## **Medical Systems**



## Vantage Titan<sup>™</sup> 3T 3-Tesla MRI System



Toshiba Medical Systems Corporation has developed the Vantage Titan<sup>™</sup> 3T, an open bore whole-body magnetic resonance imaging (MRI) system with a magnetic field strength of 3 teslas, double that of our previous MRI systems. This system was released in Japan in April 2010.

The main features of this system are as follows:

• Large patient aperture

The Vantage Titan<sup>™</sup> 3T features a large patient aperture measuring 71 cm in diameter, which permits large patients and patients who are unable to lie straight to be scanned and expands the range of examinations. The system also features Pianissimo<sup>™</sup> quiet-scanning technology with vacuum shielding, which effectively suppresses the higher levels of scanning noise generated by systems with stronger magnetic fields and ensures patient comfort.

- High-quality, high-definition images The high magnetic field strength, which results in a higher signal-to-noise ratio, and parallel reception of up to 32 channels ensure that high-quality, high-definition images are obtained. Parallel transmission using two independent lines minimizes transmission signal nonuniformity in abdominal examinations, which is an inherent limitation of high-field MRI systems. Noncontrast-enhanced magnetic resonance angiography (MRA) is also possible.
- User friendliness and high efficiency

The Vantage Titan<sup>™</sup> 3T offers a user-friendly and efficient workflow thanks to its attractive and intuitive screen layout and the Atlas coil system that eliminates the need to replace or rearrange the radio frequency (RF) coils for each target region.



MR angiographic image of renal arteries acquired without use of contrast agent

## Aplio<sup>™</sup> MX Diagnostic Ultrasound System

Toshiba Medical Systems Corporation has developed the Aplio<sup>™</sup> MX diagnostic ultrasound system, which provides state-ofthe-art imaging technologies in a compact unit. This system is designed to support a wide range of clinical applications, including abdominal, small parts, obstetrics and gynecology (OB/GYN), and cardiac examinations.

The main features of this system are as follows:

• State-of-the-art imaging technologies In addition to Differential-THI

Aplio<sup>™</sup> MX diagnostic ultrasound system

and ApliPure<sup>™</sup> imaging technologies, which have earned an excellent reputation in the market, the Aplio<sup>™</sup> MX supports Precision Imaging, which enhances tissue signals and improves the depiction of structural features such as the margins between various types of tissues, permitting tumors to be visualized more clearly. The Aplio<sup>™</sup> MX also supports Mecha 4D (where 4D refers to the three spatial axes and the time axis), allowing real-time three-dimensional display of fetuses or abdominal organs.

- Outstanding installation flexibility Compared with the Aplio<sup>™</sup> XG, the main unit of the Aplio<sup>™</sup> MX is about 50% smaller in volume and 30% lighter, permitting it to be installed in a limited space.
- Environmentally friendly Thanks to a green parts procurement policy and an energy-saving and resource-conserving design, the Aplio<sup>™</sup> MX has been certified as an environmentally conscious product (ECP) in compliance with the Voluntary Environmental Standards for Products established by the Toshiba Group.



Comparison of images of liver obtained using conventional imaging (left) and Precision Imaging (right)