

Nuclear medicine department

# Information about your strontium-89 therapy

## What is strontium-89 therapy and why do I need it?

Your consultant has recommended that you have treatment with strontium-89 (Metastron). Strontium 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.

Strontium-89 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 strontium can work well to treat all those areas at the same time.

Strontium therapy can provide lasting pain relief and is usually given when treatment with traditional methods has failed to reduce pain from bone metastases to an acceptable level for you.

It has been recommended for you, as it seems likely that it will be the most suitable treatment in your case.

## Is there any preparation before my treatment?

- The treatment is given as an outpatient and you will be able to go home afterwards.
- Before this treatment, you will need to have had a blood sample taken within the last four weeks. 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 Your consent may be withdrawn at any time before or during this treatment.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, 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 strontium 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 treatment, Strontium will be present 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.
- Wipe any spilled urine up with a tissue and flush away.
- Always wash your hands after using the toilet.
- Wash any linen or clothes that have been become stained with urine separately from other laundry.
- If you have a problem with urinary incontinence, or use a urine collection system, please ensure you discuss this with us when you come for treatment.

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 strontium-89 treatment is completed.

If you have any questions you may contact your hospital doctor or the 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. The effects of the strontium therapy are limited to the areas in the body in which it concentrates, so it will not cause 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.

After about two weeks, sometimes a little longer, the pain should start to subside. 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.

## **What are the benefits of the treatment?**

The benefit of strontium-89 therapy, in your case, is to reduce the pain caused by the cancer that has spread to your bones, as conventional pain relief has failed to relieve your symptoms. Another benefit is that it provides long-term relief from a single treatment, and treats more than one area at the same time. In a small number of patients, complete pain relief can be achieved. It can also be repeated, if appropriate for you.

As the strontium 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 pain 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](mailto: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

