



TARGeted Intraoperative radioTherapy (TARGIT)

A patient's guide

What is TARGIT?

TARGIT stands for TARgeted Intraoperative radioTherapy. In suitable patients, it can be given during a lumpectomy for breast cancer, instead of postoperative radiotherapy

Postoperative radiotherapy

Traditionally radiotherapy is given to the entire breast. As it is not focused, it needs to be given in daily small doses over three to six consecutive weeks. Small scatter of radiation can harm the heart and lungs especially in smokers.



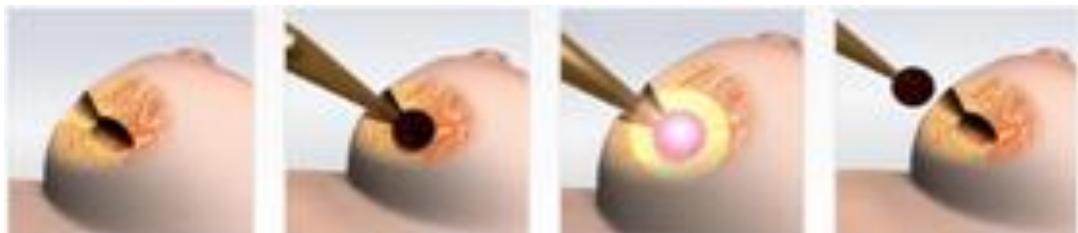
The TARGIT procedure

TARGIT is focused on the tissues surrounding the cancer, immediately after your lumpectomy to minimise the risk of recurrence.

A ball-shaped radiation applicator is placed precisely in the tumour bed. TARGIT is given over 16-35 minutes, then the applicator is removed and skin closed.



TARGIT avoids radiation to the skin and other healthy tissues such as the heart and lungs.



Has TARGIT been clinically proven?

TARGIT has been extensively tested in clinical trials over the past 20 years. The TARGIT-A trial, a randomised clinical trial, included 3451 patients treated in 33 hospitals in the UK, Europe, USA and Australia. TARGIT was compared with conventional radiotherapy given over several weeks.

Giving TARGIT meant that patients had better quality of life, less pain, better cosmetic outcomes. With TARGIT, the chance of being alive without breast cancer recurrence was 93.9% compared with 92.5% with traditional radiotherapy; the chance of dying from heart attacks and other cancers was slightly lower.

“TARGIT meant I avoided the trauma of weeks of radiotherapy, and I suffered none of the common side effects of standard radiotherapy”.



What will it involve?

You will have your lumpectomy the usual way and TARGIT will be given during the operation. Afterwards you will be able to go home on the same day or after an overnight stay.

The wound care is similar to a standard lumpectomy, but the sutures or ‘steristrips’ need to be left for at least 14 days.

Compared with conventional treatment, there is less risk of radiation damage to the skin, but a slightly higher chance of fluid collecting in the wound. This does not delay the healing process.



For around 15-20 percent of women, doctors may recommend additional radiotherapy after TARGIT, if detailed microscopic examination of tumour tissue suggests it is necessary.

Key points

- **Takes less time:** TARGIT is completed during surgery rather than a several weeks' course of daily treatments.
- **Protects healthy tissues:** It avoids damage to the heart, lungs and other organs.
- **Avoids delay:** Radiation does not need to be delayed until after chemotherapy.
- **A lower number of skin injuries:** Fewer radiation related skin problems.
- **Flexible as per individual needs:** TARGIT can be supplemented with whole breast radiation if necessary.

A piece of history

TARGIT was developed in 1998 at University College London by Professor Jayant Vaidya, Professor Jeffrey S Tobias and Professor Michael Baum with funding from Department of Health, UK

TARGIT is routinely used in over 350 centers in 35 countries and 20-30,000 patients have been treated.

In January 2018, NICE recommended TARGIT to be used in centers that have the equipment and expertise.



“The most important benefit of TARGIT for a woman with breast cancer is that it allows her to complete her entire local treatment (lumpectomy and radiation therapy) at the time of her operation, with lower toxicity.”

Latest research on TARGIT IORT with intrabeam:

- Risk-adapted targeted intraoperative radiotherapy versus whole-breast radiotherapy for breast cancer: five-year results for local control and overall survival from the TARGIT-A randomised trial: Vaidya JS, Wenz F, Bulsara M, Tobias JS, Joseph DJ..., Baum M. **The Lancet** 15 February 2014; 383:603-613



- An international randomised controlled trial to compare targeted intra-operative radiotherapy (TARGIT) with conventional post-operative radiotherapy after conservative breast surgery for women with early stage breast cancer (The TARGIT-A trial). Vaidya JS, Wenz F, Bulsara M, Tobias JS, ..., Baum M. **Health technology assessment** 2016;20(73).

More information: www.targit.org.uk

Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or whh-tr.whithealthPALS@nhs.net

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