

Longer term side effects

You may feel more tired than usual and be prone to infections due to the radiation affecting your kidneys and bone marrow. This may last for a few weeks. You will have regular blood tests to monitor the potential side effects

PRRT and pregnancy

As PRRT involves radiation it is not given during pregnancy as it can harm the developing baby. Both men and women are advised not to try to conceive during their treatment and for at least six months after treatment. Reliable contraception should be used throughout this period.

Travel and Accommodation

If you require transport to your treatment centre contact your GP to arrange this. Accommodation for family members is not provided but preferential rates in local hotels can be arranged through the treatment centre. Grants are available from Macmillan and the NET Patient Foundation towards travel and accommodation.

South Wales Neuroendocrine Tumour Service



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Peptide Receptor Radionuclide Therapy (PRRT)

This leaflet is designed to give you a brief understanding of PRRT. Further information will be given to you at the centre you have been referred to.

What is PRRT?

PRRT is a targeted radionuclide therapy that aims to inhibit tumour growth and reduce symptoms associated with the tumour. It uses a peptide hormone (somatostatin analogue) linked to a substance that emits radiation (Lutetium-177 or Yttrium-90). This combined drug is given as an infusion into a vein. It then attaches itself to the surface of neuroendocrine tumours, (via receptors called somatostatin receptors). The Lutetium-177 or Yttrium-90 is then emitted into the tumour with radiation destroying cancer cells.

Why do I need this treatment?

PRRT is offered to some patients with gastroenteropancreatic NETs when they are not responding to current treatment or when there has been some progression of their condition. It is not suitable for every patient with a NET. Your doctor should have discussed this treatment with you and prior to treatment, you will have had an octreotide scan or Gallium⁶⁸ PET scan to confirm your tumour has somatostatin receptors. You will also have temporarily stopped long acting somatostatin analogue injections (Sandostatin LAR or Lanreotide Autogel) 4-6 weeks prior to treatment date; these can be restarted afterwards.

What Happens?

PRRT is given in 4 cycles over a period of approximately 10 months. You will attend an outpatient appointment before your treatment begins and will need a CT scan which is usually arranged locally.



Each cycle is given as an inpatient and you will most likely be required to stay in hospital at least 1 night. You will have a room to yourself and visitors have restricted access due to the radiation.

Before the treatment starts you are given an infusion to protect your kidneys from the effects of the radiotherapy. Then the nuclear medicine team will come and give you the treatment, again as an infusion. You can eat and drink as normal through the treatment. The following morning you may have a brief scan in the nuclear medicine department (those patients having treatment in the morning may have this later in the day) and you may then be discharged.

When you are home you will be given advice on how to reduce the radiation dose to people around you for a few weeks. You will also need regular blood tests that can be arranged with your GP to monitor for side effects.

Will I Experience Side Effects?

You **may** experience side effects from the treatment itself and some relating to the radiation dose in your body.

Short term side effects

- Nausea and vomiting
- Increased flushing, diarrhoea, palpitations, wheezing for about 24 hours
- Increased pain
- Tiredness for up to a few weeks

Please tell your nurses if you have any symptoms so that they can be treated appropriately and quickly.