

CODE: SSE02-04

PARTICIPANTS

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SESSION: Breast Imaging (Ultrasound: Automated Systems, and Other)

Presenter

Automated Breast Ultrasound Screening in Women with Digital Mammographically Dense Breasts: First Year's Experience

DATE: Monday, November 28 2011

TIME: 03:30 PM - 03:40 PM

LOCATION: E450A

Purpose: To compare performance characteristics of Automated Whole Breast Ultrasound (AWBU) and digital mammography (DM) in screening women with mammographically dense breasts.

Results: Of the 594 participants 7 patients had biopsy-confirmed cancers (10 cancers total). 2 cancers (2 patients) were seen only on DM and 5 patients had their cancers (8 total) discovered only on AWBU. The DY was 3.4/1000 for DM, 8.4/1000 for AWBU-only discovered cancers, and 11.8/1000 for combined DM + AWBU. PPV for AWBU-prompted biopsies was 35.7% (5/14) and 16.7% for DM-prompted biopsies (2/12). Of the 8 cancers discovered in 5 patients only on AWBU 4 were invasive (avg = 5.5mm) and 4 were high-grade DCIS (avg = 6.0mm), and all node negative. The 2 cancers discovered by DM were 1 DCIS (13mm) and 1 DCIS + IDC (7mm).

Conclusion: Addition of AWBU to the mammographic screen more than doubled the detection of node-negative breast cancer in dense breasted patients (3.4 to 8.4 per 1,000) without significantly prompting unnecessary biopsies.

Clinical Relevance/Application: This study demonstrates the effectiveness of AWBU as a supplemental screening tool for women with mammographically dense breasts.