

Media Release

29 May 2015

Taking aim at prostate cancer

Calvary Mater Newcastle cancer researchers take a lead role in exploring the use of advanced radiotherapy to treat prostate cancer



Calvary Mater Newcastle researchers, in collaboration with Liverpool Hospital in Sydney, have developed a treatment option for men with prostate cancer using stereotactic radiotherapy, which gives very high doses of radiation to the prostate, without the need for a surgical procedure.

The clinical trial is called PROMETHEUS, with patients being treated on Calvary Mater Newcastle's new TrueBeam machine, the latest and most advanced radiotherapy technology, where the equivalent of two weeks of radiotherapy can be delivered in only 90 seconds.

The standard treatment before this new option was the use of high dose rate brachytherapy prior to a course of external beam radiotherapy. Unfortunately, this approach requires a surgical procedure to insert rods directly into the prostate, requiring a trip to Sydney, an anaesthetic and then recovery time.

Associate Professor Jarad Martin, Radiation Oncologist, Calvary Mater Newcastle, is leading the PROMETHEUS trial in Newcastle and hopes the early initial successes translate into longer term improvements in outcomes. Jarad says, "Men on this study in Newcastle are accessing leading edge technologies that have been brought together to minimise risks and maximise the chance of curing the disease. Final results are still some years off, but the early data is very encouraging, with several other hospitals around Australia now wishing to join this study."

Treatment accuracy is a key part of these treatments according to Lee Wilton, Senior Radiation Therapist, Calvary Mater Newcastle, "We are excited to be leading the way in Newcastle in the use of these advanced technologies for men with prostate cancer. By using novel real-time imaging of the prostate during treatment, we are able to be confident that the radiotherapy is being delivered to exactly where we need it."

The technical demands of PROMETHEUS are significant, and the medical physics group at Calvary Mater Newcastle has risen to the challenge. Lead Research Physicist at Calvary Mater Newcastle, Professor Peter Greer, describes this study as a great opportunity to assess new methods of accurate radiotherapy treatment delivery. Peter says, "The men on the PROMETHEUS study benefit from several cutting edge technologies. Some were developed elsewhere but Calvary Mater Newcastle is the first outside centre to use them. Others were developed here in Newcastle and are already generating a huge amount of interest from other hospitals."

A patient currently completing his treatment on the PROMETHEUS trial commented, "It was fantastic to have the opportunity to take part in this important cancer research. I've had no side effects going through the treatment, and have every confidence of getting the right result which is to be cancer free."

-ENDS-