

“Targeted Intraoperative Radiotherapy Proven Safe and Effective In Long-Term Study”

It is with great pleasure that I announce the publication of the long-term results of the TARGIT-A Trial, a clinical trial that compared partial breast single dose targeted intraoperative radiotherapy (IORT) to 3-6 week post-operative whole breast radiotherapy among women undergoing lumpectomy for early stage breast cancer. The clinical trial publication, which I had the privilege of co-authoring, reported equal breast cancer recurrence rates and equal cancer survival rates among recipients of targeted IORT during lumpectomy compared to those receiving multiple weeks of whole breast radiation after lumpectomy. The paper was published today in the [British Medical Journal](#).

With long term follow-up (median 8.6 years, maximum 18.9 years), the TARGIT-A Trial demonstrated no significant difference in the 5-year local recurrence rate and 8.6 year local-recurrence free survival rate, breast cancer survival rate, and overall survival rate. Women receiving targeted IORT had a significantly lower risk of dying from other causes (e.g., heart disease or cancers)(See Table).

| 10 year Outcomes | Targeted IORT | Whole Breast Radiotherapy | Statistical Comparison |
|---------------------------------|---------------|---------------------------|------------------------|
| Local Recurrence Rate (5 years) | 2.11% | 0.95% | Equal |
| Local Recurrence-Free Survival | 84.12% | 85.47% | Equal |
| Mastectomy-Free Survival | 84.24% | 82.92% | Equal |
| Distant Disease-Free Survival | 87.28% | 85.16% | Equal |
| Overall Survival | 89.61% | 86.79% | Equal |
| Breast Cancer Mortality | 6.63% | 6.17% | Equal |
| Death From Other Causes | 4.03% | 7.50% | IORT Better |

Recognizing the potential of targeted IORT, I started performing targeted IORT in 2006 as only the second U.S. co-investigator in this 2,298 subject multicenter, international clinical trial in which half of the women were randomly selected to receive targeted IORT at the time of lumpectomy and the other half were randomly selected to receive whole breast radiotherapy after surgery. I have great appreciation for the women who participated in the clinical trial, particularly my patients. These women are true trailblazers who have paved the way to effective, safer, less burdensome breast cancer care for future women.

The TARGIT-A trial is largely responsible for establishing IORT as a standard of care option for early stage breast cancer in the United States. IORT is now covered by Medicare and most health plans—the result of a decade-long advocacy effort involving myself and others. In addition to being effective, separate publications have shown targeted IORT to be associated with fewer side effects, improved quality of life, and reduced healthcare cost compared to whole breast radiotherapy.

Although several methods of IORT are performed in the United States, targeted IORT is the only method of IORT delivery whose safety and effectiveness have been evaluated and proven in a randomized controlled trial, as evidenced by TARGIT-A publication.

You may read the entire TARGIT-A Trial publication by selecting this [link to the article](#).