This leaflet is for people who have been recommended to receive radiotherapy to the skin. It will highlight the important details that you will have already discussed with your doctor. This leaflet is intended to be a guide as details and side effects of treatment will vary from patient to patient.

There are two types of radiotherapy used to treat skin cancer; superficial X–rays and electron beams. Superficial X–rays are X–rays that do not travel far into your skin before they are absorbed, electron beams is another form of X–ray treatment to treat skin cancer. The method chosen depends on the size, site and depth of skin that needs treatment, and will be explained to you before starting.

What is radiotherapy?
Radiotherapy uses high energy X–rays to target and kill cancer cells in a specific area. Radiotherapy is similar to having an X–ray as you will not feel anything whilst it is being given and it does not hurt, but you do have to lie still for a few minutes.

Treatment is normally given in short daily treatment sessions, Monday to Friday. The number of treatments required ranges from 1 to 20 and depends on the site, size and depth of the area being treated. A typical course involves one treatment a day, over 5 consecutive working days.

Your radiotherapy is delivered by radiographers, both male and female. We are a teaching hospital and have student radiographers in the department everyday who are supervised by trained staff.

Unfortunately, some healthy cells within the treated area can also be affected, resulting in some side effects. The side effects will be discussed at a later point in this leaflet. The treatment will not make you radioactive so it is safe to be around children and other people after your treatment.

It is extremely important that you are not pregnant or become pregnant during your course of radiotherapy. Even a small
amount of radiation may harm an unborn foetus (baby) so it is very important to let the radiographers know at once if you think there is even a small possibility that you may be pregnant before being exposed to any radiation.

Why do I need radiotherapy?
Radiotherapy can be used as the main treatment for some skin cancers. This treatment is usually recommended for basal cell cancer or squamous cell cancer of the skin and sometimes lymphoma (cancer that starts in lymphocytes cells) involving the skin.

What are the benefits of radiotherapy?
Radiotherapy can be used to treat some skin cancers. For most patients the benefit of radiotherapy will be to potentially cure or improve the control or the symptoms of your cancer. Your doctor will discuss this with you in more detail in clinic.

Are there any alternative treatments to radiotherapy?
Skin cancer may also be treated with surgery, cryotherapy (destroying cancer cells by freezing them) or topical chemotherapy (using anti cancer drugs to destroy cells). It may be that you receive a combination of these treatments and your doctor will discuss this with you.

What will happen if I do not have treatment?
If you choose not to have radiotherapy, your symptoms could get worse; the cancer may grow or come back. Please discuss this with the doctor.
Patients with pacemakers

Please let the doctor or radiographers know if you have a pacemaker before starting treatment. This may affect how the treatment is given.

What happens before my radiotherapy begins?

After you have given your consent for radiotherapy, you will receive an appointment to attend the radiotherapy department at the Cancer Centre, Queen Elizabeth Hospital, Birmingham.

When you arrive please report to the Cancer Centre reception desk. A doctor will need to see you in clinic to place pen marks on your skin to indicate the area to be treated and to plan your care. If you are having treatment the same day please expect your visit to take 2–3 hours approximately.

Some patients will need to attend our mould room for a special mould to be made of the exact area to be treated to ensure the treatment is accurate and the correct shape. When the mould is made the doctor will need to check this mould against your skin to make sure they are happy with the fit. This may happen on the same day, but if you do not start treatment on this day, you will be given a start date before going home.

Once the doctor has checked the mould, treatment can then be calculated, which takes approximately an hour. During this time, someone will show you where you need to go for your radiotherapy and tell you what time you can expect your treatment.

The radiotherapy department is open from 8am to 6pm and you will be offered upcoming treatment times within these hours. If you need a certain appointment on a specific day it is best to ask at the earliest available opportunity once you have started radiotherapy to avoid disappointment. It may not always be possible to accommodate requests as we are a very busy department, dealing with approximately 300 patients on treatment at any one time.
If you require hospital transport for your radiotherapy treatment please discuss this with the radiographers on your first visit.

**What happens when I arrive for my first treatment session?**

The radiographers will come and talk to you before your treatment and explain the treatment procedure to you. It also gives you an opportunity to ask any further questions you may have regarding the treatment, side effects and appointment times.

When the radiographers are ready to take you in to the room for your treatment they will call you in from the waiting room. You will be asked to lie on the couch and the radiographer will bring part of the machine towards you to touch the area needing treatment. They will line up this part of the machine (the applicator) with the pen marks you will have on your skin, or the mould you may have had made. Any pen marks that are drawn on to your skin will be needed each day for accurate treatment. It is important that you do not wash these marks off between treatments. When you are in the correct position the radiographers will leave the room to switch the machine on.

The radiographers will operate the machine from outside the treatment room in the control area. They can hear and see you at all times so if you need assistance just call out or raise your hand. For your own safety, please do not try to get off the bed as the machine is very close and the couch may be high off the floor.

When the machine switches on you may hear some noises such as buzzing and bleeping which indicates the machine is switched on. When treatment has finished please remain in position until the radiographers enter the treatment room and tell you that everything is finished. This is for your safety.

Your first treatment appointment normally takes around 20 minutes.
What happens at my other treatment appointments?

After your first treatment the appointments are normally quicker because on the first day additional checks and measurements are performed.

When you arrive please put your appointment card in the box outside your treatment room. Appointments may take around 15–20 minutes.

Is there anything that I need to do whilst receiving my radiotherapy treatment course?

• Please keep any pen marks on your skin and do not wash these off between treatments.

• If you are diabetic please ensure you bring your insulin and some food each time you attend in case there are any delays.

• We also recommend you bring any medication you are required to take regularly for example pain killers.

• Avoid shaving the area that is being treated as the friction will irritate the skin.
• If you are having treatment to your scalp avoid using hair dyes, shampoo and set hair treatments during your treatment.

It is important to leave the area free from perming lotions and colours for at least 3–6 months after your treatment course has finished.

Will I see a doctor during my treatment course?

Most patients that are attending appointments for less than two weeks do not see a doctor during treatment.

If you do need to see a doctor the radiographers will organise for you to attend a clinic in the cancer centre. Your treatment appointment time on this day will coincide with the doctors’ clinic so that you don’t have to make two visits in one day. Occasionally clinics are cancelled but the radiographers will keep you informed.

Following completion of your radiotherapy you will usually be discharged back to the care of either your GP or dermatologist at your local hospital. Your follow up time will vary according to your skin condition but may be as long as 6 months later. If you have any problems before your follow up appointment, please contact your G.P.

Are there any side effects?

When you were consented for your radiotherapy your doctor will have explained the potential side effects.

The most common side effects often occur during the course of radiotherapy treatment and may continue for a few weeks after treatment has finished this varies from patient to patient. Side effects which occur six months or longer after treatment has finished are called long term side effects.

If you have any questions about side effects please ask any member of the treatment team.
What are the possible early (acute) side effects?

These side effects are usually mild and normally start to occur approximately 2 weeks into the treatment and be at their worst at completion of radiotherapy. They should gradually improve in the weeks after your radiotherapy has finished and should have settled by the time you attend your post radiotherapy follow up appointment.

Below is a table to summarise the acute side effects commonly experienced by patients undergoing radiotherapy. Please read on for more detail.

<table>
<thead>
<tr>
<th>Acute side effects</th>
<th>Description</th>
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<tbody>
<tr>
<td>Red or sore skin</td>
<td>The skin in the treated area may look worse and become red and sore</td>
</tr>
<tr>
<td>Scabbing</td>
<td>A scab or crust may form around the area treated.</td>
</tr>
<tr>
<td>Bleeding</td>
<td>The treated area may bleed easily or weep.</td>
</tr>
</tbody>
</table>

**Sore skin**

Your skin may become red and sore in the area being treating. The skin is likely to become pink, sore and itchy about a week after the first treatment, this may last for two to three weeks after the treatment course has finished.

**Lining of the nose**

If your treatment is to the skin of the nose then a small part of the internal lining of your nose may also be affected. This may cause mild nose bleeds after you blow your nose. This can occur for up to two weeks after your treatment course has been completed.
Inside the mouth
If your treatment is close to the lips, a small area of the lining of the mouth may become sore or crack and blister. It may also bleed a little, but this will lessen in a couple of weeks.

Scabbing of the treated area
The treated area may form a scab or crusting around the edges. If the radiographers think the scab could get in the way of radiation due to its thickness, they may remove it before treatment. The scab will fall off after treatment and a smaller one will form several times, this is all part of the healing process.

Bleeding and weeping
The area may bleed or weep. The area can be cleaned using warm plain water and gently patting dry. Do not rub it dry. To help stop any bleeding, apply light pressure using a clean, dry dressing and hold until the bleeding stops.

Hair loss
Your hair will fall out in the area of skin that is being treated. For example, the scalp, a beard, eyebrow or chest hair. This usually occurs two to three weeks after your first treatment and can be permanent. Hair will only fall out in the area treated so the whole beard or hair on your scalp will not fall out.

What late side effects may I experience?
These side effects may occur months or years after finishing your course of radiotherapy;
- The skin that has received radiotherapy may appear paler than the surrounding skin
- Small veins may become visible in the treated area
- Hair loss may be permanent in the treated area
• The area treated will be much more sensitive to the sun in future years

**Skin care during your radiotherapy**

During your radiotherapy and for a while afterwards, you may develop a skin reaction in the area being treated. You may notice the following;

• Your skin gradually becoming pinker or darker, depending on your skin colour
• Your skin may feel dry or tight, and sore
• A rash may also appear and feel itchy
• Sometimes your skin may blister or peel. If this happens you will be given further help as you may need dressings

A skin reaction may appear at any time but usually begins about 10 days after starting treatment.

**What can affect my skin reaction?**

• Having chemotherapy alongside radiotherapy can make your skin reaction worse
• Smoking can make your skin reaction worse – if you need help to stop please ask for advice

Your treatment team will talk to you about your usual daily skin care routine. They will let you know if any changes are advised. Please talk to them about any worries you have.

**How can I help myself?**

It may not be possible to stop a skin reaction but by following this advice may help you feel more comfortable. This only applies to the skin in the area being treated.

• If the area being treated gets wet gently pat dry but please do not wash any pen marks off
• Wear loose fitting, natural fibre clothing next to the skin. For example, a cotton t-shirt
• Avoid rubbing the area
• Avoid/reduce shaving in the area being treated
• Avoid sticky tape on the area (such as Elastoplast™ or Micropore™)

It may also help to reduce irritation to the treated area if you use a moisturiser sparingly – gently smooth it on and apply in the direction of hair growth. Please stop using if it irritates your skin and talk to your treatment team.

If you are choosing a new moisturiser one that is sodium lauryl sulphate free is recommended. If your skin breaks/blisters you should stop using moisturiser. Your treatment team will advise you further.

• Avoid using products containing alcohol on the skin in the area being treated. This includes make up, hair dye, perfumes and aftershave

• You may swim if your skin is not broken. Shower after swimming to wash off the chlorine and apply your moisturiser. Please stop swimming if it irritates your skin

• Avoid sun exposure and protect the area from direct sunlight. You can wear a brimmed hat and/or cover up with clothing. Be careful in the sun for at least a year after you have finished your treatment. Use a sunscreen with a minimum UVB sun protection factor (SPF) of 30 and UVA protection as your skin will be more sensitive

• Your treatment team will let you know if this advice changes during treatment

It may is also advised that you maintain a good fluid intake and eat a nutritionally well-balanced diet.

After your treatment has finished, your skin will continue to be more sensitive. Your reaction may worsen for the next 7–10 days before starting to improve. Most patients find their skin has
healed around 4 weeks after treatment finishes. If the skin has broken, healing may take longer than this.

**Who do I contact if I have any questions or concerns whilst on treatment?**

All our staff are here to make sure your treatment goes as smoothly as possible and to support you through this difficult period. If you have any questions about your treatment or side effects, please do not hesitate to ask your doctor or any of the radiographers for advice.

During your treatment and for up to 6 weeks after your treatment has finished if you need urgent advice due to side effects, or are feeling unwell please contact the oncology hotline on 07789 651543.

In the event that your call is not answered, please leave a message stating your name, hospital number and contact telephone number.

**What do I need to do when I have finished my treatment?**

Once you have completed your treatment, the acute side effects may continue for a few weeks even though you are no longer receiving treatment. Continue with the advice that was given to you during your radiotherapy until the side effects stop. If you are unsure of what to do please ask a radiographer or your doctor before you finish your treatment.

Following completion of your radiotherapy you will usually be discharged back to the care of either your GP or your dermatologist at your local hospital. Follow up time will vary according to your skin condition but may be as long as 6 months later. If you have any problems before your follow up appointment, please contact your G.P.
**Further information**

The cancer centre has an information room called the Patrick Room. They can provide information and support. Please call 0121 371 3539.

You may also find these organisations helpful:

**Macmillan Cancer Support**: [www.macmillan.org.uk](http://www.macmillan.org.uk)
Tel: 0808 8080000

**Cancer Research UK**: [www.cancerresearchuk.org/about–cancer](http://www.cancerresearchuk.org/about–cancer)

**Travelling to your treatment appointments**

**By train**

University station is the closest train station to the hospital and is only a 5–10 minute walk away. There is also a shuttle bus running from the train station to the Cancer Centre, for those patients who have difficulty walking.

**By car**

Car parking in Car Park D is free for patients attending for daily radiotherapy treatment. Car Park D is located directly opposite the doors to the Cancer Centre. The postcode for your satellite navigation device is B15 2TH.

If you do drive, please bring in the ticket you have taken to access the car park and the radiographers will exchange this for a prepaid one, so you may exit the car park without charge.

**Hospital transport**

Hospital transport is available for patients who are not well enough to travel by their own means. If you use hospital
transport it can mean spending many hours away from home and travelling long distances (you will be collected/returned on a schedule). Therefore, we recommend you use other forms of transport if you can. Please ask a member of staff for details.

Alternatively, you may arrange to stay in the Bromley Wing at the Queen Elizabeth Hospital, Birmingham. It is comfortable accommodation with meals from Monday – Friday for people who are able to look after themselves. Outside treatment times you are free to entertain yourself, have visitors or go out. Accommodation here is free and can be arranged by contacting the Bromley Wing on 0121 627 2406.

Radiotherapy contact numbers

Patrick Room – Cancer Centre, Queen Elizabeth Hospital
Information and support to people with cancer and their families: Telephone 0121 371 3537/9

Oncology hotline
For urgent medical problems out–of–hours when attending for treatment and up to 6 weeks after radiotherapy or chemotherapy has finished: Telephone 07789 651543

Radiotherapy treatment rooms – direct telephone numbers
Room 1 0121 371 5077
Room 2 0121 371 5076
Room 4 0121 371 5090 (tomotherapy)
Room 5 0121 371 5085
Room 6 0121 371 5098 (tomotherapy)
Room 7 0121 371 5084
Room 10 0121 371 5079
Room 11 0121 371 5080
Please use the space below to write down any questions you may have and bring this with you to your next appointment.
The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit www.uhb.nhs.uk/health-talks.htm