Siemens sets a new standard for breast ultrasound

New automated breast ultrasound system automatically acquires volumes and offers intelligent clinical applications

Siemens Healthcare recently introduced the Acuson S2000 Automated Breast Volume Scanner (ABVS), the first multi-use ultrasound breast system that automatically acquires volume images of the breast. Thanks to the user-independent, standardized image acquisition, the system is ideally suited for early detection and diagnosis of breast cancer with ultrasound – especially for women with dense breast tissue.

According to the New England Journal of Medicine¹, dense breast tissue increases the risk of breast cancer for a woman up to five-fold. While mammography remains the method of choice in breast cancer screening, a study published by the RSNA (Radiological Society of North America) in 2002² showed that the detection rate for non-palpable, invasive breast cancer increased by 42 percent when mammography was followed by an ultrasound examination.

"I am convinced that automatic ultrasound volume imaging with the Acuson S2000 ABVS can make a significant contribution in diagnostic confidence for women with dense breast tissue or inconclusive mammography findings," said Klaus Hambüchen, CEO, Ultrasound at Siemens Healthcare. Examinations performed with the Acuson S2000 ABVS technique generally take less than 15 minutes. "Time well spent if you consider the extended diagnostic capabilities of ultrasound in dense breasts."


Coronal anatomical view

The system quickly and comfortably acquires and surveys full-field sonographic volume images that provide a more comprehensive overview of the breast. Included is the intuitive, anatomical coronal plane of the breast (from the nipple to the breast wall), which is not available with conventional ultrasound imaging. This view provides a more understandable representation of the global anatomy and architecture of the breast.

The system's automatic image acquisition significantly improves the workflow of a breast ultrasound examination. While hand held examinations usually take up to 30 minutes, with the Acuson S2000 ABVS, the exam can be performed in less than 15 minutes. Semi-automated reporting and comprehensive BI-RADS® ultrasound reporting capabilities further enhance the clinical workflow. This Breast Imaging Reporting and Data System (BI-RADS) is a classification of the American College of Radiology (ACR) for reporting mammography screenings.

To further optimize high-volume patient care, the system also supports innovative breast imaging applications, such as Fatty Tissue and eSie Touch elasticity imaging. All of these applications help increase diagnostic confidence, while at the same time reducing examination and waiting time for the patient. The new system is an all-round system for ultrasound breast care, from early detection, to diagnosis to aftercare.


The Siemens Healthcare Sector is one of the largest suppliers of healthcare technology in the world. The company is a medical solution provider with core competences and innovative strengths in diagnostic and therapeutic technologies as well as knowledge processing, including information technology and system integration. With its acquisitions in laboratory diagnostics, Siemens Healthcare is the first integrated healthcare company that combines imaging and lab diagnostics, therapy solutions and medical information technology and also supplements these with consultation and services. Siemens Healthcare offers solutions for the entire supply chain under one roof - from prevention and early detection to diagnosis and on to treatment and aftercare. In addition, Siemens Healthcare is the global market leader for innovative hearing instruments. The company employs some 49,000 employees worldwide and is present in more than 130 countries. During fiscal 2008 (ending on September 30), Siemens Healthcare achieved sales of 11.17 billion euros and incoming orders totaling 11.78 billion euros. The Sector profit from operations amounted to 1.23 billion euros.

For more information, go to: http://www.siemens.com/healthcare