



Detachable Table Plugs Your Practice into Breast MRI

The unique detachable table design of the Signa® family of MR systems enables access to exciting technological advances that can improve patient care. GE Healthcare recently announced collaboration with Sentinelle Medical Inc. (Ontario, Canada) for the exclusive use of its Vanguard™ system.

Developed and sold by Sentinelle, Vanguard can transform a GE Signa® HDx 1.5T MRI into a dedicated breast imaging and interventional system. Unique to this system is Variable Coil Geometry (VCG) – an innovative departure from the fixed coil geometry found with other MR breast coils. VCG allows the technologist to position the coils directly against the breast. When used in conjunction with a Signa HDx 1.5T MR system, Vanguard provides exceptional signal-to-noise ratio for Breast MRI and, therefore, superb image quality.



With a large grid and complete and open medial and lateral access, clinicians can perform interventions on lesions in all quadrants of the breast, including lesions in difficult positions such as the upper-inner quadrant. A patented patient support design, positioning system and surgical grade padding ensures comfort for all patients regardless of size. The unique dedicated table design allows patient exam preparation outside of the MR suite to further maximize patient throughput.

The Vanguard detachable table is available for purchase directly from Sentinelle Medical, and gives Signa customers exclusive access to this exciting new technology to further advance breast MR imaging and intervention.



About Sunnybrook Health Sciences Centre
Toronto, Canada

Sunnybrook opened its doors in 1948 as the largest veterans' hospital in Canada. As the need for public hospital services increased, Sunnybrook became affiliated with the University of Toronto as a teaching hospital in 1966 and began providing patient care services to the general public. By the early 1990s, the facility had established six major program priorities: Aging, Cancer, Community Health, Heart and Circulation, Mental Health and Trauma. With over 1,200 beds and a staff of 11,000, physicians, volunteers and students, residents throughout the province of Ontario rely upon the expertise of one of Canada's premier academic health sciences centres. During 2005 and 2006, over 123,000 MR studies were performed on two GE Signa HDx 1.5T MR scanners. Dr. Causer and Joan Glazier are part of the Clinical Breast Imaging Research Team at Sunnybrook Health Sciences Centre and have published several articles on breast MR imaging and intervention. Most recently, Dr. Causer was one of the investigators who contributed to the newly-released ACS guidelines for Breast MRI screening. Dr. Causer has collaborated with clinical and scientific colleagues as co-investigator on several research studies using Breast MRI and ultrasound for the screening of women at high risk for breast cancer. She is currently researching co-registration of these imaging modalities for guided interventions for tumor localizations and biopsies.

Dedicated Breast MR Solution Optimizes Workflow, Increases Patient Throughput at Sunnybrook

Sunnybrook Health Sciences Centre, a Center of Excellence in Toronto, Canada, realized several years ago that there was a need to optimize their breast MR imaging and intervention program for high-risk patients. The facility now uses the Sentinelle Medical Vanguard system with its GE Signa 1.5T MR systems. With the Vanguard's unique VCG, they are able to obtain higher signal-to-noise ratios translating to faster scan times that optimizes workflow and increases patient throughput.

The number of patients receiving MRI-guided biopsies has quadrupled since 2001, claims Dr. Petrina Causer, Radiologist and Associate Scientist at Sunnybrook. "We are biopsying smaller and smaller lesions and require the necessary setup, imaging protocols and biopsy systems to allow us to get these lesions."

When routinely targeting three and four millimeter lesions, Dr. Causer requires solid compression and a large grid for accessing all quadrants of the breast. "The Vanguard allows us to target lesions in the upper outer and upper inner quadrants of the breast," noted Dr. Causer.

Joan Glazier, technologist at Sunnybrook, has been integral in optimizing the breast MR interventions. She believes that one of the most important aspects of MR-guided biopsies is patient preparation. "We have the ability to prepare our patients in a room outside of the MR suite," stated Glazier. "It is easier and faster to set the patients up when they are not being intimidated by the sights and sounds of an MR scanner." This means a total reduction of time in the MR Suite by 15-20 minutes.

The Vanguard resembles a stereotactic breast biopsy table that allows the technologist to pull breast tissue away from the chest wall. The interventional grids can move medially and laterally, as well as anteriorly and posteriorly. Glazier uses one hand to hold the breast and the other hand to move the grids and lock them into place. "We can have absolutely no movement of the breast or the interventional grid during our procedures," said Glazier. "This system is extremely sturdy so we have never had an issue of the grids moving during our procedures." ■



Vanguard™ is a trademark of Sentinelle Medical Inc.
It is manufactured and distributed directly by Sentinelle.