Radiotherapy (radiation therapy) is a common treatment for cancer. This information sheet contains general information about radiotherapy and what to expect during radiotherapy.

What is radiotherapy?
Radiotherapy is a type of cancer treatment. Radiotherapy uses x-rays or other types of radiation to kill or injure cancer cells. This stops the cancer cells from multiplying.

What can I expect during radiotherapy treatment?
There are a number of steps and appointments that will happen as part of your radiotherapy treatment.

Before radiotherapy begins, and during treatment, if you are pregnant or if there is any chance that you may be pregnant it is important to discuss this with your doctor.

Tell your treatment team if you have a pacemaker or implantable cardioverter device (ICD).

Initial consultation
Your first radiotherapy appointment is when you will see your radiation oncologist (specialist).
The radiation oncologist will talk to you about:
• your medical history and test results.
• your treatment options.
• the benefits and risks of radiotherapy for you.
• possible side effects.
• purpose of radiotherapy for you, e.g. to manage symptoms.
• signing a consent form to have radiotherapy.
You may also have a physical examination at this appointment.

Important
• Tell the doctor if you don’t understand what they are saying.
• Ask for time if you need to talk about this with family or friends to make a decision.
• Have a list of questions to ask and write down the answers.
• You may have paperwork to complete if you want to go ahead with radiotherapy.
**Multidisciplinary team**

A multidisciplinary team (MDT) is a team of doctors, nurses, allied health professionals and support staff specialising in cancer care.

- The radiation oncologist is a part of the MDT.
- The MDT will discuss if radiotherapy should be part of your treatment.

**Radiotherapy team**

This is a team of health professionals that specialise in radiotherapy treatment. The team includes:

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation oncologist</td>
<td>Doctors that specialise in radiotherapy. They plan and manage your care during radiotherapy.</td>
</tr>
<tr>
<td>Radiation oncology registrar</td>
<td>Doctors training to specialise in the field of radiotherapy.</td>
</tr>
<tr>
<td>Radiation therapist</td>
<td>Allied health professionals trained in radiotherapy. They work with radiation oncologists to plan and deliver radiotherapy.</td>
</tr>
<tr>
<td>Radiation oncology nurse</td>
<td>Nurses trained in caring for patients undergoing radiotherapy.</td>
</tr>
</tbody>
</table>

Other professionals that may be involved in your care include social workers, dietitians, occupational therapists, speech therapists, psychologists and physiotherapists.

---

**Simulation**

This is where the radiation oncologist and radiation therapists map out and imitate the position your body will be in for your radiotherapy treatment. Sometimes this is called your planning appointment. It is usually on a different day to your initial consultation appointment. The radiotherapy treatment team will contact you to give you an appointment.

**What happens at the simulation appointment?**

- An imaging scan is taken to identify the exact area that will be treated.
- The scan is usually a CT (computed tomography) or MRI (magnetic resonance imaging) scan.
- The team will work out how you will be positioned during radiotherapy - tell the staff if the position is too uncomfortable.
- If necessary special props will be used to maintain your position.
- You may have small permanent dots (tattoos) marked on your skin.

**Important**

- The simulation appointment usually takes 30 minutes to an hour. Some appointments may be longer. Ask your treatment team how long you will need to be there for.
- You may need to have preparations before your simulation. Your treatment team will tell you if any preparation is needed and what to do.
- Sometimes you may also need to have other imaging scans and appointments, for example MRI or positron emission tomography (PET) scans.

For more information about simulation see “A guide to radiotherapy simulation” on eviQ.org.au.

---

**Planning**

This is when your radiotherapy team plan the treatment that is tailored for you. It is very detailed and complex. There may be days or weeks between your simulation appointment and the start of your treatment. You do not need to attend the radiotherapy department for planning.
Treatment
This is when you have radiation treatment. The two main types of radiotherapy are external beam radiotherapy and brachytherapy.

**External beam radiotherapy**
External beam radiotherapy uses beams of radiation to treat cancer from outside the body.
- This treatment may be given over days or weeks and usually takes 15-30 minutes for each treatment. Most of this time is used to set you up in the right position.
- You will be in the same position that you were scanned in at the planning simulation appointment.
- The radiation beam is only on for a few minutes.
- It is not painful and you won’t feel or see anything.
- While you are receiving radiotherapy you will be on your own in the treatment room. However, the radiation therapist can see and hear you via a video camera.
- Treatment is usually given as an outpatient.

**Brachytherapy**
Brachytherapy treats cancer by placing small radiation sources inside or on the surface of the body.

Your treatment team will tell you:
- when you are to start radiotherapy and further appointments.
- about your treatment and how it is given.
- side-effects you may get.
- how to look after your skin.
- how many treatment sessions you will need. These are called fractions.
- how often you will have radiotherapy. Most people have radiotherapy Monday – Friday.
- who to contact if you have a problem or become unwell.
- that having external beam radiotherapy won’t make you radioactive.

---

**Important**
- Not everyone has the same number of treatment sessions (fractions).
- Your radiation oncologist will talk to you about how many fractions you will need.
- The number of fractions you will have depends on:
  - the type of cancer you have.
  - the part of your body being treated.
  - whether the radiotherapy is the main part of your cancer treatment.
  - if the radiotherapy is to control or cure your cancer.
- Most people can continue with their normal daily activities and work during treatment.
- External beam radiotherapy will not make you radioactive and it is safe to be around other people including pregnant women and children.
- If you are having brachytherapy, you may be radioactive for a while after you have treatment. Speak to your treatment team about this and what precautions you need to take.

---

**Treatment side effects**
The side effects from radiotherapy are different for each person, and will depend on the part of your body that is being treated. Your treatment team will talk to you about the side effects that you may experience including that:
- they usually start gradually and may continue to get worse for up to two weeks after treatment has finished.
- most side effects will improve within 4-6 weeks of finishing treatment.
- there is a small risk of long term or late permanent side effects.

You will see your treatment team regularly to discuss and manage any side effects.

It is important to tell them if you are experiencing any side effects.
Follow up
A few weeks after you have finished treatment you will see the radiation oncologist. This is called a follow-up appointment.

- You may need to have a scan or test before this appointment.
- You might also need to see a nurse or other health professional after you have finished treatment. Your treatment team will tell you when your follow-up appointment is and if additional appointments or tests are required.

Contact your treatment team if you have any concerns before your follow-up appointment.

Things to ask your treatment team

- Why do I need radiotherapy (radiation therapy)?
- How long will my treatment go for?
- What are the side effects of my treatment?
- What problems should I tell you about?
- Should I use contraception during treatment?
- How much will treatment cost?
- Should I use other medication or supplements during treatment?
- Is there any parking, and how much does it cost?
- How do I contact the radiotherapy department?
- Where can I get more information?