
Siemens Healthineers Presents Efficient Radiology Solutions



- The Somatom go. CT platform and the Magnetom Sempra 1.5 Tesla MRI scanner boost the competitive strength and profitability of radiology service providers
- Artis pheno robot-supported angiography system enables personalized, minimally invasive surgery for multimorbid patients
- Expanded PEPconnect platform provides customers with virtual anywhere/anytime access to education and real-time performance support materials via any device
- Improving overall ultrasound workflow through automation and advanced technologies

For the first time at ECR in Vienna (March 1 – 5) the healthcare division of Siemens AG will be appearing under its new brand – Siemens Healthineers – and with the motto, “Let’s shape the future of healthcare together”. The company’s strategic goal is to help healthcare providers worldwide to meet their current challenges and to excel in their respective environments using products and solutions that increase efficiency and reduce costs. Thanks to standardized workflows and special service packages Siemens Healthineers provides radiological institutions certainty for budgeting and supports successful growth.

Accordingly, Siemens Healthineers will exhibit an entirely new platform for computed tomography, which will meet the needs of all users and improve their competitive situation. Based on the Somatom go. platform Siemens Healthineers offers two scanner variants: the 32-slice Somatom go.Now is particularly suited to radiology providers who want to establish a new CT department. Somatom go.Up is equipped with a wider detector providing up to 64 slices. Among other benefits, it offers faster scanning, which is especially important for lung imaging – e.g., to screen for cancer. Since the scanners can be controlled via a tablet, medical staff no longer has to keep moving between the CT scanner and the control room. Radiographers can thus stay with patients while preparing the scan. The software also gives additional assurance with regard to the diagnostic quality of the images. In addition, all the computer hardware that was previously housed in the control room has now been directly integrated into the scanner gantry. Radiology providers therefore no longer need a separate control room, and can make use of a lower-cost single-room design instead. The automated and standardized workflows of the Somatom go. platform help achieve thorough clinical results, and special service packages like the integrated Siemens Healthineers Connect Plan give users the opportunity to budget reliably, with lower running costs overall. The system thus represents a further step in the direction of improving efficiency and better patient care.

Competitive strength and profitability with Magnetom Sempra

Magnetom Sempra is a new highly cost-effective MRI scanner from Siemens Healthineers. Magnetom Sempra is also available with the Siemens Healthineers Connect Plan. Thanks to the service concept, low operating costs and innovative technologies, the Magnetom Sempra 1.5 Tesla MRI scanner makes it possible for radiology practices and clinics as well as small and medium-sized hospitals to work profitably despite growing cost pressures in the industry. At the same time, with the help of standardized workflows, they can achieve consistent quality regardless of user variations. The DotGO MRI workflow technology helps Magnetom Sempra users respond flexibly to individual patient conditions, while simultaneously standardizing examinations. So-called Dot engines automate and standardize workflows. The Brain, Spine and Large Joint engines come standard with the system, covering about 75% of a typical case mix. Dot engines are also available for more advanced examinations, further helping to avoid unnecessary rescans and increasing productivity. From start to finish, a complete brain examination can be performed on Magnetom Sempra in less than ten minutes. This helps both smaller practices and larger hospitals operate more efficiently while at the same time increasing patient comfort, due to shorter exam durations.

New Compressed Sensing acceleration technology

Compressed Sensing imaging technology offers impressive speed, heralding a paradigm shift in the clinical practice in MRI. It allows MRI scans to be carried out in only a fraction of the previous scanning time. For example, cardiac cine imaging of the heart – which traditionally takes just under six minutes, involves multiple breath holds and is very difficult for patients – can now be completed in as few as 25 seconds completely under free breathing, with the aid of the new Compressed Sensing Cardiac Cine applications. With this, patients who suffer from arrhythmia or who are unable to hold their breath will no longer have to be excluded from cardiac MRI, the gold standard of cardiac functional characterization.

With the introduction of the new 3 Tesla MRI system Magnetom Vida1, Siemens Healthineers expands the scope of Compressed Sensing

applications. Abdominal MRI with dynamic contrast enhancement is known to be a complex exam involving multiple breath-holds, and the timing of contrast application as well as the start of sequences is critical. It now becomes a push-button, free-breathing examination with: Compressed Sensing Grasp-Vibe, which acquires everything in one continuous run – without complex timing.

Innovative robot-supported Artis pheno angiography system

Artis pheno was developed for use in minimally invasive surgery, interventional radiology and interventional cardiology. The zen40HDR flat panel detector and the Gigalix X-ray tube give the system outstanding image quality. Compared to prior systems from Siemens Healthineers, its 2k imaging technology offers a fourfold increase in resolution for 2D imaging and likewise in comparison to prior Siemens Healthineers systems, up to 15 percent faster scan times in the body area. This is made possible by syngo DynaCT 3D imaging, which uses less contrast agent during the imaging process. The C-arm is 13 centimeters wider and has a free inner diameter of 95.5 centimeters, which offers more space for handling adipose patients and means longer instruments can be used without difficulty. The Siemens Healthineers multi-tilt table is also designed to accommodate patients weighing up to 280 kilograms. The robotic construction gives the Artis pheno a flexible isocenter, so it can represent the target area of the body from virtually any angle. The system supports effective hygiene management in the hospital thanks to its antimicrobial coating and a unique CleanGuide. Many additional optional application packages are available to suit the customer's requirements as complex cases arise. For example, up to ten vertebrae can be represented in 3D using syngo DynaCT Large Volume, giving a larger overview during spinal fusion procedures. Using syngo DynaCT 360, it takes just six seconds for the Artis pheno to generate a large-volume image of the liver or lung, for example, including the anatomy of the tumor and the vessels leading to it, which provides effective support for transarterial chemoembolization procedures.

Expanded PEPconnect platform provides customers access to education

To support highest patient satisfaction, best clinical outcomes and optimized workflows, education and professional development are also important elements. Siemens Healthineers has expanded its online learning platform PEPconnect (Personalized Education Plan) by about 1,000 new learning modules for medical imaging. Effective immediately, physicians and medical technology assistants can use PEPconnect to access training courses on Siemens Healthineers systems for imaging and minimally invasive therapy in seven different languages (English, German, French, Italian, Spanish, Korean and Japanese). Previously, the training and professional development offered by PEPconnect focused mainly on laboratory diagnostics. The new modules for imaging now bring the number of learning modules on the platform to 7,000.

Ultrasound solution for liver patients and women's health

The Acuson S Family of ultrasound systems, Helx Evolution with Touch Control offers a unique solution tailored to help clinicians personalize the treatment to each liver patient's individual disease state due to ultrasound diagnostic – all in one room and on one system directly at the patient's side. A comprehensive portfolio of advanced ultrasound applications includes for example quantification of liver stiffness using Virtual Touch quantification, eSieFusion multi-modality imaging to merge CT or MRT image data during realtime-intervention, and Cadence contrast imaging technology to delimit liver lesions. These technologies work together to enhance the clinical information needed to adapt to a liver patient's unique condition. The Personalized Liver Ultrasound approach is supported by a quick, low-stress, and minimally invasive Enhanced Liver Fibrosis (ELF) testing to improve both workflow and patient care. The Siemens Healthineers' ELF Blood test, combines three serum biomarkers, has been shown to correlate to the level of liver fibrosis assessed by liver biopsy.

Improve standardization of particular data and workflow efficiencies with the 3D Total Breast Ultrasound solution comprised of the Acuson S2000 Automated Breast Volume Scanner (ABVS) and Syngo Ultrasound Breast Analysis software. This all-in-one system combines the power of 2D handheld and 3D automated whole breast ultrasound with advanced technologies such as Virtual Touch strain imaging, a visual representation of deformations in the tissue, and intelligent workflow solutions such as multi-modality review. So, Siemens Healthineers provides a comprehensive women's health ultrasound solution for the diagnosis of gynecological and prenatal diagnostics.

1 Magnetom Vida is pending 510(k) clearance. The product is still under development and not commercially available yet. Its future availability cannot be ensured.

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