onto the skin on your chest. Small markers will be taped on top of these marks. They will show up on the scan and help with planning your treatment. These markers will be removed when the scan is finished. The pen marks will fade over the next few days.

- When your scan is complete, they will tattoo three dots on your skin. These are tiny permanent marks the size of a freckle. These are important marks that help us make sure you are in the same position each day for treatment.
- The whole appointment will last around 30 minutes, however the CT scan itself takes less than a minute.

It might be best to wear older underwear for the planning scan and treatment as the pen marks can rub off on your clothes.

# **Deep Inspiration Breath Hold (DIBH)**

This is a method of delivering radiotherapy while you hold your breath for a short period of time. By holding your breath, your chest stays still and your lungs expand. This moves your breast or chest wall away from your heart and limits movement during treatment. This can help to reduce any potential side effects.

If DIBH is appropriate for you, your radiographers will explain the procedure. They will get you to practice holding your breath before carrying out the CT scan. You would need to be able to hold your breath for at least 20 seconds.

Your breathing will be monitored by placing a very small box on your chest during the CT scan and when you have treatment. For treatment you will need to hold your breath approximately 10 times. This can vary with each individual and your radiographers will talk to you about this. If you think you will not be able to do this please speak to the radiographers at your CT planning scan appointment.

DIBH is one of our options for treatment. Treatment without it is still safe and effective.

If you are having treatment with DIBH, we recommend you watch a short video about it. This can be found at: 

www.respire.org.uk

# **Radiotherapy Treatment**

The machine you are treated on is called a linear accelerator. Your appointment list will tell you which machine you are going to. Book into the reception when you arrive so the staff know you are here. The receptionist can direct you to the correct waiting area.

Picture 2: Linear Accelerator and breast board



- Your radiographers will explain the treatment process to you before you start.
- They will ask you to undress to the waist. Your radiographers will cover you as much as possible.
- They may ask you to remove any items of headwear. This may include head scarves, hair accessories etc. This helps to ensure you are able to lie comfortably and allows your radiographers to check your treatment position. It is important to ensure your treatment is accurate and that your chin is kept raised and out of the treatment area.
- You will lie in the same position as you were at your CT scan.
- Your radiographers may ask you to lift your chin up and keep it in this position for the duration of your treatment.

- They will dim the lights for a short time while they position you and the treatment machine. The machine moves around you but it will not touch you. Your radiographers will leave the room to operate the machine.
- If you are having DIBH, they will place the small positioning box on your chest as it was at CT.
  - Your radiographers will let you know when they are ready to begin the treatment and when to take a deep breath in and hold it. They will talk to you throughout to guide you with your breathing pattern. The treatment machine will only switch on when you are holding your breath correctly. If you breathe out, the machine will automatically switch off. There may be a screen on the treatment unit to help guide you with holding your breath.
- Your radiographers may take some X-ray pictures before starting your treatment. These are used to check your position. You will not get any results from them.
- The machine will be on for a few minutes. Your radiographers watch you the whole time on a monitor in a control area.
- The treatment is painless.
- You should not feel any different immediately after your treatment is finished. If you have any questions or concerns please speak to your radiographers.

Please visit our website to watch a short video showing what to expect: ## www.beatson.scot. nhs.uk/patients-and-visitors/wards-departments/radiotherapy/

# After treatment ends

You will have an appointment with one of the clinical team who referred you for radiotherapy. This appointment is to check your radiotherapy side effects have settled down and how you are feeling after treatment. It may be a hospital visit, a telephone call or a video call. If you need any advice before this please contact our Radiotherapy advice line (the details are at the back of this leaflet), your breast care nurse or your own GP.

# Early/short-term side effects

These can start during radiotherapy or shortly after completing treatment. These effects and their duration vary from person to person. The majority of side effects wear off within 6 weeks of radiotherapy stopping and usually fully resolve within 2 to 6 months. Please ask your radiographers if you are unsure or have questions.

Expected 50% – 100%

 Tiredness during treatment. Significant tiredness affects around 30% of patients, but this should not prevent you looking after yourself. It is usually worst 10- 14 days after radiotherapy and may last for several weeks.

Try to get enough rest and sleep, especially when the treatment begins to make you feel tired. It is also important that you try to continue with some of your normal daily activities. A sensible balance between rest and activity may be most beneficial. Research has shown that gentle exercise is also beneficial for people who have had a cancer diagnosis both in the short and longer term. There are programmes available that can help with this. Please let us know if you are interested in finding out more.

# Common

10% - 50%

- Pinkness or redness of the skin, like sunburn in the treatment area. This tends to happen towards the end of treatment and in the first few weeks after treatment has completed.
- Itching of the skin in the treatment area. Your radiographers can recommend or give you cream to help with this.
- Skin soreness in the treatment area.
- 1 in 5 patients have a more severe reaction which can lead to peeling and broken skin or sore, moist patches. If this happens after radiotherapy, call the Radiotherapy advice line (details at the back of this leaflet) or seek advice from your GP or breast care nurse.
- Temporary hair loss in the treatment area. This is usually more noticeable with hair under the arm.

Following the skin care advice below can help stop your skin from feeling uncomfortable:

# Skin Care

You can gently wash the treated area in a short bath or shower with lukewarm water.

Pat the skin dry rather than rubbing it.

Moisturise the area with a Sodium Lauryl Sulphate (SLS) free moisturiser e.g. Aveeno, Diprobase, Zerobase.

You can use your normal deodorant but if your skin becomes irritated or broken, please stop using it.

You should avoid any method of hair removal under your arm on the side you are having treatment to. You may wish to shave the area before starting your radiotherapy.

Avoid sun exposure, swimming, saunas and jacuzzis to the treated area.

Follow these instructions during your radiotherapy and until any skin reaction settles.

# **Less Common**

# Less than 10%

- Swelling in the treated area. This is usually mild but can last for several months after treatment.
- Breast, chest wall or axilla discomfort.
- Changes in breast texture.

You may feel more comfortable wearing loose fitting clothes that do not rub the skin. Make sure your bra does not rub. When appropriate you may want to go without a bra.

If you had a mastectomy, you may already be wearing a permanent breast prosthesis. You may find it more comfortable to wear your soft prosthesis during radiotherapy, especially if the skin is sore. Do not use a self-supporting breast prosthesis during radiotherapy and wait until any skin reaction has settled down after radiotherapy.

### Rare

# Less than 1%

- A sore throat.
- Skin blistering.
- A cough or breathlessness. This is caused by temporary inflammation of the lung (pneumonitis).

# Late/long-term side-effects (occurring months to years after radiotherapy and may be permanent)

We believe that the benefit of your radiotherapy treatment far outweighs any risks involved. However, there are potential long-term effects that happen to a small number of people. It is important to point out that effects vary and your clinical team will explain specific individual issues to you at your consent appointment. If you have any questions please speak to your team. Useful contact details are at the back of this leaflet.

The following is a general guide:

# Common

10% - 50%

 A skin colour change in the treatment area for some months after treatment. It may be lighter, darker or pinker.

- This is usually mild.
- Mild discomfort, tenderness or shooting pains in the breast, chest wall or axilla. This usually settles with time.
   Over the counter pain medication can be used to help this.
- Scar tissue (fibrosis) forms in the breast after radiotherapy. It tends to be more noticeable close to the site of surgery or lumpectomy. Over months and years it may progress, making the tissues pull in so that the breast becomes a little firmer, smaller and higher. Your breast may also have a slightly different texture.
- A worsened cosmetic outcome after breast reconstruction. Radiotherapy increases the risk of capsular contraction, that is hardening of the implant and a change to the shape of the breast. Speak to your surgical team if you have concerns.

# Less Common Less than 10%

- Persistent swelling of the breast or chest wall may develop after radiotherapy (oedema). This may be helped by regular massage and supportive clothing. Speak to your breast team if you are worried.
- Shoulder stiffness. This is more likely if you have radiotherapy to the lymph nodes. It usually settles with shoulder exercises.
- Marked changes to the breast appearance. You may notice changes to your breast size, shape and texture.
- Lymphoedema is a swelling of the arm or hand that can develop due to a build-up of fluid. It may cause pain and movement difficulties. The risk of developing lymphoedema will depend on the type of surgery you have had and the radiotherapy technique used. Swelling

usually develops slowly, months or years after treatment. If you experience this swelling, even mildly, please discuss with your GP or breast nurse who will be able to advise you further.

You can help reduce the risk of lymphoedema by:

Treating even small grazes, cuts and insect bites immediately. Wash the area thoroughly and cover if necessary.

### Rare

# Less than 1%

- Bone fracture. During treatment, the underlying ribs, breast bone and collar bone receive some of the radiotherapy dose. Over the years these may become more brittle and small cracks may appear. Although this may cause some pain, often patients are unaware of it.
- Fibrosis (scarring) of the underlying lung. A small amount
  of your lung will receive radiation during your treatment.
  In the first couple of months after treatment you may
  notice a dry cough or mild breathlessness. This should get
  better in 2 to 4 weeks without treatment. Fewer than 1
  in 100 patients have permanent scarring of the lung that
  causes feelings of breathlessness.
- Telangectasia (tiny blood vessels becoming visible on the skin). This is more common if you have had radiotherapy following a mastectomy or if you had a bad skin reaction from radiotherapy. Although these changes are permanent, they do not cause any health risk or problem.
- Increased risk of heart disease in later life. Smoking also increases your risk of developing heart disease and other

health conditions. Stopping smoking has immediate and long term benefits to your health. Within a year of stopping smoking, your risk of coronary heart disease is cut by half.

 A second cancer many years after treatment. The chance of this happening is around 1 in every 1000 patients. This risk is higher if you are a smoker. Although this is a serious possible effect of your treatment it is important to bear in mind that the risk of developing cancer is much lower than the risk of not treating your breast cancer now.

Smoking can also make some of the side effects of radiotherapy worse.

If you would like help or advice on stopping smoking, please contact Smokeline: \$\tilde{\alpha}\$ 0800 84 84 84

https://www.nhsinform.scot/healthy-living/stoppingsmoking

Nerve tingling, pain or numbness (brachial plexopathy).
 The brachial plexus is a group of nerves that begin in the neck area and come down into the chest area. There is a small risk of these nerves becoming damaged during your radiotherapy. This can result in pain, numbness or tingling affecting the arm and shoulder.

# **Frequently Asked Questions**

These are some questions we often get asked. If you have any that this leaflet does not cover please speak to a member of the team. Contact details are at the back of this leaflet. There is also a space there to write down your questions so you can ask them when you speak to us.

# Does radiotherapy hurt?

No, you don't feel anything with this treatment.

# What do I do if I feel too unwell to come for my appointment?

If you suddenly feel unwell and are unable to come for treatment, contact your GP and also let your treatment unit know. It is important that you try to attend each appointment. If you manage to come for your radiotherapy but feel unwell let your radiographers know as soon as you arrive. They can arrange for you to be seen.

# Can I travel on public transport?

Yes, you can travel on public transport provided you feel fit and well enough to do so.

# Is it ok to be around children and family members?

Yes, it is perfectly safe to be around other people including infants, babies and people who are pregnant.

# Can I go swimming whilst on treatment?

As the chlorine in the swimming pool can affect your skin we would recommend you don't go swimming during your radiotherapy. If you develop a skin reaction, wait until this has healed.

# Can I sunbathe?

The area of skin where you are having your radiotherapy will be more sensitive to the sun. We would recommend that you keep the area covered and out of the sun. Do not use sunscreen on the treatment area while having radiotherapy.

Even after your treatment finishes, this area will always be more sensitive to the sun. You should wear a high factor sunscreen with both UVA and UVB protection and minimum SPF 50 on previously irradiated skin.

# Can I go on holiday after my treatment finishes?

Yes, although it is important to remember that this treatment has side effects which can continue for a short time after you finish. Please take this into account when making arrangements. It may be necessary to inform your insurance provider that you have recently received treatment. Macmillan can provide advice regarding insurance issues. Their details are in the contacts in this leaflet.

# Can I wear make-up or fake tan?

Yes, just not in the treatment area. You can wear it once treatment has finished and any skin reaction has settled.

# Can I dye my hair?

Yes. However if you have had chemotherapy, please check with your chemotherapy team.

# Will I see a doctor whilst on treatment or on my last day?

There are review teams with specialist staff. The radiographers will advise you about this appointment.

# What happens when I finish my radiotherapy?

You will get a follow up appointment with the hospital where you were initially seen by your radiotherapy doctor. It may be a video or telephone call appointment. It will be between 2 and 6 weeks after finishing your radiotherapy.

# Can I exercise during my radiotherapy?

It is important to keep active during your treatment provided you feel able to do so. If you are particularly active already we would advise you to try to keep up your normal routine as much as possible. Gentle exercise can help fatigue, even if it is just a walk around the block or local park.

# Can I continue to drive whilst having radiotherapy?

Most patients carry on driving during treatment but if you feel unwell or tired, it is better to ask someone else to drive for you. If your consultant thinks it might be best for you not to drive, they will discuss this with you.

# If I get patient transport and I arrive early or late for my appointment, will I still get my treatment?

We appreciate that if you come with patient transport you may arrive in the department outwith your appointment time. You will still get your treatment however you may have to wait until the radiographers have an available appointment for you.

# Where can I get help?

All the staff are here to make sure your treatment goes as smoothly as possible and will try to help with any questions or problems you may have.

The Beatson Cancer Centre has a Radiotherapy Advice Line available for patients who have completed treatment. It is an answer phone service. Please leave your name and telephone number with a short message and we will call you back as soon as possible. **To 0141 301 7432** 

Further specialist help and information is available from:-

Breast Clinical Nurse Specialists 2 0141 301 7636/7639 Information and Support Radiographer 2 0141 301 7427

The Macmillan Information & Support Centre is on Level 1 at the main entrance of the Beatson. They offer emotional support, information and signposting to services within and near to the Beatson and in your own local area. Open Monday to Friday 8:15am to 4:15pm. \$\tilde{\alpha}\$ 0141 301 7390

The Cancer Centre also has a **Cancer Treatment Helpline for urgent calls.** This is for patients on or within 6 weeks of treatment who have urgent or severe symptoms such as:

- Shivering or flu-like symptoms.
- Temperature greater than 37.5°C.
- Gum or nose bleeds or unusual bruising.
- Worsening or sudden breathlessness.
- Leg weakness or difficulty walking.

- Severe nausea, vomiting, diarrhoea or constipation.
- Sudden increased or uncontrolled pain.
- Other concerning symptoms associated with your cancer treatment.

The line is available 24 hours for emergencies, although it would be helpful if you called early in the day if this is at all possible.

# For Urgent Calls:

Beatson 8am-8pm な 0141 301 7990 National 8pm-8am な 0800 917 7711 NHS 24 な 111

# **Psychology Service**

This leaflet deals with the physical aspects of your treatment, but your emotional wellbeing is just as important to us. Being diagnosed with cancer can be a distressing time for you and those closest to you. At times it can also be difficult coping with treatment. Within the department we have a clinical psychology service that may be able to help with worries and difficulties you might be having, before, during or after treatment. If you think this may be helpful to you, please ask staff to put you in touch.

There are various other organisations providing information and support. These include:

Breast Cancer Now	☎ 0808 800 6000
www.breastcancernow.org	

Macmillan Cancer Support	☎ 0808 808 0000
www.macmillan.org.uk	

# Maggie's Centre provides a comprehensive cancer support programme for people and their families affected by cancer. Maggie's Glasgow situated in the same grounds as the Beatson Glasgow radiotherapy site: Maggie's Lanarkshire situated in the same grounds at the Beatson Monklands radiotherapy site: Maggie's Forth Valley Situated next to Forth Valley Hospital: ### www.maggiescentres.org

Cancer Support Scotland, The Calman Centre, Gartnavel Complex:	☎ 0800 652 4531	
Provides emotional and practical support on a one-to-one		
basis and through community based groups. Complementary		

www.cancersupportscotland.org

therapies available.

Macmillan Benefits Team	☎ 0141 301 7374
(located within the Beatson Glasgow):	<b>A</b> 0141 301 7374

Provides free and confidential advice for people affected by cancer and their carers.

If you are interested in finding out about becoming more active, please visit:

www.nhsggc.org.uk/getactive

**Beatson Cancer Centre** – if you want to find out more about our Centre please visit:

www.beatson.scot.nhs.uk

Smokeline- Provides support and guidance to help you stop smoking.	☎ 0800 84 84 84 or visit:	
www.nhsinform.scot/healthy-living/stopping-smoking		

You may find some useful information on the websites listed above. However, it is important to note that The Beatson West of Scotland Cancer Centre cannot accept responsibility for the quality and content of any information provided by other organisations.

# **Beatson Location**

We have two radiotherapy centres. Your appointment letter should tell you which one you will attend for your radiotherapy. If you are unsure please phone the booking office number on your appointment letter or contact the Radiotherapy advice line.

For more information on public transport, maps or directions, visit the website **www.beatson.scot.nhs.uk** 

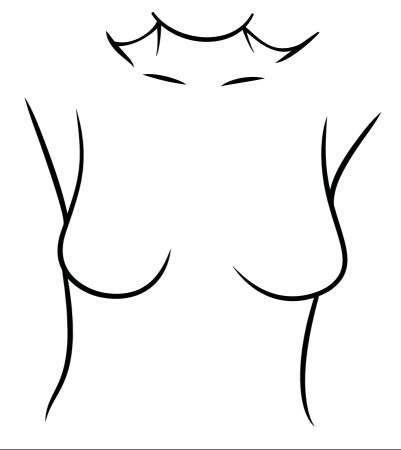
Beatson Glasgow	Beatson Lanarkshire
The Beatson West of Scotland Cancer Centre, 1053 Great Western Road, Glasgow, G12 0YN.	Monklands Hospital, Monkscourt Avenue, Airdrie, ML6 0JS.

# Your treatment plan

Your radiotherapy clinician is

You will have \_\_\_\_\_ treatments.

You will have treatment to breast/ chest wall.



Notes and Questions		

Notes and Questions		

# **Care Opinion**

We welcome your comments and feedback about our service. If you would like to give us feedback please go to:

www.careopinion.org.uk or telephone:

**TO 0900 122 3135** or scan the QR code:





Leaflet created by R. Stevens, A. Armstrong K. Aitken and H. Reid November 2017

Leaflet reviewed by H. Reid, A. Armstrong, K. Aitken December 2023 QA Approved H. Reid December 2023