

Healthcare

Imaging & IT

For the trade press

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Siemens Artis zeego brings flexibility to angiography – The Artis zee system family has a new member

Angiography (vascular imaging) uses X-ray technology and contrast media for spatial visualization of blood vessels. The new Artis zeego angiography system of Siemens Healthcare introduces unprecedented flexibility in catheter labs and operating rooms. The industrial robot technology integrated in Artis zeego allows the physician to move the C-arm to almost any position around the patient. This makes it easier than ever before to visualize internal organs from various sides, if - for example - tumors or vessel diseases have to be diagnosed. The University Clinic in Munich will be the first hospital worldwide to use the new Siemens angiography system for patient care.

Artis zeego is the latest highlight of Artis zee. This is the new name of the Siemens system family for interventional radiology and cardiology. The systems are available in biplane, ceiling-mounted, floor-mounted, and multi-functional configurations. In cardiology, Artis zee can also be equipped with the magnetic navigation system from Stereotaxis.

"The use of industrial robot technology in angiography systems is entirely new in medical engineering. This allows the treating physicians for the first time to visualize vessels and diseases from all sides with unprecedented precision. Our system considerably enhances the image quality and facilitates the physician's work during an intervention", said Dr. Norbert Gaus, Head of Angiography, Fluoroscopy and Radiography Systems at Siemens Healthcare.

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The combination of a C-arm with a powerful industrial robot provides the treating physician with almost unlimited freedom of movement. The flat detector of this system rotates around the patient at such high velocity and precision that CT-like images are created that acquire more anatomical details than possible ever before with an angiography system. Thus, diagnostic certainty is increased, particularly during complex interventions such as Selective Internal Radiation Therapy, which spares healthy tissue and shrinks tumors. In addition, the physician can perform complex C-arm movements, for example for peripheral acquisitions of the patient with the patient table in a tilted position, which are not possible with conventional C-arm systems.

Artis zeego supports innovative 3D procedures such as tomograms with syngo DynaCT from Siemens. The new Large Volume syngo DynaCT software enables the physician to visualize large volumes such as the entire abdomen or the liver, for example during chemoembolization or biopsies. Artis zeego is superior to conventional angiography systems also during neuro interventions because it can provide larger views of the skull, neck and spine.

The angiography system allows to adapt the position of the isocenter to the height of the relevant physician. This is a great advantage, particularly at lengthy interventions during which the physician has to wear a heavy lead apron. And what is really clever: If the system is not used, it can be stowed in a park position to require minimal space or the C-arm moved to the ceiling. This is a highly significant feature particularly in multi-purpose rooms, so-called hybrid operating rooms.

Artis zee system family

Artis zee is the new name of the Siemens system family for imaging in interventional radiology and cardiology. Patients and physicians to an increasing extent prefer minimally invasive therapy because it can - among other things - usually be performed under only local anesthesia and reduces the length of the stay in the hospital or doctor's office as opposed to comparable surgical interventions. This treatment method requires imaging procedures for monitoring the painless advancement of instruments along the natural paths such as blood vessels and passage systems.

The Artis zee family is characterized by enhanced quality of 2D imaging and a full suite of new 3D applications, including syngo iPilot. This application allows faster and more precise catheter navigation through 3D roadmapping. The syngo iGuide application can be used to move canula procedures from computed tomography to the catheter lab. Thus, interventions are facilitated for the physician and new capacities are created at the CT scanner which would otherwise be blocked by lengthy interventions.

Workflows such as the acquisition of soft tissue images are facilitated by intuitive menus. Moreover, all system movements of Artis zee can be easily controlled by ergonomic table-side control modules.

You will find press images on this topic at: http://www.siemens.com/med-picture/Artis_zeego

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