Siemens Unveils Ultra-Premium S3000 Ultrasound System at RSNA 2011

New system enables ultrasound fusion imaging for routine clinical use

Chicago, November 29, 2011 – Siemens Healthcare (Booth #822, East Building/Lakeside Center at McCormick Place, Hall D) launched the ACUSON S3000[1], its latest ultra-premium ultrasound platform, at the 97th Scientific Assembly and Annual Meeting of the Radiological Society of North America (RSNA), November 27 to December 2 in Chicago. The new system includes advanced automated ultrasound fusion imaging[2], as well as multi-modality review capabilities[2] to provide additional clinical and spatial information in the analysis of complex pathology and/or when performing interventional procedures such as biopsies. In combination with its comprehensive suite of elastography applications, Siemens highlighted its new strain imaging application Virtual Touch tissue IQ[2] imaging, reinforcing the company's role as a leader in strain elastography imaging. Also at RSNA 2011, Siemens introduced the latest addition to its family of high-density (HD) transducers: the 8C3 HD transducer[1] specially designed for obstetrics and pediatric applications.

The new ultra-premium ACUSON S3000 ultrasound system advances Siemens' pioneering ultrasound technologies with its proprietary eSie Fusion[2] imaging, which enables the automatic fusion of 3-D computed tomography (CT) volumes with real-time ultrasound via a single click. Current fusion techniques require time-consuming manual registration of CT or magnetic resonance (MR) images. They also require the patient to lie motionless throughout the entire exam to avoid elaborate manual realignments. The automatic, one-click advanced registration capabilities of the ACUSON S3000 system eliminate these limitations, reducing CT image registration to mere seconds, and profoundly simplifying manual registration techniques to enhance workflow during MR volume registration.

"Using the new eSie Fusion[2] imaging technology allows us to significantly speed up our workflow," said assistant professor Dr. Dirk-André Clevert, section chief of the Interdisciplinary Ultrasound Center at Munich University Hospital Grosshadern, Germany, and one of the first physicians to test

Siemens AG
Corporate Communications and Government Affairs
Wittelsbacherplatz 2, 80333 Munich
Germany

Information number: H CP2011.11.29.e

Media Relations: Jeff Bell
Telephone: 1-610-448-1477
E-mail: jeffrey.t.bell@siemens.com
Siemens Medical Solutions USA, Inc.
Healthcare Sector – Clinical Products Division
51 Valley Stream Parkway, H33, Malvern, PA 19355

eSie Fusion. “Previously, the success of interventions was generally monitored by follow-up CT examinations. However, due to the new ultrasound fusion solution, it should be possible to reduce the number of follow-ups done with CT. The use of fusion provides us with improved clinical information – without additional radiation. This is a great advantage for both the patients and the healthcare provider.” Fusion imaging can play an important role not only in diagnosis and follow-up but also in image-guided interventions.

Increased diagnostic confidence through multimodality review

In addition to fusion imaging, the ACUSON S3000 system features multi-modality review capabilities that enable CT and/or MR images to be imported into the ultrasound system for a rapid, easy, side-by-side comparison. These capabilities provide an additional layer of information to further increase diagnostic confidence and confirm therapeutic decisions.

Stiffness map and quantification in one image

Building on its vast experience in ultrasound elastography imaging, Siemens showcased the most comprehensive suite of elastography applications available in the industry. The latest application to confirm Siemens’ leadership in this field is Virtual Touch tissue IQ,[2] which permits the simultaneous display of a color-coded tissue stiffness map and shear wave velocity measurements in a single image. This application allows immediate visual assessment of lesions and their stiffness characteristics while providing simultaneous quantitative evaluation.

Since its introduction in 2005, manual-compression eSie Touch elasticity imaging has been complemented by push-pulse Virtual Touch tissue software applications,[3] Siemens proprietary implementation of ARFI (Acoustic Radiation Force Impulse) imaging. Virtual Touch tissue imaging[3] and eSie Touch elasticity imaging create a visual stiffness map (known as an elastogram) via tissue compression. Complementing these two technologies, Virtual Touch tissue quantification[3] additionally measures the propagation speed of shear waves to offer the first and only quantitative assessment of increased tissue stiffness – a frequent sign of pathology.

HD transducer technology – More accurate information in every clinical image

Siemens’ most recent proprietary high-density (HD) ultrasound transducer technology ensures the best possible information for the creation of every clinical image. Unlike conventional ultrasound transducer technologies, HD technology employs high-density ultrasound elements that deliver greater signal fidelity, improving image compounding and providing the basis for noise- and clutter-free images with a high degree of contrast resolution and clear tissue differentiation.

Siemens AG
Corporate Communications and Government Affairs
Wittelsbacherplatz 2, 80333 Munich
Germany

Information number: H CP2011.11.29.e

Media Relations: Jeff Bell
Telephone: 1-610-448-1477
E-mail: jeffrey.t.bell@siemens.com
Siemens Medical Solutions USA, Inc.
Healthcare Sector – Clinical Products Division
51 Valley Stream Parkway, H33, Malvern, PA 19355

Siemens' new 8C3 HD[1] ultrasound probe was designed primarily for obstetric and pediatric applications, permitting high-resolution imaging in a wide range of exams. The transducer features a small footprint for improved surface contact and enhanced scanning performance. A 50 percent larger field-of-view (FoV) enables the display of a full third-trimester fetal head, improving measurements and anatomic visualization. The range of ultrasound transducers enabled on the ACUSON S3000 system also includes the recently introduced 6C1 HD high-density ultrasound probe for radiology, gynecology and obstetrics, as well as the 18L6 HD probe for superb imaging in small parts, including the breast and thyroid.

Preparing for a changing healthcare market

To further strengthen its innovative power and competitiveness, Siemens Healthcare recently launched Agenda 2013, a global initiative to prepare for the changing healthcare market. It defines four fields of action – innovation, competitiveness, regional footprint, and people development – with specific measures to be implemented over the next two years. As part of this new initiative, the Siemens Ultrasound Business Unit further extend its innovative portfolio with products that demonstrate how ultrasound solutions help manage the cost pressures in healthcare without sacrificing excellence in patient care.

[1]510(k) pending; not commercially available.
[2]Works in Progress.
[3]Virtual Touch tissue imaging and Virtual Touch tissue quantification are not available in the U.S.

Some of the herein-mentioned products/features are not commercially available. Due to regulatory reasons, its future availability in any country cannot be guaranteed. Please contact your local Siemens organization for further details.

The statements by Siemens customers described herein are on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist, e.g., hospital size, case mix, level of IT adoption, there can be no guarantee that others will achieve the same results.

Launched by **Siemens Healthcare Sector** in November 2011, Agenda 2013 is a two-year global initiative to further strengthen the Healthcare Sector's innovative power and competitiveness. Specific measures will be implemented in four fields of action: Innovation, Competitiveness, Regional Footprint and People Development.

The **Siemens Healthcare Sector** is one of the world's largest suppliers to the healthcare industry and a trendsetter in medical imaging, laboratory diagnostics, medical information technology and hearing aids. Siemens offers its customers products and solutions for the entire range of patient care from a single source – from prevention and early detection to diagnosis, and on to treatment and aftercare. By optimizing clinical workflows for the most common diseases, Siemens also makes healthcare faster, better and more cost-effective. Siemens Healthcare employs some 51,000 employees

Siemens AG
Corporate Communications and Government Affairs
Wittelsbacherplatz 2, 80333 Munich
Germany

Information number: H CP2011.11.29.e

Media Relations: Jeff Bell
Telephone: 1-610-448-1477
E-mail: jeffrey.t.bell@siemens.com
Siemens Medical Solutions USA, Inc.
Healthcare Sector – Clinical Products Division
51 Valley Stream Parkway, H33, Malvern, PA 19355

worldwide and operates around the world. In fiscal year 2011 (to September 30), the Sector posted revenue of 12.5 billion euros and profit of around 1.3 billion euros. For further information please visit: www.siemens.com/healthcare.

###

Siemens AG
Corporate Communications and Government Affairs
Wittelsbacherplatz 2, 80333 Munich
Germany

Information number: H CP2011.11.29.e

Media Relations: Jeff Bell
Telephone: 1-610-448-1477
E-mail: jeffrey.t.bell@siemens.com
Siemens Medical Solutions USA, Inc.
Healthcare Sector – Clinical Products Division
51 Valley Stream Parkway, H33, Malvern, PA 19355