

Healthcare Sector Imaging & Therapy Systems Division

Siemens Enables Sustainable Cardiovascular Care at SCCT '11

From the SOMATOM Definition Flash with new FAST CARE platform to *syngo.via* software and beyond, Siemens offers solutions for preserving quality patient care without missing a beat.

Denver, July 15, 2011 – Attendees at the 2011 Annual Scientific Meeting of the Society of Cardiovascular Computed Tomography (SCCT), July 14-17 at the Colorado Convention Center in Denver, will learn how Siemens Healthcare (Booth #202) facilitates “Sustainable Cardiovascular Care” through its robust portfolio of products and services, including the SOMATOM® Definition Flash CT scanner and *syngo*®.via¹ imaging software. Additionally, Siemens will again sponsor SCCT symposiums and sessions where leading cardiologists will share the latest findings in high-end cardiac CT and detail how Siemens’ new technology platform FAST CARE – Fully Assisting Scanner Technologies and Combined Applications to Reduce Exposure – enables faster, more efficient CT examinations while keeping patient radiation dose as low as possible.

Definition Flash

The ability to acquire full-volume cardiac images within a quarter of a second via dual-source CT (DSCT) has made the SOMATOM Definition Flash a valued tool for cardiac imaging in recent years. Its accelerated acquisition speed facilitates a 75 ms temporal resolution and a dose reduction to less than 1 mSv using the Flash Cardiac scan mode. DSCT allows cardiologists to scan any patient with a high or irregular heartbeat, in some cases eliminating the use of beta blockers to slow the heart rate.

The low-dose scanning potential of the SOMATOM Definition Flash may also benefit patients with transcatheter aortic valve implantation (TAVI) – a minimally invasive therapy for valvular heart disease that links implantation of an artificial heart valve with a balloon dilatation in a catheter laboratory. Some cardiologists have been using the SOMATOM Definition Flash to assist them with planning the TAVI procedure.

To underscore the low dosage of a SOMATOM Definition Flash cardiac scan and drive its theme of Sustainable Cardiovascular Care, the Siemens booth will showcase its Worldwide Dose Counter website (<http://transfer.erlm.siemens.de/dosecounter.swf>), which records live statistics regarding the dose of each cardiac scan from a SOMATOM Definition Flash scanner. Information includes the average scan dose in mSv, the total number of SOMATOM Definition Flash CT scans performed worldwide, and the total number of mSv saved using Siemens' low-dose technology. To date, more than 51,000 cardiac scans have been performed using Flash technology, with an average dose of .84 mSv.

FAST CARE

Available on the SOMATOM Definition Flash and with the SOMATOM Definition AS line of products, Siemens FAST CARE technology accelerates workflow and lowers radiation exposure, allowing facilities to potentially reach new heights of patient-centric productivity. FAST enhances process workflow, enabling faster, more intuitive procedures, while CARE supports new dose reduction technologies that, particularly for children, comfort parents and inspire confidence in physicians. Together with *syngo.via*, FAST CARE streamlines the entire cardiac examination, ensuring a reliable diagnosis with minimal patient burden.

***syngo.via* Cardio-Vascular Engine**

Siemens also will highlight its *syngo.via*-based Cardio-Vascular Engine, which offers fast anatomical evaluation, quantification and functional assessment of CT angiography images of the heart or peripheral blood vessels while enabling manual interactions at any time. The software isolates the heart and applies the physician's preferred reading layout and evaluation tools. *syngo.via* also automatically queries archives and databases for additional image data of the same patient. *syngo.via*'s Findings Navigator collects data findings and enables easy sharing of the results.

Sessions and Symposiums

To further foster Sustainable Cardiovascular Care at SCCT '11, Siemens will again sponsor sessions and symposiums where industry experts will reveal the findings of recent cardiac CT research and offer insight into the application of Siemens cardiac CT solutions.

During a July 15 manufacturer session, Philip Stenner, PhD, CT product manager of Siemens Healthcare in Forchheim, Germany, will discuss routine sub-mSv cardiac scanning with the SOMATOM Definition Flash.

During a July 15 evening symposium, Brian Ghoshhajra, MD, MBA, director of cardiac magnetic resonance imaging (MRI) at Boston's Massachusetts General Hospital, will share how his practice and the patient experience have been positively impacted by his facility's SOMATOM Definition Flash system, which was recently augmented with the FAST CARE platform for cardiovascular applications.

As part of Siemens' July 16 lunch symposium, Stephan Achenbach, MD, FACC, FESC, FSCCT, professor of cardiology at the University of Giessen, Germany, will detail the high diagnostic accuracy of DSCT coronary angiography in predicting the need for coronary revascularization.

Also during the lunch symposium, Fabian Bamberg, MD, MPH, a Fellow in Clinical Radiology at the University of Munich, Germany, will detail the assessment of coronary arteries to rule out coronary artery disease (CAD) and quantify coronary stenoses, and demonstrate how the inherent automatic preprocessing in *syngo.via* drastically accelerates cardiovascular reading. Dr. Bamberg also will explain the evaluation of cardiac function using data from Siemens' MinDose tube current modulation algorithm.

Concluding the lunch symposium, John R. Lesser, MD, FACC, FSST, a cardiologist at the Minneapolis Heart Institute, will discuss how the SOMATOM Definition Flash and its ultra-low dose technology have changed the treatment approach on pediatric cardiac studies.

Additionally, the July 15 Siemens-sponsored Read with the Experts session will use *syngo.via* to illustrate how automatic preprocessing helps to enable Sustainable Cardiovascular Care. Hands-on *syngo.via* demonstrations will be held in the SCCT Workstation Arena or at the Siemens booth.

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 48,000 employees worldwide and operates around the world. In fiscal year 2010 (to September 30), the Sector posted revenue of 12.4 billion euros and profit of around 750 million euros. For further information please visit: www.siemens.com/healthcare.

¹ *syngo.via* can be used as a stand-alone device or together with a variety of *syngo.via*-based software options, which are medical devices in their own rights.