

Information for patients receiving

A short course or single treatment of radiotherapy to the chest



This leaflet is for patients who will have a short course or single treatment of radiotherapy to the chest area. It describes:

- What is radiotherapy?
- Your radiotherapy planning and treatment.
- The effects that you may experience during and after treatment, and how best to cope with them.
- Who to contact if you have any questions or concerns.

What is radiotherapy?

Radiotherapy is the use of carefully measured doses of radiation. It damages the cells and stops them dividing and growing. Most patients having radiotherapy are treated using a high energy beam of X-rays delivered to a precise area.

Therapy radiographers operate the radiotherapy planning and treatment machines and will be able to answer any questions or concerns that you may have. We have both male and female staff.

If you are in doubt about anything or have any questions or problems, please let us know as soon as possible.

Preparation for treatment

For some patients, your doctor **may** request a special shell or shell to be made before we plan and start your radiotherapy treatment. This can depend on the area of your chest we are treating, and also how many treatments you will be having. Your doctor will explain this to you. You will visit the mould room to have this made.

The shell is made from a warm, soft plastic which is moulded around your chin, neck and chest. As it cools, it hardens and sets before being removed. It is used to help keep you in the same position during each of your radiotherapy appointments. Having

the shell made is not painful. It has an open area over your nose and mouth so you can breathe normally. The staff will explain everything to you.



Image 1: Shell

Planning your radiotherapy

Before radiotherapy begins your treatment must be carefully planned. You will have a CT scan at one of our CT simulators. The images from this scan allow your doctor and radiographers to plan your treatment. There are no results from this scan.

Your radiographers will check some details with you and explain the procedure. They will ask you to undress to the waist and give you a gown to wear. You will be shown into the scanning room and we will help you to lie on the CT couch. The couch can be a little uncomfortable. If you find lying flat particularly difficult, it may be a good idea to take painkillers just before your appointment.



Image 2: CT simulator

We will scan the area to be treated with you lying in the position necessary for your radiotherapy. Your radiographers will have to remove your gown. They will keep you covered wherever possible. If you are uncomfortable let your radiographers know and they will do their best to make you more comfortable. If you have a shell, you will wear it for your scan. It is very important that you stay as still as you can during this time and try to relax and breathe normally.

Once you are in the correct position, your radiographers will place some temporary pen marks and stickers on the skin on your chest or on your shell. They will move the couch through the scanner and into the starting position. They will then leave the room to start the scan. They are watching you all the time. The scan itself will only take 2-3 minutes.

Once the scan is finished, your radiographers will replace the pen marks with little permanent marks (tattoos). They look like small freckles. These marks are used by your radiographers each day to ensure you are in the correct position for treatment. If you have a shell, you will not have tattoos as the marks will be on your shell.

Treatment

You will have treatment the same day or within a few days of your CT simulator appointment. If your treatment is on the same day, you may be in the department for a few hours. We advise that if you are currently taking medication for pain, that you bring it with you.

Your radiographers will explain everything before your treatment starts. You will have your treatment on a linear accelerator, which is a special type of X-ray machine.



Image 3- Linear accelerator

Your radiographers will position you just as you were in the CT simulator. The lights in the room will dim for a few minutes while they do this. The machine will move round about you, but it won't touch you. Your radiographers leave the room while the machine is on, but they will monitor you on closed circuit TV. It is important that you keep still during the treatment. It is painless and takes around 10 minutes.

If you have a shell, you will wear it for each treatment appointment.

If you have any questions, please ask your radiographers. They will be happy to answer them.

Effects of treatment (early)

The effects of treatment vary from one person to another. The information given here is intended as a general guide and does not mean that you will have all the effects described. Please remember that radiotherapy only affects the area of the body we are treating.

- **Tiredness:** During your treatment you may feel more tired than usual. The tiredness can last for some time after treatment has finished.
- **Skin:** The skin in the treated area will be more sensitive and may become pink, red, dry or itchy. This can be treated with creams; however it is very important that you use only those given to you or recommended by Beatson staff. Bathe as normal, ensuring that the water is not too hot and pat your skin dry. Avoid putting anything overly hot or cold (hot water bottle or hot/cold packs) on the treated area.
- **Hair loss:** You will lose hair in the treated area only. This should grow back.
- **Sore Throat:** If the area being treated covers part of your throat, you may develop a sore throat or a feeling of a lump in your throat when you swallow. Your GP can give you some medicine to help this.
- **Heartburn:** If the area being treated covers part of your gullet, you may experience heartburn. This can sometimes be quite uncomfortable and may last several days. Ask your GP to assess your pain control and give you medication to help this. This will help you feel more comfortable.
- **Pain:** You may have some pain in your chest during the first 48 hours after your treatment. This should settle quite quickly. If you are not taking effective painkillers please ask your GP to review.
- **Breathlessness:** If you have been breathless before the treatment, this could become a little worse during and after

treatment. Use your inhalers if you have them. If you are concerned call your GP, NHS 24 or The Cancer Treatment Helpline.

- **Cough:** Sometimes patients notice that their cough and/or spit become slightly worse during and after treatment. This should settle within a few weeks. If your spit becomes coloured (green/red) contact your GP to make sure you do not have an infection.
- **Nausea (feeling sick):** You should not be sick with the treatment but some patients find that they feel slightly squeamish and go off their food for a few days. If nausea is a problem your doctor can prescribe something to help reduce the feeling of sickness.

Long term side effects

- **Lung fibrosis:** Your lung may lose some of its elasticity due to the radiotherapy. This may cause a decrease in your lung volume and cause you to become out of breath more easily.

Please ask your team if you have any questions or concerns.

General advice

- Although you may be feeling off your food, it is important to try to eat to maintain your strength. Facing three large main meals a day can be very difficult. Try having smaller meals or snacks more often. It can also help to serve your food on a smaller plate. If necessary, you can obtain food supplements from your GP.
- Keep drinking plenty of fluids as it is important that you don't become dehydrated. You might find thicker fluids such as milk or tomato juice easier to swallow than water.
- It also helps to avoid very hot or icy drinks, rough foods, strong spices and alcohol until things settle down after treatment has ended.

- Avoid exposing the treated area to sunshine during treatment. Your skin in the area treated will always be sensitive to the effects of the sun, especially during the first year after your treatment. You should use a sunscreen with both UVA/UVB protection with a minimum SPF 50 once treatment has finished.

What do I do if I feel ill?

If you suddenly feel unwell and not able to come for treatment, let your treatment room know and contact your GP. If you feel able to come in to the department, let your radiographers know you are unwell as soon as you arrive. They can arrange for a doctor to see you.

If you become unwell after your treatment has finished you must contact your GP, NHS 24 or The Cancer Treatment Helpline. If you experience sudden severe problems with your breathing go to Accident and Emergency or dial 999.

After treatment ends

Any symptoms that have developed because of the treatment will gradually settle down. The tiredness can take several weeks to improve. It is also important to remember that the full benefits of your treatment may take a number of weeks to be felt, and it may be a little while before you feel better. Our hope is that you will notice a gradual improvement in the days and weeks after your treatment has finished.

Your doctor will arrange to see you about 4-6 weeks after treatment is completed. Continue to try to eat and drink plenty of fluids and do as much as you feel able.

Where can I get help?

Many people already have had a lot of information and support from their own Lung Cancer or Macmillan Nurse Specialist at another hospital or in the community. Remember that they can also help you with any worries or concerns at this time. They can also provide invaluable help and support during and after your treatment. Please remember to give them a call if you need to.

Information & support

All our 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. Further specialist help and information in the Beatson is available from:

- **Clinical Nurse Specialist in Lung Cancer (Beatson)**
☎ 0141 301 7601/ 0141 301 7598
- **Information and Support Radiographer**
☎ 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. Please visit or phone on ☎ **0141 301 7390**.

The Beatson Cancer Centre has a **Radiotherapy Advice Line** available for patients who have completed treatment. This is an answer phone service, available Monday – Friday. Please leave your name, date of birth and telephone number and a radiographer will call you back as soon as possible.

☎ **0141 301 7432**

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/nose bleeds or unusual bruising.
- Worsening or sudden breathlessness.
- Leg weakness/difficulty walking.
- Severe nausea/vomiting/diarrhoea/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 Tel: ☎ 0141 301 7990

National 8pm-8am Tel: ☎ 0800 917 7711

Counselling & Clinical Psychology

This leaflet deals with the physical aspects of your treatment, but your emotional well-being 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 but you don't have to cope on your own. Within the department, we have a counselling and clinical psychology service that may be able to help with worries and difficulties you might be having before, during or after treatment. Please ask staff about this if you feel it would be helpful.

There are also voluntary organisations providing information and support. These include:

Roy Castle Lung Foundation	Helpline 📞 0333 323 7200 🌐 www.roycastle.org
Providing information and support for those affected by lung cancer.	
Macmillan Cancer Support:	📞 0808 808 0000 🌐 www.macmillan.org.uk
Providing practical, medical, emotional and financial advice for those affected by cancer.	
Maggie's Gartnavel Maggie's Lanarkshire, Monklands Hospital Maggie's Forth Valley	📞 0141 330 3311 📞 01236 771 199 📞 01324 868 069 🌐 www.maggies.org
Provides information and support with a regular programme of courses. Counselling service available.	

Cancer Support Scotland – The Calman Centre, Gartnavel Complex.	Freephone 📞 0800 652 4531 🌐 www.cancersupportscotland.org
Provides emotional and practical support on a one-to-one basis and through community based groups. Complementary therapies available.	
Smokeline:	📞 0800 84 84 84
Provides support and guidance to help you stop smoking.	
Asthma + Lung UK:	Helpline 📞 0300 222 5800 or 🌐 asthmaandlung.org.uk
Provides information and publications.	
Macmillan Benefits Team (within the Beatson)	📞 0141 301 7374
Provides free and confidential advice for people affected by cancer and their carers.	
Beatson West of Scotland Cancer Centre	🌐 www.beatson.scot.nhs.uk
If you want to find out more about our Centre please visit our website.	
NHS 24	📞 111