



Coming to the proton beam therapy centre at The Christie

A guide for patients and their carers



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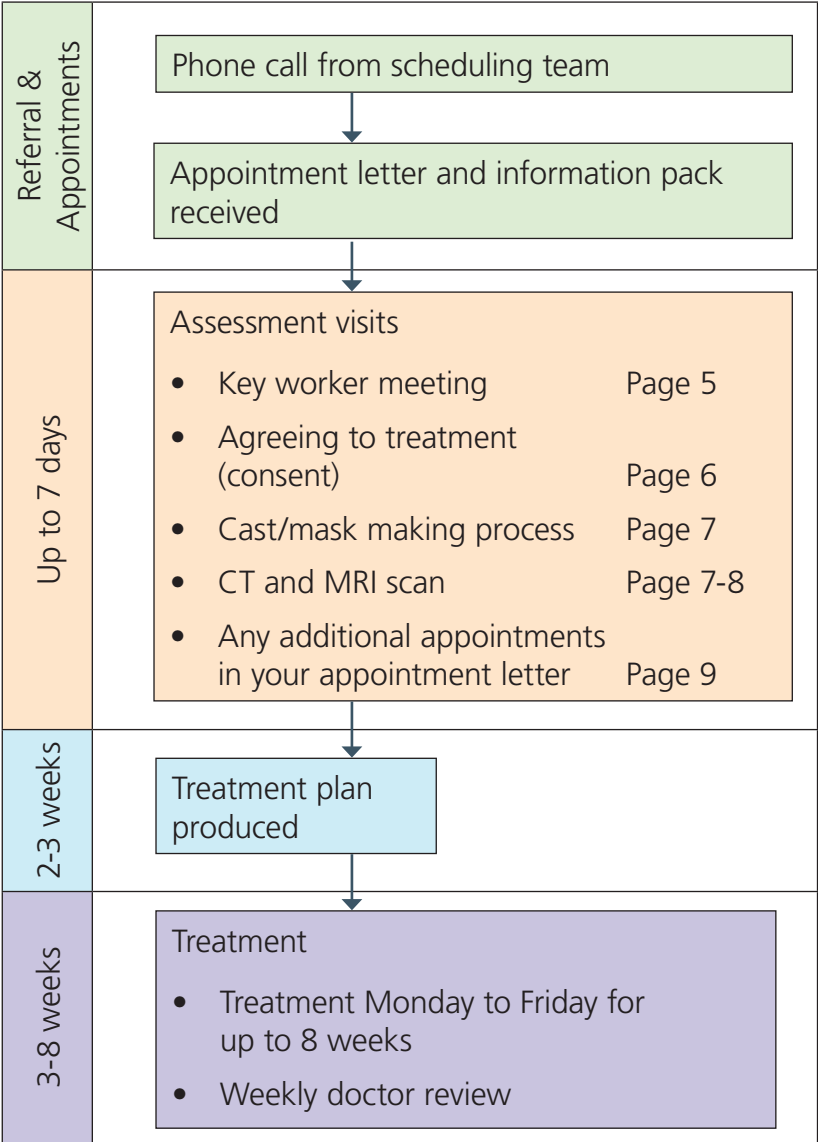
Christie website

For more information about The Christie and our services, please visit **www.christie.nhs.uk** or visit the cancer information centres at Withington, Oldham or Salford.

Introduction

You have been approved for proton beam therapy at The Christie.

What happens now?



What is proton beam therapy?

Proton beam therapy is a type of radiotherapy. Protons are small particles found in the middle of atoms. They can be used to give carefully calculated doses of radiation to treat diseases. This is different from standard radiotherapy which uses high energy X-rays. Protons release their energy at an exact point in the body. This means the dose to the tumour can be given very accurately and there is little or no dose to normal tissue past the tumour.



Proton beam therapy is given using a machine called a gantry. The gantry can rotate through 360 degrees. This means it is able to accurately aim the proton beam to the area needing treatment.

Proton technology in the UK offers pencil-beam scanning on each gantry. Pencil-beam scanning uses a narrow

beam of protons to move back and forth across the tumour site at a range of energies, to meet the required depth of the tumour.

What are the benefits of proton beam therapy?

There are two potential benefits of proton beam therapy.

- Closer sculpting of the radiation dose around the tumour. This sometimes allows a higher dose to be delivered.
- Lower dose received by the normal tissues around the tumour. This may result in fewer long-term side effects.

What happens next?

You will need to attend the proton beam therapy centre at The Christie for a consultation with the doctor and on a number of treatment planning days before your proton treatment can start. These appointments will be completed over approximately one week. You may not be needed every day for the entire day. Please refer to your accompanying appointment letter for the exact dates and times you will be required to attend during the planning days.

You have been allocated a key worker who will give assistance and support throughout your proton treatment. Your key worker will call you before your assessment visit to discuss any questions you have before you arrive at the hospital. Please read all information you have received before this phone call so that they can best manage your questions.



If you are eligible for accommodation, this will be provided for the duration of your assessment visit and the whole of your treatment. Further details will be found in your appointment letter and the accompanying accommodation guide if this applies to you. More detailed information will be given to you on your arrival at the centre.

Assessment visits

Key worker meeting

You will meet your key worker and they will provide you with a tailored information folder. This will contain all the information you may require during the whole process.



This includes information about the following:

- your treatment
- available support
- local amenities
- activities to do in Manchester

You will have frequent contact with your key worker throughout both the assessment visit process and the treatment itself.

Agreeing to treatment (consent)

When you arrive with us you will receive an information booklet related to the area you are having treated. It will contain information on the possible treatment side effects. You will have a consultation with your doctor to make sure you are fully informed about the possible early and late side effects associated with your treatment. At any point along the treatment pathway you will have the chance to ask any questions and discuss anything you do not understand.

We will ask you to sign a consent form agreeing to accept the treatment 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 a member of your treating team will discuss the possible consequences with you.

Are there alternatives to this treatment?

Your case will have been discussed with multiple specialist doctors to decide the best option of treatment/s. 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. Consent may be withdrawn at any time before or during this treatment.

Cast/mask making

Due to the accuracy and complexity of the treatment you will have, it is vital that you lie very still during your scans and treatments. To help with this, most patients are fitted with a mask or cast. This can be made in a place called a mould room or in the CT scanning room itself. The type of mask or cast varies depending on the area of the body you are having treated. The radiographers will decide what is most suitable for you. We will ask you to undress as necessary depending on the type of cast/mask made. This is repeated for CT/MRI and treatment appointments. We will always maintain your dignity and modesty.

During the process it may be necessary to use a small amount of X-rays/radiation to assist in the making of the cast/mask.

About X-rays and radiation

Everyone receives some ionizing radiation every day from background radiation. This comes from our environment. Your age and size will influence the amount of radiation used. We ensure we keep the amount of radiation we use as low as possible. Our CT equipment is regularly maintained and is subject to checks by both the radiographers and medical physics teams.

It is important to let the radiographers know if there is any possibility that you may be pregnant.

Injection of contrast agent

During the CT and/or MRI scanning process, it may be necessary to see your organs and vessels more clearly. To do this, a cannula will be inserted into your hand or arm and the contrast agent will be injected in during the scan. Another method to see your organs and vessels more clearly is to give you a special drink. A member of staff will explain which you will require and why. You may eat and drink as normal before the CT and MR scans unless informed otherwise by a member of staff.



CT scan

A CT scan is required to plan your Proton treatment. You may have more than one CT scan during this session, regardless of whether or not you have had one recently. This is because this is a technical scan which requires you to be positioned as you will be for treatment wearing your cast/mask. Our priority is to ensure

these X-rays benefit yourself and assist the consultant when planning your treatment.

During the scanning process, you will lie on the couch in the position you will be in each day for your treatment. The radiographers will use a skin pen to draw some marks on the area you are having treated. As these marks will wash off, some permanent tattoo marks, like tiny black freckles, will need to be made. If possible, these marks may be placed directly on your mask or cast, meaning that in some cases it may not be necessary to put the tiny permanent marks on your skin. These marks will be used by the radiographers each day of your treatment to set you up in the correct position.

The mask/cast and CT scan process will take around one hour 30 minutes.

If you take regular pain relief, please bring this medication with you.

MRI scan

You may be required to have an MRI scan. If so this will be detailed on your appointment letter. An MRI scan is a type of scan that uses strong magnetic fields and radio waves to produce detailed pictures of the body. This sort of scan does not use radiation. The MRI scan process is very similar to the CT scan; however the scan will take around 45 minutes. You will be given some headphones and can listen to some music during your scan.



An MRI scanner is a large tube that contains powerful magnets. Some clothing and makeup may contain small amounts of metal that can interact with the magnet and affect the images. They can also create a heating effect during the scan. When attending for your scan we ask that you refrain from wearing the following items:

- hairspray, clips, grips and hair accessories,
- mascara and other eye make-up
- magnetic eyelashes
- anti-microbial clothing such as sportswear, as this can contain small amounts of silver or copper within the fabric
- any clothing which contains copper (such as specialist underwear or socks etc. or radio frequency shielding clothing)

- any specialist magnetic clothing
- jewellery (including facial and body piercing). If you have any issue removing piercings then please discuss this with your key worker

Your cast/mask making and MRI scan may occur before consultation with your doctor. Your CT and/or MRI scans are only used to plan your proton treatment; therefore, you will not receive any results from them.

Additional clinic appointments

Depending on your age, treatment site and management plan you may be required to attend other appointments during the assessment visit. Examples of these include:

- general anaesthetic appointment
- physiotherapy
- speech and language therapy (SALT)
- occupational therapy
- dietitian
- chemotherapy
- social worker
- health play specialist

If you need to attend any of these, it will be clearly highlighted on your appointment letter.

Once you finish your assessment visit appointments, your treatment appointments will be provided to you.

Paediatric information

If your child requires chemotherapy during the time of their proton beam therapy they will also attend Royal Manchester Children's Hospital, ward 84.

The health play specialist team will work very closely with your child to prepare them for the preparation process and treatment. Age appropriate patient information will be given to you and your child by the health play specialist when you arrive at the proton beam therapy centre.



Infants and some younger children may require a daily general anaesthetic for their treatment. This allows the treatment staff to accurately deliver the treatment to your child by keeping them in the same position every day during treatment. You and your child will be fully supported throughout this procedure.

When will proton beam therapy begin?

Once the assessment visit is completed, the specialist planning team at The Christie will be working to produce a treatment plan tailored for you. This is a complex process and takes an average of 2-3 weeks to complete. If you are staying in accommodation you will return home and come back to the centre once your plan is ready and your treatment will begin. Treatment is usually given Monday to Friday but there may be times when treatment needs to be given over the weekend or on a Bank Holiday. This will be discussed with you in advance. Appointment times will be between 7:00am and 9:00pm and will be booked in advance. Unfortunately you may not be able to have the appointment time of your choice.



The treatment may take up to 8 weeks to complete.

For more information on the treatment process please visit our website www.christie.nhs.uk

A short film about proton beam therapy at The Christie is available on our website for you to watch.

Prescriptions

Prescriptions for medication made by Christie doctors during your treatment can only be collected from The Christie pharmacy. Any prescriptions relating to your cancer diagnosis will be free of charge. Please speak to your key worker for more information.

If you are taking any medication, please ensure you bring them with you if you are staying in Manchester for the assessment visits and treatment.

How to get to the proton beam therapy centre at The Christie

The centre is accessible via road, rail and air. For help planning your journey please ask at the information centre for a copy of the leaflet 'Travelling to The Christie for patients and patients' visitors' or visit our website www.christie.nhs.uk. For up to date information on public transport and journey planners visit Transport for Greater Manchester www.TFGM.com

Car parking

Minimal parking is available directly outside the proton beam therapy centre. For information on patient car parks, please check the website for the latest details, or refer to the leaflet 'Travelling to The Christie for patients and patient's visitors'.

There is also a shuttle bus service available from your accommodation (if provided) and from Royal Manchester Children's Hospital. Ask your key worker for a timetable.

Useful links:

Stagecoach Manchester
www.stagecoachbus.com/about/manchester

First Bus
www.firstgroup.com

National Rail Enquiries
www.nationalrail.co.uk
Contact: **03457 48 49 50**

Ambulance transport for patients

Ambulance transport can be arranged subject to eligibility criteria based on medical need. There also needs to be a medical need for you to bring an escort on hospital transport.

Hospital transport is provided by a variety of ambulance services. This service is not applicable for patients outside the area. If you are unsure please speak to your key worker or the scheduling team to clarify. Contact the transport liaison office at The Christie directly on **0161 446 8114** or **8143** for advice and bookings (Monday to Friday, 8.00am - 6.00pm).

Patient travel expenses

These can be reimbursed for patients from the Greater Manchester area who qualify under the 'healthcare travel cost scheme'. This can be done at the cashiers' office at The Christie. The cashiers' office can be found within the main hospital, off the main corridor near to the Wilmslow dining room. Opening hours: Monday to Friday, 9:30am - 1:00pm and 2:00 - 4:00pm.

Useful contacts

The proton beam therapy centre

Scheduling team: 0161 918 7170

First floor reception: 0161 918 2300

The Christie Hotline: 0161 446 3658

Royal Manchester Children's Hospital (RMCH)

Ward 84: 0161 701 8400 or 8401 or 8404

Ward 84 day case unit: 0161 701 8411 or 8412

24 hour triage nurse: 0161 701 7489

Proton beam therapy nurse: 0161 701 8430

Tourist Information

Visit Manchester: 0871 222 8223

www.visitmanchester.com



Please note:

Mobile phones can interfere with the treatment equipment. Please look out for signs letting you know if it is safe to use your mobile phone. If you do have one with you, you may need to turn it off.

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 **the-christie.patient.information@nhs.net**

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

Visit the Cancer Information Centre

The Christie at Withington **0161 446 8100**

The Christie at Oldham **0161 918 7745**

The Christie at Salford **0161 918 7804**

Open Monday to Friday, 10am – 4pm.

Opening times can vary, please ring to check
before making a special journey.

The Christie NHS Foundation Trust

Wilmslow Road

Manchester M20 4BX

0161 446 3000

www.christie.nhs.uk



The Christie Patient Information Service

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