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# Automated Breast Volumes. Simplified.

ACUSON S2000 Automated Breast Volume Scanner (ABVS)

Answers for life.

# Automated Breast Volumes. Simplified.

## ACUSON S2000 Automated Breast Volume Scanner (ABVS)



Acquire



Analyze



Report

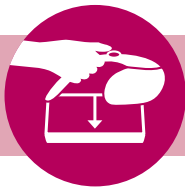
*For more than six decades, Siemens has pioneered discoveries in ultrasound that give healthcare professionals the tools they need to diagnose and treat patients with the highest standard of care. The ACUSON S2000™ Automated Breast Volume Scanner (ABVS) continues this legacy with technology that helps to identify potential pathologies by acquiring automated full-field volumes of the breast in under 15 minutes. This highly advanced, multi-purpose ultrasound system is ideal for comfortably imaging women with different needs, from asymptomatic women to women with known radiographically dense breast tissue and/or a history of breast disease. A holistic solution for women's health, the ACUSON S2000 ABVS adapts to virtually any environment – dedicated clinics, radiology departments, breast centers, and private practices.*



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# Faster Scans Lead to Streamlined Workflow.



## Acquire

Capturing ultrasound images of the breast with hand held devices can be time-consuming. The ACUSON S2000 Automated Breast Volume Scanner solves this problem by quickly and comfortably obtaining high-resolution volumetric images of the breast. It utilizes a high-frequency 14 MHz automated transducer that locks into place and automatically sweeps over the breast, producing a 15 cm x 17 cm field of view volume.

This automated process is faster and more accurate than using a hand held device,

reducing exam times from 30 minutes to 15 minutes. In addition to streamlining workflow, the combined locking mechanism and automatic sweep significantly reduce operator variability, leading to dramatic improvements in image quality and consistency.

Variations between images captured by different technicians can lead to inaccurate follow-up examinations. By capturing a full field of view volume and reducing inconsistencies between operators, the ACUSON S2000 ABVS makes it possible

to define a baseline image that can be compared against subsequent images. These consistent, reproducible images then become the foundation for confident diagnoses.



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The hands-free operation of the ACUSON S2000 ABVS increases patient throughput, making it possible for technicians to quickly perform more examinations in less time. Data acquisition and reporting can be done separately, both in place and time, freeing the ultrasound system for the next exams and allowing radiologists to review cases when it is convenient for them.



Once the transducer has been correctly positioned, the scan is activated. The **one-button locking mechanism** keeps the transducer in place, alleviating the common problem of **repetitive stress injuries** in technicians while enabling more accurate, hands-free scanning.

## Acquire | Your Benefits



With its dedicated touch screen monitor, technicians can simultaneously focus on the patient and **ensure proper skin contact**, while maintaining a comfortable ergonomic position. If contact is ever lost, the operator can quickly make the necessary adjustments **without the need to re-scan the patient.**



Customized image presets are optimized for each patient's cup size, adjusting to individual anatomic curves for more accurate imaging. Once the preset has been chosen, the system automatically adjusts depth, frequency, focal zone placement, and overall gain to ensure the best image. The system streamlines and standardizes workflow by acquiring the volumes in a systematic order, thus **improving patient throughput and making reading easier and less straining on the eyes.**



# Exceptional Image Quality for Improved Diagnostic Confidence.



## Analyze

Women with dense breast tissue have a significantly greater risk of developing breast cancer than those without\* – making early detection more important than ever. The ACUSON 2000 ABVS enables operators to capture exceptional 3D images with detailed, never-before-seen resolution of intricate structures and pathologies in the breast. By gaining the ability to visualize the segmental organization of the ductal system and surrounding tissue, healthcare providers are able to form a clearer picture of what is happening in the breast.

Siemens has perfected its transducer technology through extensive research and development, refining the send and receive signal processing used on the ACUSON S2000 ABVS. The system produces a high-fidelity ultrasound signal while seamlessly running multiple real-time applications, for the ultimate in both performance and image quality.

The ACUSON S2000 ABVS allows operators to acquire the anatomical coronal view, delivering a more realistic representation

of the breast's global anatomy – a critical capability not available with conventional hand held ultrasounds. The coronal view is highly valuable because it gives physicians and surgeons a comprehensive set of images to assist them in surgical planning. The exam is performed while the patient is in the supine position, the same position she is in for an operation – thus making planning more accurate.

\*New England Journal of Medicine, Vol. 356,  
No. 5: 227-263









For added versatility, the mobile ACUSON S2000 system can be easily detached from the column for use in other departments, delivering **unsurpassed productivity** across a broad spectrum of clinical applications.



Acquired data can be **quickly analyzed** using Siemens' online advanced *fourSight™* 3D/4D technology. Data can also be reviewed off-the-system using the *syngo®* Ultrasound Breast Analysis software.

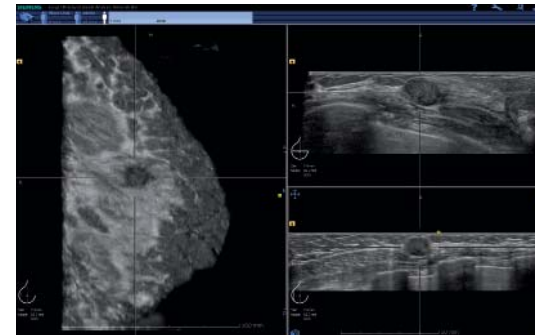
## Analyze | Your Benefits



The ACUSON S2000 ABVS can be used for both automated breast volume and conventional hand held exams with **unparalleled comfort and ease for both patient and operator**. If a lesion is found, a hand held transducer can be used to acquire additional data using advanced applications such as eSie Touch™ elasticity imaging.



The ACUSON S2000 ABVS features the **intuitive, anatomical coronal plane** and others that are not available using conventional ultrasound. **It also provides the five standard orientations:** axial, sagittal, coronal, radial and anti-radial as well as rotation around any axis.



# Quick and Confident Results. Anytime. Anywhere.



## Report

*syngo*.Ultrasound Breast Analysis is a dedicated software application that is used on an offline computer to review 3D volume data as well as 2D images and clips from the ACUSON S2000 system. This software provides the ability to import DICOM data for review, manipulation, editing, annotating and archiving. It is available through multiple licensing structures, including fixed and floating licenses.

*syngo*.Ultrasound Breast Analysis software can be installed on a wide variety of hardware, such as a personal laptop or desktop, a department's local PACS, and/or

vendor-neutral archives, thus eliminating the need for an additional computer and monitor in the reading room. This flexibility gives individuals and groups more variability in where and how to work, and helps to keep workspaces uncluttered.

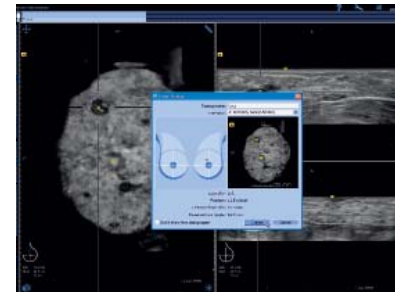
The software offers patient-centered workflow with the Siemens proprietary *syngo* look and feel. This allows personnel to more easily learn the system, especially if they are familiar with other imaging equipment from Siemens.

The software was optimized for breast ultrasound workflow, making 2D

review and 3D ABVS data manipulation more efficient than ever. It offers optimal image analysis and reporting with comprehensive tools for data review in a single place, including a magnifier, interactive zoom, a free rotation tool, and automatic scrolling. As a result, users can more easily manage patients and get the best results out of each exam.



syngo.Ultrasound Breast Analysis software can be installed as an independent application on a customer-provided computer or workstation. This **eliminates the need for additional workstations within the department**, helping to keep the reading room tidy and organized.



Customizable finding folders give users the flexibility to describe lesions as they identify them. The findings along with snapshots are automatically added to the report, **streamlining workflow by removing unnecessary steps.**

## Report | Your Benefits



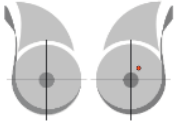
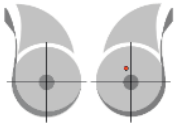
The system **provides comprehensive tools for reviewing the data** – a magnifier, interactive zoom, a free rotation tool, and scrolling all help to improve and accelerate diagnoses. Positional reference markers and a combined breast pictogram provide clinicians with precise lesion information, including location from the nipple, depth, and distance from the skin.



The system offers **customized licensing structures** that allow many users to simultaneously access the application from multiple locations for **maximum flexibility in staff planning and faster time to diagnosis**. And since they are not tied to one workstation, reviewers can be more flexible and independent.

**Ultrasound Report:**

Study Information		Report Summary
Patient		<b>BI-RADS® Category: Probably benign finding (BI-RADS® 3)</b>
Patient ID		
Birth Date		
Study		
Study Date		
Referring Physician		

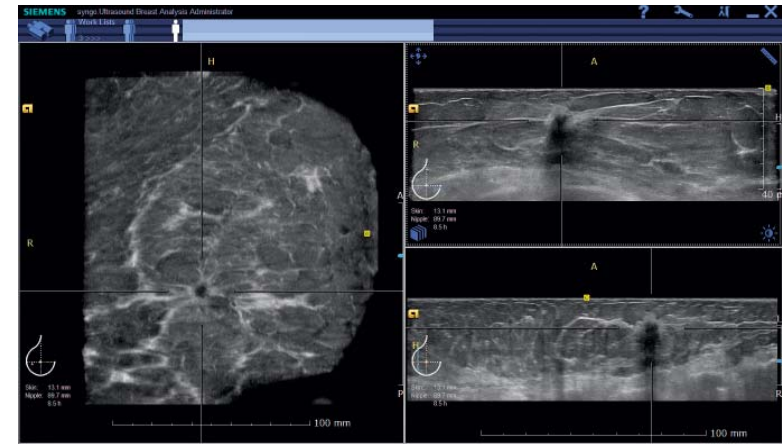
Findings in this Study	
CYST1 #1	Probably benign finding (BI-RADS® 3)
	<ul style="list-style-type: none"><li>• Laterality: Left</li><li>• Position: 1.0 o'clock</li><li>• Distance from skin: 6.5 mm</li><li>• Distance from nipple: 42.8 mm</li></ul>
CYST2 #2	Probably benign finding (BI-RADS® 3)
	<ul style="list-style-type: none"><li>• Laterality: Left</li><li>• Position: 11.5 o'clock</li><li>• Distance from skin: 10.3 mm</li><li>• Distance from nipple: 44.3 mm</li></ul>

Signature	
Interpreting Physician	
	<i>syngo</i> .Ultrasound Breast Analysis Administrator

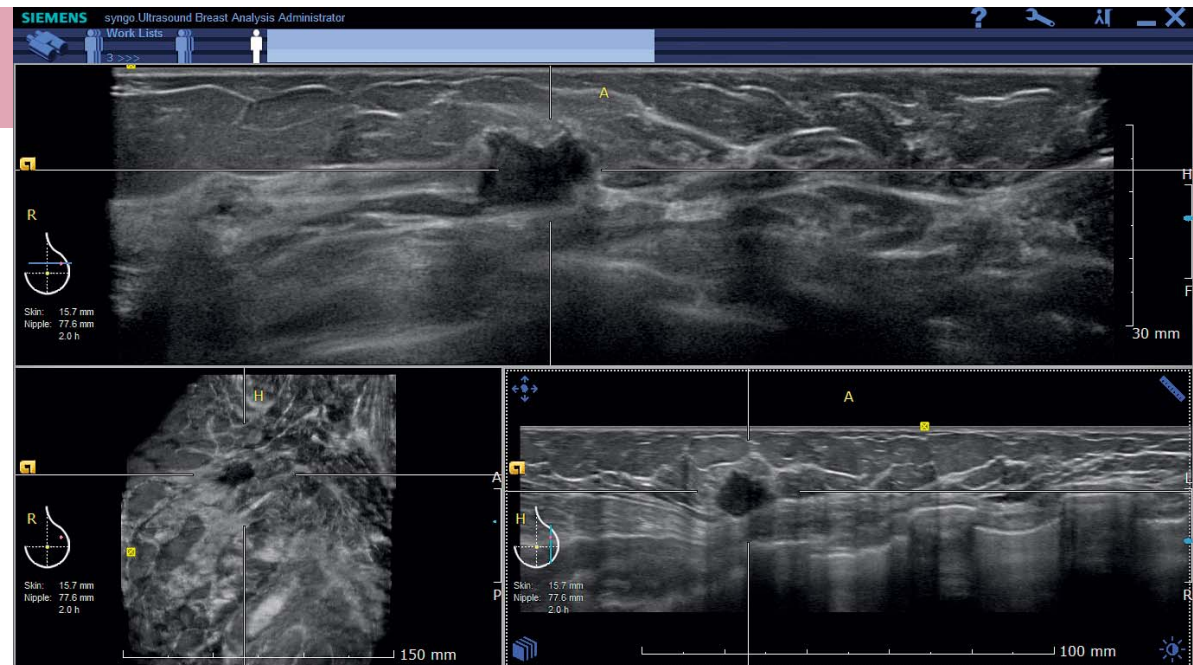
The system produces streamlined reports that support the ACR BI-RADS®\* US Lexicon Classification Form. This allows for standardized reporting, making it easier to communicate with referring physicians. In addition, it provides a diagnostic standard, which improves image quality and allows images to be compared with future or past findings.

\*BI-RADS (Breast Imaging-Reporting and Data System), a quality assurance tool, is published and trademarked by the American College of Radiology (ACR).

3-on-1 Display with the large coronal plane clearly demonstrates this Biopsy-proven invasive Ductal Carcinoma.

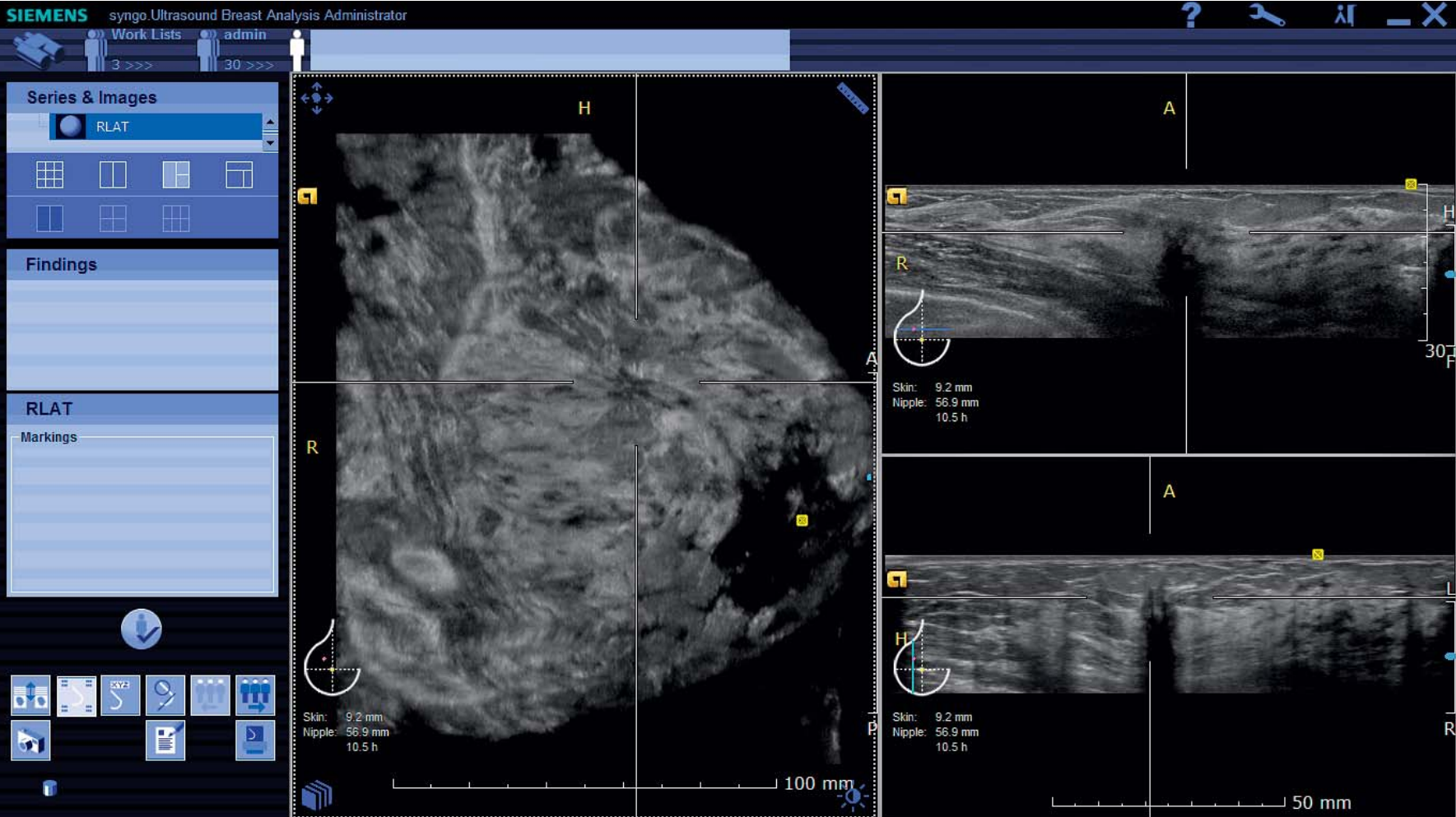


## Report



3-on-1 Display with the large transverse (acquisition) plane visualizes in detail this Biopsy-proven invasive Adenocarcinoma.





3-on-1 Display with the large coronal plane illustrates this Biopsy-proven invasive Ductal Carcinoma and spiculations.

# Price is a Number. Value is Our Promise.

## Service & Support

Siemens is dedicated to earning the trust of our customers and providing exceptional value. We have made the ACUSON S2000 system compatible with a variety of options and future updates, offering long-term investment protection and flexibility to fit a range of budgets.

The ACUSON S2000 system also features Ultrasound System Security, powered by McAfee®, for the ultimate in protection against advanced persistent threats, viruses,

malware and other executing software. For total confidence, the system automatically connects to Siemens Remote Service™, a comprehensive remote support infrastructure that connects your ultrasound system with Siemens' technical and applications experts to save valuable clinical time and improve productivity and workflow.

We offer a variety of service plans to suit the needs of different healthcare

environments – delivering both superior support and valuable cost savings for any size clinic, cardiology practice or medical setting. Siemens' coverage options provide protection from unexpected costs as well as fast and attentive service, allowing you to stay focused on what matters most – the people in your care.

Standalone clinical images may have been cropped to better visualize pathology.

McAfee is a registered trademark in the United States and other countries. ACUSON, eSie Touch, *fourSight*, S2000, and Siemens Remote Service are trademarks of Siemens Medical Solutions USA, Inc. and *syngo* is a registered trademark of Siemens AG.



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