Radio-guided Occult Lesion Localisation using Iodine-125 Seeds (ROLLIS) for breast cancer

This technology was funded through the New Technology Funding and Evaluation Program (NTFEP). The NTFEP funds the introduction and evaluation of new technologies that:

- Are safe and effective
- Provide better health outcomes
- Provide value for money
- Provide greater access to care.

The evaluation findings will inform recommendations regarding the future use and/or investment of the technology within Queensland.

What is the technology?
ROLLIS is a technique where a small seed containing a very low dose of radioactive tracer (Iodine-125) is placed into the breast lesion by the radiologist. The surgeon uses a hand held probe in theatre to accurately localise the lesion, plan the most appropriate incision and then remove the lesion together with a margin of surrounding normal tissue. Previously, hookwires where used to localize the lesion. The ROLLIS technique can be applied to all lesions, malignant or benign, which are impalpable and therefore require preoperative localization. In October 2017, the Gold Coast unit hosted the first training workshop for national and international participants.

What were the evaluation findings?

Patients were enthusiastic about ROLLIS and reported superior comfort and acceptability of ROLLIS over the comparator.

No patient experienced a significant adverse event. This was achieved with the support of ROLLIS team in WA and learning from their experience.

Radiologists and surgeons find the ROLLIS technique similar to hookwire, but Pathologists need to learn new skills and the learning curve is longer.

ROLLIS is suitable as the preferred localisation method and for diffusion beyond the Gold Coast Hospital and Health Service.

Patients with ROLLIS can have their surgery scheduled first for the day – no delays, greater management of other medical conditions (e.g. diabetes), or services (e.g. interpreters).

ROLLIS enables improved efficiency and flow in radiology and in the operating theatre allowing more procedures to be performed with the same staffing.

Where was it evaluated?
Robina Hospital, Gold Coast Hospital and Health Service (Evaluation completed 2017)

Funding provided
$92,305

Want more information?
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