Introduction
This leaflet aims to help patients and their families understand more about stereotactic ablative body radiotherapy (SABR) for cancer treatment to their bones. 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 bones 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 actually starting 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 the radiographers will draw some marks with a skin pen on the area being treated. 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 treatment planning scans and treatment.

Planning appointments can take around 1 - 2 hours. Please bring your regular medication with you and something to read, eat and drink. It may be beneficial to take painkillers 30 minutes before this session if you have any pain.
If your bone tumour is located in your skull:
You will be required to attend The Christie at Salford to have a planning CT scan. At this appointment the radiographers will make a mask of your head for you to wear during the treatment planning scans and treatment. This mask helps ensure you are as still as possible for the scans and treatment.

You will also be required to attend The Christie in Withington to have a planning MRI scan.

If your bone tumour is located in your chest (e.g. ribs or the breast bone):
You will be required to attend The Christie in Withington to have a planning CT scan. 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 bone tumour is located in your pelvis:
You will be required to attend The Christie in Withington to have a planning CT scan. 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 bone tumour is located in your limb (e.g. arm or leg):
You will be required to attend The Christie in Withington to have a planning CT scan. At this appointment the radiographers will make a mask of your limb for you to wear during the treatment planning scans and treatment. This mask helps ensure you are as still as possible for the scans and treatment.

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 your treatment?
If you are having SABR to your skull you will be required to attend The Christie at Salford to have your treatment.

If you are having SABR to your chest, pelvis or limb you will be required to attend The Christie in Withington.

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 for 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. A closed circuit television 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 – 45 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.
- **Scalp redness** Some patients may experience some mild redness of the scalp in the area being treated. This is usually mild and settles without requiring treatment. If troublesome, your doctor can supply some cream to alleviate this.
- **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.

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 be seen by your SABR consultant but may continue with follow-up appointments with your referring doctor.
Contact details:

Specialist radiographers:
At Salford - 0161 918 7825

Via your consultant’s secretary:
Dr R. Colaco - 0161 918 7197
Dr J. Wylie - 0161 446 3265

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.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. 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