

Impact on Recall Rates Following Implementation of Synthesized 2D Mammography in Digital Breast Tomosynthesis Screening

Zuckerman S, Weinstein S, Synnestvedt M, Korhonen K, McDonald E

Radiological Society of North America 2015 Scientific Assembly and Annual Meeting

November 29 - December 4, 2015, Chicago IL.

Objective

The goal of this study was to evaluate a population screened entirely with synthesized 2D digital mammograms using Hologic's C-View™ software plus tomosynthesis (C-View+DBT). Recall rates and recall finding types from the C-View+DBT population were compared to similar historic outcomes from traditional digital mammography plus tomosynthesis screening (DM+DBT).

Materials and Methods

Recall rates and lesion type were compared for 15,571 women screened with DM+DBT during the period from October 1, 2011 to February 28, 2013 and 2,090 women screened with C-View+DBT during the period from January 7th, 2015 to March 20th, 2015.

Findings

The overall recall rate with C-View+DBT was 8.3% compared to 8.8% for DM+DBT ($p=0.45$). In addition, C-View+DBT screening was not associated with a significant change in the distribution of recalled lesion type. Of particular interest, there was no change in the rate of recall for calcific lesions.

| | C-View+DBT | DM+DBT |
|------------------------------|------------|--------|
| Overall Recall Rate | 8.3% | 8.8% |
| Recall Finding Types | | |
| 1. Calcifications | 1.6% | 1.6% |
| 2. Masses | 2.4% | 2.7% |
| 3. Asymmetries | 3.8% | 4.5% |
| 4. Architectural Distortions | 1.1% | 1.0% |
| 5. Technical Reasons | 0.05% | 0.2% |

Conclusion

This study demonstrated no significant difference in recall rates and lesion types when DM is replaced with C-View generated 2D images for use in combination with DBT. Ongoing data collection will allow comparison of cancer detection rates and PPVs.

hologic.com | info@hologic.com | +1.781.999.7300

Presented by **Hologic Medical Education**