The whole picture with one sweep. New syngo DynaCT 360 software from Siemens speeds up rotational angiography

Siemens Healthcare presents a new feature for Artis zeego, the only interventional imaging system on the market utilizing robotic technology. Thanks to the syngo DynaCT 360 application, an angiography system for the first time can rotate 360 degrees in six seconds to provide CT-like slice images with a field of view of 35 by 25 centimeters. Up to now the C-arm has taken 16 seconds to achieve such extensive soft tissue coverage, as is necessary for abdominal interventions. An exposure time reduced by more than one half brings a number of advantages: it is now unnecessary for the patients to hold their breath for so long during the exposure, and the images are subject to fewer motion artifacts. Furthermore, the physician generally needs to administer less contrast agent. Syngo DynaCT 360 is one of the innovations of Siemens Healthcare's recently announced Agenda 2013 investment program.

The syngo DynaCT 360 software is a further development of syngo DynaCT, a Siemens-developed technology that creates CT-like slice images from the approximately 400 images made during a rotational angiography, and displays them on screen in the angiography suite while the intervention is still in progress. Particularly in the case of unexpected complications during the intervention and also for immediate follow-up, this enables physicians to arrive at a precise diagnosis without needing to transfer the patient to the CT suite.

Compared with syngo DynaCT, syngo DynaCT 360 has a larger field of view: the volume of a patient's anatomy recorded during a rotation now measures 35 by 25 centimeters. In addition, the new application can record the field of view roughly twice as fast as before, thus reducing motion artifacts on the images. Thanks to the shorter recording time, patients do not need to hold their breath for as long. Additionally the examination requires less contrast agent and patients can be exposed to less radiation.
During therapy, the large field of view offered by syngo DynaCT 360 makes it possible to visualize entire organs, such as the lungs and liver, as well as tumors, including their tumor-supplying vessels. For example, the large field of view is advantageous if the liver is already enlarged, or the patient is adipose. In addition, the high quality of the soft tissue imaging facilitates needle guidance, biopsies or ablations, e.g. by radio frequency or microwave.

Syngo DynaCT 360 runs on Artis zeego, part of Siemens' Artis-zee family of interventional imaging systems.

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.

A press picture for syngo DynaCT 360 will be available at: http://www.siemens.com/healthcare-pictures/syngoDynaCT360

The products/functions cited here are not yet available for purchase in certain countries. Due to the legal specifications pertaining to medical devices, their future availability cannot be promised in any country. More detailed information can be obtained from the relevant local Siemens organization.

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.