

Nuclear medicine department

Information about your radium-223 (Xofigo) therapy

What is radium-223 therapy and why do I need it?

Your consultant has recommended that you have treatment with radium-223 (Xofigo). Radium therapy can be an effective treatment for reducing pain caused by cancer that has spread to the bone (bone metastases). It is most commonly used in prostate cancer.

Radium-223 is a radioactive drug that behaves in a similar way to calcium and collects in the bone metastases. The radioactive particles act on bone metastases, reducing the pain that they can cause. If there are cancer cells in more than one area of bone, the radium can work well to treat all those areas at the same time.

This treatment is considered by your consultant to be the most suitable method of treating your cancer.

The therapy is given as a course of 6 treatments, at monthly intervals.

Is there any preparation for my treatment?

- The treatment is given as an outpatient and you will be able to go home afterwards.
- Before each treatment, you will need to have an outpatient clinic appointment to have a blood sample taken. This is to ensure that your blood cell counts are sufficiently high to receive this treatment.
- If you are taking calcium supplements you will have been asked to stop taking these for 14 days before the treatment. Continue to take your other medications as normal.
- Please continue to eat and drink normally.
- Please allow plenty of time to get to your appointment.
- Please do not bring along anyone who is pregnant or under 18 years of age.
- You should expect to be in the nuclear medicine department for around 30 minutes.
- Please read carefully the later section: **Are there any special precautions after the treatment?**

Agreeing to treatment: consent

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you. Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.



What happens on the day of the treatment?

Your consultant will have explained the treatment to you before your appointment. On the day of the treatment the nuclear medicine staff will be available to answer any additional questions that you may have.

The treatment will be given by a senior clinical technologist, who is experienced in giving Radium therapy. You will have a small needle (sometimes called a cannula) put into a vein, in your arm or hand, for the treatment to be given. The therapy is given in a very small amount of fluid and will only take a few minutes.

Afterwards, the needle will be removed and you will be free to leave the hospital straight away. A small plaster will be placed at the site of the needle insertion which can be removed after a few hours.

Will I feel anything when the treatment is given?

There are no immediate side effects from the treatment; it will not make you feel sleepy or affect your ability to drive. Having the needle inserted feels similar to having blood taken. The treatment itself will not cause any discomfort.

What do I need to do after the treatment?

You may eat and drink normally following the treatment. There is no need to avoid alcohol, unless you have already been advised to do so for other reasons.

Are there any special precautions after the treatment?

During the first few days after your treatment, radium will be present in your stools with a small amount also in your blood and urine. It is very important that you take the following precautions for **one week** after treatment. After this time you do not need to take any special precautions.

- Where a normal toilet is available it should be used in preference to a urinal. Please sit down to use the toilet if possible.
- Please flush the toilet twice after use.
- Use disposable gloves when wiping up blood, urine, stools or vomit, or when handling stained clothes.
- Wipe up any spilled urine or stool with a tissue and flush it away.
- If you are sick, wipe up spilled vomit with a tissue and flush it away.
- Ensure that you always thoroughly wash your hands after using the toilet or after wiping up spilled fluids.
- Machine wash (without pre-washing by hand) any linen or clothes that become stained with urine, blood or stools, separately from other clothes.
- If you are sexually active, the use of a condom is recommended during intercourse for the first week after each injection because there may be some radioactivity in the body fluids.
- If sampling of your blood, urine or stools is necessary during the first week following radium treatment, please tell the people treating you that you have been treated with radioactive radium-223. If possible show them your appointment card with our contact details on it.
- If you need medical care such as an operation or hospital admission during the first week following radium treatment, please also inform the staff as above.

Because of the potential effect of radiation on sperm, you should always use effective contraceptive methods during treatment. It is important to continue this practice for a minimum of 6 months after your radium-223 treatment is completed.

If you have any questions you may contact the hospital doctor or nuclear medicine department for advice. (The contact number is at the end of this information sheet).

How safe is the treatment?

You will have some radioactivity in your body for a while after this treatment. The total amount is very small and gets lower each day until the next treatment. The effects of the radium therapy are limited to the areas in the body in which it concentrates, so it will not cause any harm to other people through contact.

What are the side effects of the treatment?

There are no immediate side effects from the injection.

During the two or three days following your treatment, you may feel a slight increase in pain. This is quite normal, and often indicates that the treatment is working. This can be relieved by taking your normal painkilling medication. Occasionally you may need to take more painkillers than normal or even start on a stronger painkiller. In this situation you may need to consult your GP. In the long term, the pain should hopefully improve as the treatment starts to take effect.

There may also be a slight drop in the number of certain cells in your blood. This rarely causes problems. However, if you develop nose bleeds, excessive bruising or gum bleeding you would need to contact your consultant or GP and have an urgent blood test arranged.

You may also experience some nausea and diarrhoea. If this is affecting your day-to-day life, you should contact your consultant or GP, who will be able to prescribe you something to help.

What are the benefits of the treatment?

Radium therapy has been shown to control the effects of cancer in your bones, leading to better pain control, an improvement in the quality of your life and longer survival. As the radium begins to relieve the pain you may find that you can attempt activities that were previously too difficult or painful. Usually there is no problem with this, but if in doubt seek your doctor's advice.

Are there any alternative treatment options?

Bone metastases can be treated in a variety of different ways including the administration of painkillers, chemotherapy, bone targeted treatment (e.g. zometa), or external beam radiotherapy. Sometimes several of these approaches are needed. Having considered these options, your consultant has recommended this treatment as being the most appropriate for you, at this time. Other options may be considered at a later date.

What happens if I decide not to have the treatment?

The benefits of having the treatment are mentioned above. If you decide not to have the treatment, then please discuss this with the doctor looking after you.

What happens if I cannot keep my appointment?

If you cannot keep your appointment, contact the nuclear medicine department straight away. We may be able to offer the treatment to someone else.

Please attend promptly at the time shown on the attached appointment letter.

If you have any questions about this appointment or any questions about the examination, please telephone the number below:

0161 446 3942 or 3946

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact patient.information@christie.nhs.uk

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week

