

### Healthcare Sector Workflow & Solutions Division

#### **Image. Plan. Treat: Siemens Reaches Beyond Traditional Radiation Oncology at AAPM 2009**

IM-RealART Solution brings the plan to the patient for treatment and planning confidence

**Anaheim, Calif., July 23, 2009 – Siemens Healthcare (booth #711) brings the treatment plan to the patient with the IM-RealART™ Solution, debuting at the 51st Annual Meeting of the American Association of Physicists in Medicine (AAPM) in Anaheim, Calif., July 26-30. IM-RealART Solution is one of the first real-time adaptive radiation therapy solutions, resulting in high quality plans that can be produced in approximately 10 minutes or less, and does not require patient re-positioning or extensive re-planning processes.**

With current image-guided solutions, doctors have the ability to track shape changes in a patient's anatomy between treatments, but unfortunately, this does not allow for adjustments in the treatment plan prior to the treatment delivery within an acceptable timeframe. IM-RealART Solution accounts for the difference in the patient from scan to scan, while still maintaining the same timeslots.

"Image-plan-treatment is the wave of the future in radiation therapy," said X. Allen Li, PhD, DABMP, FAAPM, chief of Physics and professor at the Medical College of Wisconsin in Milwaukee. "With IM-RealART, I can create new plans in as little as eight minutes, enabling me to make real-time corrections to the plan based on the interfractional anatomy variations."

IM-RealART Solution is designed specifically for immediate replanning within Image-Guided Radiation Therapy (IGRT). It combines Siemens CTVision™ system with the PROWESS® RealART Treatment Planning System, offering diagnostic-quality, in-room imaging, while allowing physicians to react immediately to changes in patient anatomy and replan the treatment on the spot .

"With the speed and accuracy of IM-RealART Solution, plans can be quickly adapted and delivered, with the further advantage of targeting only the regions that need to be treated, sparing

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healthy tissue,” said Wolfgang Rueger, vice president, Oncology Care Systems, Siemens Healthcare. “Precise targeting and accurate plans allow for optimal patient care.”

### **Technology on Display**

This year, the Siemens booth will also feature a theater area, where live presentations will be presented, further demonstrating Siemens’ commitment to radiation oncology. Presentation topics scheduled for the theater area include: the IM-RealART Solution, the SOMATOM® Definition AS CT scanner, a new image review and approval solution (ImageGrid RT Viewer) and the recently launched Biograph™ mCT.

On July 25, Siemens will hold a customer event, featuring three presentations, followed by a reception. Each presenter will talk on a separate part of the Siemens theme: “Image. Plan. Treat.” Dr. John Bayouth, department of Radiation Oncology at the University of Iowa Hospital & Clinics will present “Multi-modality Imaging in Radiation Therapy Treatment Planning: How Much of the Potential Is Realized Today?”; Dr. X. Allen Li, Medical College of Wisconsin, will focus on “Online Re-planning for Adaptive Radiation Therapy”; while Dr. Kurt Blodgett, chief of physics, Allegheny General Hospital, will discuss how to “Deliver Personalized Treatment with the ARTISTE™ Solution.”

Among the many innovations in the booth at this year’s conference, Siemens will be highlighting the following:

**syngo® MultiModality Workplace (MMWP)** – Formerly known as LEONARDO™, this *syngo*® post-processing workplace provides the ability to view, process, and evaluate the results from various imaging modalities to accurately screen, diagnose, prescribe, and then plan the treatment. The MMWP provides the ability to view different images, such as CT, MR, PET, or X-ray, and then compare, overlay, and fuse the datasets in a single database.

**syngo RT Therapist 4.1** – *The syngo*-based Therapist Workspace™ combines Siemens imaging expertise, advanced data processing, and *syngo* standard medical imaging platform to provide a comprehensive Oncology Workflow Solution™ for radiation therapists. The *syngo*-based Therapist Workspace is the first application to truly integrate and automate the processes of image guidance and treatment delivery. This application supports automated 2D and 3D image acquisition, patient offset determination, patient setup, treatment delivery, and full access to the oncology information system.

**syngo RT Oncologist\*** – This application provides the oncologist with all necessary data and applications required for localizing and contouring the target and critical adjacent structures, visualization, and review of 2D and 3D images prior treatment history – all in the privacy of the oncologist’s office.

**Biograph™ mCT** – In addition to being the first imaging device to offer whole-body PET•CT scanning in just five minutes, Biograph mCT is an ideal solution for radiation therapy planning. It gives you a large 78-cm bore for RTP devices, a sturdy, extra-wide 500-pound capacity bed, integrated PET and CT gating, excellent tumor delineation, and full DICOM RT connectivity with all major RTP vendors. Additionally, mCT’s Adaptive Dose Shield protects the patient from unnecessary pre- and post-spiral radiation, conserving 20 percent dosage in routine CT exams.

**MVision** – MVision is a unique volumetric in-line target imaging solution and the natural next step in IGRT. The system is one of the first commercial implementation of cone beam technology utilizing a standard radiotherapy treatment beam. Designed to complement a clinic’s oncology workflow, MVision fully integrates and automates all processes, including acquisition, reconstruction, registration, assessment, patient positioning, and clinical review. With a few simple steps, therapists can calculate 3D offsets, send them to the treatment couch to compensate for daily variations, and safely deliver therapy.

**PreScision™ Stereotactic Solution** – This package combines the ONCOR™ linear accelerator, 550 TxT™ treatment table, a variety of beam-shaping devices, and an array of stereotactic apparatus and patient fixation devices for radiosurgery.

For more information on Siemens Oncology portfolio, visit <https://www.med.usa.siemens.com/oncologyusa/>.

\*The COHERENCE Oncologist workspace is currently being rebranded to *syngo RT Oncologist* and may be purchased under the COHERENCE name brand.

The **Siemens Healthcare Sector** is one of the world’s largest suppliers to the healthcare industry. The company is a renowned medical solutions provider with core competence and innovative strength in diagnostic and therapeutic technologies as well as in knowledge engineering, including information technology and system integration. With its laboratory diagnostics acquisitions, Siemens Healthcare is the first integrated healthcare company, bringing together imaging and lab diagnostics, therapy, and healthcare information technology solutions, supplemented by consulting and support services. Siemens Healthcare delivers solutions across the entire continuum of care – from prevention and early detection, to diagnosis, therapy and care. Additionally, Siemens Healthcare is the global market leader in innovative hearing instruments. The company employs around 49,000 people worldwide and operates in 130 countries. In the fiscal year 2008 (Sept. 30), Siemens Healthcare reported sales of €11.2 billion, orders of €11.8 billion, and Sector profit of €1.2 billion. Further information can be found by visiting <http://www.siemens.com/healthcare>.

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