## **Social Infrastructure**

## Medical Systems

## **Alexion**<sup>™</sup>/**Access Edition Whole-Body** X-Ray Computed Tomography Scanner



Alexion<sup>™</sup>/Access Edition whole-body X-ray CT scanner

Focusing on clinics in Japan and emerging markets, Toshiba Medical Systems Corporation has developed the Alexion<sup>™</sup>/Access Edition whole-body X-ray computed tomography (CT) scanner.

The main features of this CT scanner are as follows:

- Low exposure dose and high image quality The Alexion<sup>™</sup> incorporates an adaptive iterative dose reduction three-dimensional (AIDR 3D) image reconstruction technology, which has been developed for our high-end CT Aquilion™ series, as the standard configuration in four-row multislice CT systems for the first time. Image noise can be reduced by up to 50%, and an exposure dose reduction of up to 75% can be expected.
- Simple operation and improved examination efficiency A simple scan navigation mode is provided. In addition, a scanning time of 0.75 s and an image reconstruction speed of 15 images/s are achieved.
- Flexible system configuration The space required for installing the system is minimized and selection of the moving range of the patient couch becomes possible. In addition to two types of X-ray tubes, an X-ray output control function is provided, allowing optimal system configuration for each scan room according to the installation conditions, such as the size of the room, power supply conditions of the facility, and number of examinations conducted.





With AIDR 3D

Comparison of images with and without AIDR 3D

## Aplio<sup>™</sup> 500/400/300 Ultrasound **Diagnostic Systems**



Aplio<sup>™</sup> 500/400/300 ultrasound diagnostic systems

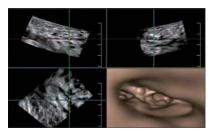
Toshiba Medical Systems Corporation has developed the Aplio<sup>TM</sup> 500 diagnostic system, which provides stateof-the-art imaging technologies in a compact unit.

The main features of this system are as follows:

- New image engine
- With improved ultrasound transmission and reception performance, new sophisticated algorithms, and improved real-time processing capability, this system provides high-quality clinical images with high spatial resolution, allowing clear observation of tissue structures.
- Advanced applications
- This system is equipped with the "Smart Fusion" function, which displays a CT image or a magnetic resonance (MR) image for the same patient in synchronization with an ultrasound image for reference; and "Fly Thru," which displays the inner walls of luminal structures such as the large intestine.
- High energy efficiency and operability Power consumption has been reduced by approximately 25% (\*) by reducing the size of the system. The "Quick Start" function allows conditions recommended for the patient's size and purpose of examination to be set with one touch of a switch. Moreover, the operating panel and touch panel can be customized.

We have also developed the Aplio<sup>™</sup> 400 and Aplio<sup>™</sup> 300 models, which use the same platform as the Aplio<sup>™</sup> 500 model but with a more limited range of functions.

(\*) In comparison with the Toshiba Aplio™ MX system.



Fly Thru image of mammary duct (data courtesy of Kurita Clinic, Japan)