TECHNOLOGY HISTORY

For over 130 years, Toshiba has been a world leader in developing technology to improve the quality of life. Our 50,000 global patents demonstrate a long, rich history of leading innovation. It might surprise you to learn about some of the things we've invented.

1915 Japan's first X-ray tube	**1990** First helical CT scanner	**2002** First 400 ms CT scanner
1954 First digital computer	**1993** First real-time CT fluoro	**2007** First **dynamic volume CT** scanner
1977 First cardiac ultrasound scanner	**1995** First DVD	**2009** First 160-row Helical
1985 First slip-ring CT scanner	**1999** First quiet MRI	**2010** First iterative recon technique for 320 Detector Row CT
1986 First laptop computer	**1999** First 0.5 mm multidetector CT	**2011** First 80 detector row CT scanner

Made for Life™

TOSHIBA MEDICAL SYSTEMS CORPORATION

http://www.toshibamedicalsystems.com

Model number: TSX-201A MCACT0226EA 2012-04 TME/D

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.

Printed in Japan

TOSHIBA

Leading Innovation »»»

AIDR 3D *integrated*

Aquilion LB

Opening New Dimensions

See the bigger picture with the largest true field-of-view

Designed to expand the dimensions of CT, Aquilion™ / LB combines Toshiba's award winning CT technologies with the advantages of a large bore platform. Aquilion / LB provides you a true 70 cm field-of-view (FOV) acquisition, covering more anatomy with greater accuracy than ever before.

INDUSTRY'S LARGEST GANTRY APERTURE

The unparalleled 90 cm gantry aperture allows extraordinary patient access and positioning, improving exam positioning for CT simulation, bariatric exam and interventional procedure.

QUANTUM PLUS DETECTOR: LARGEST ACQUIRED FOV

70 cm acquired field-of-view without extrapolation images anatomy that could be lost on other systems due to patient size or off-center exams.

- 40% larger acquired field-of-view
- Improved image quality across the entire image for bariatric exams and CT simulation
- Diagnostic quality information is now visualized past the standard 50 cm FOV

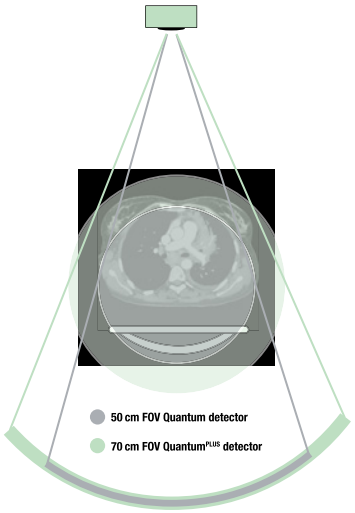


Diagram demonstrates the ability to visualize all anatomy during and off-center exam that resulted from a 25 degree tilted treatment board.

Dramatically expand the dimensions of CT Oncology.

Aquilion / LB is specifically designed to meet oncology challenges and improve patient care. Now CT simulation positioning can easily mirror radiation therapy positioning without compromise.

MORE POSITIONS, MORE POSSIBILITIES

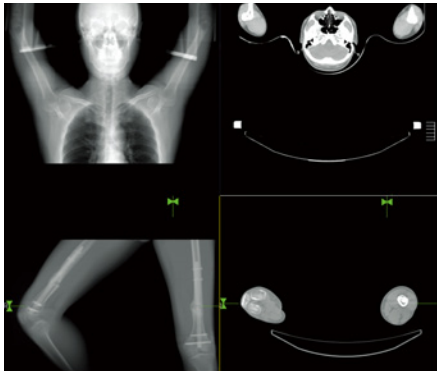
Aquilion / LB is the only system that combines the largest bore and largest true field-of-view so that you can scan the largest area's with greater accuracy.

- 90 cm gantry bore opening
- Uncompromised patient positioning
- 70 cm acquired field-of-view
  – 40% more diagnostic coverage
- 85 cm extended field of view*

LEAP INTO THE NEXT DIMENSION

Using our Made for Life philosophy, the Aquilion / LB has been designed to support leading edge oncology applications such as respiratory gating and CT Fluoro.

- Image the tumor volume in the correct dimension
- Increased tracking accuracy and reproducibility of tumor volume
- 4 dimensional guidance for tumor biopsy and/or marking with SUREFluoro™*



The 90 cm bore provides maximum positioning flexibility for unrestricted CT simulation.

Aquilion / LB's wide bore and 70 cm scan field-of-view allows a wide range of positioning options.

**Option*

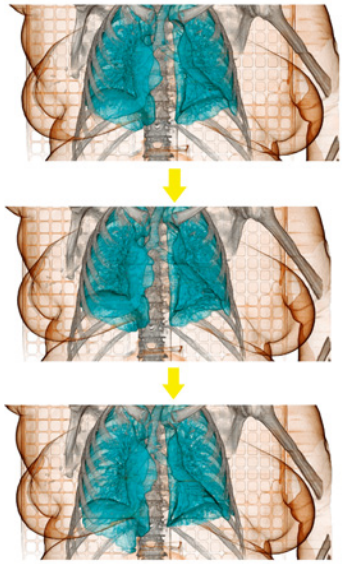
Make flexibility work to your advantage.

Aquilion / LB provides the advanced capabilities you need for the most challenging cases. The Quantum PLUS detector, with a true 70 cm field-of-view enables unparalleled image quality for larger patients. 4D acquisition and respiratory gating capabilities enable motion management.

RESPIRATORY GATING* FOR RADIATION THERAPY PLANNING

Aquilion / LB technology delivers robust flexibility for respiratory motion management.

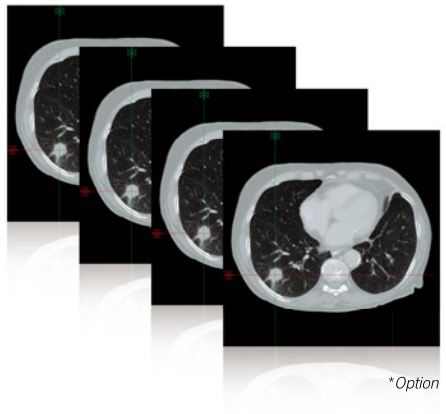
- Prospective respiratory gated acquisitions enabled by industry-leading infrared tracking system
- 4D acquisition mode with retrospective gating
- Voice coach function ensures the robust respiratory gated examinations.
- Phase average reconstruction provides range of motion tracking in a single image.



Three phases of a multiphase 4D aquisition.

4D VIEWING

Advanced 4D viewing software supports real fine 4D playback, tumor tracking, and intuitive batch saving capabilities.



*Option

Maximum image quality at minimum dose.

Aquilion / LB incorporates a variety of functions based on technologies that were developed for Aquilion ONE™ with the aim of significantly reducing the patient exposure dose, including AIDR 3D and SUREExposure™ 3D. Aquilion / LB achieves consistent image quality with industry-leading low-contrast resolution of 2 mm at 0.3% in low-dose scanning.

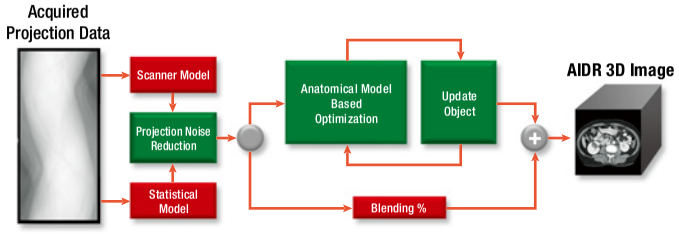
AIDR 3D
(ADAPTIVE ITERATIVE DOSE REDUCTION 3D)

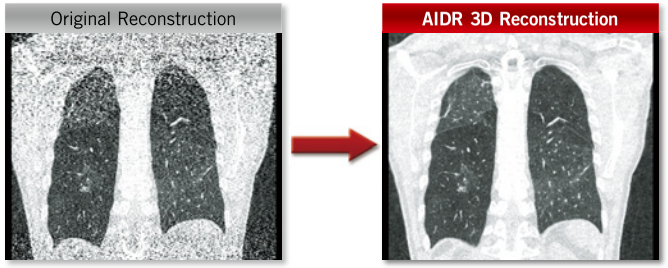
AIDR 3D is a sophisticated algorithm that has been designed to work in both the raw data and reconstruction domains.

The collective AIDR 3D process results in robust noise reduction, which is essential for achieving ultra low dose examinations in routine clinical imaging.

This iterative algorithm is superior in removing background noise while preserving diagnostic information compared to non-iterative approaches.

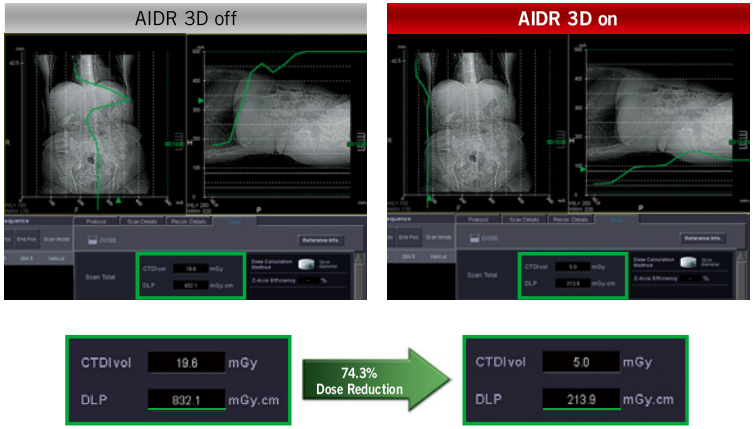
AIDR 3D can be applied to all acquisition modes for routine clinical use and is able to remove up to 50% of image noise resulting in dose reduction of up to 75%.





SUREEXPOSURE 3D
(INTEGRATED WITH AIDR 3D)

The integration of dose reduction features is essential for optimal dose management, so AIDR 3D has been seamlessly integrated with SUREExposure 3D, Toshibas automatic tube current modulation software. SUREExposure 3D is a powerful dose reduction tool that modulates the exposure for each patient based on a preset target level of image quality. When it is combined with AIDR 3D, X-ray exposure is automatically reduced before the scan to maintain the preprogrammed image quality adjusted for the expected level of noise reduction.



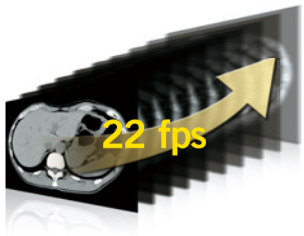
Fast and optimized workflow.

Aquilion / LB incorporates the latest generation hardware to optimize productivity and enhance diagnosis.

NEW CONSOLE ARCHITECTURE

From performing exams to distributing data, Aquilion / LB accelerates the process of providing the information you need to make the best treatment decisions.

With a reconstruction of up to 22 images per second, all images are available in a flash, even when scanned with Toshiba's unique 0.5 mm slice thickness.



ULTRAFAST DATA TRANSFER*

- The enhanced DICOM protocol allows an ultrafast data transfer speed of up to 60 images per second.
- Automated data transfer to multiple destinations can be set in the exam protocol.

MPR IMAGE GENERATION – MULTIVIEW

MultiView automation saves time by reconstructing MPR images as a part of the exam protocol, reducing the number of images for initial review and/or printing.

SUREXTENSION™*

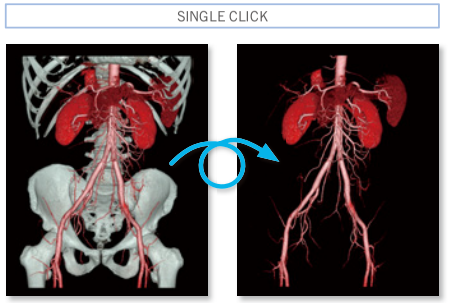
Healthcare providers increasingly need to make information resources available outside the traditional workplace.

SUREXtension provides remote access to Toshiba's powerful post-processing applications from client PCs in the hospital.

AUTOMATED BONE REMOVAL

Aquilion / LB incorporates automated bone removal algorithms to quickly and accurately segment bone in CT angiography examinations.

In just a few seconds, high-quality angiographic images are available for diagnosis.

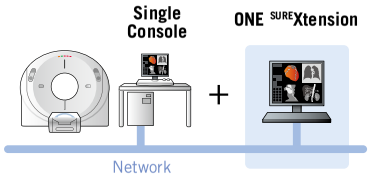


DOSE REPORT

In accordance with IHE recommendations, the Radiation Exposure Monitoring Profile function is provided in the software. This function automatically records all scanning data, enabling accurate tracking of the dose for a particular study.

SINGLE CONSOLE WITH DOUBLE PRODUCTIVITY

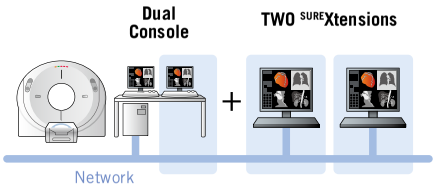
The space saving single console environment provides multitasking productivity, helping technologists keep up with increasing patient loads.



One concurrent SUREXtension remote user can be added to further enhance the workflow.

DUAL CONSOLE* FOR GREATER EXPANDABILITY

The console configuration is highly flexible to match the needs of any user. In addition to the standard single console, optional dual console is supplied with two hybrid keyboards, two-mice, and two 19-inch display monitors. Ideal for two-operator environment.



Two concurrent SUREXtension remote users can be added.

*Option

Live in the moment with Real-time Interventional Radiology.

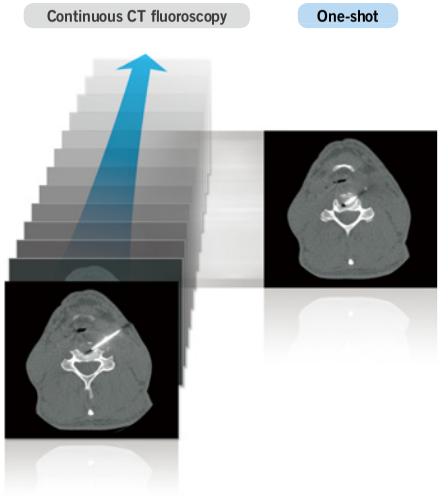
Expanding on over a decade of experience in real-time image display, Aquilion / LB combines three-frame CT Fluoro* with a spacious gantry opening to take interventional radiology to the next dimension.

90 cm opening allows unprecedented access to the patient. Specialized needle holder supplied with SUREFluoro provides additional protection to operator without affecting image quality.

REAL TIME LOW-DOSE CT FLUOROSCOPY

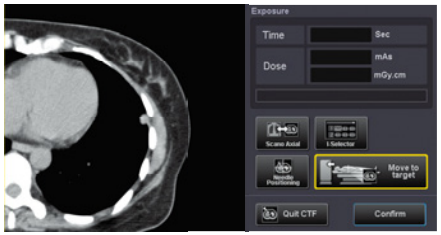
Toshiba's patented real-time reconstruction technology provides low-dose CT fluoroscopy with simultaneous three-slice display format.

- Continuous CT fluoroscopy permits real time guidance with 3 image display for accurate needle positioning
- One-shot scan mode provides high-resolution image display with a low dose exposure



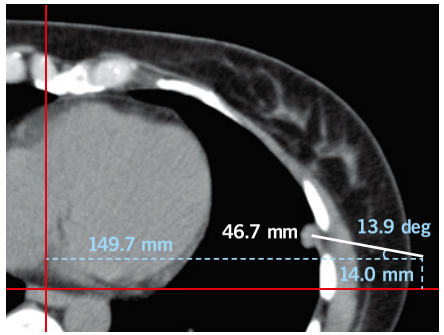
TARGET IMAGE DISPLAY AND CONTROL

The target image displayed on the CT fluoroscopy screen provides a handy reference during complex procedures. The table can be moved to this slice location in a single click.



VIRTUAL NEEDLE POSITIONING AND PLANNING TOOL

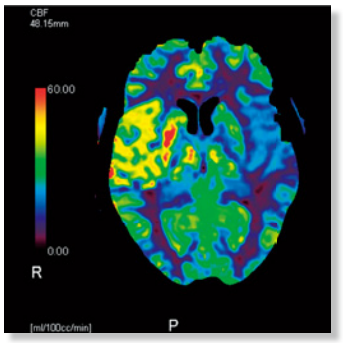
Easy needle position planning by automated distance and angle measurement with reference to the laser positioning lights.



*Option

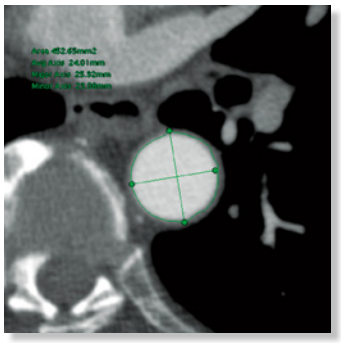
Maximizing clinical capabilities.

Aquilion / LB supports Toshiba's sophisticated suite of SURE Technologies™ and other advanced software tools to further increase clinical utility. Aquilion / LB employs cutting edge clinical application capabilities to meet the needs of all customer's for examinations.



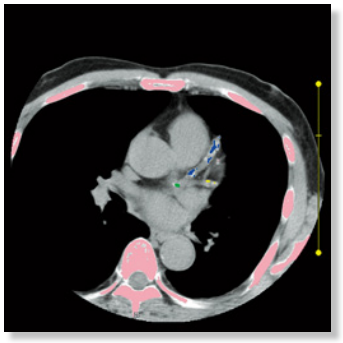
CBP Study*

Analysis of bloodflow characteristics from dynamic scan images and display of the results as map images



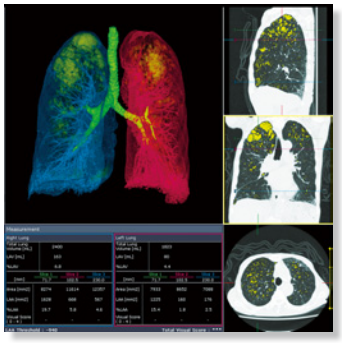
Vessel View*

Generation and display of CPR and cross-cut images of blood vessels



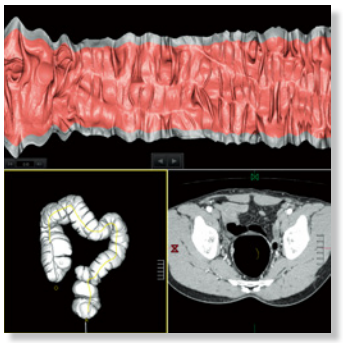
SURE Cardio™ Scoring*

Fast and easy evaluation of calcium based on non-contrast ECG-gated data



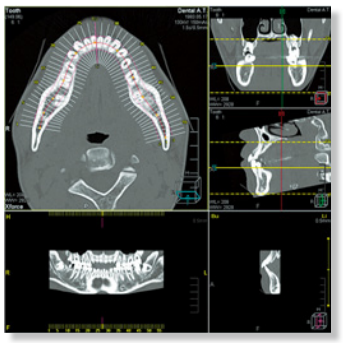
Lung Volume Analysis*

Quantification of low attenuation regions in lung tissue (regions of pulmonary emphysema)



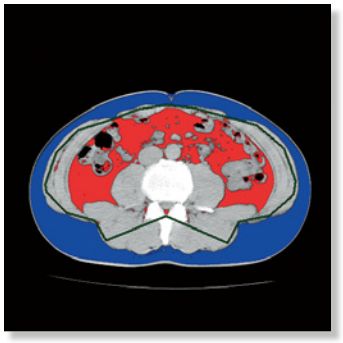
Colon View*

Advanced analysis and reporting tools for CT colonoscopy, with display functions such as filet view, fly through, and polyp tagging



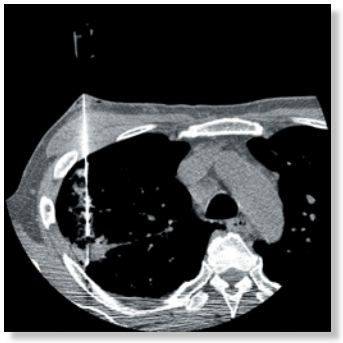
Dental Analysis*

Comprehensive dental MPR with easy-to-use tools for pre-operative planning



Fat Index View*

Automatic calculation of the ratio of visceral to subcutaneous fat as a prognostic indicator of the risk of metabolic syndrome



SURE Fluoro*

Real-time reconstruction and display of fluoroscopic images for faster and safer interventional procedures

*Option