

# INNOVATION *BY DESIGN*

For over 130 years, Toshiba has led the world in developing technology to improve the quality of life. This Made for Life commitment is reflected in our family of leading edge imaging systems for CT, MRI, ultrasound, cath labs, X-ray and nuclear medicine. From creating our first slip-ring scanner in 1985 to introducing the first 64-slice CT system in 2004, Toshiba continues to build upon its legacy with technological innovations that improves patient care while providing lasting quality for a lifetime of value.

## Toshiba — A History of Leadership

- 1875 • Founding of Toshiba
- 1985 • First slip-ring CT scanner
- 1989 • First Helical CT Scanner
- 1993 • First Real-time CT Fluoro
- 1998 • First 500 ms CT Scanner
- 2002 • First 400 ms CT Scanner
- 2003 • First 32 slice CT scanner
- 2004 • First 64 slice CT scanner



*Activision*



**TOSHIBA MEDICAL SYSTEMS CORPORATION**

<http://www.toshibamedicalsystems.com>

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Toshiba Medical Systems Corporation meets internationally recognized standards for Quality Management System ISO 9001, ISO 13485.

Toshiba Medical Systems Corporation Nasu Operations meets the Environmental Management System standard, ISO 14001.

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# TOSHIBA

Leading Innovation >>>

*Activision*

Ready-Set-Go



*Activision*

# Easy Operation and High-Quality Images for Every User

Introducing the Activion™16 multislice CT system, a new addition to Toshiba's multislice family that combines the high technology of Toshiba's 4- to 64-slice CT systems to provide exceptional image quality with a single-console interface. Outstanding reconstruction speed and automated MPR generation of true isotropic data expands your diagnostic capabilities and push productivity to new heights.



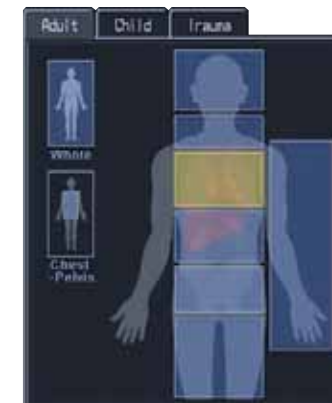
For over 90 years, Toshiba has maintained a global leadership position by manufacturing diagnostic imaging systems to improve the quality of patient care. In the Activion16, Toshiba brings together innovative technologies in a single console.

Featuring fast and efficient image reconstruction, giving clinicians access to high-quality images, and powerful diagnostic tools enhancing workflow, productivity and clinical outcomes.

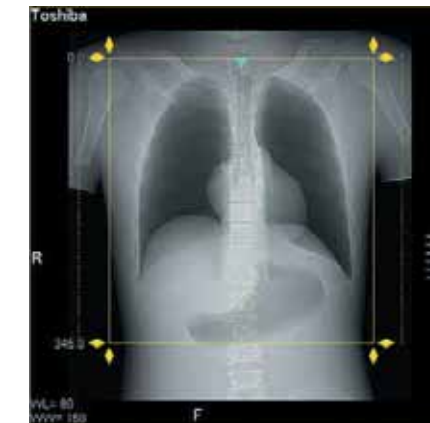


# Activion16 - Redefining "Easy Operation"

Activion16 offers on-screen protocol guidelines for every type of CT examination. The sophistication of the system allows all scan, reconstruction, and image transfer parameters to be incorporated into each examination protocol, allowing the operator to focus on the patient rather than system operation. Examinations can be performed by any operator to the same high standard by following just three steps: "Ready - Set - Go". All remaining operations are fully automatic.



> Ready select the scan region



> Set perform scan planning



> Go! start scanning





# Powerful "3D on Console"

Toshiba's newly developed user-friendly 3D imaging software permits 3D images to be generated with outstanding ease, while intuitive 3D preset icons ensure easy operation and quick results.

Preset icon

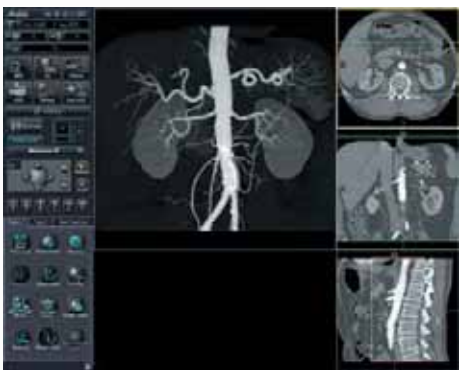


Quick results



# Fast and Accurate Bone Removal

Toshiba's bone removal software provides the operator with an easy and accurate means of removing bone from CT angiographic images. Extremely high-quality MIP images with bone segmentation can be obtained in just a few clicks. Toshiba provides realtime preview of bone removal on synchronized 3D and MIP images to ensure highly accurate and diagnostic 3D CT angiograms every time.

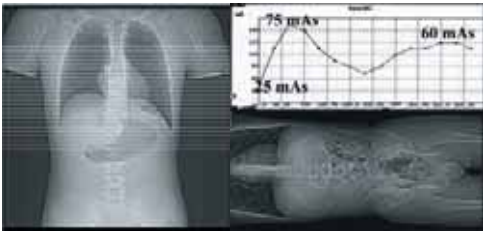


# High Level Technology for Low exposure dose

## Personalized dose control

Realtime exposure control with **SUREExposure™** automatically adjusts the tube current to the patient's body habitus to reduce the exposure dose while maintaining high image quality throughout the entire anatomy based on the noise level specified by the user.

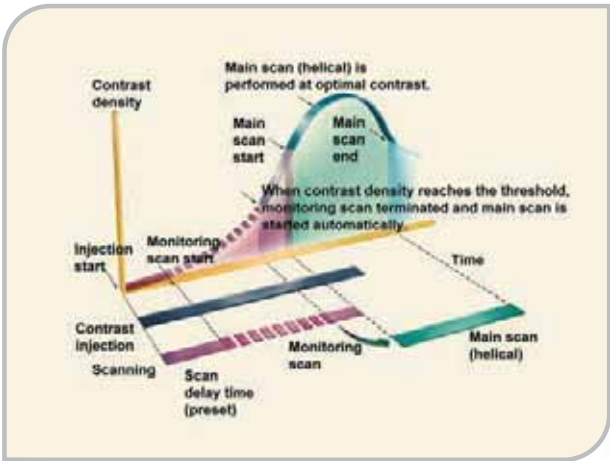
- ▶ Up to 40% dose reduction
- ▶ Automatic tube current modulation
- ▶ Dose optimized for each patient's anatomy
- ▶ Intelligent dose reduction with QDS reconstruction



## Industry-leading CT bolus tracking

**SUREStart™** monitors contrast uptake in the target region using intermittent or continuous mode with a low-dose technique and automatically triggers scanning at the optimal level of enhancement in order to.

- ▶ Increase examination efficiency by avoiding repeat procedures
- ▶ Improve image quality by optimizing contrast utilization
- ▶ Reduce contrast usage by eliminating the need for a test bolus



# Advanced CT algorithms

## Advanced CT algorithms

The Activion16 employs a variety of post processing filters named anatomically with **SUREIQ™** to enhance image quality while applying low dose techniques.

- ▶ Quantum Denoising software, reduces the exposure to half while keeping the low and high contrast resolution
- ▶ Advanced raster artifact suppression technique (**Boost3D™**), an adaptive filter process applied to raw data that removes high noise due to low dose scanning technique
- ▶ 2 path Beam Hardening Correction, a double reconstruction technique that compensates for changes in effective photon energy when passing tissue with high density e.g. bones



### Quantum Denoising Software



### Boost3D



### Beam-Hardening Correction

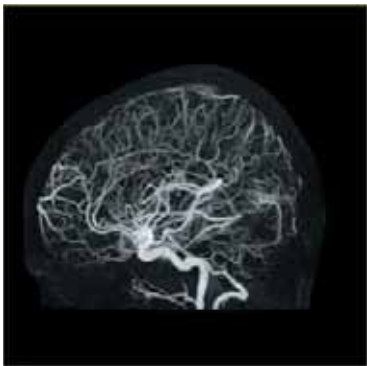




# Options for Activion16

## SURESubtraction™ Cerebrovascular imaging reaches new heights

SURESubtraction in brain CTA is revolutionary new technology that provides 3D DSA images for the complete and accurate assessment of the blood supply to the brain. With superb accuracy, low-dose precontrast images are automatically subtracted from a regular post-contrast study, providing unsurpassed detail of the intracranial internal carotid artery and the carotid siphon. Surgical aneurysm clips and coiling devices are removed, permitting unobstructed postoperative assessment.



## Vessel View

Vessel View automatically provides curved planar reformations (CPRs) of selected arteries in just two clicks. For fast angiographic diagnosis, the automatically generated curved planar images can be freely rotated around the curved path in both anatomical and straightened CPR views. Cross-sectional images perpendicular to the curved path are automatically displayed, allowing complete assessment of the arterial lumen and walls. Quantitative percentage stenosis measurements are easily obtained based on either the minimum luminal diameter or total luminal area.



## Real-time multislice CT fluoroscopy

Because real-time CT fluoroscopy tracks biopsy needle movement without delay, interventional procedures are easier, quicker and more accurate than ever.

- ▶ Shows the needle in 3 continuous images in real time for precise positioning and control
- ▶ Improves the accuracy of biopsy procedures
- ▶ Offers patient greater safety and less discomfort

