

## Healthcare

For the Trade Press

Erlangen, February 15, 2008

**Breast Care Solutions by Siemens offer a comprehensive product spectrum for the diagnosis and therapy of breast cancer**

**Among women, breast cancer is the most common cause of cancer death. Each year nearly 180,000 women in the United States are diagnosed with breast cancer. More than 40,000 a year die from this disease.<sup>1</sup> These facts stress the importance of a quality-ensured early detection of breast cancer as well as the availability of individual therapies. In response, Siemens Healthcare developed comprehensive Breast Care Solutions for the early detection and treatment of breast cancer. These combine different imaging methods, such as ultrasound, mammography, and magnetic resonance tomography (MRT), which are supplemented by innovative software tools and solutions from lab diagnostics.**

This multi-modality approach in breast medicine is increasingly gaining the acceptance of physicians. Imaging methods, such as MRT and Ultrasound, are becoming more and more important. All imaging methods in breast medicine enable comprehensive early detection and after-care. The advantages of the new technologies include improved image quality and optimized workflows that support the physician in his work. In turn more patients can be examined within a shorter period of time. Immuno-diagnostic tests provide information about the course of therapy.

---

<sup>1</sup> American Cancer Society, September 2007, [www.cancer.org](http://www.cancer.org)

The most current breast care developments in detail:

- Digital mammography system of the future: Mammomat Inspiration

The full-field system Mammomat Inspiration provides for higher image quality than conventional systems and for more agreeable patient examinations with the new MoodLight function. Time-saving workflow functions allow screening of up to 15 patients per hour. The new system is based on an upgradable digital mammography platform that provides a standard screening configuration as well as stereotactic biopsies directly at the system. And it will be possible to integrate the future three-dimensional (3D) imaging method with breast tomosynthesis (work-in-progress).

- Advances for MRT spectroscopy of the breast

A recent study published in *Radiology* found that proton MRI spectroscopy may eliminate 68 percent of biopsies for benign non-mass breast lesions found on standard MRI exams without missing any cancers<sup>2</sup>. Siemens' solution for quantitative breast MRI breast spectroscopy, syngo Grace, allows physicians to obtain essential metabolic information about the biochemical composition of breast lesions. This additional information helps physicians better distinguish between malignant and benign lesions to potentially reduce the risk of unnecessary breast biopsies. Using choline as a biomarker, syngo Grace provides improved differential diagnosis and enhanced confidence in therapy monitoring.

- Ultrasound for early breast cancer detection

The new technology "eSie Touch Elasticity Imaging" by Siemens for breast ultrasound is based on the principle of elasticity imaging and presents the various compression characteristics of tissue. According to the American Cancer Society, 80 percent of all biopsied breast lesions are benign. Physicians hope to reduce the number of unnecessary invasive breast biopsies with this method. The new application provides the physician with

---

<sup>2</sup> Bartella L, et al "Enhancing Nonmass Lesions in the Breast: Evaluation with Proton (<sup>1</sup>H) MR Spectroscopy" *Radiology* 2007; 245: 80-87.

improved accuracy in characterizing breast lesions. Tissue that cannot be compressed is indicative of malignant changes. In addition, the automatic breast SomoVu by U-Systems provides new possibilities: at the push of a button the new system acquires 3D ultrasound images of the breast quickly and cost-effectively and offers coronal views as well. Through automatic exposure, the ultrasound images depend less on the user and are easier to compare as with previous systems. Ultrasound in connection with mammography is the method of choice for women with dense breast tissue. This applies to two out of five women in Europe and North America.

- Advances in immuno-diagnostics

Newer developments in immuno- diagnostics led to a biomarker that supports the physician in his decision which medication to use – especially in case of metastasized cancer. The concentration of this biomarker known as HER-2/*neu* is determined in the blood of the patient. HER-2/*neu* is a protein that plays a keyrole in certain malignant growths of breast cancer cells. The serum test for HER-2/*neu* by Siemens Healthcare Diagnostics is the first, and so far the only blood test approved by the FDA. HER-2/*neu* values measured during the course of the illness provide for informative data about the course of therapy. They are able to provide the physician with important data within the framework of patient treatment.

In addition to the solutions for breast cancer described above, the product spectrum of Siemens also includes products for molecular imaging as well as radiation therapy and IT solutions.

Pictures for this press information are located under:

<http://www.siemens.com/med-pictures/Mammomat-Inspiration>

<http://www.siemens.com/med-pictures/Elasticity>

**Siemens Healthcare** 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 will be the first fully integrated diagnostics 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. The company employs more than 49,000 people worldwide and operates in 130 countries. In the fiscal year 2007 (Sept. 30), Siemens Healthcare reported sales of €9.85 billion (on a pro forma basis including Dade Behring roughly €11 billion), orders of €10.27 billion, and group profit of €1.32 billion. Further information can be found by visiting <http://www.siemens.com/healthcare>