

AccuBoost® Booster Club

Notes from the Editor:

This issue reports on the latest AccuBoost developments: new additions to the team, the implementation of AccuBoost at 4 new facilities, and the company's trade-show/exhibition schedule in 2013.

The highlight of this issue is the announcement of the buy back of AccuBoost assets and contracts for some 20 facilities from Elekta that, up to now, were jointly owned.

The main feature of this issue is a summary of the recent matched-paired analysis that compares the side effects of AccuBoost with the alternative *en-face* electron boost by external beam and demonstrates some of the inherent benefits of the procedure. The study was presented as a poster at ASTRO 2012.

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New AccuBoost Installations:



1st Line Oncology, as the name may suggest, is a first class community based facility in Coconut Creek, South Florida that has recently joined the family of AccuBoost users. 1st Line Oncology was established by Ed Kaplan, MD. The facility takes



pride in offering the latest technology for the benefit of its patients. Dr. Kaplan has plans to use AccuBoost for boost as well as monotherapy – APBI.



The Lahey Clinic Hospital is a nationally recognized center offering the highest degree of care and the latest and best in medical technologies for patients

in the greater Boston, Massachusetts area. Lahey is among the most recent facilities that has committed to make the AccuBoost procedure available for the benefit of their patients. In fact, Lahey has simultaneously signed up for two AccuBoost Systems for the main headquarters in Burlington and the North Shore facility in Peabody, Massachusetts.



Lahey Clinic, Burlington, MA

The effort at Lahey is spearheaded by Andrea McKee, MD, the chair of radiation oncology and a breast cancer specialist. The treatment of breast cancer represents a particularly large portion of patient treatments at each of the Lahey Clinics.

† CATHOLIC HEALTH INITIATIVES®

Saint Elizabeth
Regional Medical Center
CANCER INSTITUTE

St Elizabeth Medical Center in Lincoln is the first hospital in Nebraska to be offering the AccuBoost procedure. The facility decided to acquire an HDR after-



loader, primarily, for the purpose of offering the AccuBoost procedure. The facility is under the direction of Kevin Yiee, MD, radiation oncologist.



AccuBoost will be exhibiting at the 2013 ACRO Annual Meeting Feb 14-16th Booth No.38

New Addition to the team



Kevin Hunt is the latest addition to the AccuBoost team. He has been hired as the AccuLoader Account Manager. His responsibility is to identify and be responsive to facilities that are interested in the AccuBoost offering but lack the prerequisite HDR afterloader.

Kevin is a veteran of medical device industry capital equipment sales with a concentration in diagnostic equipment. He has extensive experience in market analysis and the ability to identify market opportunities and focus on appropriate targets.

Buy back of AccuBoost installations

According to the January 14, 2013 news release, starting with the new year, AccuBoost has acquired the assets of all of Elekta's AccuBoost installations that up to now were jointly held by both com-

"AccuBoost is well positioned to enter into a stage of substantial growth and plans to hire additional staff in the coming months to support the addition of new treatment centers as well as the introduction of additional products."

panies. Over the last three years, Nucletron, an Elekta company, has acted as the non-exclusive distribution partner for AccuBoost and shared the ownership of certain AccuBoost facilities. As part of this repurchase, AccuBoost has acquired the assets and the operating agreements for more

than 20 installations in the U.S. The transaction is designed to enable both companies to focus on their core competencies. It serves the users group by removing the middleman, allowing AccuBoost to

increase its presence and providing the much needed direct support for these installations.

The endorsement and the unqualified support of Nucletron, in the past, has been instrumental to the growth of the AccuBoost procedure to become an established treatment option for partial breast radia-

tion therapy. With this agreement, AccuBoost will resume its lead position to provide direct support to the 20 treatment centers, to concentrate on future growth of the technology and to accelerate the introduction of new treatment options.

Piran Sioshansi, president and CEO of AccuBoost explained, "AccuBoost is well positioned to enter into a stage of substantial growth and plans to hire additional staff in the coming months to support the addition of new treatment centers as well as the introduction of additional products" in the Jan 14th news release on the settlement agreement.

Schedule of events

In 2013, AccuBoost will be participating in many of the key radiation oncology meetings and will display its products at major industry events.

Name of Conference	Dates	Location
Cancer Imaging & Radiation Therapy Symposium (CIRT)	Feb 8 – 9	Orlando, FL
American College of Radiation Oncology (ACRO)	Feb 14 – 16	San Antonio, TX
American Brachytherapy Society (ABS)	April 18 – 20	New Orleans, LA
American Radium Society (ARS)	April 27 – May 1	Scottsdale, AZ
Asociación Latinoamericana de Terapia Radiante Oncológica (ALATRO)	July 28 – 31	Cartagena de Indias, Colombia
American Society of Radiation Oncology (ASTRO)	Sept 22–25	Atlanta, GA

Study shows AccuBoost causes less toxicity

The primary function of radiation therapy for breast cancer is to prevent recurrence. However, an undesired consequence of radiation therapy is the collateral damage and toxicity that is caused. Toxicity, as shown by numerous studies, is directly related to the volume of tissue that is exposed to a high dose. With better targeting and a more conformal dose, AccuBoost has always been believed and indeed expected to be less toxic – however, up to now, there has not been a formal study that measures the lower toxicity of AccuBoost as compared to conventional external beam boost therapy.

Kara Leonard, MD and colleagues at Tufts Medical Center and Rhode Island Hospital (RIH) presented the results of their research study in a poster at the recent ASTRO meeting. This study evaluates the toxicity and compares the outcomes among two similar groups of patients that received either AccuBoost or the conventional *en-face* boost therapy by external beam (EB) from linear accelerators.

Materials and Methods – The clinical outcome and acute and late toxicity in patients with early stage breast cancer treated with whole breast irradiation (WBI) and AccuBoost were compared against the



BROWN

**Breast Boost Using
Non-invasive Image-Guided Breast
Brachytherapy vs. En Face Electrons:
A Matched Pair Analysis**

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matched pair controls of those who were treated with WBI and EB. The controls were identified as the best possible match with respect to age, stage, chemotherapy use, fractionation and to the extent possible breast size and smoking status in patients who were treated during the same time period. There were 47 patients in the AccuBoost group vs 94 in the control for a 1:2 comparison. The Table on the right shows the patient characteristics for the study.

Results – Four patients in the AccuBoost group and 9 in the control group required a break in the treatment. Among the AccuBoost group 39% developed Grade 2+ desquamation as compared to 52% in the control group ($p = 0.07$). Breast size, electron energy (for the EB group) and fractionation were good indicators for acute desquamation, patient age and chemotherapy did not increase the odds. The median follow up for the study was 13.6 months. One patient (2%) among the AccuBoost group developed

grade 2+ skin/subcutaneous fibrosis 15 months after finishing the treatment vs. nine patients (9.5%) in the control group who developed subcutaneous fibrosis and one patient who developed recurrent breast cellulitis (McNemar OR = 0.13 (0.003-0.93); $p = 0.046$).

Study Patient Characteristics

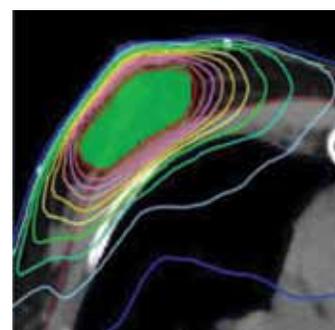
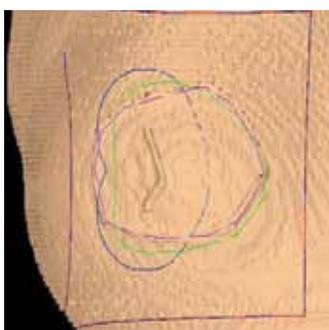
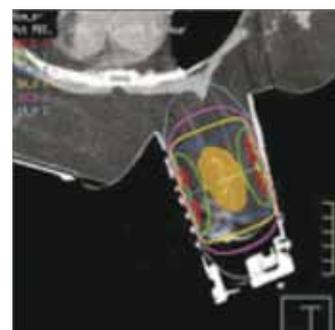
	NIBB (n=47)	EB (n=94)
Age (mean)	58 Yrs	58 Yrs
Stage		
DCIS	12	24
I	28	54
II	6	16
III	1	0
Chemo		
None	31	62
Adjuvant	13	26
NeoAdj	3	6
Electron Energy		
< MeV		44
≥ MeV		50

Discussion – The study reveals that there is less statistically significant skin/subcutaneous toxicity in the

Study shows AccuBoost causes less toxicity (cont.)

AccuBoost group compared to the external beam control. This finding is particularly noteworthy as the boost dose is a relatively small component of the total dose. The study shows that a typical boost dose of 10–16 Gy by AccuBoost when added to the 45–50 Gy of whole breast dose can significantly reduce the complication rate.

Conclusion – The study concludes that AccuBoost is associated with favorable clinical outcomes as compared to those seen with electron boost.



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POSTAGE



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...achieving results

