



# **Stereotactic Ablative Body Radiotherapy (SABR) for limited spread of cancer (oligometastases)**

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**This leaflet is for people who are about to have oligometastatic stereotactic ablative body radiotherapy (SABR) treatment. Family members may also find it helpful. We hope it will help to answer some of the questions you may have. Your clinical oncologist (specialist doctor) will also discuss the treatment with you.**

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## **What is radiotherapy?**

Radiotherapy is the use of high energy x-rays (radiation) to treat cancer. It damages tumour cells to stop them from growing or causes them to die. This damage is what causes the side-effects you are likely to experience during the treatment. The purpose of radiotherapy is to destroy the cancer cells while causing as little damage as possible to normal cells

Radiotherapy itself is painless and does not make you radioactive. It is perfectly safe for you to be with other people, including children and those who may be pregnant, during the course of your treatment.

When recommending radiotherapy, your doctor will have taken into account the risks and benefits of the treatment. Although there are risks and side effects, it is felt that the advantages for you outweigh the disadvantages.

## **Pregnancy**

Patients with child-bearing capacity must not be pregnant or become pregnant at any time during a course of radiotherapy as radiation can be harmful to the unborn child. It is important to let the radiographers know if you have missed a period or suspect that you may be pregnant, before you are exposed to any radiation.

Patients with child-bearing capacity will be asked to confirm their pregnancy status prior to planning the radiotherapy and again on the first day of radiotherapy treatment. This applies to all those with child-bearing capacity between the ages of 10-56 years and is a legal requirement.

## **What is Stereotactic Ablative Body Radiotherapy (SABR)**

Stereotactic ablative body radiotherapy (SABR) is a radiotherapy technique used to deliver a high dose of radiotherapy to a small area of the body where there may be limited spread of cancer.

Radiotherapy is delivered using a special type of X-ray machine called a linear accelerator, or 'Linac'. The staff operating these machines are therapeutic radiographers and have specialist training to carry out your SABR treatment.

SABR is an effective way of accurately targeting these areas while reducing the radiation dose to surrounding healthy tissues. This means that a higher dose of radiotherapy treatment can be given to a smaller treatment area in relatively few sessions or fractions.

The aim of SABR is to destroy (or ablate) the treated tumour. The potential benefits of this type of radiotherapy treatment are to reduce pain or other symptoms in the area to be treated and to prevent further spread of cancer to other areas of the body.

## **What is meant by limited spread of cancer and why is this important?**

Limited spread of cancer means that your cancer has spread from its original location (metastasised), but is only visible at three or less sites on CT, MRI or PET scans. Current research suggests that people with this low number of metastases may have benefit from SABR treatments. SABR can be used to treat metastases if they are found in the lungs, bones (including the spine), lymph nodes, adrenal glands or liver.

## **Before your planning appointment**

We will contact you by telephone to arrange an appointment for a radiotherapy planning CT scan. During this call, please mention if:

- You have a pacemaker or other implanted cardiac device as radiotherapy can affect some types of cardiac device.
- You have a urinary catheter fitted.
- You have not had a blood test taken in the last 12 weeks as we may require you to take one prior to the planning scan date.
- You have any problems with travel or appointment times and we will do our best to help you.
- The CT scan appointment can take up to two hours so you may wish to bring something to read, eat and drink.

If you have any questions regarding your radiotherapy planning CT scan appointment, contact us on the number below:

- **Telephone: 0118 322 7872**
- **Email: [Radiotherapy.planning@nhs.net](mailto:Radiotherapy.planning@nhs.net)**
- **Monday-Friday 8.30am-4.30pm**

## **On arrival in the department**

Please report the radiotherapy reception where the receptionist will book you in and check your personal details e.g. contact number. In order to ensure you receive free parking in the multi-storey carpark or the carpark location on London Road please provide a car registration number if you, a friend or relative drives you to the hospital for your appointments. Whilst you have access to free parking, it does not guarantee a parking space. Parking availability at the Royal Berkshire Hospital can be very limited.

## **Radiotherapy planning appointment**

The team will decide the best treatment position for you at this appointment. You will be asked to lie flat on the CT couch in a position that is comfortable for you to maintain for the duration of the scan and the SABR treatment. The position and the equipment we will use will depend on where on your body we are going to treat. If you think that you might have difficulties keeping still please discuss this with your oncologist and also please take any required pain relief at least 30 minutes before your scan if you think this will make the experience more comfortable for you.

In preparation for, or during the scan, you may be given a special contrast agent often referred to as a dye to swallow or as an injection. If you need a contrast injection this will involve having a cannula (a bendy tube) inserted into your arm or hand using a needle. This will be removed 30 minutes after your CT scan is finished.

The contrast agent is used to make specific organs, blood vessels and/or tissue types 'stand out', to assist the doctor when planning your treatment. You should let the radiographer know if you have any allergies and if **you have previously had a reaction to being given contrast**, but they will discuss this before they use any dye.

The most common side-effects of the dye are; a warm or hot 'flushed' sensation during the injection (for about 20 seconds), feeling like you need to urinate and a 'metallic' taste in the mouth. These do not last and there is no treatment necessary.

You may also be asked to use a micro enema (a separate leaflet will be provided for you if this is required) to increase the reproducibility of the treatment.

Once you are in a suitable position the radiographers will take the required CT scans to accurately plan your radiotherapy treatment.

**It is important that you can breathe as you normally do during the scan and you will not need to hold your breath.**

## Having your treatment

A team of radiographers will see you at each treatment appointment and ask how you are feeling. The radiographers work together in the treatment room to position you accurately, moving the treatment couch, you and the machine. The machine will not actually touch you.

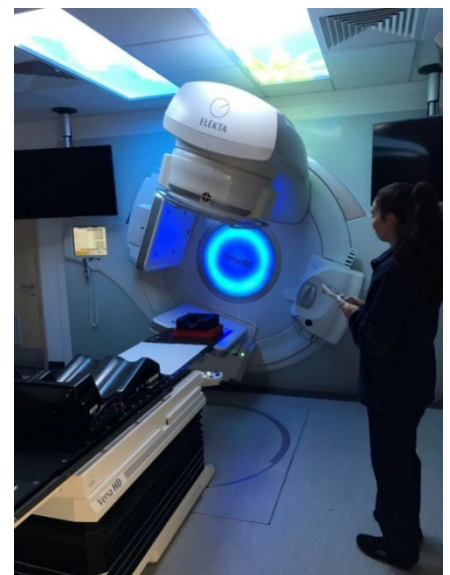
You will hear them giving each other instructions and information relating to your treatment.

It will take approximately 45 minutes for each treatment.

SABR is given in 3, 5 or 8 treatments at least 24 hours apart (for example 5 treatments would be given on days: Monday, Tuesday, Thursday, then the next Monday and Tuesday). Your oncologist will advise you how many treatments you will need.

Our treatment rooms have a camera system which uses infra-red lights to help us get you into the correct position and will also detect movement during the radiotherapy. We will need to remove your clothing around the relevant part of your body, in order to use the camera system. Patients will be offered medical underwear if we are going to be treating in the abdomen or pelvic region. You may feel a bit exposed, but it will only be your treatment team that is present with you. You will not feel anything from the infra-red light and it will not affect or hurt your eyes so you can keep them open if you wish. Please do let us know if you are light sensitive and the radiographers will advise how this can be minimised.

During treatment, it is important for you to stay as still as possible and to breathe normally. Once you are in the correct position and all the checks are completed the radiographers will leave the room to switch on the machine.



The radiographers will be watching you on a closed circuit TV monitor (CCTV) to ensure you are safe during the delivery of the radiation. The radiographers need to see that you are keeping still and check that you are not experiencing any problems during your treatment.

The radiographers will monitor you for any side effects throughout your treatment course and arrange for you to see a doctor if necessary.

Some days the radiotherapy department may be very busy and your appointment time may be delayed. We will keep you informed of any delays.

Your appointment times for radiotherapy will be confirmed in advance and will be at set times of the day.

It is important to speak to a health care professional before booking a holiday immediately following your radiotherapy.

## What are the potential side effects of treatment?

Side effects can vary from patient to patient and depend on the area of the body to be treated. Your radiotherapy doctor will explain any potential side effects that are relevant to your particular treatment.

It is important to tell the radiographers how you are feeling, particularly if your symptoms worsen, so that you can get the care you need.

## Early side effects

Early reactions to SABR tend to occur during treatment or up to 3 months after completing your treatment. They are usually temporary and include:

- **Tiredness:** This is common, especially towards the end of treatment. Listen to your body and allow time to rest and sleep. You will gradually feel less tired.
- **Skin reactions:** Your skin may become red, itchy or dry in the treated area. You will be given skin care advice by the team caring for you.
- **Nausea and/or vomiting:** This may occur if you are having SABR treatment to your abdomen or pelvis. This can happen just a few hours after treatment or at any time during the treatment course. Your oncologist or review radiographer will prescribe anti-sickness medication for you to take before each treatment if necessary. A full explanation on how to take this medication will be given to you by the team.
- **Change in bowel habit:** This may occur if you are having treatment to your abdomen, pelvis. Drinking plenty of fluids to replace those lost if you experience diarrhoea will help to prevent dehydration. Reducing the amount of fibre in your diet may also help to ease the symptoms of diarrhoea. Please inform the radiographers if you experience changes in your bowel habits as advice regarding diet and medications is available.
- **Increased pain:** You may experience a temporary increase of pain in the area treated. The pain is usually mild and can be relieved by taking simple pain relief medication such as paracetamol. Please speak to the radiographers for advice regarding pain relief.

## **Possible long-term side effects**

Long term side effects can occur many months to years after radiotherapy has finished. These late side effects are hard to predict and unfortunately, if they do occur, can be permanent. We plan the treatment to avoid the areas surrounding the tumour as much as possible, to reduce these side effects. Your oncologist will discuss possible long-term side effects with you.

## **After treatment**

After your treatment has finished you will return to the Outpatient Clinic for follow-up with your radiotherapy doctor. Radiotherapy takes time to work and so it is at this appointment that your doctor will assess and discuss your progress. They will also talk with you about any continuing side effects and will plan future appointments.

It is common to feel tired after cancer treatment. Try to eat healthy balanced meals, drink plenty of fluids, rest as needed but aim to be physically active every day.

## **How to contact us**

Radiotherapy Department: Telephone: 0118 322 7872 (9am-5pm)

Email: [Radiotherapy.planning@nhs.net](mailto:Radiotherapy.planning@nhs.net)

Radiotherapy Clinic: 0118 322 7890 (9am-5pm)

Macmillan Cancer Information Centre: 0118 322 8700

Patient Advice & Liaison Service (PALS): 0118 322 8338

## **Useful organisations and websites**

**Macmillan Cancer Support** 0808 808 2020 [www.macmillan.org.uk](http://www.macmillan.org.uk)

**NHS Smoking Helpline** 0300 123 1044 <https://www.nhs.uk/better-health/quit-smoking/>

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Berkshire Cancer Centre (Radiotherapy)

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