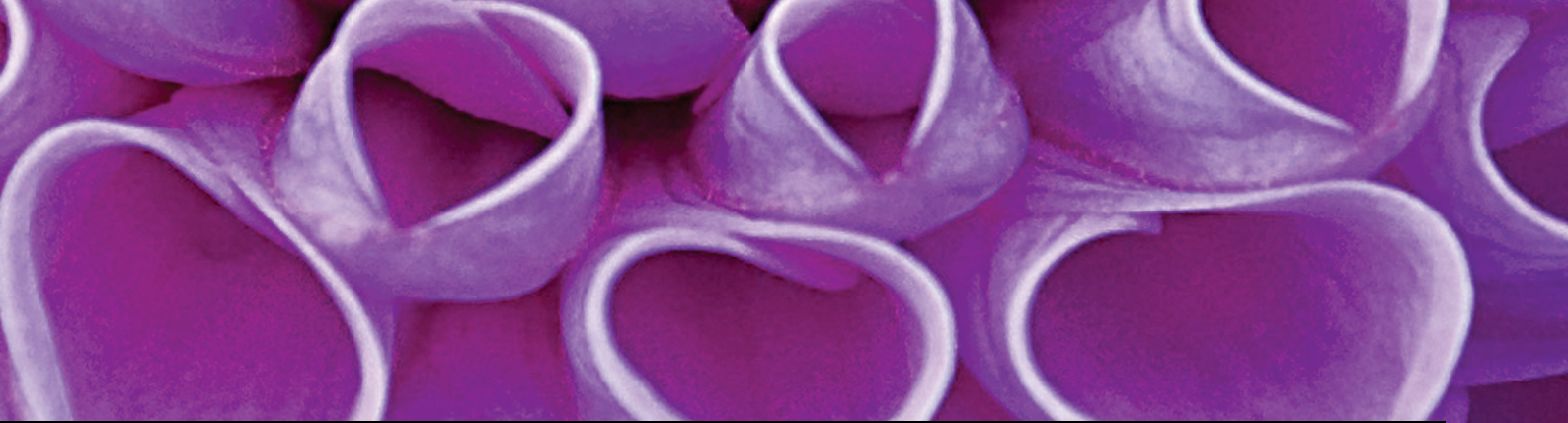# Look differently.

Invenia™ ABUS

Automated Breast Ultrasound

The unseen risk.
Too many tumors are missed.

40%   **>1/3**

Having dense breasts increases a women's likelihood to develop cancer four to six times.[1]

This is a significant problem. **Over 40% of women** have dense breast tissue,[2] which can mask the appearance of tumors and limit the performance of mammography.

Mammography may miss **over 1/3 of cancers in dense breasts.**[3] When it is warranted to look beyond mammography, there now is a screening technology that can effectively detect cancer to help deliver confidence and peace of mind.

## For a woman with dense breasts, screening with mammography may not be enough.

Enhanced Detection.
## Invenia ABUS contribute to find more cancers.[4]

# Enhanced Diagnosis.
Global View for planning.

Screening with ABUS has a 55% relative increase in invasive breast cancers identified in dense breast tissue using supplemental ABUS and a 37% relative increase in cancer detection overall than mammography alone.[4]
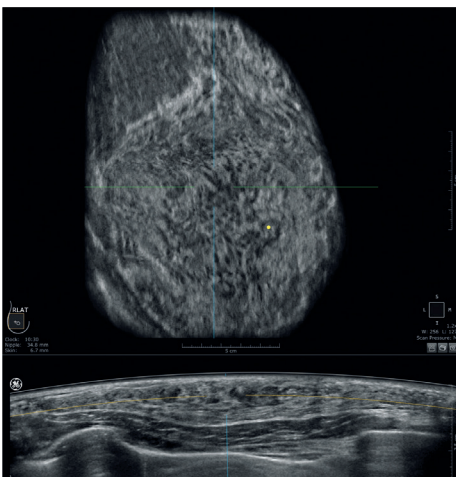
93% were INVASIVE Breast Cancer

- DCIS
- Invasive
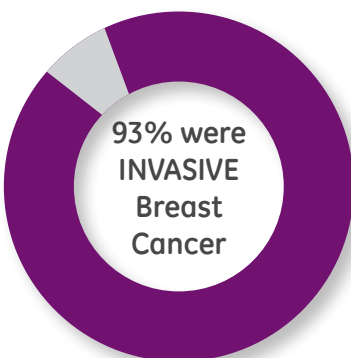
93% were NODE NEGATIVE
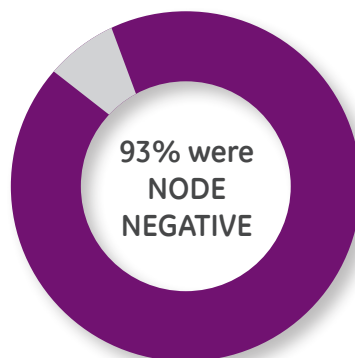
- Node Positive
- Node Negative

87% were SMALL
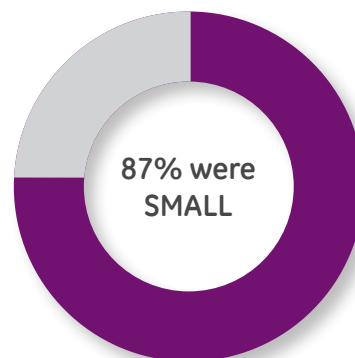
- >19 mm
- <19 mm
  median 10 mm
  mean 15.2 mm

Multiple clinical research studies demonstrate that physicians can detect more cancers at an **earlier, more treatable stage.[4]**

Clinical studies confirmed the **accurate, cost-effective and non-invasive staging** of breast cancers prior to surgery due to the global view of the breast.[5]

Designed for automated screening.
Remarkable Architecture.
Advanced imaging algorithms.

Powerful Imaging Architecture

Invenia ABUS's imaging architecture shifts traditional ultrasound from hardware- to software-based processing, resulting in exceptional performance for the fast paced breast imaging environment. With its massive parallel processing power and proprietary beamforming technology, the system creates focus at every pixel, delivering an image of high uniformity and resolution

Intelligent Imaging Algorithms

Advanced algorithms and one button automation help provide remarkable image quality and reproducibility from user to user.

- ▶ **Tissue Equalization Algorithm**
- ▶ **Nipple Shadow Compensation**
- ▶ **Breast Border Detection**
- ▶ **Chest Wall Detection**

User-friendly touchscreen

Operator workflow is smooth and easy with the Invenia ABUS high-resolution touchscreen display with advanced Projective Capacitive Touch (PCT) technology. Its sleek, graphical user interface enhances the way you work. Tap and swipe colorful icons to quickly and easily maneuver through the exam.

Shaped for a woman's anatomy.

The Reverse Curve™ transducer

Contribute to enhance both patient comfort and breast coverage during the exam. The 15 cm wide field-of-view high-frequency transducer automatically creates uniform compression across the entire breast for consistent, reproducible image quality independent of the operator. The convergent scan line geometry allow to minimize beam refraction.

▶ Enhanced anatomical detail   ▶ Resolution at depth
▶ Deep penetration
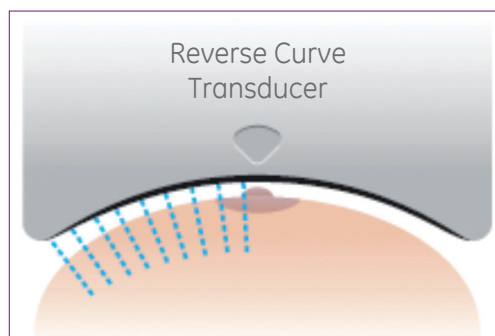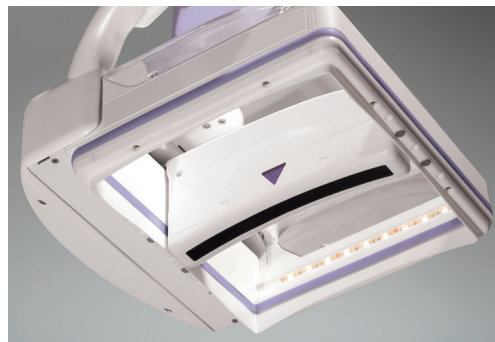
A fast, efficent workflow.

Invenia ABUS Workstation

The Invenia ABUS Workstation displays 3D volumes in a patented, 2 mm thick coronal slice from the skin to the chest wall. The workstation's intelligent tools provide efficient exam reading and analysis within 3 minutes[6] - which offers remarkable time saving for physicians compared to handheld ultrasound.

▶ DICOM 3.0 compliant   ▶ Quick interpretation
▶ Intelligent tools for analysis
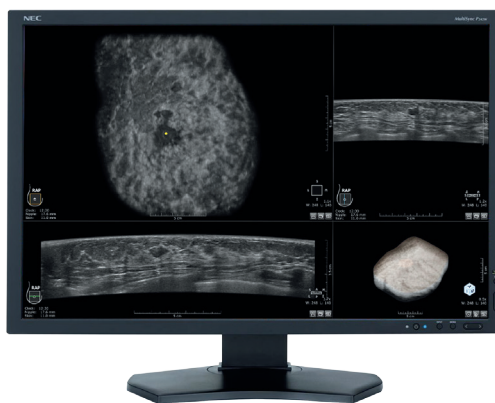
Support beyond technology.

Customizable marketing tools

Targeted marketing tools feature clinically researched and professionally designed content to help you promote Invenia ABUS screening to referring physicians, their patients, and women.

Comprehensive education and training

The Invenia ABUS Mastery Program for physicians and technicians uses progressive teaching techniques led by our experienced team of peer educators and clinical applications specialists.

Imagination at work

1. Boyd, N.F., Guo, H., et. al., Mammographic Density and the Risk and Detection of Breast Cancer N Engl J Med 2007, 356 (3): 227-236

2. Tabár, L., Vitak, B., et. al. Swedish Two-County Trial: Impact of Mammographic Screening on Breast Cancer Mortality during 3 Decades Radiology: 2011 260:3, 658-663.

3. Mandelson et al. Breast density as a predictor of mammographic detection: comparison of interval- and screen-detected cancers. JNatl Cancer Inst 2000; 92:1081–1087.

4. Brem RF, Tabár L, et.al. Assessing Improvement in Detection of Breast Cancer with Three-dimensional Automated Breast US in Women with Dense Breast Tissue: The SomoInsight Study. Radiology.2015 Mar; 274(3): 663-73.

5. Grady, et al. Elsevier, Journal of Ultrasound, 10.1016/j.jus.2010.07.005

6. ARRS 2012 Breast Imaging: Screening/Emerging Technologies Oral Abstract; Radiologist Interpretation Time for 3D Automated Breast Ultrasound Screening, R. Brem