



Admission for treatment with

Lutathera



This leaflet is for people who will have a course of Lutathera for a neuro-endocrine tumour. We hope that this leaflet answers your questions. Please read this information carefully and bring it with you when you come to hospital. If you have any questions, or if there is anything about the treatment you do not understand or are concerned about, please ask.

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.

What is Lutathera?

Lutathera is a radioactive substance used to treat neuroendocrine tumours. It is absorbed by the tumour, delivering localised radiation treatment. Cancer cells absorb the Lutathera more than normal cells. The cancer cells therefore receive a higher dose of radioactivity, damaging and killing the cells. This type of treatment is known as Radionuclide Therapy.

What are the benefits of treatment?

The aim is to make the tumours grow more slowly or stop them from growing. It can also help manage symptoms caused by the tumours. The long-term effectiveness will vary from person-to-person. Your doctor will have discussed what the treatment will involve and the benefits, risks and alternatives. We will ask you to sign a written consent form before the treatment begins.

Is there any preparation for the treatment?

Before you have treatment you will have some tests to make sure that it is a suitable treatment for you. This involves having several scans which will all take place on one day as an outpatient. Your doctor or clinical nurse specialist will explain this in more detail.

You will see your doctor at another appointment to discuss the results of these scans. If this treatment is appropriate for you they will arrange for your admission to the ward.

Before your admission you will also have a CT scan. We use this as a comparison for future scans. This allows us to monitor the effects of treatment.

You will have a kidney function test. This is usually done by taking a blood sample. Sometimes you may need an intravenous injection before the blood sample. This allows us to make sure your kidneys are working efficiently.

You will also need an ultrasound scan of your heart. This is painless and does not involve any injections. This is to make sure your heart is pumping well and will be able to cope with the medication we give during your treatment.

What about my medications?

Some drugs can interfere with the way that tumours absorb Lutathera. Your doctor will check which medications you are on and advise you which, if any, should be stopped before treatment. You must make sure that you provide a complete list of all medications you are taking on admission.

If you are being treated with Octreotide or Lanreotide, this will not be given before your dose of Lutathera. It will be given on the day after your treatment. You will get the next dose 4 weeks later.

How is the treatment given?

The treatment is given to you as an in-patient in ward B3 which is on Level 2 of the Beatson.

Lutathera is given to you as an intravenous infusion (a drip) via a vein. It is typically given in four cycles, eight weeks apart. Your doctor or clinical nurse specialist will advise you individually about your specific treatment.

Having the treatment is very straightforward and in total lasts about 4 to 5 hours. We will put a cannula (small plastic tube) into a vein in both your arms. In one arm, we will give you an infusion of amino acids. This helps to protect your kidneys during the treatment. This infusion takes around four hours.

When the amino acid infusion has been running for at least 30 minutes, we will then give you the Lutathera infusion in the other arm. This will last 30-40 minutes.

These infusions shouldn't be painful, but can be a little uncomfortable. If you notice that your arm is sore, red or stinging please tell our staff straight away.

What are the risks?

There are two main types of possible side effects: those relating to the administration of the treatment itself and those relating to the ongoing effects from the radiation dose to your body.

Side effects related to the therapy

The amino acid infusion may:

• Make you feel sick and you may vomit. This normally only occurs on the day of the therapy. We will prescribe anti-sickness medication to prevent this.

The Lutathera therapy may:

- Cause increased pain due to inflammation of the tumour, especially if it is in your bones, liver or pancreas. This is usually limited to 72 hours following treatment. We can prescribe a low dose of steroids (dexamethasone) to help reduce this. You may need to take your usual pain medication more regularly. If you have increased pain or pain lasting more than 72 hours, please let your doctor or specialist nurse know as soon as possible.
- Cause a temporary increase in the intensity of your day-to-day symptoms such as flushing, sweating, palpitations or wheezing and increased frequency of diarrhoea. This is usually limited to 24 hours following treatment. You may need to increase the amount of anti-diarrhoea medication you are taking.
- Result in temporary hair thinning or minimal hair loss. Your hair will regrow normally after treatment finishes.
- Make you feel tired for a few weeks following treatment.
 Your clinical nurse specialist will talk to you about how you can manage any tiredness after each cycle of treatment.
- Alternatively you may feel no different.

Side effects related to the radiation dose

Lutathera can affect parts of your body other than the tumour. In particular, it may affect your bone marrow and kidneys. This can make you feel more tired than usual, or be more prone to viral infections for 4-6 weeks after treatment. Your kidney function may also decrease.

You will have blood tests around 4 weeks after your treatment finishes to monitor these potential side effects. The results of these tests may influence when your next treatment can be given, but we will discuss all of this with you.

Side effects from the radiation can also include damage to healthy cells, although these cells take up much lower amounts of Lutathera compared to the tumour itself. There is a very low risk that this might damage your bone marrow or cause a secondary blood cancer in the future, several years after you have completed your treatment.

Why do we mention precautions?

You will be radioactive for a while after the treatment and will therefore stay in an isolation room on the ward. You will have to remain in isolation until the amount of radioactivity in your body has dropped to a safe level to return home. This usually takes 24 hours.

Once you return home, we will ask that you follow precautions described later in this leaflet. This is to reduce the dose to members of the public, including your friends and family. We are particularly cautious of the potential dose to people who are pregnant and young children.

What precautions should I take whilst in hospital?

- Drink plenty of fluids.
- Shower freely.
- Rinse your washcloth and toothbrush thoroughly.

- Flush the toilet twice after use. To avoid any splashes we ask people to sit down when using the toilet.
- Please use disposable tissues rather than handkerchiefs.
- If you experience prolonged constipation please inform the nursing staff.
- Wash your hands before eating, reading or handling items.
- Tell the nurses straight away if you have an accident with urine spillage or splashing, vomiting or diarrhoea.

Although you are in a room on your own, the nursing staff will be in regular communication with you. They will bring your meals, but will not clear your plate. Meals will be served on a paper plate for disposal in the bin. Nursing staff are not able to make your bed. However they are always available if you feel unwell.

How long will the radioactivity stay in my body?

Excess Lutathera leaves your body, mainly in your urine. Drinking plenty of fluids after each treatment will help your body to do this more quickly. The radiation dose also naturally reduces each day. During your treatment we will monitor you and take measurements of the radiation activity (dose rate).

Will I have to have another scan or treatment?

You will have a scan in the nuclear medicine department. This allows us to check the distribution of Lutathera in your body. This scan will be the morning after your therapy has been given. It is performed using a gamma camera and is very similar to the scan you will have had before your treatment.

What other things do I need to know?

The clothes you wear during treatment will be radioactive. They will therefore need to be disposed of when you are finished treatment. Please wear comfortable clothes you do not mind disposing of. Any clothing needed for going home will be kept outside your room in another part of the ward.

There is a locker in your room. Please do not bring large amounts of money or valuables. You may bring fruit, sweets, biscuits, squash and books. Please keep in mind that you will not be able to take these items home with you when treatment has finished. You can bring and take home your mobile phone. However, if it has a phone cover, please remove this and leave it at home.

If you wear contact lenses it is best not to use them whilst you are having the treatment. Please bring glasses.

As part of NHSGGC, the Beatson has a strict no-smoking policy. You will not be allowed to leave the ward during treatment. It may therefore be helpful to see your GP to arrange for nicotine replacement therapy before you come into the ward.

There is a telephone in your room for receiving calls. Please use this to speak to your family and friends. As explained above, you may also bring in a mobile phone.

We will give you a quality of life questionnaire to fill in and return to us before your treatment starts. This helps to highlight any changes in your wellbeing related to your treatment.

How long must I stay in hospital?

You will be required to stay for a minimum of one night.

May I have visitors?

Visitors are not allowed on the day of treatment as this is when you will be most radioactive. If visitors attend on your day of discharge they may sit in your room behind the lead shield. Visitors should not use your bathroom or eat or drink any of your food in the isolation room.

It is important that children under the age of 18 and people who are pregnant do not visit during this time.

Are there any precautions when I go home?

When you are ready to go home, we will give you a precautions letter. This will have instructions and guidance about close contact with other people. You may want to discuss them with your family if necessary. We hope that these precautions will not make life too hard for you. You may have to plan to take some time off work, and avoid public transport or certain social activities.

How can I reduce the radiation dose to other people?

When you receive your precautions letter, it will give you two sets of advice about precautions: one-week and two-weeks:

 For one-week you should have separate living arrangements to avoid young children and people who are pregnant. Avoid long journeys on public transport and social activities where you may be close to others for a long period of time (e.g. cinema). For two-weeks you must not share the same bed with your partner. Avoid prolonged close contact with people who are pregnant and young children. Maintain high standards of personal hygiene to avoid contaminating others.

How may I travel home?

Generally, you may go home by private car or local taxi, provided you are not travelling with children or people who are pregnant. You should not sit directly behind the driver. Please sit in the back seat, behind the passenger seat.

You may be able to go home by public transport depending on the length of your journey. If we would rather you did not take public transport, we will arrange alternative transport for you.

When may I go back to work?

We will advise you when you can return to work and will discuss this individually with you. Please let us know if you:

- Work with children, for instance as a teacher or a nurse.
- Have close contact with people who are pregnant at work.
- Work in the food preparation industry.
- Think that a small amount of radiation might affect your job.

If in doubt, please discuss this with us.

Can I travel?

You will be advised when you can use public transport. However if you are planning to travel abroad, particularly on a flight, please let us know about it. We need to ensure that it is safe for you to sit close to someone for the length of your flight. Also, many airports and ferry terminals now have radiation detectors as part of their security systems. Recently, there have been a few cases where these detectors have been triggered by radionuclide therapy patients. We are happy to provide a letter explaining your treatment, which can be produced in the event of any problems.

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