Lutetium-177 PSMA Therapy
For Metastatic or Treatment Resistant Prostate Cancer

Patient Information Guide
What Is Lutetium-177 PSMA Therapy?

Lutetium-177 PSMA Therapy, or Prostate-Specific Membrane Antigen Therapy, is treatment that is increasingly being used for people with advanced prostate cancer. This therapy aims to reduce the size of the tumour/s and stop them from multiplying, as well as to ease the symptoms that people may get with these tumours. It is most often used when the disease has metastasised and when other therapies are poorly tolerated or have failed. In certain patients, it appears to be able to produce long term remission.

How Does Lutetium-177 PSMA Therapy Work?

PSMA is a type of protein located on the surface of a cell and is naturally found on the prostate gland. In someone with prostate cancer, an increased amount of PSMA cell surface receptor is present. If the prostate cancer has spread to other parts of the body (i.e. metastasised) the PSMA will also appear in those areas. Lutetium-177 PSMA Therapy uses a molecule which attaches itself to the PSMA receptors on the cancer cells. Before it is administered, the PSMA molecule is bound with Lutetium-177, which emits beta radiation, a destructive type of radiation that damages the cancer cells when it is in close proximity to them.
Over time, it destroys the prostate cancer cells. The PSMA molecule acts as a means of transporting the radiation to the tumour site, so that the whole body does not get exposed to the radiation. This is often referred to as Peptide Receptor Radionuclide Therapy (PRRT).

**Is This Treatment Safe?**

The radiation used in this therapy is designed to damage and kill the cancer cells. As the PSMA travels to the tumour locations, it targets the unhealthy cells. Aside from the prostate gland and cancer cells, PSMA is also found in the salivary glands, lacrimal glands, kidneys and small intestine, so the PSMA molecule can also take the damaging radiation to these healthy areas. Any damage to these areas, however, is minimal. Side effects of this type of therapy may include a dry mouth, tiredness and a brief decline in the production of blood cells. Blood tests are performed intermittently to ensure the radiation is not damaging healthy tissue.

**When Would I Consider Using This Treatment?**

This type of therapy is very specific, and is used on people with cancer originating in the prostate. It is used for managing metastatic prostate cancer or prostate cancer that is no longer responsive to other types of treatment. Nearly all types of prostate cancer will produce excessive PSMA, however prior to starting the therapy, a diagnostic scan is performed (Gallium PSMA PET CT) to ensure the radiation will target the right areas during treatment.
What Do I Do Now? What Is The Process?

Step 1: Enquire via the Theranostics Australia (TA) Website.

Step 2: Obtain a referral from a General Practitioner or Specialist

Step 3: Access the TA Portal with credentials assigned to you by Theranostics Australia or an approved Medical Provider.

Step 4: Complete the Patient Questionnaire and upload requested medical files to your account.

Step 5: Organise an initial consultation with a TA physician either in person, teleconference or via Skype.

Step 6: The TA physician will advise of your options. If you meet the therapy criteria and agree to the various consents, your treatment can commence.

How Do I Contact Theranostics Australia?

Administration
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