

A new product getting significant interest in the healthcare community and the consumer and business press is Hologic's breast tomosynthesis technology. Here are four reasons why this technology lives up to the hype.

REASON #1

Large clinical studies find that Hologic breast tomosynthesis significantly improves breast cancer detection while simultaneously reducing recall rates

Clinical data supports the fact that Hologic's tomosynthesis technology when used in conjunction with conventional mammography is superior to conventional mammography alone.

- The much anticipated Oslo Breast Cancer Screening Trial, the first large-scale, prospective clinical study was published in [Radiology](#), the Radiological Society of North America (RSNA) scientific journal, in January 2013. Dr. Per Skaane and his fellow researchers found that adding Hologic breast tomosynthesis to a conventional screening exam enabled their radiologists to detect 40% more invasive cancers while simultaneously reducing the number of false positives.
- The results of the Italian breast tomosynthesis screening trial (STORM), a prospective study of 7,292 women screened for breast cancer using digital mammography compared to digital mammography plus Hologic's breast tomosynthesis technology, were published in April 2013 in [The Lancet Oncology](#), a leading clinical research journal. The researchers reported that the combination of breast tomosynthesis and conventional mammography identified 8.1 cancers per 1,000 screens, compared with conventional mammography's 5.3 per 1,000 screens, an increase in the cancer detection rate of 53%.
- The first large-scale population-based study in the U.S. was published in the June 2013 issue of the [American Journal of Roentgenology](#). Dr. Stephen L. Rose and his colleagues found that the introduction of breast tomosynthesis into their practice was associated with a significant increase in breast cancer detection rates (up 35% for overall cancers and 53% for invasive cancers). The study population included 13,856 women who received conventional mammography exams and 9,499 women who elected to receive a Hologic tomosynthesis screening exam.
- A large clinical study of breast tomosynthesis led by Dr. Brian Hass at Yale University Cancer Center was published in the July 2013 issue of [Radiology](#). The researchers reported a 30% drop in recall rates, from 12.0% to 8.4% ($p < .01$), in the patient population using Hologic's tomosynthesis system versus the conventional mammography patient group — an immense benefit to patients and a significant savings for the health system. The Yale study involved 13,158 women, of whom 6,100 received a Hologic breast tomosynthesis exam.
- To date over 50 papers from leading academic and clinical sites have been published on Hologic's tomosynthesis technology. [View](#) the bibliography.

REASON #2

Hospital and imaging sites large and small are adopting tomosynthesis technology at an impressive rate

Hologic's breast tomosynthesis technology was approved in the U.S. in February 2011 and has had CE marking since 2008. It is now available in 49 states and over 50 countries.

- An estimated 3 million women living in America will be screened with Hologic breast tomosynthesis technology this year.
- World-class healthcare sites have been early adopters of the technology and fought hard to bring the new technology to their patients. Some of the sites with very visible outreach efforts include: Massachusetts General Hospital, the Yale University School of Medicine, the Mayo Clinic, Johns Hopkins Medicine, Mt. Sinai Hospital in New York, The Hospital of the University of Pennsylvania, the University of Pittsburgh Medical Center, the University Hospitals Case Medical Center, TOPS Comprehensive Breast Center, Memorial Hermann Health System, and the John C. Lincoln Breast Health and Research Centers.
- It's not just hospitals investing in the technology. Large imaging practices including Washington Radiology Associates and Zwanger-Pesiri Radiology were early adopters of the technology and now offer tomosynthesis screening at all their imaging sites.
- More than half of the top 20 hospitals named in the [U.S. News and World Report](#) list of Top-Ranked Hospitals for Cancer offer Hologic tomosynthesis.

REASON #3

Hologic tomosynthesis provides a platform for future advances

Hologic designed the system as a platform to accommodate advanced technologies for this evolving modality. Several of those new technologies are already in the marketplace.

- Approved in January 2013, the Hologic Affirm 3D breast biopsy option helps doctors locate lesions seen only on and/or better visualized using tomosynthesis imaging. Magee Hospital in the University of Pittsburgh Medical Center system issued a [press release](#) proudly announcing that they were the first U.S. site to use the new technology.
- In May 2013, Hologic received FDA approval to use its C-View software to construct 2D images from a 3D data set in place of the conventional 2D x-rays required as a part of a tomosynthesis screening exam. Supporting clinical data shows that the combination of Hologic's breast tomosynthesis

technology and C-View 2D images results in superior results compared to 2D mammography alone. C-View provides an improved patient experience — lower radiation exposure and a faster exam time — without compromising the clinical superiority of the tomosynthesis screening exam. [The American College of Radiology](#) issued guidance saying that 2D constructed images should be billed in the same way as conventional 2D images.

REASON #4 | The healthcare community and consumer press have recognized the merits of breast tomosynthesis

- AuntMinnie readers picked breast tomosynthesis as the best new technology three years running and it's nominated for the award again this year.
- The Cleveland Clinic picked breast tomosynthesis as one of the [Top 10 Medical Innovations for 2013](#) because "It allows doctors to find cancer even earlier and with more accuracy than traditional 2D mammograms."
- The healthcare research firm, KLAS, surveyed [radiologists and administrators](#) at 40 imaging centers offering Hologic's breast tomosynthesis technology.

Ninety-eight percent of the respondents said they would buy tomosynthesis again. KLAS ended their report by saying, "providers who are considering tomosynthesis would benefit by quickly jumping on the bandwagon."

- Over 6,000 U.S. TV, newspaper and print stories covered breast tomosynthesis technology. In-depth stories have appeared in the *Wall Street Journal*, *USA Today*, *The Boston Globe*, *The Washington Post* and on network TV on "Good Morning America," "CBS Morning News," "The Doctors," and "Dr. Oz."