

# Radioiodine ablation therapy for thyroid cancer

Department of Nuclear Medicine

Information for Patients

Last reviewed: July 2024

Updated: April 2026

Next review: July 2027

Leaflet number: 962 Version: 4.1

## What is radioiodine ablation treatment?

This is a treatment for thyroid cancer. It has 2 parts:

### Inpatient treatment

- We will give you a capsule to swallow.
- This has a radioactive form of iodine (called radioiodine).
- The radioiodine will kill off thyroid cells left after surgery and thyroid cancer cells. This is an effective treatment, with few side effects.

Please note that the capsule has a small amount of gelatine. Please speak to your consultant if you have any concerns.

When you are most radioactive, you will stay in hospital in a special room on a hospital ward. The length of your stay will normally vary from about 6 hours to 3 days. This is based on

- your home circumstances,
- the amount of radioiodine you are given
- how quickly it leaves your body

We will discharge you when you reach the required level of radioactivity. Due to the radioactivity in your body, other people will enter the room as little as possible. Low levels of radioactivity will then stay in your body for a few weeks.

The room has a TV and an en-suite toilet and shower. You are welcome to visit this room before your appointment date and discuss your stay with the ward staff. Please phone **0116 258 6309** to arrange this.

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.uhleicester.nhs.uk](http://www.uhleicester.nhs.uk) for maps and information about visiting Leicester's Hospitals  
To give feedback about this information sheet, contact [uhl-tr.informationforpatientsmailbox@nhs.net](mailto:uhl-tr.informationforpatientsmailbox@nhs.net)

## Outpatient scan

You will have a scan in the nuclear medicine department 3 days after you take the capsule. This is to show where the radioiodine has gone in your body.

This may mean you need to come back to the hospital after being discharged from your in-patient treatment.

Please note that you will need to lie still for 30 to 40 minutes. The camera will come very close to your face.

You may also have a CT scan during this visit.

Please let us know if you suffer from claustrophobia.

If you have any questions about your outpatient scan, you can ask the member of Nuclear Medicine staff you see when you are given the capsule, or contact the Nuclear Medicine Department. The phone number will be on your appointment letter.

## Pregnancy, breastfeeding and starting a family:

If you were registered as male at birth, radioiodine can damage your sperm cells for a short time. We advise you to use effective birth control. Do not conceive a child for 4 months after treatment. If you have any family planning concerns or special circumstances please discuss them with your consultant, or with nuclear medicine.

If you were registered as female at birth you should not be given radioactive iodine if there is any chance that you might be pregnant or are breastfeeding. This is due to the radiation risk to unborn children and breastfed infants.

If you are aged 55 or younger, you will be asked to have a pregnancy test. You are also advised not to have any sexual activity for 15 days before your treatment, so that an early pregnancy is not missed by the test. This may not be needed if there is a reason you cannot become pregnant, such as:

- You have gone through your menopause and have not had a period in the last 2 years
- You have had surgery that means you cannot become pregnant

You should avoid pregnancy. Use an effective method of birth control for 6 to 12 months after treatment. You may need to start using your birth control before your treatment date. This depends on the birth control method you choose.

If you are breastfeeding, you should stop 8 weeks before treatment. You must not start again with the child you currently feed.

After the time periods above, family planning is seen to be safe with no more risks from radioactive iodine treatment.

Breastfeeding a child conceived after your radioiodine therapy (following the advice above) is safe.

If you have any family planning concerns or special circumstances please discuss them with your consultant, or with nuclear medicine.

## Who will be doing the treatment?

A large group of staff are involved in your treatment:

- The ward staff will offer day to day care during your stay. This includes doctors, nurses and healthcare assistants.
- A member of staff from the Nuclear Medicine Department gives you the capsule. They will work out when you can go home.
- Your outpatient scan will be done by a Nuclear Medicine Technologist.
- Sometimes a trainee may also be present. If you wish, you can ask that the trainee is not present during your procedure.

## How do I prepare for this treatment?

- If you have incontinence problems, need caring support, or if you care for anyone please tell your consultant or the Nuclear Medicine Department. This will not stop you having the treatment but more precautions may be required.
- You must follow the low iodine diet information sheet for 1 week before treatment. This is to make sure that you do not have iodine rich foods, supplements or medicines before treatment, which may make the radioiodine in your treatment work slightly less well.

### For the 2 days before your treatment:

- You will be given Thyrogen injections at the hospital 24 and 48 hours before your treatment. This makes sure your thyroid will absorb the radioiodine without you having to stop your thyroid medication. This will be arranged with you in advance. We will send you an appointment letter with details on where to go, and when, for these injections.
- Your consultant will explain how to collect your Thyrogen from the trust pharmacy. Please make sure you keep the Thyrogen vials in your fridge. Please bring them to the hospital for your appointment.
- Some patients may not be able to have Thyrogen injections. These patients will have to stop their normal thyroid medication for some weeks before the treatment. They will then restart when told to by their consultant. If you are not able to have Thyrogen we will discuss this with you before your treatment.

### What to bring for your hospital stay:

- You will need to bring some old clothes to wear during your stay. This includes footwear such as slippers and socks. These will be contaminated with radioiodine after your treatment. You can often take your clothes home, unless your circumstances means you are more likely to contaminate your clothes with pee (urine) or other waste (you may have incontinence, or some form of stoma or catheter), in which case your clothes may need to be disposed of by the hospital. Please also bring an extra set of clothes to change into when you go home. Easily cleaned, important items that are worn (such as glasses and hearing aids) will have as much radioactivity removed from them as possible, so they can be taken home for personal use when you are discharged.

- Please bring with you any current medication to last your stay in hospital. We recommend 4 days supply for most patients.
- Please ensure you bring a toothbrush you are happy for us to dispose of, as your saliva will be very radioactive and the toothbrush will be very contaminated.
- If you use an inhaler please bring one we may dispose of. Ensure you have spares at home to use after your treatment.
- Please only bring the **fewest** number of items you think you will need. Any items you bring with you into the room are likely to become contaminated with radiation. They will be disposed of after you have been discharged.
- You will be able to use your mobile phone and/or tablet in the room. We can cover your phone/ tablet with plastic film so that it does not become contaminated. You will be able to take it with you when you leave hospital.
- There is hospital Wi-Fi available for patients, but the signal can be low in this room.

## On the day of your treatment

- We will give you a radioiodine capsule (similar in size to a paracetamol capsule) to swallow with a drink of water. It is important that you let us know before if you have difficulty swallowing capsules.
- **Please do not eat any food or drink large amounts of fluids from 9am on the day of treatment, and for 2 hours after taking the capsule.**

## During your hospital stay

After your radioiodine treatment, your body has some radioactivity. This will go down every day. Most of the radioiodine leaves your body in your pee (urine), sweat and saliva during the first few days after your treatment. For this reason, there are some instructions we would like you to follow during your stay to help lower the spread of contamination:

- Drink plenty of fluids. Go to the toilet often. This will help clear the radioiodine more quickly. Do not hesitate to call the ward staff when you need a top up of water.
- When using the toilet, take care to make sure there are no splashes of pee. Flush the toilet 2 times and wash hands well. Male patients should sit down when going for a pee.
- The shower is a wet room style. Please point the showerhead towards the wall when possible.
- When using the sink for brushing teeth and washing, please try to avoid splashing, and rinse the basin after use.
- Please use slippers when walking around the room.
- The bedroom floor and any items you are likely to touch when in the room (table, door and window handles, remote control etc.) will be covered in a plastic, non-slippery see-through film called Packexe.

- Nuclear Medicine staff will measure the radioiodine remaining in your body at least once a day, to work out when you can go home.

## Visitors

Visitors are not allowed during your stay due to rules that we have to follow.

## Going home after your hospital stay

You can travel home on the day of discharge by public or private transport, as long as it does not take more than 1 hour. If sharing a car you should be sat diagonally opposite (and not directly next to) any other passengers.

If your journey home is likely to take longer than 1 hour, please contact us in advance to discuss this.

## Advice to follow after discharge

If you have discomfort in the throat or neck in the days after treatment, take aspirin or paracetamol to ease the symptoms.

### In the first week after discharge:

- Flush the toilet 2 times after use. Make sure you wash your hands well.
- Do not prepare food for other people. Wash your cutlery well.
- Make sure you drink plenty of fluids.
- You will visit the Nuclear Medicine Department for an imaging procedure (see “Outpatient scan” on page 2).

## Limits on your contact with other people:

You will still have some radioactivity left inside you when you leave hospital. This means you will need to limit your contact with other people you see regularly, such as people you live and work with.

We will give you details of the limits before you leave hospital on the ‘**Radionuclide instruction sheet**’ - **please carry this sheet with you at all times** whilst the contact restrictions still apply. Show this sheet to healthcare workers if you go to the doctor or into hospital as a patient, so they are aware that you have recently had the treatment. Limits will be made on an individual basis, but please be prepared to follow the limits below for up to 2 weeks:

- make sure that you stay at least 1 metre away from pregnant women, children and adults with whom you have regular contact. This may delay your return to work (see below).

- sleep separately from other people. The beds should be at least 1 metre apart. This distance still applies if the beds are in different rooms next to each other.

You may also be advised to avoid spending very long periods of time around members of the public for up to 1 week. One off encounters walking down the street or past people in shops is fine during this time.

### Going back to work:

There may also be a delay before you can return to work; typically you can expect to take up to 2 weeks off. This period will vary according to your job. It may be longer if you work with children. A member of staff will discuss this with you.

### Travelling abroad:

If you plan to travel abroad in the 6 months after your treatment, please be aware that the security gates at ports and airports may use very sensitive radiation detectors. They may be able to detect the very low levels of radiation coming from you. We will give you information that you can show to security officers if needed.

## Are there any side effects with radioiodine treatment?

- **Thyrogen** - you may feel sick (nausea) or have headaches after your injection. These are not severe and do not last long.
- **Feeling sick (nausea)** - nausea occurs in 1 in 10 patients within the first 12 hours after taking radioiodine. You should ask a nurse for anti-sickness drugs if you feel sick.
- **Taste disturbance** - you may find that your sense of taste changes the day after taking radioiodine. You might get a metallic taste or you might lose your sense of taste. This usually returns to normal over the next few weeks. Drinking plenty of fluid helps to lower this.
- **Neck oedema** - slight swelling of the neck tissue occurs in about 1 out of 10 patients, a couple of days after treatment. The swelling usually goes away within a week of treatment. Paracetamol or aspirin can be taken to relieve these symptoms.
- **Tiredness (lethargy)** - if you have to stop your thyroid medication, you may feel tired (lethargic) and weak before treatment. These symptoms will disappear when you start your thyroid medication again, following instructions from your consultant. Patients who have Thyrogen injections and stay on their medication should not have this side effect.

## Frequently asked questions

### Will treatment increase the chance of getting other cancers?

There is no strong evidence to suggest that treatment with radioiodine increases the chances of getting another cancer. If you have been referred for this treatment your consultant believes the benefits of treating your thyroid cancer outweigh any risks involved.



## Do I need to restrict contact with my pets?

We offer no specific guidance on this but feel free to discuss this with us, before or on the day of your treatment.

## Contact details

If you have any further concerns or questions about the restrictions due to radiation, or your whole body iodine scan, please phone **0116 258 5627** during normal working hours (Monday to Friday, 9am to 5pm) and ask to speak to a physicist.

If you have any medical questions or concerns, you can contact the consultant's secretary during normal working hours on **0116 258 7882**. For concerns out of hours please contact your GP.

## Useful sources for further information

- The British Thyroid Association website: <https://www.british-thyroid-association.org/information-for-professionals-and-patients#patientinformation>
- The British Thyroid Foundation website: <http://www.btf-thyroid.org/>  
You can obtain a copy of the British Thyroid Foundation booklet from the patient information stand in the main entrance to the Oncology Service, Osborne Building at Leicester Royal Infirmary.
- Leicester's Hospitals website: [www.uhleicester.nhs.uk/](http://www.uhleicester.nhs.uk/)

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email [uhl-tr.equalitymailbox@nhs.net](mailto:uhl-tr.equalitymailbox@nhs.net)