



# Radium-223 therapy

Patient Information Series PI 79

## Contacts

Who can I contact about this treatment?

If you have any questions or concerns at all about this treatment please feel free to contact us.

Nuclear Medicine Department:

Mon - Fri: 8.30am – 4.30pm ..... 020 3826 2263

**24 hour Acute Oncology Service**  
**Mount Vernon Cancer Centre: 07825 028855**

**NHS**  
East and North Hertfordshire  
NHS Trust



## If you normally pay for NHS prescriptions

People undergoing treatment for cancer do not have to pay NHS prescription charges if they have a valid medical exemption certificate. To get an exemption certificate, ask your GP for an application form.

## Radium-223 therapy

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### Introduction

This booklet is written for patients who are being offered radium therapy to help reduce their pain and slow the spread of cancer in their bones. It aims to answer some of the most commonly asked questions about this treatment.

If anything in this leaflet is unclear, please call the Nuclear Medicine Department (see contact number on page 2) and the staff will be pleased to help you.

### What is radium-223 therapy?

Radium-223 therapy has been developed to attack the secondary deposits of cancer cells (metastases) in your bones. Radium is similar to calcium. It is given by an injection into one of the veins in your arm and finds its way to all the areas where your bones are absorbing extra calcium due to cancer cells. By giving this treatment we are able to target the radium to all the sites where the bones are damaged across your body.

The radium is radioactive which means that it releases radiation into the site of bone where it is concentrated.

The radiation is only able to penetrate a very short distance into the bone. It is able to concentrate at each site and does not result in any radiation outside your body.

This means we are able to deliver 'radiotherapy' to all the sites in your bones damaged by secondary cancer. This is a very effective way of treating the cancer cells there.

### Where is the treatment given?

The treatment is given in the Nuclear Medicine Department at Mount Vernon Hospital. The hospital entrance that is closest to this department is Gate 1.

The easiest route is through the main entrance of the hospital, turn left and with your back to the main staircase turn left again (staying on the ground floor). Walk to the end of the corridor where you will see the signs to the Nuclear Medicine Department on the left.

Or you can use the door into the corridor to the left of the main entrance. This gives better access for disabled people. Through this doorway, turn left and follow the signs as before to the Nuclear Medicine Department.

### **Will I have to sign a consent form?**

Yes. As with all medical procedures you will be asked to sign a consent form, which shows you agree to have this treatment. If you are concerned or unclear about any aspects of this treatment, please ask the team treating you. They will answer your questions before you sign the consent form (see contact number on page 2).

### **How is this treatment given?**

You will have your treatment as an outpatient. Your course of treatment will be six injections of radium: one injection every four weeks. The radium injection is usually into one of the veins in your arm.

A cannula (small tube) will be inserted into a vein and blood samples are taken. The blood samples need to be checked by the doctor, before the injection can be given. This will allow the doctor to determine if it is safe to give you the next radium injection. The radium is then injected through this cannula.

You will also be weighed. This is to ensure you receive the correct dose for your body weight. You should expect to be in the hospital for most of the day.

### **How should I prepare for this treatment?**

You will need to have a blood test two to three weeks prior to your first treatment, so that the radium can be ordered. It is important that you attend for the blood test on the date given to you so that your radium can be ordered in time for your treatment appointment.

We advise you to avoid taking calcium supplements for seven days before the radium therapy. You can re-start these two days after the radium therapy. There is usually no need to prepare or make any other changes to your diet before having radium therapy, unless your doctor has advised you. Please feel free to ask your doctor or the team treating you, if any of this information is unclear.

If you are having any problems with bladder or bowel incontinence (which is when you have little or no control over passing urine or faeces, or if you leak or dribble urine or faeces) you must tell the doctor about this before you come for the radium therapy. Advice will be given to you by the doctor or the team in nuclear medicine department.

Try to increase your fluids (water) for the first few days following your treatment.

### **Are there any side-effects from this treatment?**

Many patients will not have any side-effects.

The most frequently seen side-effects are diarrhoea, nausea, vomiting and a decrease in the number of blood platelets, called thrombocytopenia.

There may also be a slight fall in the number of other cells in your blood, but this is unlikely to cause any effects which you will notice. You will have blood tests before starting radium therapy and before each radium injection to check this.

If you have any questions or concerns about your treatment, you should ask your doctor who will be pleased to explain.

If you notice any of the following symptoms you should contact your doctor straight away:

- any unusual bruising
- more bleeding than usual after minor injury
- fever
- symptoms of pain, swelling or numbness of the jaw, or loosening of a tooth

### **When will I know if it has worked?**

You may not notice any changes. If you are having pain from the cancer in your bones, the pain may slowly improve.

As radium targets the cancer in your bone your PSA levels may stop rising or even fall. But this may take several months to happen.

### **Will I be radioactive after the treatment?**

For a short time after the treatment your body fluids will be slightly radioactive. The risks to you from the radioactivity are very small compared with the benefit you get from the treatment.

### **What about my family and other contacts?**

At home you will need to take some precautions, because the radioactivity in your body fluids may be hazardous to other people.

As your body fluids will be slightly radioactive, it is important to take the following precautions for a week after each radium treatment:

- If a normal toilet is available it should be used rather than a urinal
  - Wipe away any spilled urine or faeces with a tissue and flush it away
  - The toilet should be flushed twice with the lid down
  - Ensure that you always wash your hands after going to the toilet
  - Always wash any linens or clothes which become stained with body fluids straight away. Wash these items separately from other items and rinse them well. You should wash your hands well afterwards (even if you have worn gloves)
  - If you should cut yourself, wash away any spilled blood
  - Any rubbish should be placed in your normal household rubbish, NOT clinical waste.
  - You should not have sexual intercourse for a week
- If you are unclear about any of these instructions please call for advice (see contact number on page 2).

### **Information for men: fertility**

This treatment may damage the sperm even though it won't prevent its production. This damage could cause genetic problems to an unborn child. For this reason we recommend that a man does not father a child during radium treatment and for six months afterwards.

Please discuss this topic with your hospital doctor or one of the team treating you, so that you are quite clear what this actually means in your case.

## Can I change my appointment once it is made?

Yes, you can change your appointment. However, to get the most benefit from the radium therapy it is important for you to keep your appointments and have your injections on time.

The radium is expensive and has to be ordered specially for each patient when the appointment is booked. The hospital will still have to pay for it if there is a late cancellation.

We would be grateful if any unavoidable appointment cancellation or rearrangement could be made at least **one week** before the appointment is due. This is so that the order for your radium can be changed. We will understand if there are situations such as illness which are beyond your control.

Please call if you **cannot** attend your appointment (contact number on page 2).

## Car parking at the hospital

A Pay & Display parking scheme operates 24 hours a day. Cancer patients have a £1 concessionary parking rate but must register for this. Registration forms are available at the Cancer Centre Reception desks or on the back of appointment letters. Take your registration form to the Facilities Office or Car Parking Office on your first visit and you will be given a yellow Concessionary Parking Pass. Facilities Office or Car Parking Office: Monday - Friday, 8am - 12 and 1pm - 4pm.

- For car parks accessed via Gate 1 or Gate 3: get a Concession/Blue Badge ticket for £1 at the Pay and Display machine and display this and your yellow pass on the car dashboard. Your yellow pass can be used in any car.

- The car park accessed via Gate 2 is Pay on Exit: type your car registration number into the machine when you are ready to leave. You will be charged £1 and the barrier will rise automatically. You do not need to display your yellow pass in this car park, but **only** the car registered can be used there.

**Blue badge holders** do not need to register. Pay £1 at the Pay & Display machine. Please display your ticket and blue badge on your dashboard.

## Getting help with paying for transport

If you are on a low income, you may be eligible for help with paying for the cost of transport to and from the hospital. This includes bus and train fares and car mileage but not taxi costs.

For further information about eligibility, please speak to Patient Affairs (020 3826 2343) or visit [www.direct.gov.uk](http://www.direct.gov.uk) and search for 'Travel costs'.

## Other help and support

The Lynda Jackson Macmillan Centre (LJMC) offers information and support to patients and their families and is located next to Chemotherapy Suite by Gate 3. The staff at the LJMC work as part of the overall team caring for you.

People who have cancer often say that during their illness they experience a range of emotions. Many find it to be a stressful, anxious and confusing time. Please feel free to drop in before, during and after any of your visits to Mount Vernon Cancer Centre to find out more about the LJMC services that you may find helpful.

The volunteers and healthcare professionals at the LJMC provide help, support and information in a relaxed setting to help patients cope with cancer and its treatment.

LJMC services include a range of complementary therapies, counselling, relaxation sessions and financial advice. You can drop in without an appointment or call the LJMC helpline

## Consent

It is a legal requirement to have a signed consent form from you before the start of your treatment.

If you have already been given one of these forms, please bring the completed form with you when you come for your first appointment.

If you have not been given a form, this will be discussed with you at your first appointment.

## Identification

Please note that it is a legal requirement for the staff to check your name and details against your treatment sheet every time you attend.

## Fathering a child

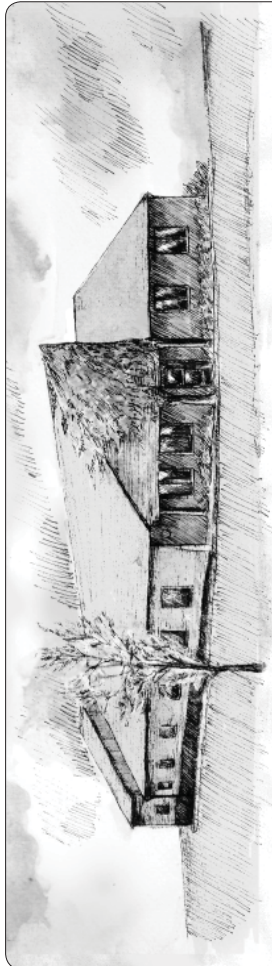
Male patients must not father a child during the course of treatment or for some months afterwards. Please discuss this with your cancer specialist.

If you think there is a chance of your partner being pregnant during treatment, it is very important that you discuss this with your oncologist, radiographer or nurse as soon as possible.

This leaflet has been produced by staff in the Nuclear Medicine Department, together with professionals, patients and carers from Mount Vernon Cancer Centre and the Lynda Jackson Macmillan Centre who have expertise and experience in the topics covered by this publication.

All our publications are reviewed and updated regularly. Details of the references used to write this information

are available from the Information Team at the Lynda Jackson Macmillan Centre.



# Lynda Jackson Macmillan Centre

*... supporting people affected by cancer...*

- ⓪ Drop-in centre for support and information
- ⓪ Telephone helpline
- ⓪ Complementary therapies\*
- ⓪ Counselling\*
- ⓪ Benefits advice\*
- ⓪ Relaxation classes
- ⓪ Look Good...Feel Better™ beauty workshops
- ⓪ The Way Ahead headwear workshops
- ⓪ Self-help courses

The **Lynda Jackson Macmillan Centre** is situated between the Cancer Centre and Gate 3 (White Hill)

Please drop in or call to find out how we may be able to help you

Opening hours: **Monday–Friday: 9.30am–4.30pm**

Mount Vernon Cancer Centre, Northwood, Middlesex HA6 2RN

Telephone Helpline: **020 3826 2555**

Website: **[www.ljmc.org](http://www.ljmc.org)**

\* Service only available to NHS patients under the care of an oncologist based at Mount Vernon Cancer Centre



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