

**TOSHIBA**  
Leading Innovation >>>



***Aplio 400***

*Platinum Series*

BETTER OUTCOMES  
FROM DETECTION TO TREATMENT

# PRECISION, CONTROL AND AN AMAZINGLY CLEAR PICTURE



Aplio™ 400 delivers in every way. Ensuring every examination has an optimal result, it provides you with unsurpassed image quality, superior productivity, and an ergonomic workplace with fully customizable console. Specialist tools, expert volume imaging functions and groundbreaking quantification options allow you to build your Aplio to perfectly suit your clinical needs at all times.

Aplio's unique core technologies provide an unmatched level of clinical precision, departmental productivity and ease of use, allowing you to get your diagnosis quicker and with higher confidence.



**High Density  
Beamforming**




**High Density  
Rendering**



**Realtime  
Application**



**iStyle+  
Productivity**



Superior imaging performance is one of the key reasons that make Aplio one of today's most popular premium diagnostic ultrasound systems. A full range of clinically proven tools offers uncompromised image quality. A host of advanced imaging and quantification functions ensures that you can make the best informed disease management decisions.





# ENJOY THE PERFECT PICTURE EVERY DAY

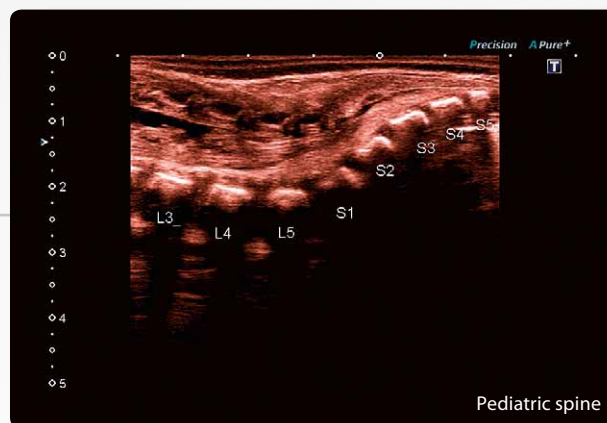
At Toshiba we believe that only the best image quality allows a diagnosis to happen quickly and with confidence. Each of our unique imaging technologies provides you with better image quality by reducing noise, strengthening signal and improving visualization. Aplio's revolutionary High Density Beamformer uses the most advanced digital signal processing to control the ultrasonic beams more precisely and flexibly than any other system.



Epididymis

## Precision Imaging and Precision+

With Aplio's new and enhanced Precision Imaging technology you can experience ultrasound imaging as close to reality as never before. From widespread areas to fine details in layers and boundaries Precision Imaging reveals more clinical detail for a faster and safer diagnosis. Precision Imaging delivers outstandingly smooth images with significantly sharpened outline of lesions, enhanced image uniformity and reduced clutter.



Pediatric spine

## ApliPure™+

ApliPure+ combines the advantages of spatial and frequency compounding to provide you with images of unsurpassed uniformity and detail while preserving clinically significant markers such as shadows behind echo-dense objects. ApliPure+ delivers increased imaging contrast and reduced speckle noise to improve visualization.



Ileus

## Differential Tissue Harmonics

Differential Tissue Harmonic Imaging takes outstanding tissue definition deeper than ever before. By simultaneously transmitting two frequencies in a single pulse Differential Tissue Harmonics provides images of unsurpassed spatial resolution and contrast, alongside with greatly increased penetration.

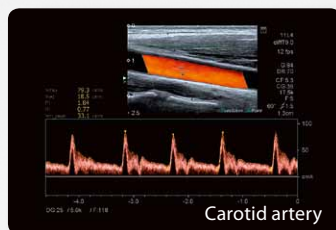




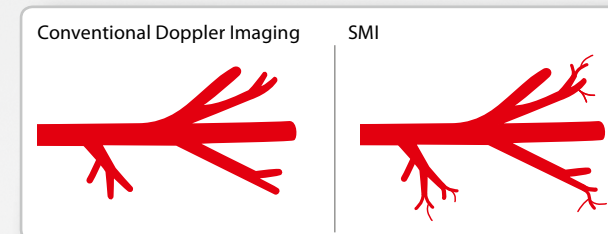
## Unprecedented detail for a precise diagnosis

Each of our unique imaging technologies provides you with better image quality by reducing noise, strengthening signal and improving visualization.

- + Precision Imaging
- + Differential THI
- + ApliPure
- + Power Doppler
- + Spectral Doppler
- + Doppler auto trace



## Seeing the unseen

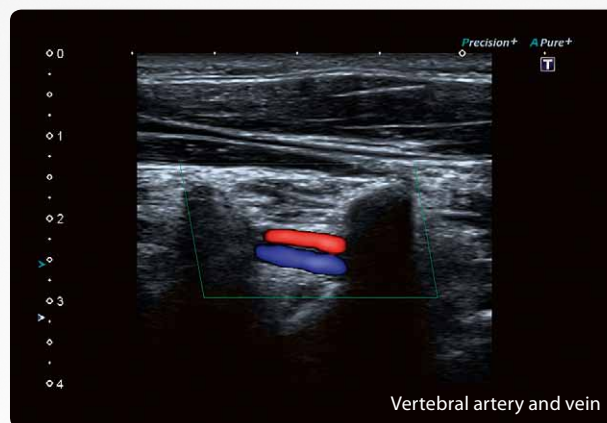


While conventional color Doppler (right) is unable to display flow in the smallest vessels, SMI (left) separates flow from overlaying tissue motion effectively, while preserving even the subtlest low-flow components with unmatched detail and definition.



### Advanced Dynamic Flow™ (ADF)

Advanced Dynamic Flow adds superior spatial resolution to color Doppler imaging to reveal minute vasculature and complex flow patterns with unprecedented accuracy and detail. With ADF you can display flow directionally and accurately at high frame rates, while maintaining the full B-mode image quality.



### Directional Color Angio (DCA)

DCA combines the sensitivity and penetration of Power Doppler with the directional information of color Doppler into one precise procedure. This allows you to more accurately determine tissue perfusion at greater depth or low flow velocities while differentiating between arterial and venous flow.



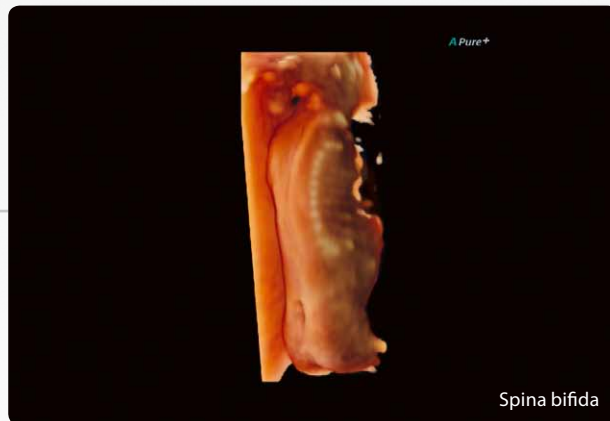
### Superb Microvascular Imaging (SMI)

SMI expands the range of visible blood flow and provides visualization of low velocity microvascular flow never before seen with ultrasound. SMI's level of vascular visualization, combined with high frame rates, advances diagnostic confidence when evaluating lesions, cysts and tumors, improving patient outcomes and experience.

# A NEW DIMENSION OF IMAGING AND INTERVENTION

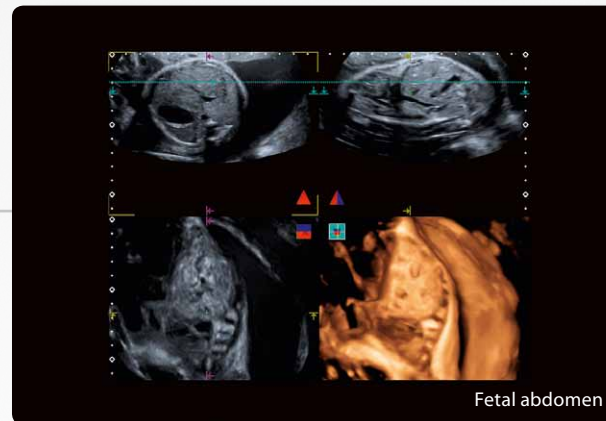


Aplo's comprehensive 3D/4D volume imaging suite extends your diagnostic capabilities into the next dimension of imaging and intervention by providing accurate renderings and arbitrary volume cuts in realtime or offline. Aplo's new High Density Volume Rendering Engine gives you extraordinary image quality at high volume rates for uncompromised workflow and clinical result.



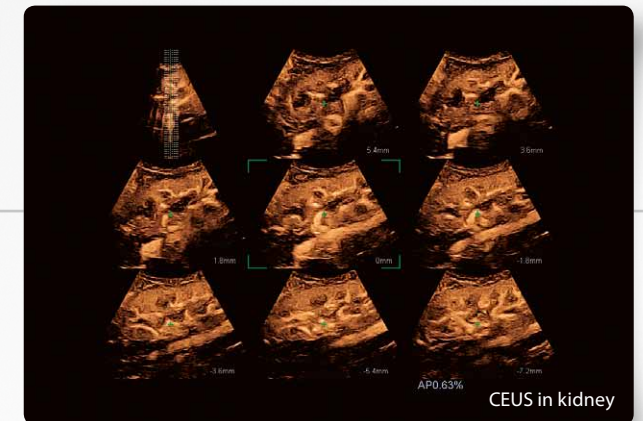
## Luminance

Luminance is an innovative new surface rendering technique that provides a softer, more natural visualization of the human skin resulting in images of almost photographic impression and quality. The function's freely movable light source gives you strong visual feedback on depth and detail. Changing the position of the light can help you identify pathological changes and skin defects better and with greater clarity.



## Multi-Planar Reconstruction (MPR)

Aplo's MPR function allows you to review a specific structure or region of interest simultaneously in three orthogonal planes accompanied by a surface rendering or box volume image. The increased anatomical information contained in the high-resolution cross sections can help you to better understand anatomical relationships or the extent of a given lesion.



## MultiView

With MultiView you can generate series of cross sections of a given volume in an instant. The resulting display of multiple parallel cut planes provides a very effective tool for the assessment of lesions and their associated structures. MultiView allows you to cut a given volume in any direction to reveal high-resolution off-axis views that can further enhance your diagnostic confidence.





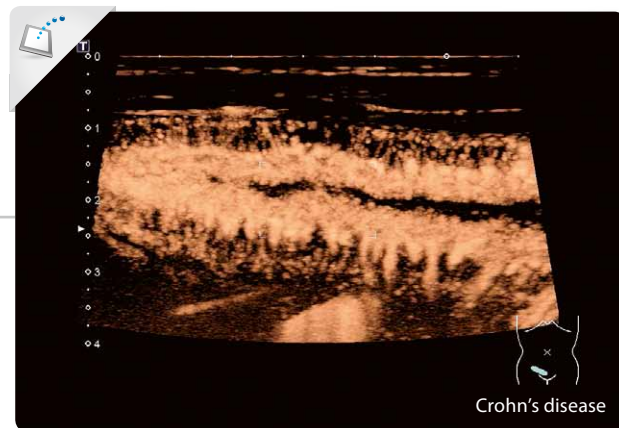
Both the busy clinician and the patient benefit from volumetric ultrasound. A complete set of data can be acquired and stored in raw format in just a few seconds, reducing examination time to a minimum. The stored raw data can be retrieved, read and manipulated anytime later with no loss of functionality.





# ADVANCED TOOLS TO HELP YOU BETTER EVALUATE DISEASE

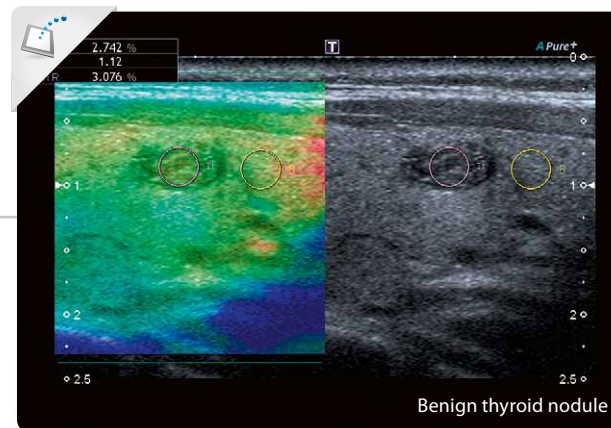
Powered by the industry's most advanced Realtime Application Platform, Aplio 400 provides you with a complete range of exclusive, clinically proven technologies to increase your diagnostic confidence. By giving you valuable additional information in easy to understand visual, parametric and quantitative formats, these advanced technologies can help you avoid supplementary exams to get your diagnostic answer. Thus, you can save expenses and enhance your department's productivity.



Crohn's disease

## Contrast-Enhanced Ultrasound (CEUS)

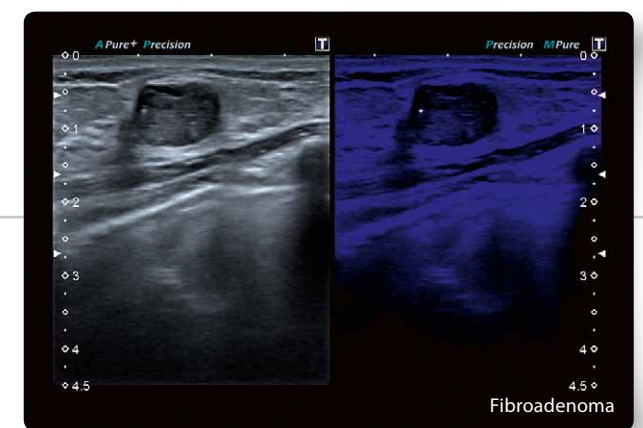
Our comprehensive contrast imaging package allows you to assess perfusion dynamics in a wide range of clinical settings. Depending on the system configuration, up to 24 transducers support contrast-enhanced studies, including an ample variety of specialized probes such as high frequency, intra-operative, intra-cavity and 3D/4D transducers.



Benign thyroid nodule

## Realtime elastography

Our comprehensive elastography solution with raw data functionality assists you in localizing and assessing palpable masses with high accuracy, sensitivity and reproducibility in a wide range of clinical settings. Different degrees of tissue elasticity can be quantified or color-coded in parametric images making suspicious tissue changes quantifiable and visible in the ultrasonic image.



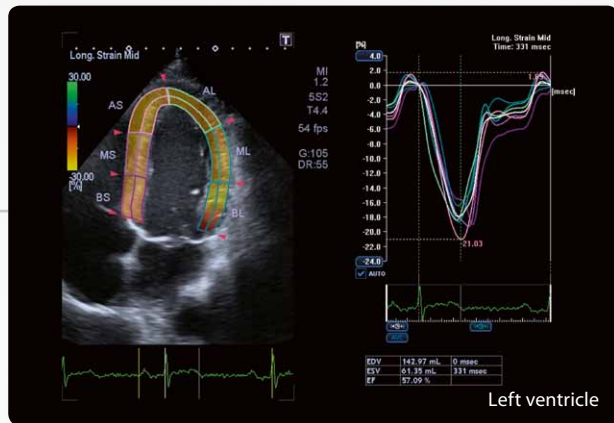
Fibroadenoma

## MicroPure™

MicroPure is an innovative clinical tool that can help you identify microcalcifications, a potential marker for malignancy, in the breast and other organs. The technique highlights automatically detected calcifications as white spots in the masked 2D image. MicroPure can provide effective support for precise biopsies under realtime ultrasound control.

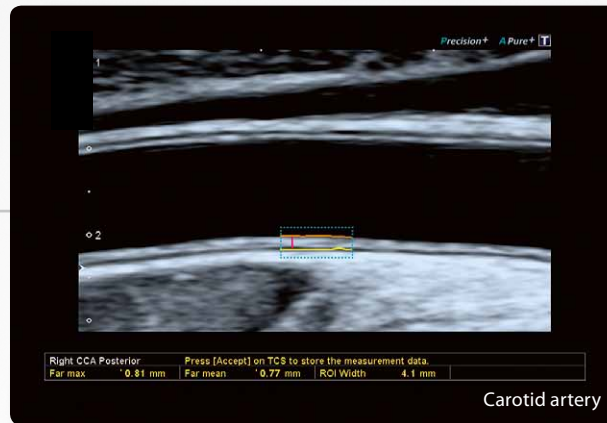


Meeting your day-to-day demands with ease, Aplio is designed to grow with your clinical demands as your patient workload develops or changes. Thanks to its software-driven raw data platform, advanced clinical applications can be added to your Aplio as you need them.



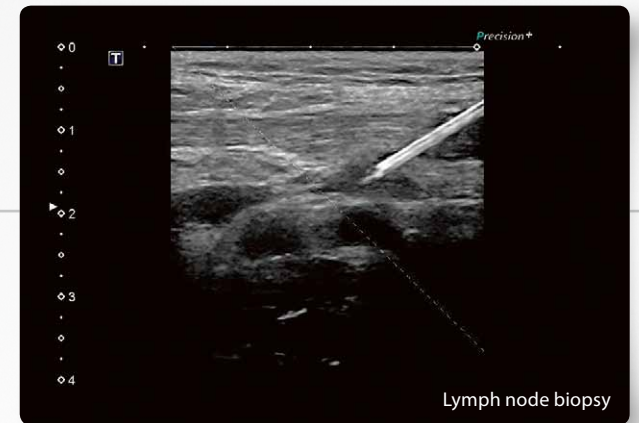
### Wall Motion Tracking

Toshiba's proprietary speckle tracking technology provides immediate visual and quantitative access to regional myocardial wall motion with unrivalled accuracy and resolution. With Aplio you can assess and quantify parameters such as strain, strain rate or displacement during the examination or anytime later, on the console or on the workstation.



### Auto IMT

The intima-media thickness (IMT) of the carotid artery is an important parameter for assessing a patient's risk of developing cardiovascular disease. Aplio provides you with an easy to use tool to determine the thickness of the intima-media layers of the near and far arterial walls automatically at an optimal angle of incidence and in two complementary planes.



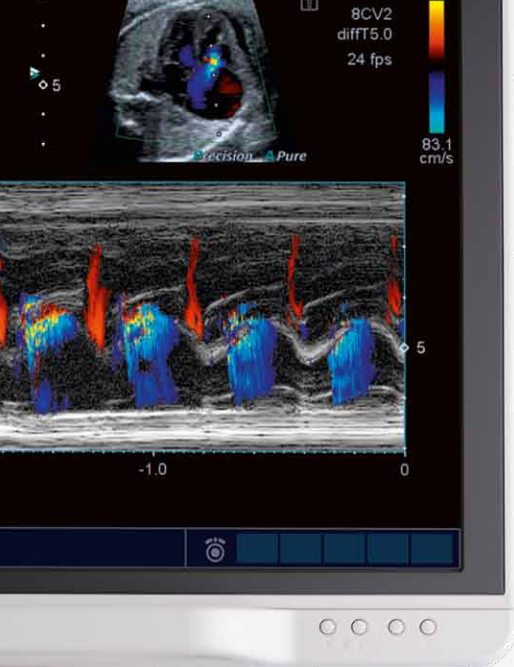
### BEAM

Toshiba's Biopsy Enhancement Auto Mode (BEAM) provides a clearer visualization of biopsy needles in the live ultrasound image. BEAM enhances the visibility of a biopsy needle and works with all common needle sizes. The function provides three enhancement levels and selects the best scan angle fully automatically.





# PERFORMANCE MEETS INTELLIGENCE



Our unique iStyle™+ productivity suite provides you with a full host of technologies that offer ergonomic relief by reducing keystrokes, improving workflow and raising the consistency of exams. A smaller, lighter form gives you greater maneuverability while the fully configurable console and intelligent workflow support functions enable faster exams and greater productivity.



## Ergonomic user interface

Aplio 400's compact design with floating console and fully articulating monitor arm enables you to create an ergonomic work environment in virtually any clinical setting. The system's premium quality LCD screen with the four-axis arm can move and swivel into perfect position for better viewing and to protect you from neck, shoulder and eye strain.



## 3D multifunctional keys

Aplio's 3D multifunctional keys offer four degrees of freedom for outstanding usability. Their mode-sensitive function is fully programmable and displayed in the adjacent touch screen in an easy to understand manner.





### Fully programmable console

You can customize Aplio's console to suit your clinical needs and personal preferences simply by reassigning functions to the keys of your choice. This results in better reach, fewer keystrokes and a shorter learning curve. The mode-sensitive touch screen, which is now also programmable, enables direct access to complex measurements, labels and advanced functions.



### Quick Start clinical settings

Changing presets during an exam can disrupt your workflow, because system settings need to be optimized from scratch. The fully programmable Quick Start menu allows you to adjust only the relevant parameter set at a single touch of a button. All other settings remain untouched. This way you can easily adjust the system to any specific clinical target while ensuring a smooth, uninterrupted workflow.



### QuickScan image optimization

QuickScan allows you to achieve greater consistency in your exams by ensuring that superb image quality is the benchmark at all times. With a simple push of a button you can automatically optimise image quality in 2D and spectral Doppler modes with acoustic precision while suppressing unnecessary noise and clutter in echo-weak regions.



### Quick Assist protocols

Aplio's protocol assistant provides a reliable method to ensure that the same exam is performed from patient to patient. Once activated the tool automatically launches a clear, easy to read on-screen menu that will guide you through your exam. Aplio's protocol assistant can be customized based on your department's scanning procedures.



From imaging to quantification, from reporting to archiving, Toshiba provides a full-spectrum solution that helps you manage routine and advanced clinical studies more efficiently.

Thanks to the system's embedded raw data functionality you can review, analyze, report and archive your clinical data anytime with no loss of functionality. Aplio is designed to embrace open network standards to facilitate easy integration in the widest variety of network environments.

Additionally, to ensure the system's continuous high performance, we offer a range of support services our customers have consistently rated best in the industry.



## Remote service

We're here – even when we're not there

Our remote service support and diagnostic system InnerVision provides secure access for Toshiba specialists through a VPN network. Using it, our highly trained customer engineers and applications specialists can monitor customer systems remotely and assist our on-site engineers in preventing problems. All without interrupting your essential flow of patient care.

# Innervision

## UltraExtend™ FX

Our external workstation solution gives you full access to your clinical data and diagnostic tool set wherever and whenever needed. With embedded raw data functionality and a host of clinical tools you can review, analyze, report and archive your data quickly and easily.



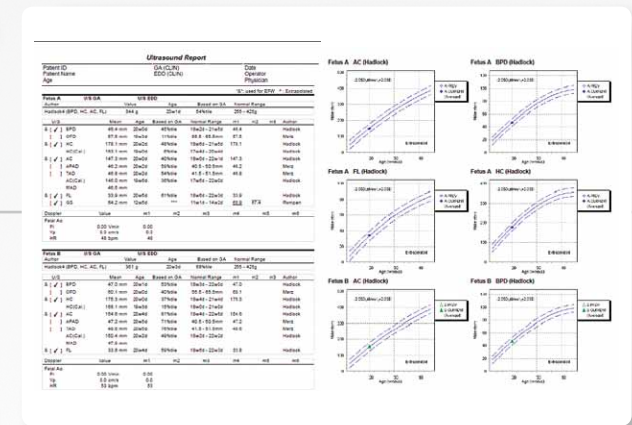
## Managing your study data

Aplo's fully integrated patient and image management system allows you to review and manage your studies conveniently onboard before sending them to PACS for reporting or archiving, including image and raw data as well as structured reports. And if a study is not performed in the exact order, Aplo's shuffle feature allows you to place the images into the correct order before sending them to PACS for reading.



## Exporting your clinical data

Aplo ships standard with a DVD writer and USB connection for study documentation and data export. The unit can be equipped with integrated medical printers or a DVD recorder for onboard study documentation. A digital video interface is available to connect your Aplo to external devices such as additional monitors.



## Reporting options

Aplo provides comprehensive onboard facilities allowing you to semi-automatically generate reports including measurements, charts, clinical images, as well as text. Reports are customizable to meet your department's standards and formats. If you prefer to do your reporting offline, we offer a wide range of workstation and connectivity solutions.



# BRINGING INNOVATION TO LIFE

For over 130 years Toshiba's research and development has improved the health and welfare of people around the world. Today, Toshiba Medical Systems offers a full range of diagnostic imaging products and is a reliable service partner in more than 120 countries around the globe. Our Mission is to deliver the best quality products and services, as well as the industry's best after-sales support through long-term, customer focused partnerships.

## Innovation

Toshiba is a world leader and innovator in high technology. Year on year we file thousands of patents, making innovation a key part of the Toshiba fabric. In accordance with our Made for Life™ commitment, we develop innovations that improve patient care and provide lasting quality for a lifetime of value.

## Quality

At Toshiba quality and reliability is at the heart of everything we do. With technologies and products being developed in more than 30 R&D laboratories and over 300 subsidiary companies across the globe Toshiba engineers are dedicated to develop the best-performing, most reliable and environmentally friendly product solutions for you.

## Design

Our product design is driven by customer feedback and the close consultation with industry visionaries and opinion leaders. Our award-winning Design Center has over 50 years of experience in developing pioneering products and industry-leading solutions to ensure that you can work at the highest standards of diagnostic precision, usability and productivity.

## Partnership

Making sure your systems deliver from day one is an important part of our relationship. Whether you need onsite or offsite training, we can provide options that work best for you. Experienced clinical application specialists will help you and your team to maximize the potential your diagnostic imaging equipment has to offer.

The logo features the word "TOSHIBA" in a small, white, sans-serif font above the word "eco" in a large, white, lowercase sans-serif font, followed by "style" in a smaller, white, lowercase sans-serif font. The text is contained within a green speech bubble shape with a tail pointing towards the bottom right.

## TOSHIBA eco style

Caring for earth and its people is at the heart of everything Toshiba does – and one of the many ways we innovate. Toshiba's passion for safeguarding earth is enshrined in our Environmental Vision 2050, whereby we seek to improve our eco-efficiency by a factor of ten over the next four decades through strict monitoring of energy usage, continuous improvement of manufacturing processes and eco-conscious product development. Far from being a distant goal, the Environmental Vision 2050 sets tangible milestones year by year. These include the reduction in emission of CO<sub>2</sub> and other greenhouse gases, and the complete phasing out of certain hazardous substances from our products.

### Design, manufacturing and shipment

#### **No sustainability without quality**

By manufacturing high quality diagnostic imaging equipment that lasts, we ensure that you can enjoy working with your machine over many years. Our software-driven platforms are easy to upgrade to keep you abreast of new diagnostic tools for a long time. And while we continuously work to improve the performance of our equipment, we drive down consumption of energy and resources at the same time.

### Product use

#### **Energy efficiency is the key**

A major part of the greenhouse gas emissions our medical imaging systems produce accrue while you scan your patients. Therefore we design our products to be outstandingly energy efficient, and even to recycle energy wherever possible. Take for instance our Aquilion ONE™ CT scanner. While braking its gantry, 25% of the energy used to set it into rotation can be recovered and stored for the next scan.

### Refurbishment and recycling

#### **End of use is not the end of life**

Because outstanding quality lasts, your Toshiba medical imaging equipment remains of high value even after you replace it with new equipment. Our Secondlife refurbishment program is an integral part of our corporate philosophy helping to maximize the life span of our equipment by enabling you to sell or buy used equipment of the same high quality as our new machines.



# ***Aplio***

*Platinum Series*

**TOSHIBA MEDICAL SYSTEMS CORPORATION**

**[www.toshibamedicalsystems.com](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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