

About APBI Brachytherapy

Two decades of data have established breast conservation therapy (BCT) as the standard of care in early stage breast cancer. The traditional approach for radiation therapy as part of BCT has been a full course of whole breast irradiation (WBI), which exposes the entire breast and surrounding critical structures to radiation and requires daily treatments for four to six-and-a-half weeks.

APBI brachytherapy is a targeted form of radiation that is delivered after surgical excision of the tumor (lumpectomy) to only the area of the breast where the cancer was removed. This is accomplished by introducing a radiation source through a series of narrow tubes or struts that are placed inside the breast at the location where the tumor was removed.

APBI Brachytherapy offers:

- **Demonstrated Efficacy:** Cancer control and long-term survival rates similar to WBI.^{i,ii,iii,iv}
- **Minimized Risk of Side Effects:** Precision delivery enables surrounding healthy tissues to be spared from unnecessary radiation, reducing toxicity/damage to healthy breast tissue and nearby structures such as the chest wall, heart, lungs or skin.^{v, vi, vii}
- **Preservation of Future Treatment Options:** In the case of a tumor recurrence BCT can be performed a second time with APBI brachytherapy allowing the breast to still be preserved and avoiding mastectomy.^{vii}
- **Excellent Cosmetic Results:** Limited fibrosis and skin toxicity, providing excellent cosmetic results.^v
- **Convenience:** The short treatment course (five days or less) allows patients to get back to their routines more quickly.^{viii}

Additional support for APBI Brachytherapy:

- Since its introduction in the late 1990s, more than 100,000 women in the U.S. have received APBI brachytherapy.
- Concerns about potential side effects and the duration of WBI have been cited as one reason that up to 50 percent of patients in the U.S. either fail to receive radiation or choose mastectomy to avoid radiotherapy.^{ix}
- Consensus statements and guidelines from three leading medical societies (GEC ESTRO, ABS, ASTRO) recommend use of APBI with women ≥ 50 with cancers are stage 0-2.^{x,xi,xii}

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- ^{xii} Correa C, Harris EE, Leonardi M, et al. , Accelerated Partial Breast Irradiation: Executive Summary for the Update of an ASTRO Evidence-Based Consensus Statement, *Practical Radiation Oncology* (2016)