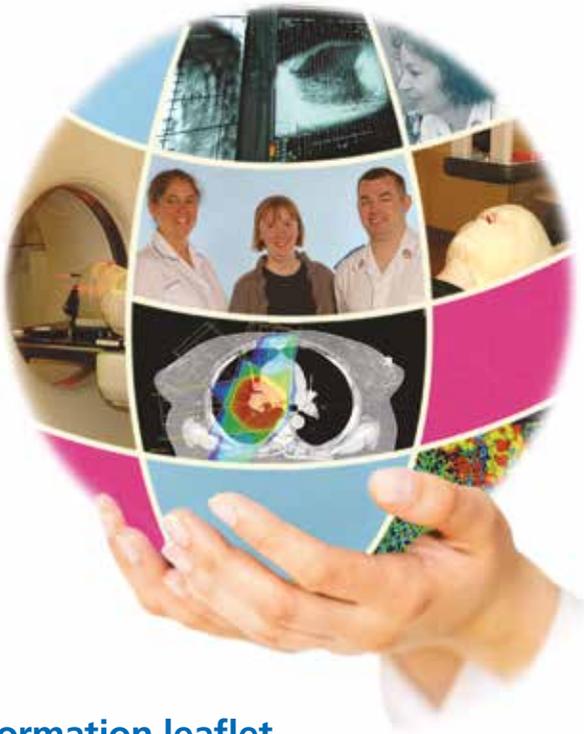


# Radiotherapy to the abdomen

Radiotherapy Department



Patient information leaflet

## What does this leaflet cover?

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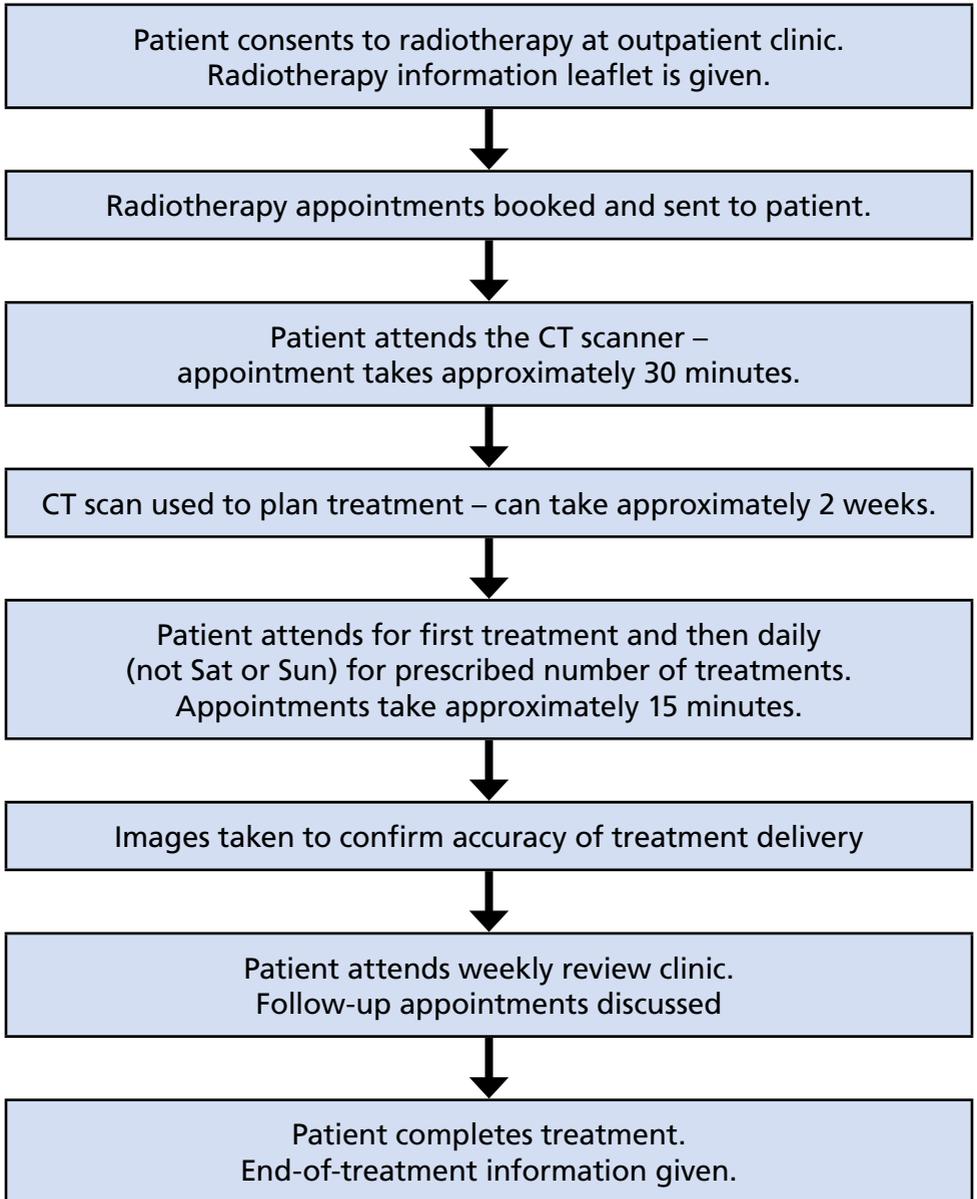
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Please see the department's website for additional information. The site also provides information on recent patient surveys carried out in the department and any actions arising from the results.

**[www.royalsurrey.nhs.uk/st-lukes-centre](http://www.royalsurrey.nhs.uk/st-lukes-centre)**

## Patient Pathway – Abdomen

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## St Luke's Cancer Centre

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Please be aware that St Luke's Cancer Centre has two radiotherapy departments. One is located at the Royal Surrey County Hospital in Guildford and the other at East Surrey Hospital in Redhill. Please refer to your appointment letters for the location of all your appointments. All information contained in this leaflet is relevant to both sites.

### Introduction

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Your clinical oncologist has decided that a course of radiotherapy would be the most appropriate way of treating your cancer. When recommending radiotherapy, your doctor takes into account the risk of the tumour returning or growing if no radiotherapy is given. While the treatment may have some side effects, it is felt that the advantages for you would outweigh the disadvantages.

At this stage your doctor will probably have discussed with you the risks and benefits of undergoing a course of radiotherapy and you may have been presented with a consent form to sign agreeing to have the treatment.

The short and long term risks of receiving radiotherapy to the abdomen are outlined towards the end of this leaflet.

### Who is this leaflet for?

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This leaflet is specifically for patients having radiotherapy to the abdomen.

Figure 1 shows the anatomy of abdomen.

Please be aware that your treatment will be tailor-made for your specific needs. It may differ slightly from what is described in this leaflet, and also from what another patient with a similar diagnosis may be having. You will have an opportunity to talk with a radiographer before the planning of your radiotherapy, and again before you start your first treatment. You may also ask to see your doctor or clinical nurse specialist if you wish.

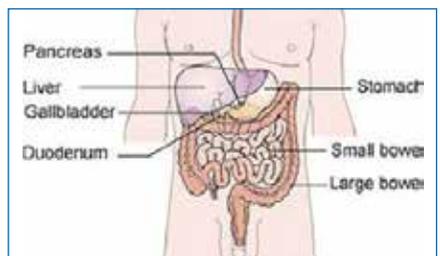


Figure 1 (courtesy of Cancer Research UK)

## What is radiotherapy and how does it work?

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Radiotherapy is the use of high energy x-rays or electrons to treat tumours. It is delivered from a machine called a linear accelerator (or Linac for short). See photograph 1.

Most commonly it is given externally with you lying on a treatment couch. Carefully calculated doses of radiation are directed to a specific part of your body. Accurate planning of your radiotherapy means that the treatment is limited to a small area, avoiding as much healthy tissue as possible. However, some healthy tissues will be affected and may cause side effects. Most side effects are temporary as normal tissue is able to repair itself. External beam radiotherapy is a very quick and usually painless treatment.



## What are the alternatives?

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You may decide that you do not want to have radiotherapy; this is an option you can choose. Talk again with your doctor if you wish and let them know what you have decided.

You may request a second opinion on your diagnosis or treatment at any time during your consultation or treatment process. Please speak to your clinical oncologist or GP.

## What happens before radiotherapy starts?

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Following your initial out-patient appointment with the doctor you will be sent a letter asking you to attend the radiotherapy department for a pre-treatment appointment. This appointment will be for the oncology CT scanner. Please check your appointment letter for the exact location of your appointment. It is helpful to bring your appointment letter and a dressing gown with you.

A member of the pre-treatment radiotherapy team will explain what is going to happen and give you a further opportunity to discuss your treatment and side effects before proceeding with the treatment preparation. However, if you feel you have questions that you would like to address to the doctor, a radiographer can organise a meeting for you.

During this discussion you will be asked to confirm your name, address and date of birth. You will be asked for this information before every procedure or treatment undertaken in the department. The following subjects will also be addressed:

- **Confirmation of consent:** you will probably have already signed a consent form with your clinical oncologist. That consent will be re-confirmed with a radiographer prior to your first planning session to ensure that you agree to proceed with the proposed treatment.
- **Pacemakers:** If you have a pacemaker and you did NOT discuss this with your clinical oncologist when you signed the radiotherapy consent form please phone the CT scanner to let them know. The number is at the end of this information leaflet. It is safe to give radiotherapy to patients who have a pacemaker but there are a few precautions we may need to take. The radiotherapy department will send you an information sheet entitled 'Pacemakers and Radiotherapy' for you to read and keep with your other patient information leaflets. This leaflet will explain why extra precautions may be needed and what those precautions are. It will also highlight any extra appointments you may need to attend the hospital for. Please bring your pacemaker ID card to your CT appointment.
- **Pregnancy:** All female patients under the age of 55 will be asked to confirm their pregnancy status before the first planning session starts.

It is very important that you are not and do not become pregnant while undergoing radiotherapy planning and treatment. If you think you may be pregnant at any time during your course of treatment please tell your clinical oncologist or radiographer immediately. If necessary please speak to your doctor about contraception methods suitable for use during radiotherapy.

## The CT scanner

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You may eat and drink normally on the day of your scan and throughout your treatment appointments unless you are instructed otherwise in your appointment letter.

A CT (computerised tomography) scanner is a special x-ray machine that produces a series of detailed pictures showing the abdomen and surrounding tissues. The scan cannot be used for diagnostic purposes or for assessing whether the tumour has spread, it is purely for radiotherapy planning. The scans are sent to a computer and used to reconstruct a 3-D image of your abdomen. The radiotherapy team will then use this image to accurately target your treatment.

Your oncologist may request that a contrast agent (a fluid that shows up on x-ray images) be used during your scan. This allows the abdomen and surrounding tissues to show up more clearly on the images. This contrast agent is given through a needle in your arm. In a small number of people the contrast can occasionally cause side effects. You will be given a questionnaire to fill in, which will help highlight if you may be one of those people more prone to these side effects. The radiographer will then decide whether to go ahead with the contrast agent. If you do not have the contrast agent it does not mean that the planning of your treatment will be any less accurate.

- The radiographers will go in and out of the room several times during the procedure and you will hear them talking over you during the setting up process.
- They are able to hear and see you at all times so if you need to communicate with them call out or raise your arm.
- At the end of the session the radiographers will, with your permission, place two or three permanent ink dots under the skin around the area to receive treatment. These marks will not come off your skin but they may fade over time. Radiographers on the treatment units will use these permanent marks to make sure that you are correctly positioned on the couch on each visit and to ensure an accurate treatment.

- Very occasionally, in order to show clearly how you are positioned on the couch, the radiographers may take a digital photograph of you. They will get your permission for this beforehand and the image will only be accessible by the radiographers.
- Your CT scan appointment will take about 40 minutes

## **Why doesn't my treatment start straight away?**

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After your planning scan, the detailed images are sent to a specialised computer. Your oncologist will then define the exact area to be treated. The rest of the planning is carried out by planning radiographers and physicists. They will decide the best field arrangement and create shaped beams to focus the radiation on the area to be treated, while avoiding as much healthy tissue as possible.

The plan will then go through an extensive checking procedure. This includes being checked and signed by your clinical oncologist. The planning process can take up to two weeks. The next step will be your treatment.

## **First day of treatment**

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Please check your appointment letter for the exact location of your appointment. It is helpful to bring your appointment letter and a dressing gown with you.

One of the treatment team will greet you and discuss your treatment with you. This discussion provides a good opportunity to ask questions that may have arisen since your last appointment. There is space at the end of this leaflet to write down anything you may want to ask. You will be given a list of all your appointment times including review clinics, doctors appointments and any blood tests you may need.

## Chemotherapy with radiotherapy

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In some circumstances your clinical oncologist may advise you to have treatment using both chemotherapy and radiotherapy, to be delivered at the same time (sometimes called combined or concurrent). If you are to have chemotherapy alongside your radiotherapy your appointments will have been arranged appropriately. The nursing staff in charge of your chemotherapy will explain this side of your treatment to you. The radiographers will liaise with the nursing staff on the days when you are to have both treatments to ensure the day runs smoothly. You will have weekly reviews with the doctor or radiotherapy review team and weekly blood tests. Any radiotherapy side effects experienced may be more acute when having radiotherapy and chemotherapy together.

## Preparing for the treatment

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Prior to your treatment the radiographer will ask you to go into a changing room and remove your clothing from the waist up and put on your gown. After your first visit you may get changed straight after booking in at reception.

## The treatment

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The radiographer will call you into the treatment room, introduce you to the team members present and ask you to lie on the treatment couch. The radiographers will then begin to get you into the correct position.

- The radiographers may come in and out of the room several times during the treatment and you will hear them talking over you during the setting up process.
- Imaging will be done frequently and small adjustments can be made to treatments as a result of this. The treatment couch may move slightly during the imaging process.
- The radiographers are able to hear and see you at all times so if you need to communicate with them call out or raise your arm.

- When you are positioned correctly the treatment couch will be quite high up (about 4.5 ft). Therefore it is very important you do not move or attempt to get off the couch. The radiographer will tell you when it is safe to sit up and get off the couch.
- The whole procedure will take approximately 10-20 minutes.

All treatment rooms have a CD player so feel free to bring your own music along if you wish.

## What sort of side effects might I have, and for how long?

Although modern planning and treatment methods have helped to reduce side effects, most people still experience some effects from the radiotherapy. The severity of side effects varies from person to person.

You are most likely to be aware of side effects towards the end of your treatment course. Most of these are not severe and medication can often be of help. It is unusual to have to stop or postpone radiotherapy due to the severity of the side effects.

Short and long term radiotherapy side effects are closely related to the exact area of your body where you are treated. As you are to receive treatment to your abdomen most side effects that you have will be limited to this area of your body.

## Short term risks

Short term side effects usually start to develop about 2 weeks after the start of the treatment. They gradually get more marked as the treatment progresses and for about 2-3 weeks after treatment has finished. After that they should begin to slowly improve. The list below may look very daunting but you will be given lots of support and advice from all staff members involved in your care to help you manage these side effects. It is also helpful to remember that many are temporary and will improve given time.

- **Appetite:** you may find that during treatment you lose your appetite. This will return once your treatment is finished. Meanwhile eat small portions of what you like when you feel like it.

- **Loss of appetite/nausea (feeling sick):** You may feel sick or nauseous during your treatment. What and how you eat can help to boost your appetite and reduce feelings of nausea. We advise trying some of the suggestions listed.
  - If possible, avoid preparing food yourself.
  - Avoid fatty, fried, and strong smelling food.
  - Eat several small meals a day, rather than one or two bigger meals.
  - Drink plenty of fluid with meals.
  - If you find it difficult to eat or want some advice on nutrition the review radiographers will arrange for you to see a dietician.

Medication, called antiemetics, can be prescribed to help with nausea. If the tablets you are given do not seem to be working please tell the radiographers as there are lots of different antiemetics and it sometimes takes a few tries to find the one that suits you. Support therapies such as acupuncture can also help. The radiographers can put you in contact with the Fountain Centre if this is something you would like to try.

- **Changes in bowel habit:** some patients experience the need to have bowel movements more frequently and with a greater urgency than usual. You may find that you have some diarrhoea, stomach cramps and wind. If necessary you will be offered medication that can help with both the diarrhoea and the discomfort. It is also very important to drink plenty in order to replace the fluids you have lost. You can continue to eat normally. Your bowel habit should begin to return to normal a few weeks after treatment is completed.
- **Skin soreness:** the skin in the area being treated may gradually become red, dry and itchy. Using a moisturiser can help to soothe the skin and a suitable cream will be recommended to you by the radiographers on your first day. We recommend you use plain water to wash the treatment area and a moisturiser afterwards. In the majority of cases the skin reaction is usually mild to moderate. Please do not use any other products in the treatment area without checking with your doctor or radiographer first as they may make any reaction worse. Please do not soak in a hot

bath. The radiographers treating you will give you additional skin care advice or medication if it becomes necessary.

- **Sun exposure:** please be aware that the area being treated will be more sensitive to the sun both during treatment and for some time afterwards. While you are still on treatment and while any skin reaction is present it is advisable to keep the area covered up. After this time, you can use a maximum factor sun cream.
- **Hair loss:** you will find that you lose any hair that is within the area treated with radiotherapy. The hair on your head will not be affected in any way by the radiotherapy. Any hair you do lose may or may not regrow after treatment, depending on the radiation dose the area has received. Your doctor will inform you if any hair loss is likely if you are also having chemotherapy.
- **Tiredness:** it is quite common to feel more tired than usual while having radiotherapy. As the treatment can make you dehydrated, drinking the recommended amount of fluid per day can help with this. Rest if you need to, but if you feel OK you can carry on with all your normal daily activities.

As your treatment progresses the radiographers will be talking to you each day to find out how you are feeling. This is so they may offer help and support if the treatment gives you any problems. Please feel free to discuss all issues that may be concerning you. You will also be seen regularly by the review radiographers and your medical team.

## Long term risks

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Careful treatment planning and monitoring of the doses received by healthy structures help limit the occurrence of long term effects. If they do arise it can be several months or even years after the treatment has finished.

Once your radiotherapy has ended you will have regular follow-up appointments with your consultant and you will be carefully monitored for any signs of these long term effects. It may be useful to keep a note of your side effects during and after your radiotherapy so they can be more easily monitored. There is space at the end of this leaflet for any notes you wish to make.

- **Bowel toxicity:** very occasionally, a few patients find that loose bowel movements or diarrhoea persist even though radiotherapy has been finished for some time. This can usually be treated with medication, but in a very small number of cases may require other interventions such as an operation. In some cases chronic diarrhoea (malabsorption) can be caused by a reduction in pancreatic digestive enzyme production for which your doctor can prescribe oral supplementary medication. Another rare side effect is scarring of the lining of the bowel (adhesions) which can lead to bouts of abdominal pain or sickness. This could be mild and require simple bowel rest or be more serious requiring an operation. These long term problems are rare and there are a number of things that can be done to help minimise them. Do speak to your clinical oncologist about this. There are also two excellent support groups who offer information on this topic: Macmillan Cancer Support and the Continence Foundation. Details of these two sites are listed at the end of this leaflet.
- **Second malignancy:** treatment with radiotherapy can give rise to a second primary cancer. This would normally occur in the area of the body that had received the radiation. This is a very rare late effect.

## What happens when treatment ends?

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- On the last day of your treatment a radiographer will explain that the treatment will carry on working for another 2-3 weeks. Any short term side effects may get slightly more noticeable during this time but after that they should slowly improve.
- The radiographer will make sure you have a follow-up appointment with your clinical oncologist. This may be at a hospital nearer to your home.
- You will be given a leaflet and two copies of your radiotherapy discharge summary. One copy is for your records and the other is for you to give to your GP. In due course a letter summarising your treatment in more detail will be sent through the post to your GP.

- Please remember you are free to contact the radiographers at any time after your treatment has finished should you have any concerns or questions. Contact numbers are at the end of this leaflet.
- Please do not book a holiday too close to the end of your treatment in case the treatment does not finish on the date originally listed on your appointment schedule. This also allows you time to recover from any side effects experienced.

## Where can I get further support?

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Further support can be given by the various support centres at locations in Guildford, Crawley and Purley. These centres provide information, complementary therapies, support groups and one to one support.

To find out more contact the individual centres or ask radiotherapy department staff for a leaflet.

- The Fountain Centre is located in St Luke's Cancer Centre at Guildford.  
**Telephone:** 01483 406618  
**Website:** [www.fountaincentre.org](http://www.fountaincentre.org)
- The East Surrey Macmillan Cancer Support Centre is located at East Surrey Hospital.  
**Telephone:** 01737 304176  
**Email:** [informationcentre.sash@nhs.net](mailto:informationcentre.sash@nhs.net)
- The Olive Tree is located in Crawley Hospital, Crawley.  
**Telephone:** 01293 534466  
**Website:** [www.olivetreecancersupport.org.uk](http://www.olivetreecancersupport.org.uk)
- South East Cancer Help Centre is located in Purley, Surrey.  
**Telephone:** 020 86680974  
**Website:** [www.sechc.org.uk](http://www.sechc.org.uk)

**Please also see the department's website for additional information at**

- [www.royalsurrey.nhs.uk/st-lukes-centre](http://www.royalsurrey.nhs.uk/st-lukes-centre)

## Other support websites and groups

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- Cancer Research UK  
www.cancerresearchuk.org 0808 800 4040
- Macmillan Cancer Support  
www.macmillan.org.uk 0808 808 0000
- Breast Cancer Care  
www.breastcancercare.org.uk 0808 800 6000
- Surrey Primary Care Trust  
Stop Smoking Service 0845 602 3608

## Useful telephone numbers

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### Telephone numbers across both sites (Guildford/Redhill)

- Treatment Appointments 01483 571122 ext 6632
- Onslow Ward (out of hours) 01483 571122 ext 6858
- **For urgent enquiries** (out-of-hours) call hospital switchboard on **01483 571122** and ask operator to bleep on-call oncology SHO.

### Guildford numbers

- Radiotherapy Reception 01843 406600
- Patient Support Office 01483 571122 ext 2066
- Oncology CT Scanner 01483 406630
- Clinical Nurse Specialist 01483 571122 ext 6374

### Redhill numbers

- Radiotherapy Reception 01737 277311
- Oncology CT Scanner 01737 7680511 ext 1202
- Patient Support Office 01737 277315
- Clinical Nurse Specialist 01737 277315 ext 6686

## Additional information

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- In order to improve treatments and services, audits are regularly carried out in the department. This can involve using patient notes. The notes will have all identifiable details removed to ensure patient confidentiality. However, if this is unacceptable to you please let your consultant know so your wishes can be respected.
- Clinical trials are undertaken within the department. If appropriate your doctor will discuss this with you.
- If you require this information in a different format or language please let a member of staff know as soon as possible.
- Staff at St Luke's Cancer Centre cannot take responsibility for patient belongings brought into the hospital. Please keep all your personal belongings with you at all times and leave valuables at home.

## Reference sources

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- Radiotherapy Clinical Protocol – Pancreas – Royal Surrey County Hospital NHS Foundation Trust 2010
- Treating Stomach Cancer – Cancer Research UK 2016
- Gastric Cancer: The diagnosis and treatment of gastric cancer – NICE Guidelines 2017

If you wish to make a comment or complaint about any aspect of the treatment or services provided by St. Luke's Cancer Centre and its staff please speak to a member of St. Luke's. Alternatively you can visit, email, phone or write to the **Patient Advice and Liaison Service (PALS)**. Their contact details are:

**PALS office** in the main hospital reception area

**Telephone:** 01483 402757

**Write to:**

PALS Manager,  
Royal Surrey County Hospital NHS Trust, Egerton Road, Guildford,  
GU2 7XX.

**Email:** [rsc-tr.pals@nhs.uk](mailto:rsc-tr.pals@nhs.uk)

**You may also write to the Chief Executive of the Trust at:**

Royal Surrey County Hospital NHS Trust, Egerton Road, Guildford,  
GU2 7XX.





## Radiotherapy contact details

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### Radiotherapy reception

**Telephone:** 01483 406 600

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### PALS and Advocacy contact details

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Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757

**Email:** [rsc-tr.pals@nhs.net](mailto:rsc-tr.pals@nhs.net)

**Opening hours:** 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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