

Siemens Fights Cancer – Fast and Focused at ASTRO 2009

Oncology portfolio demonstrates ultimate precision and uncompromised speed

Chicago, Ill. Nov. 1, 2009 – Siemens Healthcare takes the fight to cancer – fast and focused – at the 51st Annual Meeting of the American Society for Radiation Oncology (ASTRO), November 1-5, at McCormick Place West in Chicago. At ASTRO 2009, Siemens (booth #1829) showcases its portfolio of oncology innovations that can provide the key factors for a successful cancer fight: ultimate precision and uncompromised speed.

“Fighting cancer – fast and focused’ is more than a philosophy. It is incorporated in our products and solutions, providing the intelligent balance of precision and speed as key factors for successful radiation therapy,” said Holger Schmidt, chief executive officer, Oncology Care Systems, Siemens Healthcare. “We can make a difference in the lives of cancer patients – and in improving cancer treatment workflows through innovative products that set trends in the oncology industry and create new standards for streamlined workflows and personalized cancer care.”

ARTISTE Solution

Taking center stage at the Siemens booth is the ARTISTE™ Solution, a linear accelerator engineered specifically for Adaptive Radiation Therapy (ART). Unique in design, ARTISTE is an integrated imaging and workflow solution that offers a comprehensive portfolio of image-guided and advanced treatment delivery protocols, including in-room computed tomography (CT) imaging capabilities and 160 MLC™ multileaf collimator.

The ARTISTE Solution offers clinicians multiple imaging modalities. From Megavoltage (MV) to gold-standard, in-room CT imaging, clinicians can select the optimal imaging application for their treatment approach. Siemens MVision™ Cone Beam Imaging Package delivers remarkable soft-tissue contrast, especially in challenging cases, such as imaging prostheses and with large

patients. The CTVision™ CT-on-rails System provides in-room, diagnostic quality imaging; thus opening up opportunities to implement benchmark concepts, such as daily re-planning.

For precise patient positioning, the 550 TxT™ Treatment Table meets the growing demand for accuracy and stability, while providing the mechanical strength to accommodate a patient weight capacity of up to 550 pounds.

IM-RealART

Siemens brings the treatment plan to the patient with the IM-RealART™ Solution, one of the first real-time adaptive radiation therapy solutions, resulting in high quality plans that can be produced in approximately seven minutes, and does not require patient re-positioning or extensive re-planning processes. IM-RealART Solution accounts for the difference in the patient from scan to scan, while still maintaining the same timeslots.

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.

IM-RealART can be combined with the solution from Siemens and PROWESS, IM-Confident™ Plan, which consists of ARTISTE with the 160 MLC and an intelligent irradiation planning software. These components will possibly help reduce the treatment time required for intensity-modulated radiation therapy (IMRT) to five minutes or even less. Furthermore, this combination offers two solutions which, on the one hand, make daily workflows in radio-oncology much simpler and more efficient while, at the same time, enabling high precision patient treatment: Using innovative technologies, the tumor is irradiated with excellent accuracy while the latest software and imaging enable planning, replanning and therapy to all proceed as swiftly as possible.

Innovations Suited to Meet Your Needs

In addition, Siemens will also highlight the following:

- In-Line kView™**** Imaging delivers the new standard in IGRT with one beam, one source, one detector, for kV-like cone beam image quality. In-Line kView Imaging uses the same beam for both treatment and imaging to help verify patient positioning before and after treatment. Using a modified treatment beam, both kV-like images and low dose imaging can be obtained. syngo® Adaptive Targeting™ software quickly and reliably compares

pretreatment image with planning CT image, and provides powerful image fusion and 3D visualization tools.

- PreScision™ Stereotactic Solution combines the ONCOR™ and ARTISTE*** linear accelerator, 550 TxT™ treatment table, a variety of beam-shaping devices, and an array of stereotactic apparatus and patient fixation devices for radiosurgery. PreScision can provide full-field high-energy treatment with up to 2,000 MU/min for better tumor control, shortened treatment cycle.

Molecular Imaging

Siemens will also showcase the power of Molecular Imaging in Oncology with the large bore Biograph® mCT. The only integrated imaging device to offer routine, whole-body positron emission tomography (PET) scanning in just five minutes, Biograph mCT enables both molecular imaging and radiology to take advantage of its large bore capacity and high-definition technology, with premium CT capabilities with up to 128 slices. Using its advanced PET technology, the scanner is the world's only system that offers High-Definition PET imaging with 2 mm uniform PET resolution throughout the field of view (FOV), combined with the enhanced contrast of time-of-flight (TOF) technology.***** Results of this unique combination of High-Definition PET and Siemens TOF technology have been proven and published in the August, 2009 issue of the *Journal of Nuclear Medicine*. Results of the study showed that when the techniques are used together, they provide better lesion detection than using TOF alone.

The entire Biograph TruePoint PET•CT family of imagers features high-resolution PET•CT for diagnosis, staging, and planning, integration of biology imaging in the treatment plan with proven connectivity with most treatment plans and treatment evaluation.

One of Siemens latest applications for oncology workflow management, *syngo* TrueD, enhances the ability to compare patient scans over time and on one screen, by allowing the user to simultaneously display three studies, such as baseline and two follow-up exams. *syngo* TrueD was designed specifically for the oncology workflow, including diagnosis, staging and assessment of cancer treatment response.

MR in Oncology

Siemens redefines Magnetic Resonance in Oncology with its unique Total Imaging Matrix (Tim™) technology with up to 205 cm imaging. Tim technology enables multi-region exams without patient or coil repositioning, and enhances oncologic imaging workflow and efficiencies to the next level. *syngo* MR applications powered by Tim provide image morphology, access function (fMRI) and

metabolites (spectroscopy) non-invasively. Tim also enables radiotherapy planning through a partnership with CIVCO and their flat tabletop indexing system and positioning accessories.

Commitment to Excellence

This year at ASTRO, Siemens will promote its latest partnerships and enhanced technologies and services. Calypso Medical Technologies, Inc. and Siemens will jointly develop products integrating the Calypso® System with the Siemens ARTISTE linear accelerator and other Siemens radiotherapy technologies*. The Calypso System, incorporates the company's proprietary GPS for the Body® technology, utilizing miniature implanted Beacon® transponders to continuously provide accurate, precise, real-time tracking of the tumor location during external beam radiation therapy.

Siemens also teams with CIVCO Medical Solutions to provide unmatched flexibility for radiation therapy. The Protura™ 6 Degree of Freedom robotic couch for radiation therapy** can be bundled with new Siemens linear accelerators. When combined with CIVCO's Universal Couchtop™ and SBRT Body Pro-Lok™, Protura becomes an all-in-one motion management solution. The new Universal Couchtop is a strong, lightweight couchtop with low attenuation, ideal for IGRT tracking.

And under the extended agreement, Siemens will offer the MOSAIQ software from IMPAC Medical Systems, Inc. as its next-generation oncology information system (OIS) offering to LANTIS, the OIS currently sold by Siemens. Siemens LANTIS customers will have the option of upgrading to MOSAIQ or continuing to utilize their LANTIS systems. Siemens will extend service support and application training for its customers to include MOSAIQ. MOSAIQ is an image-enabled electronic medical record for oncology that allows documentation of patient data, from diagnosis to therapy. Clinical images, lab results, and external documents can also be integrated.

Siemens will also distribute and sell Candelis, Inc.'s ImageGrid™ PACS-RT Appliance and the ImageGrid™ RT Viewer. Fully compliant with the DICOM (Digital Imaging and Communications in Medicine) and DICOM-RT standard, ImageGrid PACS-RT provides Radiation Therapy and Oncology facilities with a scalable, reliable and highly cost-effective storage solution to accommodate the increasingly larger volumes of images and data.

Siemens will also highlight Vision RT's AlignRT® product, a revolutionary, non-invasive, real time imaging solution for patient tracking and 3D motion management in radiation therapy. AlignRT® does not require the use of any markers and employs proprietary 3D imaging technology to produce high-resolution and accurate 3D surface data referenced to the treatment isocentre. AlignRT® is able to track patient motion in all six degrees of freedom, displaying translations and

rotations about all three axes, in real time. Any movement that exceeds user defined tolerances is detected and the radiation beam is held automatically.

*Works in progress.

**The intended use of this device is to support a patient during radiation oncology therapy; or the intended use of the MDE-TEC 6 degree axis couch is to support and aid in positioning a patient during radiologic, radiation therapy, and other medical procedures. The 6 degree axis couch adds pitch and Roll to the normal X, Y, Z, and Yaw motions. The additional Pitch and Roll makes patient alignment simpler without the need to manually move the patient on a table.

***Works in progress, requires 510(k) pre-market review, does not have a Declaration of Conformity MDD and are not yet commercially available.

**** In-Line kView is work in progress, requires 510(k) pre-market review, and is not yet commercially available in the U.S.

*****All competitive claims valid at time of publication, data on file.

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 is the only company to offer 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 49,000 employees worldwide and operates in over 130 countries. In fiscal year 2008 (to September 30), the Sector posted revenue of 11.2 billion euros and profit of 1.2 billion euros. For further information please visit:

www.siemens.com/healthcare.