



# Beyond the Bore

June 2006

## News about Philips Panorama 1.0T

## Easy Patient Access Opens New Opportunities

The Panorama 1.0T's open architecture and movable patient couch, which enable easy patient access, are important benefits for the University of Cologne (Germany). The Panorama 1.0T is not only more comfortable for claustrophobic and large patients, it provides new diagnostic imaging possibilities for trauma and cardiac stress cases, according to Axel Gossmann, M.D., radiologist at the University of Cologne.

The first European site to install a Panorama 1.0T, the University added the scanner in June 2005, and also purchased Achieva 1.5T and 3.0T systems. Since then, the Panorama has become a key scanner for complex MRI procedures and kinematic joint studies as well as routine studies at the University of Cologne.

### Open Aperture Facilitates Trauma Cases

*"This system covers the whole spectrum of modern MRI."*

Dr. Gossmann asserts that patient access is a major advantage of the Panorama 1.0T. He points to the example of trauma cases where CT typically has been the imaging

modality of choice because of the patient access it affords. Whereas cylindrical MRI scanners may be limiting, he explains that the Panorama 1.0T's open design enables the use of MRI for trauma cases, such as spinal injuries, where MRI is a better choice.



Axel Gossmann, M.D., radiologist, University of Cologne

Cardiac stress imaging is another area where patient access is vital. "Panorama 1.0T gives us great access to the patient if a cardiac arrest is induced," he says.

### Superb Performance

Dr. Gossmann compares the image quality on the Panorama 1.0T to that of a high-field cylindrical system. "The C-spine images are exceptional and we can clearly see the nerve roots with virtually no artifacts," he says. "In musculoskeletal imaging, we obtain great T1 contrast and the cartilage images look superb."

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# PHILIPS



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He continues, “The T2-weighted FLAIR brain images and diffusion-weighted images are great, and the brain stem images show hardly any susceptibility effects by virtue of the 1.0T field strength.”

Knee, shoulder, spine and wrist studies are easier in the Panorama 1.0T because of the ability to slide the patient couch laterally to position off-center anatomy in the magnet isocenter. Dr. Gossmann says he is impressed with the Panorama 1.0T’s ability to perform kinematic joint studies that would be impossible in a cylindrical scanner.

*“The C-spine images are exceptional.”*

**Increased Patient Comfort**

Patient reactions to examinations on the Panorama 1.0T at the University of Cologne have been very positive. For example, while patient Karin Hartmann describes her experience in a cylindrical scanner as very stressful and uncomfortable, she says the Panorama 1.0T is a much better option. “This is a big difference. You don’t have claustrophobia at all. You feel very relaxed and can let the examination be done without problems,” says Hartmann.



University of Cologne

“This system covers the whole spectrum of modern MRI,” says Dr. Gossmann. “The Panorama 1.0T is a complete system that is comparable to high-field cylindrical systems. And, the open gantry is highly accepted by all classes of patients.”

# Marketing SPOTLIGHT

Decatur Memorial Hospital is using print advertising, direct mail and public relations to introduce its new outpatient imaging clinic that features the Panorama 1.0T with Ambient Experience. Mike Cassell, marketing manager, Decatur Memorial Hospital says he believes the system will draw patients from beyond its 30-mile existing catchment area. “Our goal is to educate the surrounding community about the availability of this new MRI experience – it’s unique to the area with its calming, soothing environment.”

The hospital is running print ads in the local daily newspaper as well as specialty magazines (see example at right). In addition, the Panorama 1.0T was featured in a newsletter that was mailed to 85,000 households in May (see newsletter at right). The hospital also hosted a news conference to unveil the system for print, radio and television reporters. Outdoor advertising is planned for later this year.

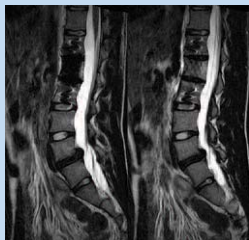


# CLINICAL CASE Study

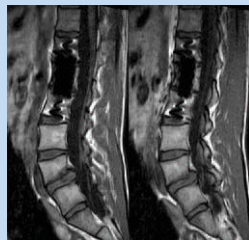
**This series of clinical case studies highlights Panorama 1.0T's capability to perform "Beyond-the-Bore" applications that are either not possible in cylindrical scanners or extremely difficult. Panorama 1.0T thereby enables you to offer a wider range of examinations to an increased percentage of the population, resulting in improved return on investment.**

Metal screws and reinforcements are not uncommon in patients who have undergone spine surgery. Such objects cause distortion of the main magnetic field due to the differences in susceptibility between the metal and the surrounding tissues. In conventional high-field imaging, the effect of this is seen as a large susceptibility artifact in the image.

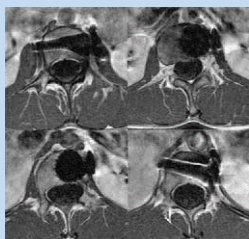
With the Panorama 1.0T, the lower main magnetic field exhibits significantly less distortion – resulting in far less pronounced susceptibility artifacts. This enables the tissue of interest close to the metal objects to be more clearly visualized. It is even possible to visualize the screws in the bones.



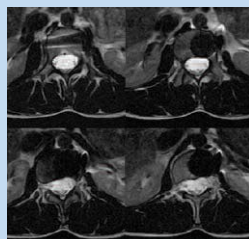
High res T2W TSE, thk 4.0 mm, scan time 3.16 min



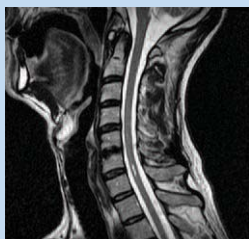
High res T1W TSE, thk 4.0 mm, scan time 2.34 min



High res T1W TSE with gadolinium, thk 4.0mm, scan time 3.58 min



High res T2W TSE, thk 4.0 mm, scan time 4.37 min



High res T2W TSE, thk 3.0 mm, scan time 2.36 min, metal C4-C5



High res T1W TSE, thk 3.0 mm, scan time 3.24 min, metal C4-C5

*Courtesy of Nevada Imaging Center (NIC). NIC operates five independent diagnostic imaging clinics in and around Las Vegas, Nevada, USA.*



Baptist Imaging Center

## Panorama 1.0T has drive

In March, one patient drove six and one-half hours across Kentucky, from Ashland to Paducah (380 miles), to have his shoulder scanned on the Panorama 1.0T at Baptist Imaging Center. This new outpatient diagnostic imaging facility affiliated with Western Baptist Hospital in Paducah, Kentucky, opened in October 2005. According to Betty Brown, supervisor of imaging at the center, the Panorama 1.0T has significantly expanded the catchment area for hospital MRI services from a radius of 45 miles to three or four times that distance.

In this case, because of the patient's large, broad-shouldered build his physician referred him to the Panorama 1.0T for a post rotator cuff surgery MRI exam. The Panorama 1.0T is ideal for this type of exam, because the patient couch moves laterally to position off-center anatomy, such as the shoulder, in the magnet isocenter. A Panorama 1.0T is scheduled to be installed later this spring in Ashland, but the patient could not wait.

"The Panorama 1.0T undoubtedly has the best images I have ever seen on an open MRI," says Eric Shields, M.D., radiologist at the center. "The image quality is comparable to any 1.5T magnet."

While there are two more MRI scanners at Western Baptist Hospital, the Panorama 1.0T is used for the majority of outpatient MRI exams and for inpatients who are claustrophobic or large.

Brown says the center has been very pleased with the Panorama 1.0T. "Low-field open systems often require long scan times and result in decreased image quality," she comments. "But because the Panorama 1.0T is a high-field scanner, scan times are not longer and the image quality is excellent. We scan 12 patients in an eight-hour day."

# News

## PANORAMA I.0T

### Unbeatable combination

Four locations have purchased Panorama I.0T with Ambient Experience to differentiate their services. In May, Decatur Memorial Hospital (Decatur, Illinois, USA) opened South Shores Imaging Center, a new outpatient clinic that features the system. Desert Medical Imaging (Palm Springs, California, USA) with five independent imaging sites in the Palm Springs area is adding a Panorama I.0T with Ambient Experience in early summer. Saint Barnabas Ambulatory Care Center (Livingston, New Jersey, USA) and DiaSana (Mill, The Netherlands) are the other two sites. Additional orders for this unbeatable combination are expected soon.

### Market embraces high-field open scanner

Philips welcomed its 50th Panorama I.0T customer in the first quarter of this year. The only commercially available high-field open system, Panorama I.0T has been popular with customers who are interested in setting themselves apart.

### Optistar® LE Power injector for use with Panorama I.0T

In May, Philips introduced the Optistar® LE Power injector for use with the Panorama I.0T. Mallinckrodt, a business of Tyco Healthcare, offers the Optistar LE Power injector as a total integrated injector with pre-filled syringes. Possible applications that might benefit from use of a power injector are CE-MRA and contrast uptake studies.



### Live demonstration proves power and utility of SmartExam

Attendees at Philips' ten-city "Trends in MRI" symposium were treated to a live demonstration of SmartExam that showcased the software's ability to automate scan planning, scanning and processing with a single mouse click.



Via a live Internet connection with a Philips' test bay in Best, The Netherlands, attendees saw two volunteers scanned on a Panorama I.0T. The volunteers were scanned in different

head positions to illustrate how SmartExam compensates for poor positioning. Viewers watched as the scanner completed scout surveys, and then used anatomical landmarks to correct for positioning and create accurate, reproducible images.

SmartExam is an option on the Panorama I.0T, as well as Philips' 3.0T and 1.5T scanners. For more information, visit <http://www.mri.philips.com> or contact your sales representative.

### First Panorama I.0T site opens in Switzerland



(l. to r.) Markus Scheidegger, Ph.D., modality manager MR, Philips Medical Systems; J.G. Battikha, M.D., radiologist and owner, Geneva Radiology Institute; and J.P. Van den Bussche, sales manager, Philips Medical Systems

The Geneva Radiology Institute (Geneva, Switzerland) celebrated the addition of a Panorama I.0T on March 9. A pioneer in the use of new technologies, the clinic is the first in Switzerland to install a Panorama I.0T.

While the clinic already had a Philips 3.0T scanner, clinic owner Dr. J.G. Battikha says he wanted to add the high-field open system for patients who are large or claustrophobic; for young children who may need to be accompanied by an adult; and to enable easier patient access.



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