Introduction
This leaflet aims to help patients and their families understand more about stereotactic ablative body radiotherapy (SABR) for cancer treatment to their lymph nodes. Please read this leaflet alongside The Christie booklet ‘Radiotherapy - a guide for patients and their carers’. Your clinical oncologist (specialist doctor) will also discuss the treatment with you.

This leaflet will explain:
• what SABR is and what the benefits of this treatment are
• general information about the planning of your treatment
• general information about what happens on the day of your treatment
• general information about side effects of treatment
• who to contact when you need advice

What is SABR and what are the benefits of this treatment?
SABR to the lymph nodes involves the precise delivery of high dose radiotherapy. SABR is given over fewer treatment sessions than conventional/standard radiotherapy which may increase the chances of controlling the tumour at the treatment site and reducing pain more effectively than standard radiotherapy.

Planning your treatment
You will have appointments in the radiotherapy department before you start the treatment. During your visit, you will have a radiotherapy planning scan on a CT scanner. The scans which are undertaken to plan your radiotherapy are solely aimed to give enough information to plan the radiotherapy accurately. These scans are not diagnostic and therefore do not give sufficient information to assess the status of your cancer or any other abnormalities.

During this planning session, you may be given a contrast injection to enable the doctor to see clearly the area of treatment. The radiographers will draw some marks on the area being treated with a skin pen. These marks wash off and so we would like to give you some permanent marks (pin sized tattoos) on your skin in order for us to reproduce your position during the planning scans and treatment.

Planning appointments can take around 1 - 2 hours. Please bring your regular medication with you and maybe something to read. You can take painkillers 30 minutes before this session if you have any pain.
Ensuring accuracy of treatment
To give accurate treatment we need to ensure that you are in the same position each day when you come for treatment planning and treatment delivery.

If your tumour is located in your neck
The radiographers will make a mask of your head and neck for you to wear during the planning scans and treatment. This mask helps ensure that you are as still as possible for the scans and treatment.

If your tumour is located in your chest
We will ask you to lie on the couch with your arms above your head. The position you lie in has to be exactly the same on each day of your treatment and the radiographers will help you with this.

If your tumour is located in your pelvis
We may ask you to empty your bladder before your planning scan and before each treatment. We will ask you to lie on the couch with your arms positioned comfortably across your chest. The position you lie in has to be exactly the same on each day of your treatment and the radiographers will help you with this.

If your tumour is located in your abdomen
The position of your lymph nodes within your abdomen is affected by several factors. The two that have the most impact are breathing motion and the movement of the digestive tract.
• To help with this we have a device which attaches to the treatment couch and is then adjusted to create some pressure on your abdomen. This is to try to minimise the amount of movement caused by breathing motion. Using this device should not be painful and you will still be able to breathe freely.
• Filling and emptying of the stomach and digestive system can cause distortion (alteration of the original shape). To minimise this we ask that you do not eat or drink anything 2 hours before having your scan or treatment. It is important that you have eaten a light snack on the day as prolonged fasting causes a build-up of gas.

You may have 2 appointments in the radiotherapy department before actually starting the treatment.
At your first appointment we will begin the planning process:
• We will ask you to lie on a treatment couch in the position you will be treated in. This will be with your arms above your head resting on a board.
• Then we will fit the device over your abdomen and ensure that the device is adequately limiting your motion.
• Following this you will have 2 CT scans in the same position with the device in position.
• The first scan will be taken whilst holding your breath.
• The second scan will be taken whilst breathing normally.
At your second appointment, which will be about 2 weeks after your first appointment:
• We will carry out the final checks. The checks are performed for two reasons, to ensure that you are comfortable in the treatment position and to check the radiotherapy plan on the treatment machine.

Consent
We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie’s written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you. Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.
When will I start my treatment?
Treatment will usually start a couple of weeks after your planning session. You will be given a list of
treatment appointments when you attend for your CT planning scan.

What happens on the day of treatment?
SABR is normally given over 3 treatments, usually on alternate working days. The treatment course is
usually completed within 1 week, but may occasionally take a few more days to complete.

A team of radiographers, physicists and clinicians work together in the CT scanner and treatment rooms
and you may hear them sharing information and giving instructions relating to your treatment.

You will need to be positioned as you were in your planning session.

A scan of the area you are having treated will be taken before and sometimes during each treatment. These scans are purely to check that you are in the correct position and not to check how the tumour is
responding to treatment.

You will be alone in the radiotherapy treatment room while the machine moves around you and delivers
treatment. CCTV on the control desk gives the radiographers a clear view of you and they will be
watching you all the time. If you feel the need to cough or sneeze the radiographers will tell you
beforehand how to let them know this. They will switch off the machine and come in immediately. You
will not feel the treatment and it is important that you stay as still as possible during the treatment
process. Treatment can take between 30 - 60 minutes.

Side effects of treatment
As your treatment progresses you may experience some side effects or reactions. Not everyone will have
all of these reactions. These are normal reactions and usually temporary. They can vary between people,
dependent on what area has been treated. Your SABR consultant will discuss with you which of the
following side effects apply to you and how likely they are to occur.

- **Tiredness (fatigue)** - you will feel more tired than usual for several weeks after the radiotherapy has
been completed.
- **Skin reactions** - the skin where you are having the radiotherapy may change. Skin reactions can vary,
but the common symptoms are redness, dryness and itchiness. Very rarely, the skin may break down.
- **Pain** - there is a risk that any pain you have may increase for a few weeks immediately following
  treatment. This is usually mild and relieved with simple painkillers such as paracetamol.
- **Difficulty swallowing** - very rarely you may experience difficulty swallowing or swelling in your mouth,
  which can be painful. We may prescribe painkillers to enable you to continue eating and drinking
  normally.
- **Shortness of breath** - if you are having your chest treated, occasionally you may develop a cough, have
difficulty breathing and notice an increase in the amount of phlegm you have.
- **Changes in bowel habits** - if you are having your pelvis treated, you may experience some changes in
  your bowel habits such as diarrhoea.
- **Hair loss** - occasionally some people may find that they lose small patches of hair in the area being
treated. Hair loss may occur within the first 4 weeks after treatment and usually grows back.
- **Fractures, joint stiffness and arthritis** - for some patients there may be an increased risk of fracture
  following treatment or stiffness/reduced movement of joints. This may occur months after treatment.
- **Myelopathy** - potential lack of coordination and/or weakness of arms, sensory disturbance and/or
  bowel dysfunction and/or bladder dysfunction.

Tell the radiographers if you experience any of these side effects or have any new symptoms. They will
make sure that you receive the support and any medication that you may need.
Follow up
You will be seen by your SABR consultant between 4 - 6 weeks after your SABR treatment has finished. After this, you may not routinely see your SABR consultant, but may continue with follow-up appointments with your referring doctor.

Contact details (via consultant's secretary)
Dr L Barraclough - 0161 446 3406
Dr N Bayman - 0161 446 3337
Dr L Bhatt - 0161 446 8580
Dr R Colaco - 0161 918 7197
Dr J Livsey - 0161 446 8278
Dr G Radhakrishna - 0161 446 3820

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact patient.information@christie.nhs.uk

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week