NHS
The Leeds Teaching Hospitals
NHS Trust

Radiotherapy for pancreatic cancer

Information for patients

Leeds Cancer Centre

This leaflet aims to help you and your family understand more about your radiotherapy treatment to the pancreas.

It describes:

- What is Radiotherapy?
- How your radiotherapy treatment is planned and given
- The side-effects that you may experience during and after treatment and how to cope with them
- Useful contacts

We treat each patient as an individual and the effects of treatment may vary from one patient to another.
The healthcare team looking after you will explain your treatment and possible side-effects in detail. If you have any questions after reading this leaflet, please speak to the team looking after you or ring the numbers listed at the end of leaflet. Staff will make every effort to meet your individual needs or direct you to the person who can help.

All your radiotherapy planning and treatment will take place in the Radiotherapy Department on Level -2, Bexley Wing, Leeds Cancer Centre, St James' Hospital (LS9 7TF).

Radiotherapy reception Tel: 0113 206 8940

Please do not bring any valuables into hospital with you as the Trust cannot accept liability for loss or theft.

What is Radiotherapy?

Radiotherapy is the use of high energy X-rays and other types of radiation to treat cancer. Radiotherapy causes damage to cancer cells in the treated area. Although normal cells are also affected, they can repair themselves and are able to recover. Radiotherapy can be used to control or slow down the growth of pancreatic cancer. This will be generally between 5 and 15 treatments, usually Monday to Friday, although your treatment may start on any weekday.

Your Clinical Oncologist will discuss with you how many treatments you will receive. Radiotherapy is a local treatment. This means it only affects the part of the body being treated. When you are having your radiotherapy you do not feel anything and it does not make you radioactive. You may hear a buzzing noise when the machine is switched on.

It is perfectly safe for you to be with other people, including children and anyone who may be pregnant throughout your treatment.

You will have your radiotherapy on a treatment machine called a linear accelerator, as shown here in the photograph. You will see your radiographers at each treatment session and they will be happy to answer any questions you may have.

Visiting us before your treatment

If you would like to visit the radiotherapy department before starting treatment, please call **0113 206 7603.** This visit can be very useful as you can find out more information about radiotherapy.

> ***'I was so pleased to see the machines before my treatment and the staff were so helpful and really put my mind at rest.'***

Who will I meet?

Therapeutic radiographers

Radiotherapy is given by therapeutic radiographers of any gender. They are highly trained in the accurate planning and delivery of radiotherapy treatment. You will see your radiographers at each treatment session and they will be happy to answer any questions you may have.

Student radiographers

The radiotherapy department is a training centre for therapeutic radiographers. They are supervised at all times. If you do not wish students to be present, please speak to a member of staff. This will not affect your treatment or care.

Others involved in your care

You may meet other staff whilst you are coming for radiotherapy. Everyone you meet will introduce themselves, tell you their job title and explain the role they have in your care.

Important advice before your treatment

Pregnancy

It is very important that patients who could become pregnant, are not pregnant at the start of their radiotherapy course. Also, patients should not become pregnant during their radiotherapy treatment, as this can have an effect on the unborn child. Use an effective form of contraception, for example condoms, coil, depo injection or contraceptive pill.

For more information see the ***'Contraception and pregnancy during cancer treatment'*** **(LN003721)** leaflet. Please do not hesitate to ask your doctor or nurse if you have any questions or concerns about these issues.

Please scan or click the QR code or visit:

www.leedsth.nhs.uk/patients/resources/contraception-and-pregnancy-during-cancer-treatment/

Planning your treatment

Your first appointment for radiotherapy will be a consent and/or planning appointment. Some patients may have already signed a consent form during a previous appointment with the Doctor. Other patients might have a consent appointment with us first, and return another day for the planning appointment. We will contact you by phone with the dates and times of the appointments. Directions to the hospital and transport arrangements will be discussed with you at this point.

Some tests and scans may be needed to help plan your treatment. We will explain which of these you will need when your appointment is made. You may see your clinical oncologist (or a member of their team) at this appointment. This is an ideal opportunity for you to ask questions. If you have not previously consented to your treatment you will be asked to sign a consent form.

What to bring with you:

- a list of any questions you may have;
- an up-to-date list of all the medications you are taking (including inhalers, sprays, vitamins or herbal products);
- any medication that you may need during your visit;
- Something to eat and drink (for after your scan) and something to occupy you, as this first visit can be quite lengthy (up to two hours).

Your planning scan

Unless there is a medical reason not to, you will be asked not to eat or drink for two hours before your planning scan.

In order to plan your treatment you will have a planning CT scan. This is done on a machine called a CT Scanner, see photo. It allows the images from the scan to be sent to the radiotherapy computer planning system.

The scan will be carried out by therapeutic radiographers; occasionally there may be other members of staff present.

Planning scans are not diagnostic examinations and will not be reported on as such.

During the planning scan, you will be asked to hold your breath when breathing out (exhale). You may be asked to do this several times. However, it is important that you breathe 'normally' during the scan until you are specifically requested to hold your breath.

The radiographers will carefully position you, and then draw some marks on you. These marks will be used as a reference for your treatment later on.

At the end of the scan the skin marks may be replaced by a small permanent mark (tattoo). These marks will be used each day for your treatment. They are just one of many ways we can ensure that your position is the same every day. It also means that you can wash without worrying about your marks coming off.

Permanent mark next to a five pence piece

Contrast (dye)

A special contrast agent, often called a 'dye', may be used for your scan to make specific organs, blood vessels and/or tissue types appear clearer in the scan images. This can make it easier for the Oncologist to plan your treatment. The dye is given through a very small plastic tube called a 'cannula' into a vein in your arm. The staff will complete a series of questions with you before this procedure. The radiographers will give you specific advice before, during and after you have received the dye. They will also advise you about drinking plenty of fluid after your injection.

Contrast side-effects

You may notice a warm feeling throughout your body and have a metallic taste in your mouth.

You may also feel as if you have passed urine. This will pass very quickly.

There is a slight risk of an allergic reaction to the injection, such as a skin rash, but this very rarely may lead to other complications.

The staff in the radiotherapy department are trained to manage any complications and the risk involved is very small.

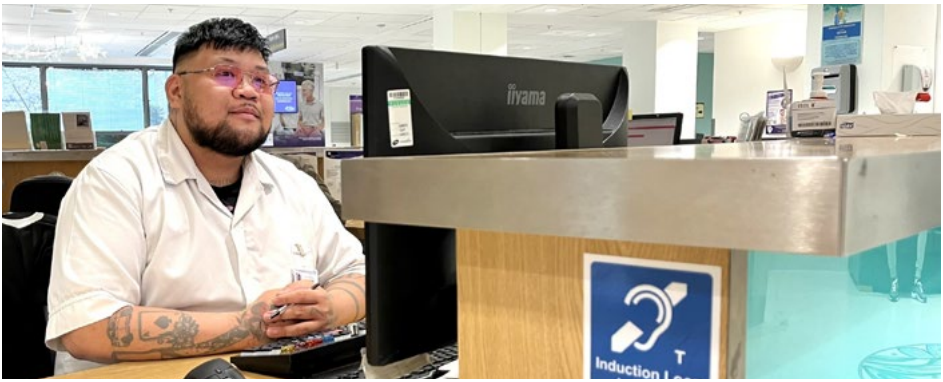
You will be able to drive your car or go to work after your scan.

Following the scan the radiographers will give you the time of your first appointment on the treatment machine. This is most likely to be a couple of weeks after the planning visit. The radiographers will talk to you about any further appointments you have.

Please note: very occasionally some patients may be asked to return for a planning scan on an MRI scanner. In this case you will be contacted with further details about the extra appointment.

Having your treatment

You will be asked to fast for up to two hours before your treatment, unless there is a medical reason not to.



When you arrive for your treatment you should go to the radiotherapy main reception desk at the entrance of the radiotherapy department. On the first occasion you will be given all your appointments and be escorted to the waiting area for your machine.

The radiographers will explain what will happen and answer any questions that you may have.

You will be asked to undress and put on a gown; the radiographers will discuss this with you when you first attend the department. The radiographers will position you, and adjust the treatment couch and machine to the correct positions. We will also take images to check your position and accuracy of set up. This may happen during the first couple of treatments, but can also happen on a daily basis.

These images do not monitor your condition but are purely for treatment accuracy.

You will be asked to stay as still as possible during treatment but you should breathe and swallow normally. Once you are in the correct position the radiographers will leave the room to switch on the machine. The radiographers will be watching you on a closed circuit TV (CCTV) monitor during treatment. The CCTV camera is not recording or saving any images. There is also an intercom system so the radiographers can talk to you.

Usually music is played in the treatment rooms. If you have any preferences for style of music, or would prefer no music, please tell the radiographers.

The treatment only takes a few minutes but you will be in the treatment room for about 10-20 minutes. The machine stops automatically after your prescribed dose of treatment has been given. The radiographers can stop the machine at any time if needed. The treatment machine makes a buzzing sound when switched on. You do not feel anything. The radiographers may need to come in and out part way through each treatment.

After the treatment is complete the radiographers will come back into the room and help you off the couch.

It may be a good idea to bring something to eat and drink with you for after your treatment, including any supplement drinks you have been asked to have and any medication you may need.

On some days the radiotherapy department may be busy and there may be a delay before your treatment.

We will keep you informed of any delays over 30 minutes. Please see the delay boards in the waiting areas.

Your treatments will generally be on the same machine. However, there may be days when this machine is being serviced and your treatment will be in a different room.

It is very important that you do not miss treatment days as it may make your treatment less effective. If you feel you are unable to attend for any reason please telephone the radiotherapy department to discuss. If you have queries about your appointment times please discuss these with the radiotherapy coordinators on your treatment unit.

For appointment queries please telephone the radiotherapy reception desk 0113 206 8940.

Clinic appointments

While on treatment you may need a weekly blood test. This will usually be done on a Wednesday or Thursday in the Princess Royal Suite in the radiotherapy department. The results should be available for your clinic review which will take place on a Thursday or Friday.

You will be weighed weekly before your clinic appointment.

You will be reviewed weekly on a Thursday afternoon by the Pancreas clinical nurse specialist.

Generally, in your last week of treatment you will be reviewed by your Oncologist who will explain the next step.

Completing your radiotherapy and follow up

Telephone review: One of the Pancreatic Clinical Nurse Specialists (CNS) will contact you by telephone a week or two after finishing your treatment. This is to see how you are recovering from the treatment.

CT scan: You will have a CT scan to review how your cancer has responded to treatment. For some patients this may need to be within a few weeks of finishing treatment. For other patients the CT scan will be approximately three months after finishing treatment. Your Oncologist will discuss this with you.

Creon: If you are taking a pancreatic enzyme such as Creon we would advise you to stay on these indefinitely.

Lansoprazole: If you are taking lansoprazole (or an equivalent acid-reducing medication) you should continue taking this for a minimum of three to six months after you have completed your treatment.

Blood sugar monitoring: We recommend you see your GP to monitor your blood sugars. This is because there is a risk of developing diabetes, or having more erratic blood sugar control if you are already a diabetic. If you are not known to have diabetes already, we would recommend you have a random glucose blood test checked approximately every three months following radiotherapy.

We will send a letter to your GP informing them you have finished radiotherapy treatment.

Please ask your GP for further prescriptions for ongoing medication after finishing your treatment.

Short term side-effects from radiotherapy

Most side-effects are common and are temporary. Side-effects tend to build up from about the second week of treatment. They will be at their worst at the end, or just after treatment has been completed. They generally last a number of weeks or months after treatment has finished.

Change in bowel habits

This may occur because of inflammation of the bowel, but can be controlled with medication. You may also experience an urgent need to open your bowels (to have a poo), increased wind or occasional abdominal cramps. It is important to keep eating and drinking as normally as possible, but you may need to avoid high fibre foods. If you experience diarrhoea or constipation please tell a member of your treatment team.

Nausea (feeling sick)

This may give you a reduced appetite, or you may find it hard to eat and drink. Please speak to your nurse specialist or one of your radiographers if you have nausea. A medication to help manage this can be considered, as well as advice to help you deal with side effects from treatment.

Skin reactions

Skin reactions are uncommon with current radiotherapy techniques, when treating people with pancreatic cancer. Occasionally you may notice a change in the appearance of your skin in the region being treated. It may become dry and itchy.

Avoid hair removal where possible, including shaving, waxing, cream and lasers unless advised otherwise by your consultant, nurse or radiographer.

Before you start your treatment, a radiographer will explain what could happen to your skin and how to look after it. They will also give you a leaflet to take home. If you are concerned about your skin reaction please talk to your radiographers or contact the review clinic nursing staff in the Princess Royal Suite, telephone: **0113 206 7587.**

Tiredness (fatigue)

Nearly all patients having radiotherapy will feel tired. Be prepared to take things easy during treatment and allow for extra rests. See the booklet ***'Fatigue and pancreatic cancer'*** from Pancreatic Cancer UK for tips and advice in dealing with fatigue. For support with your fatigue please ask a member of staff.

Things you can do to help include:

- Gentle exercise can help reduce the symptoms of fatigue.
- Having enough to drink can prevent tiredness from dehydration.
- Small meals or snacks eaten more often than three times a day may be easier to face.
- Try to get a good night's sleep where possible, a daytime nap may help.
- Try to 'pace' yourself, listen to what your body is telling you, rest if you need to.
- Pick out the things that you enjoy and try to accept help with other tasks.
- Little and often is the rule of thumb.

Please note: Please read the information leaflets enclosed with any medications used, this will explain any side-effects you may experience when taking them.

If you are at all concerned about any side-effects you are experiencing from your medication, please talk to your pharmacist, nurse specialist or GP.

Long-term side effects

These can happen many months or years after radiotherapy and can be permanent. There is some risk of developing:

- Diabetes
- Malabsorption needing more Creon supplements. This can affect control of pre-existing diabetes in the longer term. This is due to scarring effects on the normal pancreatic gland. There is also a less common risk of scarring on the outlet area of stomach into the duodenum (bowel). This can cause narrowing or obstruction to food passing through in the longer term.

If you would like to discuss this further, please speak with your specialist nurse or consultant.

Nutrition

It is important that you are well nourished and drink plenty of fluids during your treatment in order to keep you healthy and to help your body to heal.

Some patients may need to see one of our specialist dietitians before or during treatment.

Research at Leeds Cancer Centre

Leeds Cancer Centre is a major centre for cancer research. You may be asked if you would like to help with some of the clinical studies. You are under no obligation to take part in any trials, and your treatment will not be affected in any way if you do not wish to take part.

If you do take part in a clinical trial you may meet a research nurse or radiographer who will be helping to run the trial.

Further information and support

If you have any questions please ask your hospital team. We all have our own ways of coping with difficulties. Some people have a close network of family and friends who provide emotional support. Others would rather seek help from people who are not involved with their illness.

The following are also available as sources of information and support that you may wish to use.

Clinical Nurse Specialists (CNS)

Your CNS is available to discuss any aspect of your treatment with you. You will be seen by a CNS before your treatment. They will give you their contact number. A CNS can offer support and advice about the practicalities and effects of your treatment. They will also assess and discuss any physical, psychological, social, occupational and spiritual needs that you may have.

Macmillan Specialist Radiographer and Macmillan Radiotherapy Nurse Specialist

Sometimes people need more help if they are feeling depressed, very anxious or are having problems with their treatment. If this is the case you may benefit from seeing the Macmillan radiographer or nurse specialist.

Your oncologist, radiographer or nurse can refer you at any point before or during your treatment.

Local Support Services

Leeds Cancer Support

Leeds Cancer Support complements care provided by your clinical team. We offer access to information and a wide range of support, in a welcoming environment for you, your family and friends.

We can be found in the information lounges in Bexley Wing and also in the purpose built Sir Robert Ogden Macmillan Centre. (behind the Thackray Medical Museum)

The Sir Robert Ogden Macmillan Centre

The Centre is on the St James's Hospital site and offers a variety of support services including complementary and supportive therapies.

Contact numbers for Leeds Cancer Support

Information Lounge Level -2 Radiotherapy Department
Open from 8.00am - 6.00pm **Tel: (0113) 206 7603**

Information Centre Level 1 Outpatients Department
Open from 9.00am - 4.00pm. **Tel: (0113) 206 8816**

Sir Robert Ogden Macmillan Centre
Open from 9.00am - 4.00pm. **Tel: (0113) 206 6498**

All the above services can be emailed on:
leedsth-tr.cancersupport@nhs.net

Maggie's Centre

If you or someone you love has cancer you may have lots of questions. Maggie's is a warm, welcoming place where you can meet people who are experiencing similar things to you.

You may also be able to find support groups specific to your needs and get advice and information from their professional staff.

You don't need an appointment and all support is free.

Open Monday to Friday 9.00 am - 5.00pm. **Tel: 0113 457 8364**

Address: St James's Hospital (next to the multi-storey car park), Alma Street, Leeds LS9 7BE

Email: leeds@maggies.org

Website: www.maggies.org

National Support Organisations

Macmillan Cancer Support

Freephone: **0808 808 0000**, 8am to 8pm seven days a week.

A textphone service for deaf and hard of hearing people on **18001 0808 808 0000**

Website: www.macmillan.org.uk

Pancreatic Cancer UK

A dedicated pancreatic cancer charity, providing specialist support.

Support Line freephone: **0808 801 0707**.

Monday, Tuesday, Thursday, Friday 9am to 4pm, and 10am to 4pm on Wednesdays.

Website: **www.pancreaticcancer.org.uk**

Stopping smoking

NHS Smokefree Helpline: **0300 123 1044** Monday to Friday 9am to 8pm, Saturday and Sunday 11am to 4pm.

Website: **www.nhs.uk/smokefree**

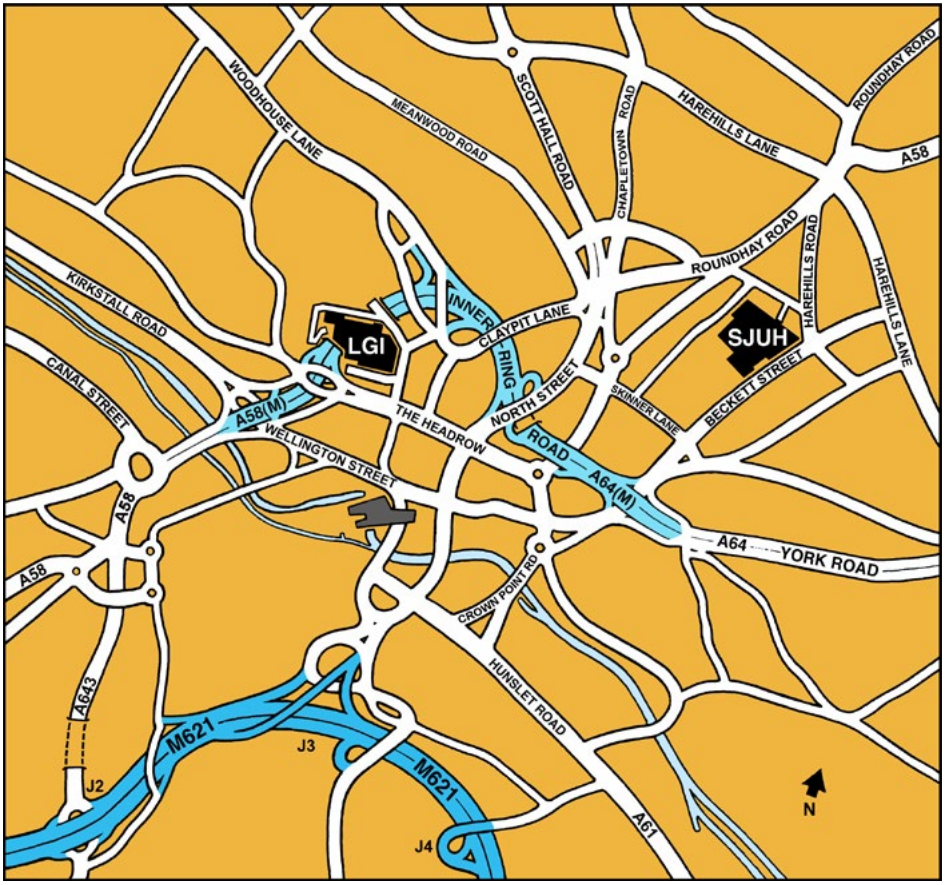
OUTpatients

A cancer support and advocacy charity for the LGBTIQ+ community.

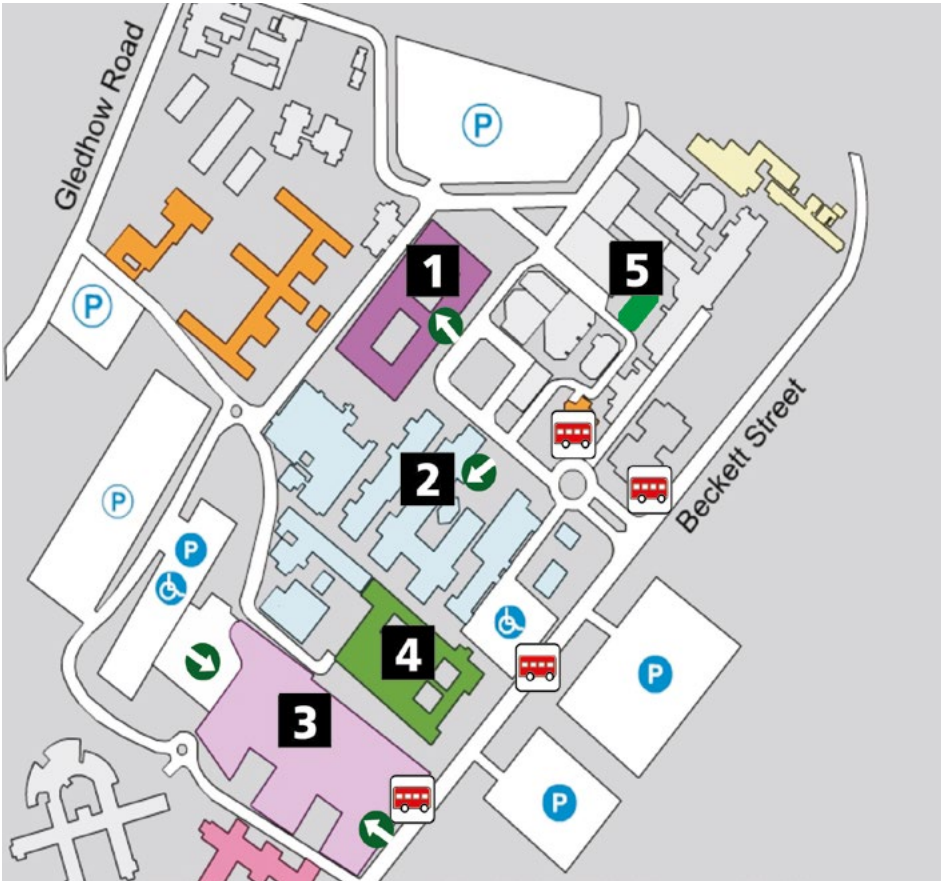
Email: **contact@outpatients.org.uk**

Website: **www.outpatients.org.uk**

How to find us



St James's University Hospital - site plan



1 Gledhow Wing
2 Lincoln Wing
3 Bexley Wing
4 Chancellors Wing
5 Robert Ogden Centre

Entrances
Visitor parking
Disabled parking
Staff parking
Bus stops

What did you think of your care?

Visit: www.leedsth.nhs.uk/patients/support/feedback-complaints/friends-family-test/

Scan or click the QR code - Your views matter

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