



Imagine Now & Next

OASIS Velocity

Introduction

OASIS Velocity™ is the only open architecture high-field MRI system with several advantages over traditional imaging technologies, including its patient-friendly design and ability to serve all types of individuals. Its new main features include:

- SynergyDrive™ Automation Suite
- WIT coil set
- IP-RAPID
- AutoExam Brain
- AutoPose Brain&Spine
- AutoClip
- Multi language AutoVoice
- SoftSound

These features and the advantages of using OASIS Velocity will be discussed further in this post.

The technology

OASIS Velocity is the only true open superconductive MRI scanner in the industry, making it the first of its kind. This industry-leading patient table can accommodate up to 300 kg and 83 cm of width with three axis motorized movement. It also implements the advanced SynergyDrive™ technology that accelerates the entire workflow from patient positioning to diagnosis. Its accessibility and efficiency make it one of the most advanced imaging devices available.

The size of traditional MRI devices limits their accessibility to patients. In today's world, 25 percent of MRI patients experience some form of claustrophobia. In fact, for every 100 patients, up to four of them suffer from severe claustrophobia that causes examination interruption or termination. In addition, a third of the U.S. adult population is considered obese, yet 90 percent of emergency departments do not have imaging equipment of adequate size to accommodate larger patients. These issues can make the size and capacity of traditional MRI machines inadequate. OASIS Velocity differs in that it has an open architecture, allowing for an unobstructed view and unlimited lateral opening that provides free range of motion and high patient accommodation. Likewise, it provides a more comfortable environment for both claustrophobic and obese patients.

Of note, 5.4 percent of MR imaging is performed on pediatric patients. Many times, these patients will require sedation, thereby increasing examination times and putting the patient at additional risk. The open architecture of the OASIS Velocity allows for parent-child interaction to continue throughout the procedure. This can help put the patient at greater ease, thereby lowering sedation rates and the risk associated with MRIs.

OASIS Velocity has high-field capabilities and is the only true open superconductive MR system with 1.2T field strength. It features SynergyDrive™ Suite technology that utilizes automation, simplification, and acceleration. SynergyDrive™ assists with positioning in the MR system, setting imaging parameters, and scanning, thereby creating a simpler examination process and shortening scan time up to 30%.

SynergyDrive™ incorporates an efficient, workflow integrated coil system (WIT) that allows for ease of use and higher image quality. It also includes IP RAPID, a compressed sensing technology that incorporates high speed imaging, thereby shortening scan time without sacrificing quality. SynergyDrive™ also offers:

- AutoExam – a single click exam
- AutoPose – an automatic technology identifying scan plane positions and position slices
- AutoClip – automatic MIP post processing with no manual clipping
- AutoSend – automatic image data transfer to the DICOM server
- AutoVoice – a multi-language voice system

These features, in conjunction with the accessibility of the device itself, make OASIS Velocity an incredible development in the field of MR imaging. As Dr. Lawrence Tanenbaum, VP and Chief Technology Officer, RadNet Inc. puts it, “these devices tend to draw patients towards them that are either large or extremely anxious, which tends to make the value of these systems when they go in even greater”.

Conclusion

OASIS Velocity offers high image quality with speed and simplicity while patients feel at ease. It is designed to accommodate all types of patients, including pediatrics, those of greater size, and those with anxiety. Additionally, it offers technologic advances via its SynergyDrive™ system that allows for automation and reduced workflow burden for imaging staff. As the very first open superconductive MRI on the market, it can help to overcome many of traditional MRI challenges.

