



**University
Hospitals Sussex**
NHS Foundation Trust

Having stereotactic ablative radiotherapy treatment to the lung

Sussex Cancer Centre

Patient information

What is SABR?

Your Oncologist has advised that you would benefit from a course of SABR treatment to the lung. Stereotactic ablative radiotherapy (SABR) can also be referred to as stereotactic body radiotherapy (SBRT).

Radiotherapy is the use of high energy x-rays to treat cancer. It destroys the cancer cells in the area that we are treating and aims to stop cancer cells growing by either shrinking the tumour or completely destroying it.

SABR is an effective way of giving focused radiotherapy to try to control the tumour whilst sparing normal healthy tissue by:

- Small precise beams of radiation
- High dose of radiation at each treatment.

How often will I have radiotherapy?

You will have radiotherapy in 3, 5 or 8 treatments on alternate days over a period of two weeks. The rest days between treatments allow for normal cells to recover and repair. We will make up for any bank holidays that occur during your treatment.

It is very important that you attend all of your radiotherapy appointments. If you are feeling unwell or think that you may be unable to attend for any other reason, please contact the radiotherapy department as soon as possible on: **01273 664901** as it may be important to have an urgent medical review.

How do I prepare for radiotherapy?

Computer tomography planning scan

Your first appointment will be a CT scan, which will take around 30-40 mins. It may be necessary for you to have an injection of special dye known as contrast to make some areas show up better on the scan. The CT staff will let you know if you need this.

You will be asked to lie on your back with your arms up above your head holding onto handles. There will be cushions under your head, knees and feet. A small breathing monitoring device will be attached around your chest/abdomen which is linked to the CT scanner.

The aim is to find a position that is comfortable and reproducible for the treatment sessions, that can take up to 45 minutes to deliver. It is very important you let staff know if the position is too uncomfortable as adjustments can be made.

After the CT scan the radiographers will have to have make three permanent tattoo dots on your chest. These allow us to position you accurately during treatment They are about the size of a pinpoint, but are permanent and are only made with your permission. If you are concerned by this please let the CT radiographers know and they can discuss other options with you.

If you are taking any medication, particularly for pain, please bring them with you to the hospital. Make sure you take your pain relief before the planning scan appointment as this will make it more comfortable when we position you for your scan.

Moulds and masks

As part of the CT scan process, depending where in your lung the tumour is may mean that a mould or mask may be required to help you stay still for the treatment.

The team will tell you more about this if a mould or mask is required.

Having your radiotherapy treatment

Please report to radiotherapy reception when you arrive each day for treatment. On the first day the treatment radiographers will have a brief discussion with you and answer any questions which you may have.

You may need to remove some items of clothing and will then be asked to lie down on the treatment bed. The radiographers will position you carefully on the treatment couch, adjusting the height and position of the bed to align the marks on your skin.

We will also be making pen marks on your skin to monitor your position which will wash off. It is important for you to remain as still and relaxed as possible and to breathe normally.

When you are in the correct position the radiographers will leave the room. They will be watching on CCTV just outside the treatment room whilst they deliver the treatment. They can see you at all times so if there are any problems wave or call out and they can be back into the room very quickly.

The radiographers will be in and out of the treatment room moving panels attached to the machine and adjusting the bed position but we want you to remain still and in position.

The radiographers will inform you when the treatment has been completed and you are able to move freely again.

The treatment will take between 30 and 45 minutes to complete.

Radiotherapy treatment is completely painless, you will not see or feel anything while it is being delivered.

Possible side effects of SABR to the lung

Side effects can vary from patient to patient. Not everyone will experience all of the side effects but it is important you are aware of them.

If you are someone who smokes it is important to stop as this can increase the risk of side effects occurring. We can offer you help and support for smoking cessation. Please ask if this applies to you.

It is important to tell the radiographers how you are feeling when they ask, particularly if you feel symptoms worsen so we can get you the care that you need.

Early side effects of treatment

These side effects can occur up to 6 weeks after completion of your treatment. They are usually temporary and gradually resolve by themselves without intervention.

Tiredness

- It is common you will feel more tired than usual following radiotherapy.
- Ensure you drink plenty of fluids and keep up nutritional intake.
- Prioritise tasks and try to keep as active as possible but listen to your body and rest when needed.
- Your energy levels may take weeks or months to return to normal.

Skin reaction

Skin reactions are uncommon but may occur where you are having treatment across your chest, it may look pink/red or darker and become dry and itchy.

To avoid developing a skin reaction:

- When washing avoid extremes of temperature and avoid vigorous rubbing with a towel. Instead, pat skin dry gently.
- Use your normal washing products. If this causes a reaction we may ask you to use something else (e.g. E45 or Aveeno).
- Wear loose-fitting, breathable clothing (e.g. cotton/wool).
- Avoid exposing the skin in the area we are treating to the sun or cold wind (If you are going to be in the sun wear a high factor sun cream).

Shortness of Breath and/or raised temperature

- Following treatment to the chest the lung tissue may become inflamed, this is called 'radiation pneumonitis'. It can result in breathlessness, wheezing, cough or fever that may last up to 12 weeks following treatment and can sometimes be mistaken as a chest infection.

Please seek advice from the radiotherapy team or GP before using antibiotic medication.

- Radiation pneumonitis is rare and less likely to happen with SABR treatment but if this is suspected you may be prescribed some oral steroid medication to help reduced the inflammation and manage your symptoms.

Chest Pain

- If your lung tumour is close to the chest wall following treatment you may experience some chest, rib and back pain.
- This is usually mild and often can be relieved with simple over the counter pain relief medication such as paracetamol.
- If the pain is more severe or persists for a long period of time please seek advice from your radiotherapy team.

Late side effects of treatment

Lung scarring / lung collapse

- SABR treatment to the lung may cause scarring in the area that was treated. This is permanent and may cause a small portion of lung to collapse.
- The precise planning of treatment keeps this to a minimum however those that experience this can feel short of breath and may require oxygen either temporarily or permanently.
- The chance of this happening is small.

Continued chest wall pain/ rib fractures

- For tumours close to the ribs there is a chance that the radiotherapy may weaken the ribs and cause pain and rib fracture.
- For most patients this does not cause any symptoms and is discovered when you have a scan after the treatment.

- A small number of patients with a rib fracture may require painkillers, sometimes for a long period of time to help manage the discomfort.

Upper arm nerve damage (brachial plexopathy)

- For tumours close to the top of the lungs, there is a very small risk of the radiotherapy treatment damaging the nerves going into the arm.
- This would mean that there may be weakness or numbness in part of the arm which could be permanent.
- The chance of this happening is very small. Great care is taken in the planning process in order to avoid/ minimise the dose of radiation to these nerves.

Secondary malignancies

- As with any dose of ionising radiation the treatment does carry a small risk of causing another cancer in the area that has been treated, many years after treatment.
- The risk of this is small and if relevant the team will discuss this with you.

Who to contact if you have concerns

SABR specialist radiographer: [Danielle Payne](#)

It is the role of the SABR specialist to support you throughout treatment and to give practical advice and information. They will be your key worker and your main point of contact with the hospital.

They can be reached by calling through to the reception number overleaf or via e-mail: UHSussexSABRsupport@nhs.net

Review Radiographer: [Hetal Raval](#)

The review radiographer might see you or speak to you during or following treatment to discuss any side effects you may be experiencing and give you support and advice on how to manage these. They can be reached through radiotherapy reception.

Consultant clinical oncologist

If you have questions relating to your medical care you can contact your consultant oncologist.

[Dr. Juliet Brock](#)

[Dr. Anna Britten](#)

[Dr. Joanna Stokoe](#)

[Dr. Edward Chandy](#)

They can be contacted through their medical secretary
[01273 696955 Ext. 64601.](#)

Student radiographers / staff training

We are a teaching hospital and sometimes we may have students or other members of staff observing or taking part in your treatment. Please tell the treatment staff if you would prefer not to have an observer with you.

How do I know if the treatment has worked?

The radiotherapy treatment continues to work for weeks or months after treatment ends so your radiation oncologist won't be able to tell you straightaway how the cancer is responding. However, they can help you manage any side effects.

After treatment finishes, you will have regular check-ups. Your radiation oncologist will do a physical examination and arrange tests or scans to check whether the cancer has responded to treatment. You may not know the full benefit of having radiation therapy for some months.

What happens after radiotherapy?

You will be reviewed 2 - 6 weeks after completing your treatment. This may be a telephone call initially at 2 weeks with our review radiographer and then a face to face appointment with your clinical oncologist at 4 - 6 weeks post treatment.

You will generally be seen at 3 monthly intervals for the first year after treatment and if all is well this will become less frequent over subsequent years.

Using your information / clinical trials

To keep improving our radiotherapy services, audits are regularly carried out in the department. This may involve using patient notes. Any data collected will have all personal and identifiable details removed to ensure patient confidentiality. However, if this is unacceptable to you, and you would prefer that your notes are not seen, please let your consultant know and your wishes will be respected.

Clinical trials are undertaken within the department, which you may be eligible to take part in. If necessary and appropriate, your doctor will discuss this with you.

Useful contact numbers

Sussex Cancer Centre radiotherapy reception: 01273 664901

Eastbourne Radiotherapy Unit: 01273 938900

Further contacts

Macmillan clinical nurse specialists:

Brighton

Email: uhsussex.cancernursespecialists@nhs.net

Telephone: 01273 696955 Ext. 63803

Worthing

Email: uhsussex.worlungcns@nhs.net

Telephone: 01903 205111 Ext. 84339

Eastbourne and Hastings

Telephone: 01323 417400 Ext. 4617

Chichester

Email: wshnt.lungcarenurses-srh@nhs.net

Telephone: 01243 831754

Get more support from

Macmillan Cancer Support:

0808 808 0000 www.macmillan.org.uk

Roy Castle Lung Cancer Foundation:

03333 237200 www.roycastle.org

British Lung Foundation:

03000 030555 www.blf.org.uk

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This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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