



AccuBoost[®]

for image guided breast irradiation



A patient's guide to

AccuBoost[®]

The only non-invasive brachytherapy treatment option for early-stage breast cancer.

Why AccuBoost®?

The AccuBoost® Technique is the latest innovation in breast brachytherapy that enables your radiation oncologist to achieve the goal of confidently targeting the radiation dose to the lumpectomy cavity margin – the tissue that is the most likely site of future recurrence. The AccuBoost® Technique combines the power of Breast Immobilization and Real-Time image-guidance with Non-Invasive, Shielded Brachytherapy Applicators. This approach allows the radiation oncologist to deliver a well-defined beam of radiation and targets the radiation dose accurately and reliably to the surgical excision site while strongly limiting unintentional exposure to otherwise healthy tissue, minimizing radiation-related side effects. ^{1,2,3}

Hitting the Bull's Eye – The Importance of IGRT

While seated at a Mammography machine the breast will be immobilized using only a fraction of the pressure of a mammogram. The immobilization, combined with the clear mammography images, allows your radiation oncologist to confidently target the lumpectomy cavity and surrounding tissue. AccuBoost® applicators will then be placed on the x-ray imaging paddles that are used to immobilize. The applicators, similar to a flashlight, deliver beams of penetrating radiation to the breast tissue that lies directly in front. By properly imaging the surgical site and positioning the applicators at multiple angles around the breast, a therapeutic dose is accumulated in the target tissue without over-exposing the skin and intervening tissue. ^{1,2,3}

Conformal Dose, Low Toxicity & Excellent Cosmetic Results

By virtue of delivering both a more conformal dose and less exposure to healthy tissue, the AccuBoost® Treatment approach has been shown to provide favorable cosmesis. Recent multi-institutional studies show ^{2,4} excellent cosmetic outcome and few complications during the acute phase.



Breast Conservation Therapy with AccuBoost

The AccuBoost® Treatment is a non-invasive method of delivering radiation to the breast of patients opting for Breast Conservation Therapy (BCT). This proven approach combines image guidance, breast immobilization and shielded Tungsten applicators to deliver the radiation dose to the lumpectomy site within the patient's breast using a technology known as Brachytherapy.

BCT Treatment Options

In BCT, there are two primary radiation treatment options:

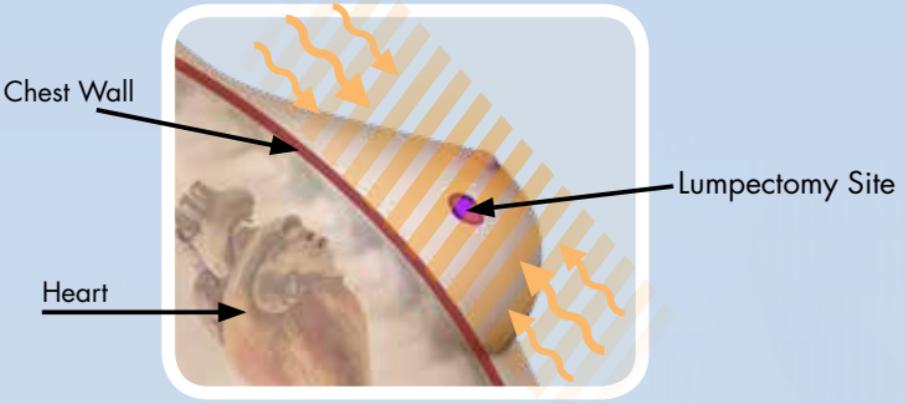
Whole Breast Irradiation (WBI) plus a radiation "Boost" - to the tissue near the site of the original cancer, the most likely site for a recurrence taking typically 3-6 weeks or;

Accelerated Partial Breast Irradiation (APBI) - A technique that targets the radiation to tissues immediately around the lumpectomy site over a period of 1-2 weeks.

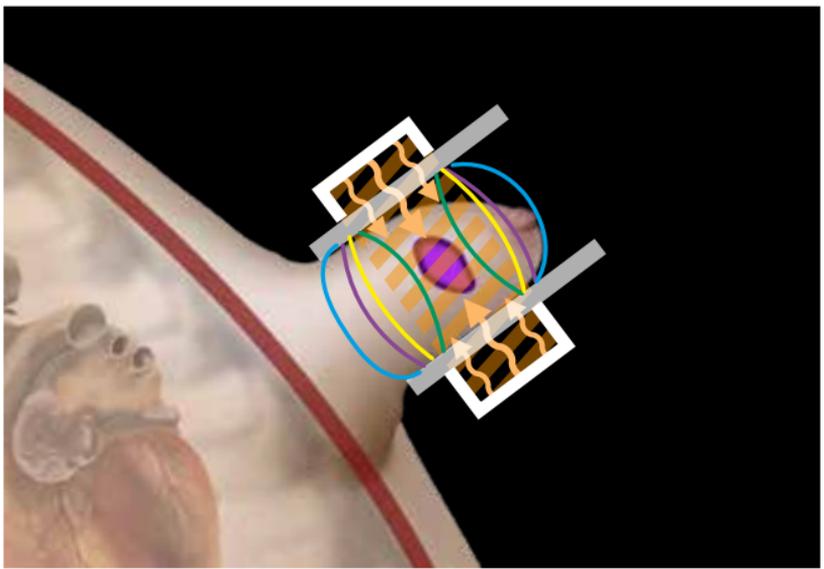
The AccuBoost Technique allows the doctor to confidently deliver either form of treatment.

AccuBoost® for Boost

Whole Breast Irradiation



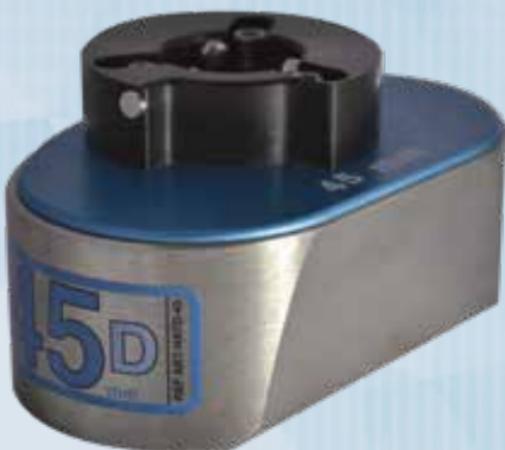
Followed by a Boost Dose

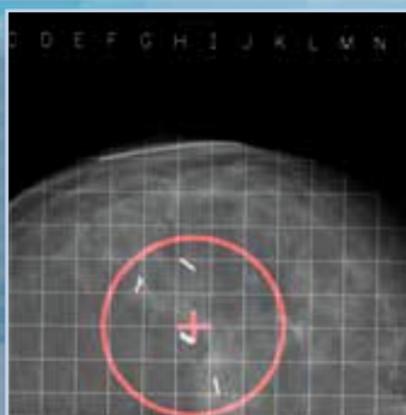
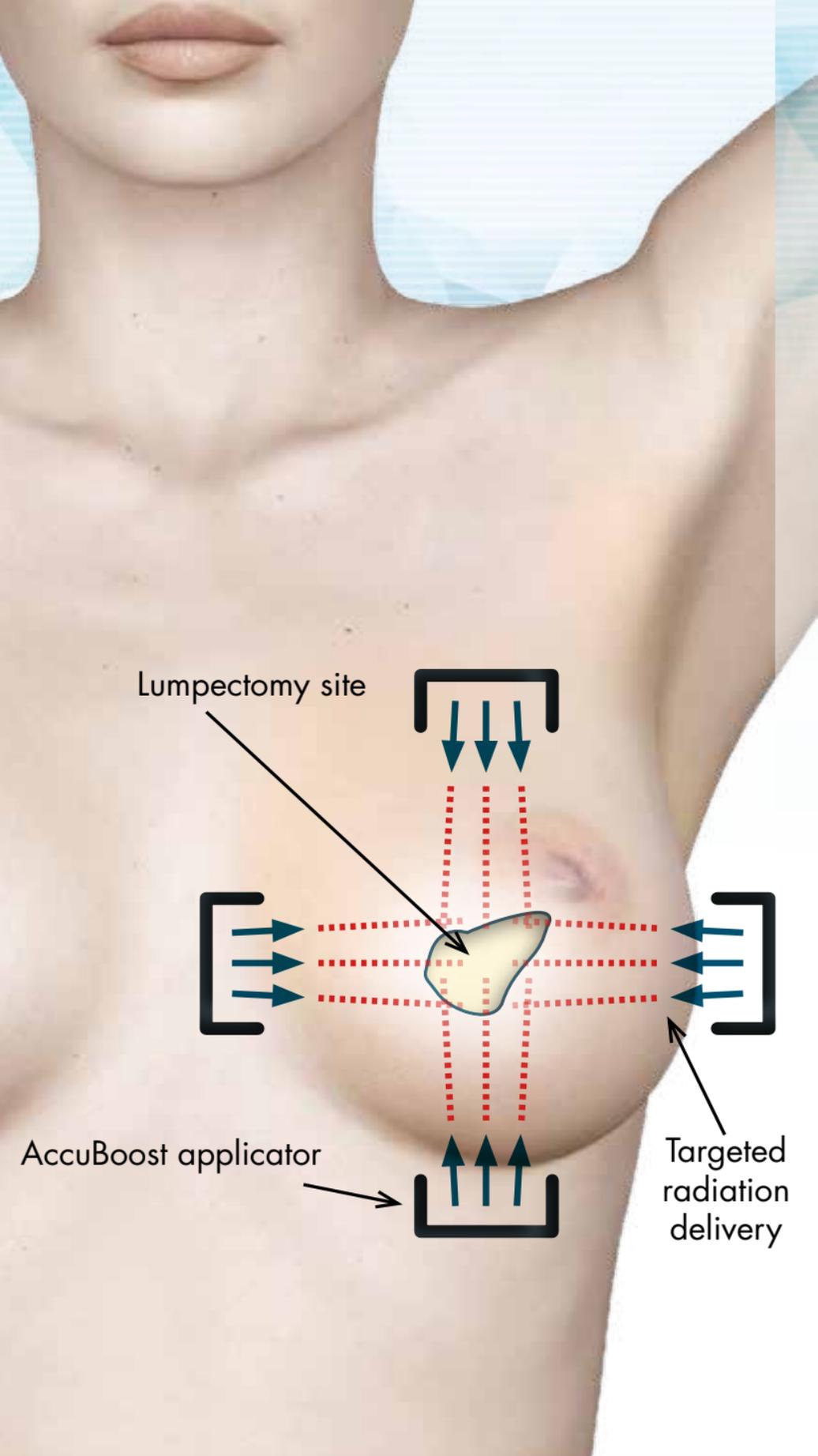


AccuBoost®

Features for Boost

- **Flexible Treatment Schedule** – before, during or after WBI
- **Low Toxicity** – spares dose to healthy tissues
- **Targeting Accuracy** – through daily image-guidance
- **Cosmetics** – Excellent cosmesis





The AccuBoost® Process

- 1 The breast is imaged to identify the lumpectomy site in need of the boost dose.
- 2 The AccuBoost® applicators are positioned on opposing sides of the breast to deliver a confirmed radiation field to the lumpectomy site.
- 3 In the next step, the x-ray system is reoriented to target the radiation to the lumpectomy site from a different direction.
- 4 A higher dose is accumulated in the target tissue while sparing the dose to normal skin and tissues.



Treat Horizontally

3



Accumulate Dose
To Target

4

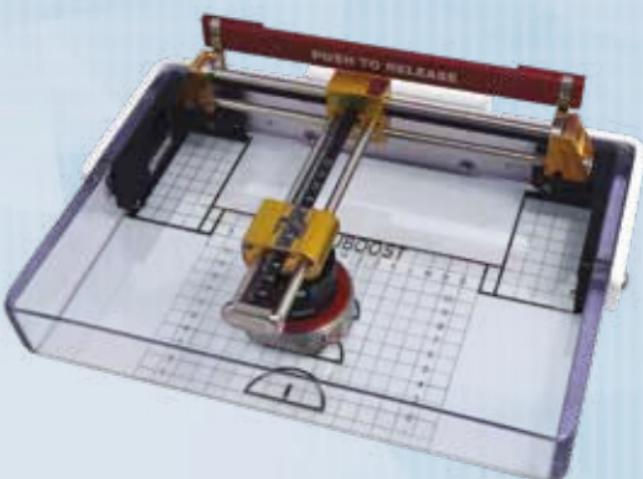
AccuBoost® for APBI



AccuBoost: Non-Invasive Breast Brachytherapy

Features for APBI

- **Non-Invasive** – Novel, proven approach eliminates implanted device related infections and complications
- **Flexible Treatment Schedule** – 5 or 10 day options
- **Low Toxicity** – spares dose to healthy tissues
- **Targeting Accuracy** – through daily image-guidance
- **Cosmetics** – Excellent cosmesis



Patient Testimonials



"I chose AccuBoost because it was only treating my breast, not my chest wall and healthy tissues."

- **Linda Schuk** Breast Cancer Survivor & AccuBoost Patient



"One of the reasons I decided AccuBoost was the right treatment option for me was the flexible schedule.

I really liked the idea of being able to go through radiation treatment in one week."

- **Sandra Bibb** Breast Cancer Survivor & AccuBoost Patient



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REFERENCES

- 1 Sioshansi, Int J Radiation Oncology Biol Phys, 2011
- 2 Hamid, Int J Radiation Oncology Biol Phys, In Press
- 3 Leonard, Clinical Breast Cancer, 2013
- 4 Schuster, Red Journal, 2015

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As with any medical decision, please consult your radiation oncologist to see if AccuBoost is the best choice for you.