



Information for
patients and
carers

Radiotherapy for Lung Cancer

Details of your treatment

This leaflet is designed for patients who are receiving radiotherapy to the lung. If you have recently been diagnosed with lung cancer, it is normal to experience a wide range of emotions.

Your partner, family or friends might also find this leaflet useful to understand what you are currently experiencing so that they can help to support you.

What is radiotherapy?

Radiotherapy is a specialised treatment which uses precise, carefully measured doses of radiation to treat cancer.

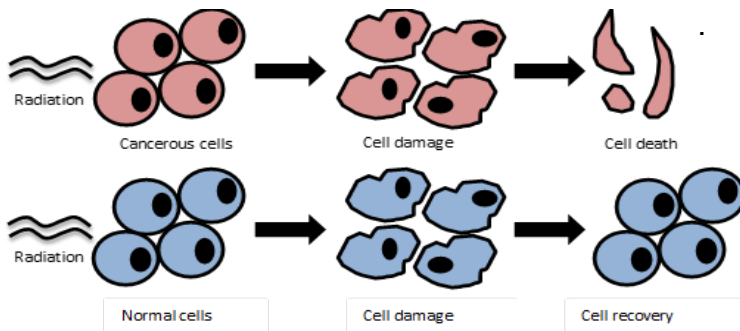
Treatment is given by highly trained radiographers, using specialised machines known as linear accelerators. The radiographers and planning staff work closely with your consultant to plan and deliver your treatment.

How does radiotherapy work?

Radiotherapy uses high energy X-rays to treat lung cancer. The X-ray beams are directed at the treatment area and cause damage to cells.

Normal healthy cells can recover from this damage, whereas abnormal cancer cells cannot.

Radiotherapy is therefore given to kill the cancer cells in the targeted area and reduce the chances of your cancer recurring (coming back) or delay its progression. The treatment itself is painless and there is nothing to feel.



Will I be radioactive?

If you are having external beam radiotherapy you **will not be radioactive**. It is safe to be in close contact with people, including pregnant people, babies, and children.

When will my radiotherapy start?

After your consultant or specialist nurse has discussed your treatment options with you, you will receive an appointment to attend your radiotherapy planning scan appointment. You will be given your first radiotherapy treatment appointment when you attend for your planning scan.

The planning scan appointment is used to plan your radiotherapy treatment; this can take up to 3 weeks. Please do not be alarmed if you feel there is a long time between these appointments, this is due to the complex nature of the planning process.

If you require certain times and/or hospital transport, please let a member of staff know before you start treatment. The radiotherapy appointment team will do their best to accommodate your request, however this cannot always be guaranteed.

Chemotherapy

Some patients will have chemotherapy alongside radiotherapy. You will attend a pre-chemo assessment before starting radiotherapy where relevant information and advice will be given to you.

Before your treatment

Pre-treatment

At the planning appointment you will have a CT scan of your chest. The treatment planning team use this scan to accurately plan your radiotherapy treatment, whilst ensuring that surrounding areas close to the treatment area do not receive more radiation than necessary.

During the scan

For the scan radiographers will position you as required for treatment, which includes lying on your back with your arms raised above your head. Support will be given under your knees to aid comfort. It is important you can manage this position for around 15 minutes.

You may need to have a dye injection for the scan, known as contrast. Your radiographer will discuss this with you if it is required. Please note that if you need to have the dye injection, we ask that you stay in the department for up to 30 minutes afterwards. This is to ensure you are feeling ok after the dye injection. This will not be required for treatment.

Radiotherapy Treatment

Before your first radiotherapy session, a radiographer will discuss the treatment process and answer any questions you may have, as well as giving you your full list of appointments.

It is very important that you do not miss any of your radiotherapy treatments, as it can make the treatment less effective. If you are feeling too ill to attend your treatment, please call the department and speak to a member of the team to see if we can assist.

For your radiotherapy treatment, you may be asked to change into a gown in a changing cubicle. You will then lie down in the same position as when you came for the planning scan.

The radiographers will then make sure you are in the correct position for treatment. Once the radiographers have completed their checks, they leave the room to start the treatment. Only the patient can be in the treatment room when the machine is delivering treatment, but staff will monitor you via CCTV.

The radiographers will firstly complete a CT scan, to verify your position and you may feel the bed move as they make minor adjustments. The radiographers will then begin treatment from outside of the room, this will only take several minutes and there is nothing to see or feel during treatment. The whole treatment process takes approximately 15 minutes.

Blood Tests

You may be required to have weekly blood tests for this treatment. Your appointment list will have a reminder on what day you are to get your bloods done. The blood clinic is open 8am-5pm and is located at the main entrance of the hospital.

Treatment reviews

Depending on your treatment regime, you may have scheduled review clinics with your consultant or the review team, within the department or over the phone.

These review clinics are for you to discuss any concerns or side effects that you may be experiencing from treatment.

The review clinics are scheduled on specific times and days and will be scheduled on your treatment appointment list.

Staff you will meet

We are a mixed gender department and treatment will be given by male and female staff members.

Royal Preston Hospital is a teaching hospital which means that we train and support undergraduate and postgraduate radiotherapy students and medical students. Students take an active part in treatments and are closely monitored by qualified staff.

Side effects

Most people will experience side effects of radiotherapy, although the severity will vary from person to person.

Side effects do not usually happen straight away but may start to develop around a week into your treatment, and they will continue after treatment finishes.

You will be given advice by the review team and treatment radiographers on how to manage any side effects.

If you are having other treatments, e.g. chemotherapy you may experience side effects alongside radiotherapy, if you are suffering with chemotherapy related side effects, you can contact the **oncology helpline on 01772 523205**

Short term side effects

Short term side effects start during or shortly after radiotherapy and usually resolve within one to three months. These side effects vary in frequency and will be explained in more detail during the consent process.

- Fatigue
- Soreness when swallowing
- Skin soreness
- Breathlessness and coughs
- Nausea or vomiting
- Risk of infection
- Coughing up small amounts of blood

Late side effects

The late or long-term effects of radiotherapy can occur several months and years after the radiotherapy has finished. This is dependent on your treatment site and will be monitored and managed at your routine follow-up appointments. Long term side effects also vary in frequency, and this will also be explained during the consent process.

- Lung fibrosis
- Worsening of shortness of breath and cough
- Irritation of the oesophagus
- Risk of damage to the heart
- Chronic lung infections
- Risk of damage to the nerves to the arms/hands

After your treatment

After you have completed your course of radiotherapy your consultant or review team will explain your follow-up procedure. It is important to be aware any side effects can continue to worsen after treatment but should have improved by your follow up appointment which is usually 6-8 weeks after treatment finishes.

You will receive an appointment through the post to see your consultant or specialist nurse around 6-8 weeks after completion of your radiotherapy.

Please remember that you are free to contact the department at any time after your treatment has finished should you have any concerns or questions. You will be given a summary letter towards the end of your radiotherapy treatment containing contact information for the department.

Returning to normal life takes time and it is a gradual process which involves a period of readjustment, all of which will be individual to you. It is not possible to be specific about the amount of time it will take for each person. You can return to work as soon as you feel well enough. This can vary between patients depending on how physically demanding your job is.

Smoking

It has been proven that smoking can make your radiotherapy side effects worse and reduce the effectiveness of the treatment. It is important that you reduce or stop smoking whilst on treatment.

We understand that this may be difficult at such a stressful time and staff are very open to discussing this with you and offering you the support you may need. There are contact details for Smokefree Lancashire

Contact details

Should you require further advice or information please contact:

Radiotherapy Reception **(01772) 522923**

Appointments **(01772) 522931**

Transport **(01772) 522295**

If you would like to watch a short information video about radiotherapy, please scan the QR code below.



Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

Stop smoking services

<https://www.lancashire.gov.uk/health-and-social-care/your-health-and-wellbeing/keeping-physically-healthy/stop-smoking/>

Macmillan at Rosemere Cancer Centre

<https://tinyurl.com/38z3d2fy>

(01772) 523709

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

www.lancsteachinghospitals.nhs.uk/cancer-patient-information-leaflets

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