

Lutetium-177 PSMA (Lu-PSMA) Therapy

Radiation Safety Instructions for Patients

May 2023

You have been treated with a radioactive compound
¹⁷⁷Lutetium PSMA

Are there any precautions after I leave hospital?

- We know that the radiation risks of this medicine are low due to world-wide experience using ¹⁷⁷Lutetium for other treatments.
- When you leave the department a small amount of radiation continues to be emitted from your body for up to one month and we therefore ask you to follow certain precautions to minimise radiation exposure to the people around you. These precautions are based on the principle that the amount of radiation received by people around you decreases markedly with time and distance.
- Typically within 2 hours of the administration of ¹⁷⁷Lu-PSMA the level will have fallen to about one-half of what you were originally administered, and after 6 hours will have fallen to about one-quarter. This is mostly passed out of your body in your urine. Most of the remainder will be taken up in the tumour cells where it will remain and irradiate these cancer cells over a period of up to one month.

For 5 days from the time of treatment:

Sleeping

- Do not sleep in the same bed as another adult or child. Beds should be at least 3 metres apart even if there is a wall between them. You should also refrain from sexual contact for this period.

Contact with adults that you live with

- Maintain a distance of at least 1-2 metres from those that you live with where possible. You should limit prolonged close contact (i.e. less than 2m) with anyone to less than 2 hours per day. For people over 60 years of age, the precautions are less important and can be relaxed if this is an issue for you and your family, although you should discuss this with the Nuclear Medicine Physician.

Contact with members of the general public

- Maintain a distance of at least 1-2 metres where possible. You should limit close contact (i.e. less than 2m) with members of the general public to less than 2 hours per day (avoid pregnant women or children, see below). This means that you should avoid long trips on public transport, trips to the theatre, movies or any activity where you might be in close contact with other people (e.g. a work environment).

Contact with children and pregnant women

- Avoid or limit close contact (i.e. less than 2m) with young children and pregnant women to less than 15 minutes per day.

- If your children are under 5 years old, minimise hugging or holding and avoid prolonged contact. Children under 3 years should be preferably looked after by someone else (e.g. relatives or friends).

Return to work (child care worker)

- If you are a child care worker, do not return to work for another 2 days (i.e. 7 days from time of treatment).

Return to work

- For all other occupations, do not return to work for another 1 day (i.e. 6 days from time of treatment).

Other general radiation safety precautions:

- You should take extra care with hygiene when using the toilet as your urine will contain some radioactive ¹⁷⁷Lutetium. The toilet should be used in a seated position to avoid spillage of urine.
- You should flush the toilet twice each time. It is important to wash your hands thoroughly afterwards.
- For carers: when providing assistance in the bathroom, the carer should wear disposable gloves. If urine catheter bags are used, the urine should be emptied into the toilet and flushed twice. All urine spillage must be wiped clean. Dispose of any waste and disposable gloves in a garbage bin outside.
- You can use public transport (buses, trains and airplanes) as long as the journey is no longer than 2 hours. If you are taking a taxi sit in the back left passenger seat to maximise the distance from the driver.
- If you intend to travel internationally you may trigger sensitive radiation detectors which have been installed in some airports, even for 1-2 months after the treatment. The hospital can supply you with a letter advising that you have had radioactive therapy. Please discuss this with the Nuclear Medicine Physician.
- If you have medical or dental appointments within 3 days after therapy, please inform your doctor or dentist you have been treated with ¹⁷⁷Lutetium.

Contact our San Radiology & Nuclear Medicine team for more information:

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