

Healthcare Sector Clinical Products Division

FDA Clears Siemens' New ACUSON SC2000 Ultrasound System, Release 2.0

Boasting an unprecedented 2.88 gigabytes per second acquisition and processing speed, system improves workflow and patient outcomes by taking volume echocardiography to a new level

Malvern, Pa., January 11, 2012 – Siemens Healthcare has announced that Release 2.0 of the ACUSON SC2000™ volume imaging ultrasound system has received 510(k) clearance from the Food and Drug Administration (FDA) and is now commercially available in the United States. This latest version of the ACUSON SC2000 system – Siemens' pioneering premier echocardiography system – elevates volume imaging in echocardiography to a new level, delivering significant performance and imaging enhancements to improve workflow and patient outcomes. Release 2.0 offers a host of new applications, including the quantification of the 3D proximal isovelocity surface area (PISA) to assess the severity of valvular disease and volumetric color Doppler. Other applications include a comprehensive package for automated left ventricle analysis (LVA), which enables the auto-detection and tracking of volume contours, and Siemens' exclusive IN Focus coherent image-forming technology, which yields a high level of image uniformity and clinical detail. Release 2.0 supports volumetric intracardiac echocardiography (ICE), enabling integration of the ACUSON AcuNav™ ultrasound catheters.

Through the advanced volume analysis application known as eSie PISA™ – an industry first from Siemens – the user of the ACUSON SC2000 system can obtain semi-automatic quantification of the PISA from 4D color Doppler data. This quantification enables the clinician to eliminate the current practice of 2D PISA assumptions and improve measurement accuracy by using volumetric color analysis for valvular regurgitation, which affects millions of people worldwide. The examination can be performed on almost all valvular disease patients and delivers in seconds more accurate, effective regurgitant orifice area (EROA) measurements than previously possible, resulting in a faster, more confident diagnosis. Also featured on Release 2.0 of the ACUSON SC2000 system is eSie VVI™ Velocity Vector Imaging technology, a unique visual representation to display cardiac contraction-relaxation mechanics. This feature helps to obtain important clinical

information for the analysis of cardiac synchrony, strain and strain rate, along with fetal heart dysfunction as well as atrial and ventricular assessment.

Reduced exam time with automated left ventricle assessment

The ACUSON SC2000 system features eSie LVA™ volume LV analysis, an automated volume quantitative analysis package designed for left ventricle assessment. This breakthrough application enables the clinician to detect and track volume contours in one step, reducing exam times and improving consistency. Unlike stitched imaging technology that excludes arrhythmia patients, eSie LVA analysis can be used with all patient types because the ACUSON SC2000 system captures the entire heart in one beat, eliminating geometric assumptions.

More clinical detail in every image

The ACUSON SC2000 system's unique IN Focus technology acquires and processes information at an unprecedented 2.88 gigabytes per second – faster than any other echocardiography system in the world. This technology enables the user to focus on the entire field of view instead of a single focal zone, revealing more detailed information in one image and ultimately benefiting a patient's diagnosis.

The latest version of the ACUSON SC2000 system also integrates intracardiac echocardiography applications. With the ACUSON AcuNav advanced technology, electrophysiologists and interventional cardiologists can obtain critically important ultrasound images from within the heart in real time, enabling them to perform complex procedures with greater precision and confidence.

Improving patient outcomes with real-time full-volume cardiac imaging

Offering these and other innovations, the ACUSON SC2000 system marks the next step in echocardiography technology. It is the first and only ultrasound system that enables the production of real-time, full-volume cardiac images in one heart cycle. This capability eliminates the need for electrocardiogram (ECG) gating or stitching, which improves image accuracy. With a processing speed that is 16 times faster than a premium ultrasound system, the ACUSON SC2000 system delivers vastly more diagnostic information than conventional 3D imaging methods, allowing for wider patient access. Easily integrated into a routine echocardiography exam, the ACUSON SC2000 system offers new workflow pathways to improve diagnostic confidence and efficiency. Release 2.0 of the ACUSON SC2000 system is an example of Siemens' approach to delivering innovative solutions that provide maximum customer value – a primary goal of the Healthcare Sector's Agenda 2013.

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 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.

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