

Canon



Aquilion Start

Quality Care for All

Available in 16 and 32 slice configurations



Start with high-end technology

Whether you are starting a new imaging business, looking for a reliable workhorse to handle increasing workloads efficiently, or expanding an established imaging business, Aquilion Start is the CT system of choice for all your routine imaging needs.

Aquilion Start is packed with premium technology originally developed for our high-end CT systems. It is carefully crafted and adapted to the changing requirements of healthcare organizations, including the need for faster workflows, universal accessibility, and sound economics.

Quality Care for Patients

Over the years, the number of patients requiring CT scans has increased significantly. Combine this with the rising prevalence of obesity, a larger group of patients with metal implants, and the ongoing pressure to reduce dose, and you've got a world of challenges to deal with.

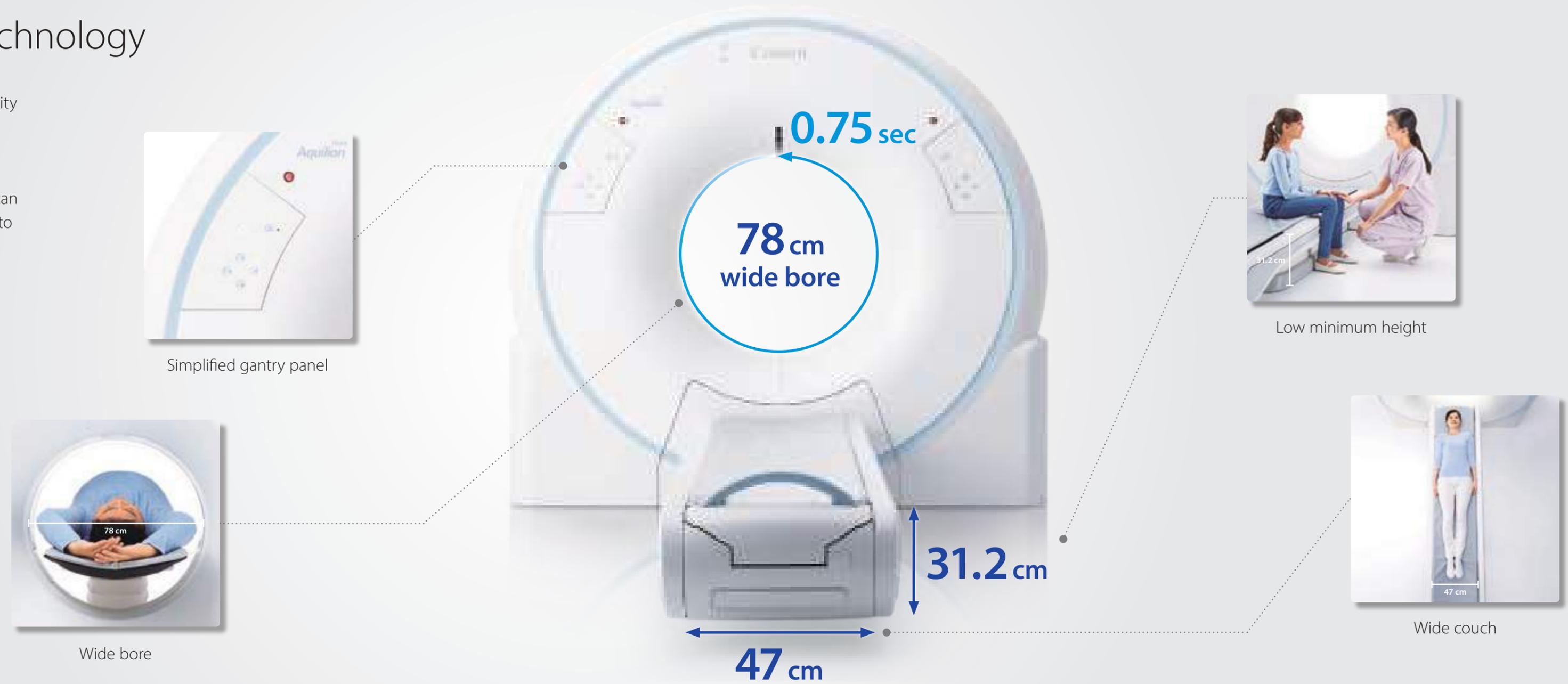
Leveraging years of research, Aquilion Start delivers a superior scan experience with maximum patient comfort and better diagnostic images at lower doses.



New gantry – packed with technology

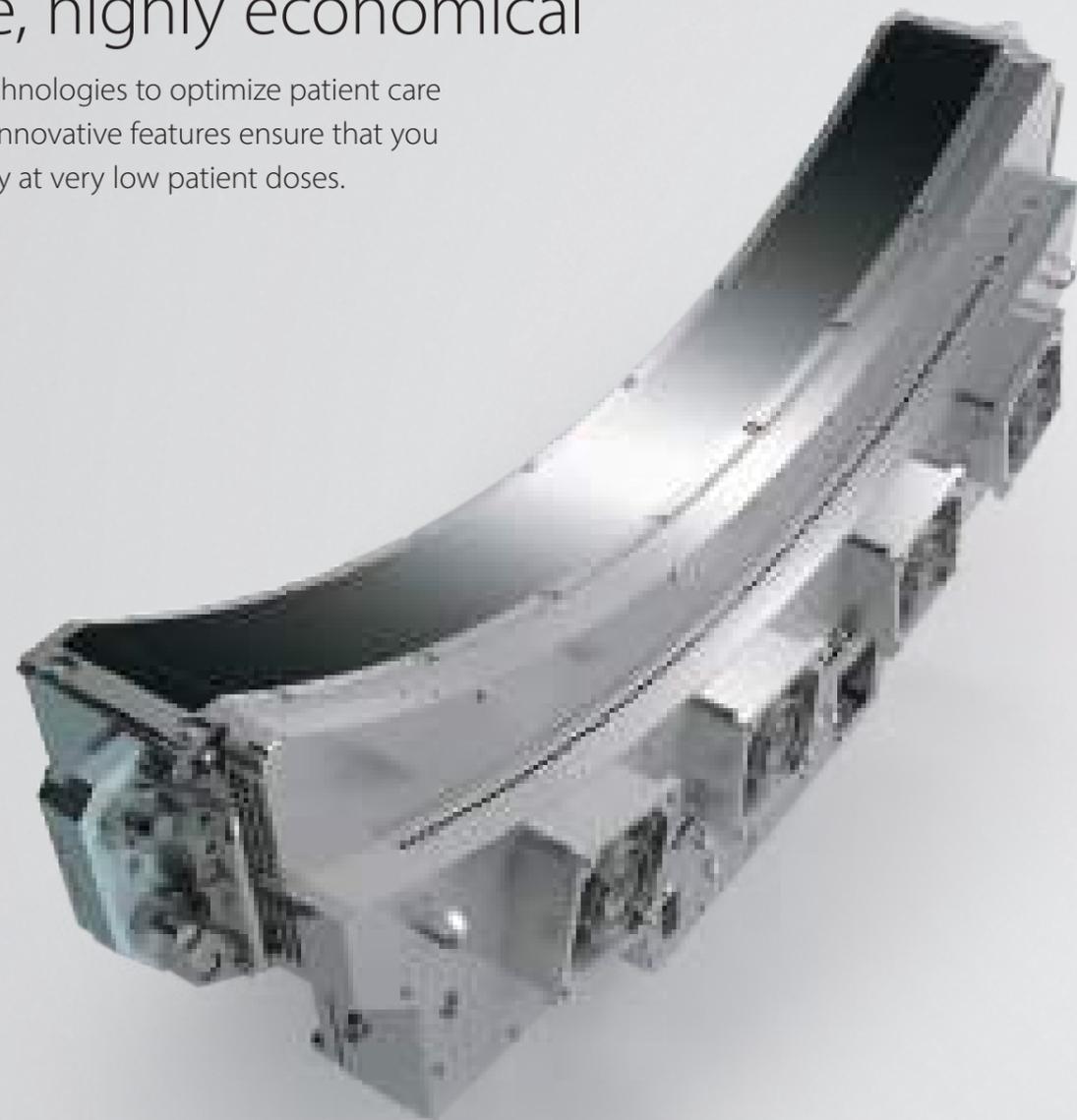
Aquilion Start's gantry features design innovations to improve the scanning experience for patients while providing excellent operability and safety.

The spacious 78 cm wide bore and 47 cm wide couch allow comfortable scanning for even the largest patients. The couchtop can be lowered to a minimum height of 31.2 cm, which makes it easier to transfer patients from a wheelchair.



High performance, highly economical

Aquilion Start incorporates advanced technologies to optimize patient care and accelerate clinical decision making. Innovative features ensure that you can acquire high-quality images routinely at very low patient doses.



New PUREVISION Detector

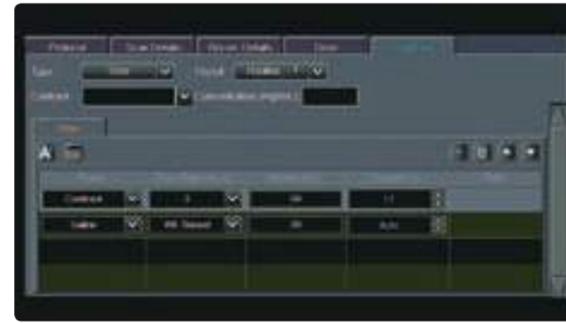
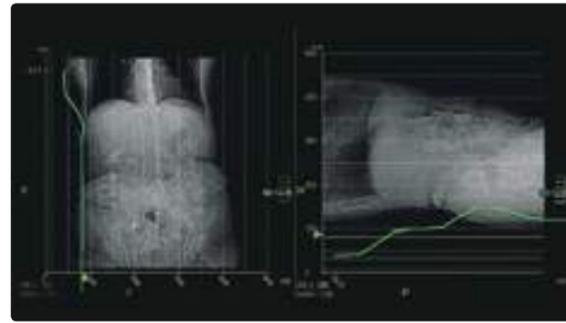
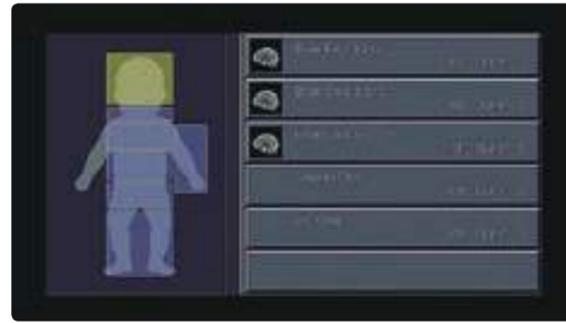
PUREVISION Detector technology, which was introduced in our premium systems, has been adapted to achieve the perfect balance of image quality and patient dose optimized for outstanding speed in routine clinical practice.



Enhanced patient safety

Aquilion Start is designed with patient safety top of mind and is packed with features that enhance patient safety while maintaining excellent image quality.

Smart automation of these features results in fast and efficient examinations, and provides a perfect balance between imaging results, the patient experience, and clinical efficiency.



Exam Plan

Pediatric protocols

Aquilion Start allows you to set up special pediatric protocols to minimize radiation dose for children.

Dose check

Aquilion Start helps to ensure that the radiation dose limit you have selected cannot be exceeded, thus avoiding unintended high-dose levels.

Scan

SURE^{EX}posure 3D

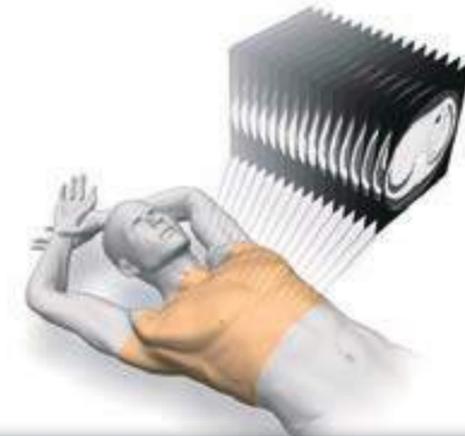
Aquilion Start features fully automatic exposure control for optimal image quality and patient dose.

Automated kV selection

Aquilion Start supports automated kV selection with SURE^{kV}, which automatically selects the ideal kV based on the patient's size and the clinical objective. This feature can also help optimize the use of iodine contrast agents, reducing both cost and patient risk.

Safer contrast management

Aquilion Start allows contrast protocols to be added to your exam plans. The flow rate and volume can be calculated automatically based on the patient's weight and the type of exam, with contrast injection synchronized with scanning.



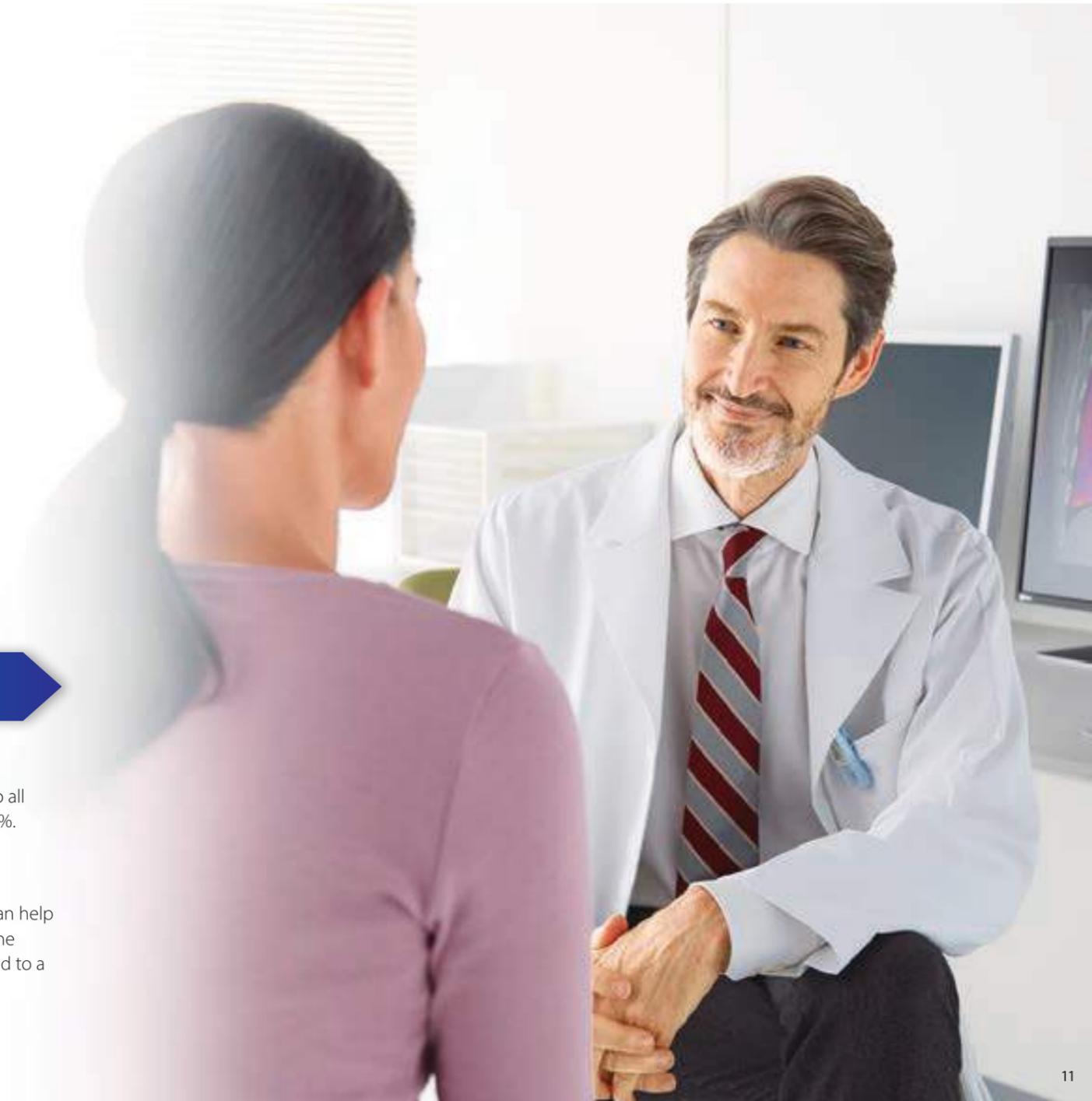
Reconstruction

AIDR 3D enhanced

Our AIDR 3D Enhanced technology can be applied to all examinations, resulting in dose reduction of up to 75%.

OEM

Our Organ Effective Modulation (OEM) technology can help minimize exposure to radiosensitive tissues such as the breast and the lens of the eye by up to 60% compared to a fixed tube current.



Quality Care for Operators

These days, there's simply no time for intricate or complicated equipment in a busy radiology department. You need to be sure that your software and scanners can be used efficiently by all your team members, regardless of their experience level.

With Aquilion Start, you and your team can look forward to more simplicity across the board, with one-click operations, automatic processes and zero-click workflows.



Ultimate clinical flexibility with increased clinical confidence

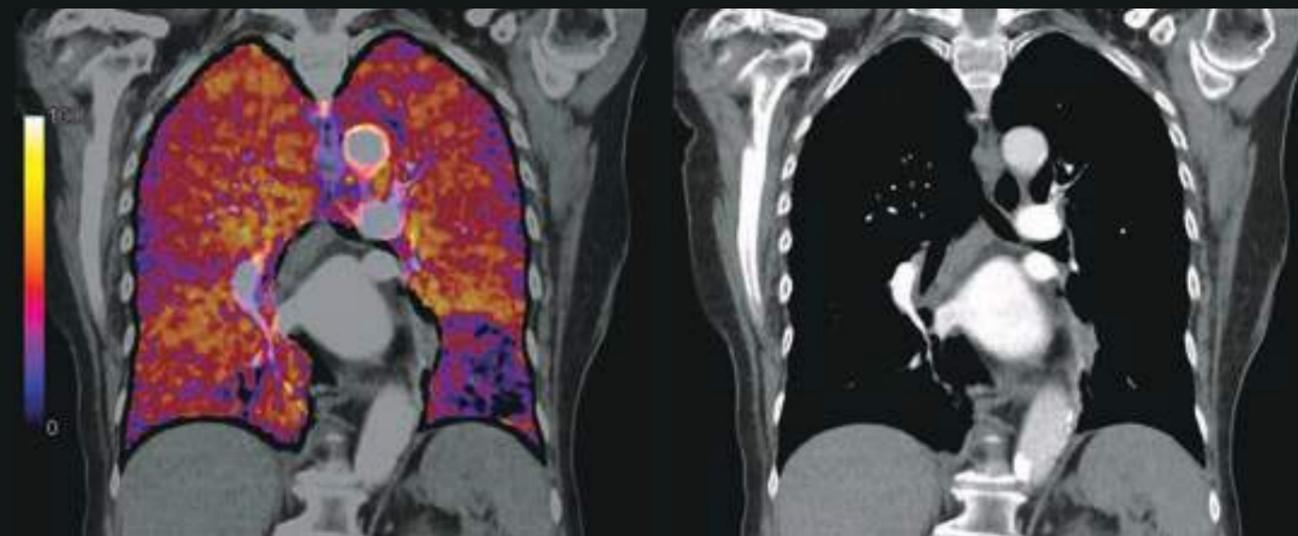
Canon Medical's advanced clinical solutions ensure excellent visualization of vasculature in CTA studies, while Iodine Mapping provides an extra level of detail as part of your chest CTA exams.

Subtraction CTA

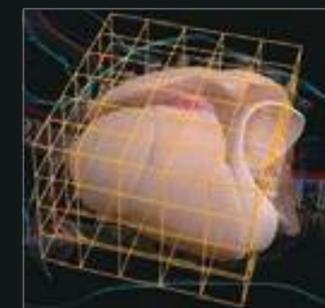


Superior visualization in CTA with true subtraction of bone and calcium

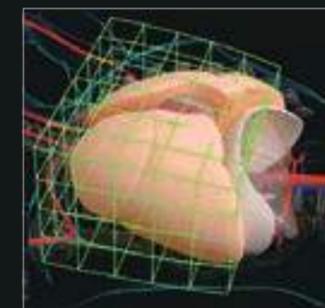
Iodine Mapping



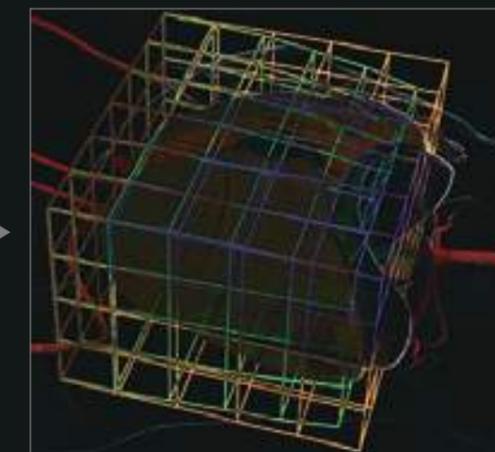
Clearly defined iodine distribution with color blood flow maps



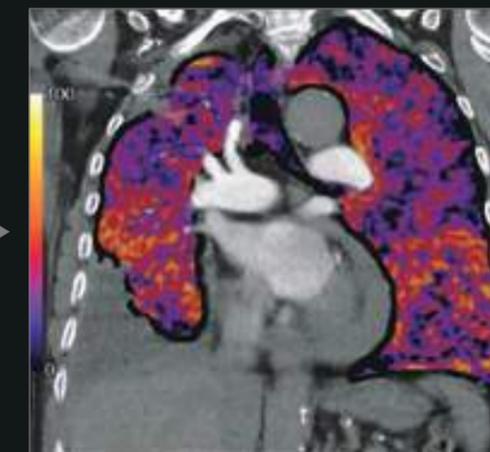
Pre-contrast



Post-contrast



3D deformable registration



SURE Subtraction Lung Iodine Map

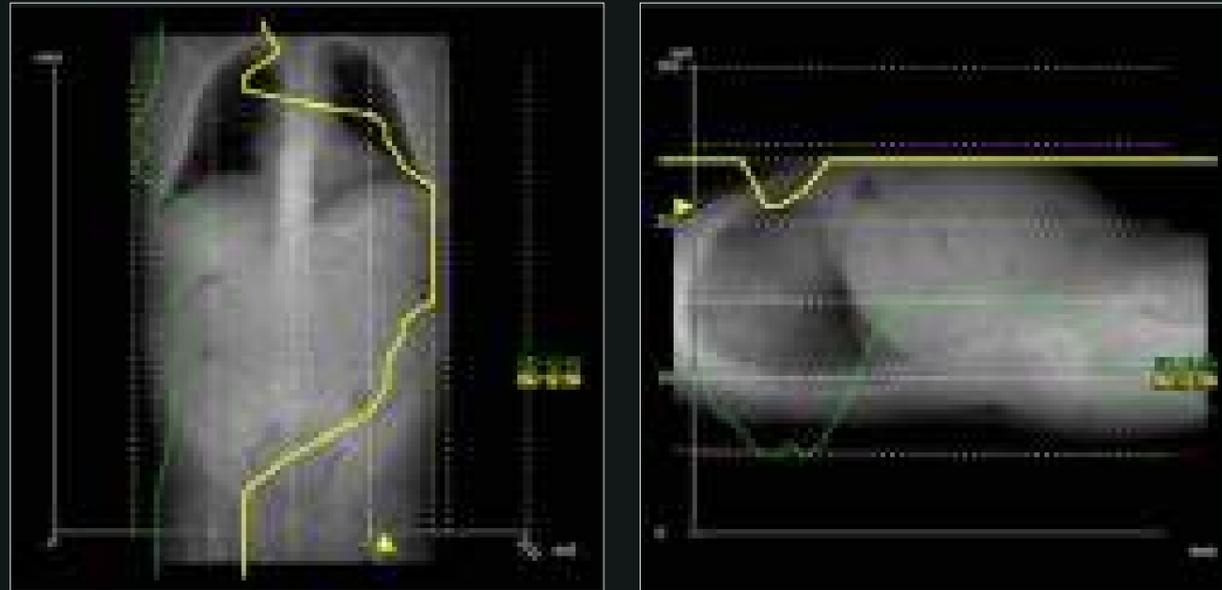
Clinical images in this page illustrate the technology described. They may not have been acquired using Aquilion Start.

Expect the best where it matters the most

Aquilion Start features Canon Medical's advanced reconstruction technologies like AIDR (Adaptive Iterative Dose Reduction) 3D Enhanced and SEMAR (Single Energy Metal Artifact Reduction) so that you can provide the best services for your patients.

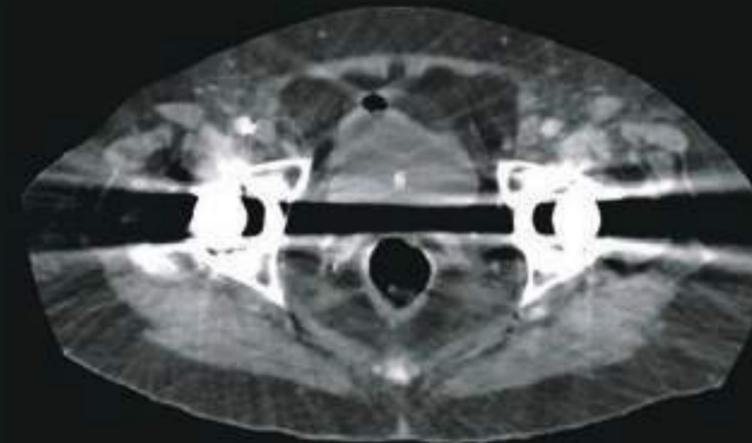


Green = AIDR 3D ON
Yellow = AIDR 3D OFF

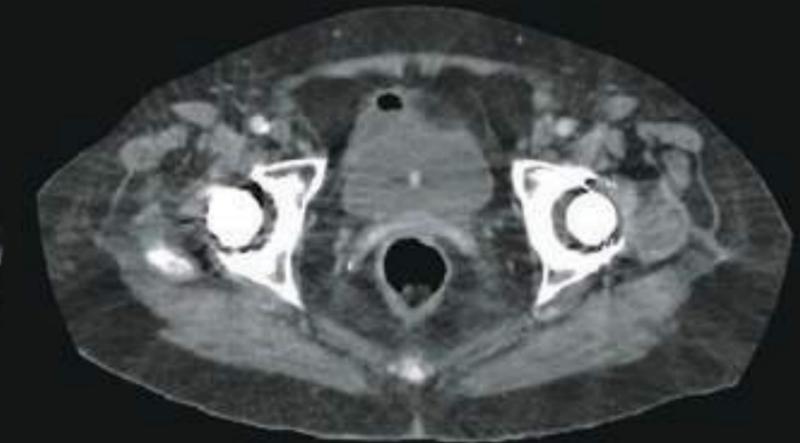


Canon Medical's 4th generation iterative reconstruction, AIDR 3D Enhanced, is fully integrated into the automatic tube current modulation software ^{SURE}Exposure 3D, taking the guesswork out of optimizing patient dose. The exposure dose is automatically reduced by up to 75%. With ^{SURE}kV, the lowest kV will be selected based on patient size and ^{SURE}Exposure settings for low-kVp imaging.

Original



SEMAR



Canon Medical's smart SEMAR technology helps you see beyond common streak artifacts, such as fillings or implants, to give you a clearer idea of what's going on with your patient. It can be applied to any routine scan protocol - even retrospectively - without affecting your reconstruction times.

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Optimized clinical workflow

Aquilion Start is designed to handle busy workloads with ease.

Intuitive automation and a host of intelligent functions enable fast and efficient workflows that not only save time, but also provide the perfect clinical solution.

HybridView

Save time and storage space with our hybrid reconstruction algorithms.

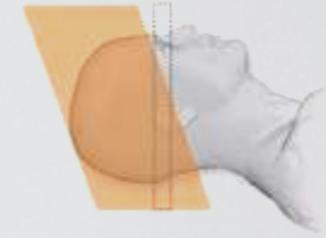
These advanced reconstruction algorithms provide sharp lung images and excellent soft tissue resolution in the same image. Reading times are shortened because you only need to concentrate on a single series to make a diagnosis.



Flex e-Tilt

Aquilion Start introduces the intuitive Flex e-Tilt feature that provides you the functionality of tilt from the comfort of the console to enable faster scan planning to generate images at the desired anatomical reading plane.

Organ Effective Modulation (OEM) technology can complement the Flex e-Tilt feature by reducing exposure to the eyes by up to 60%.

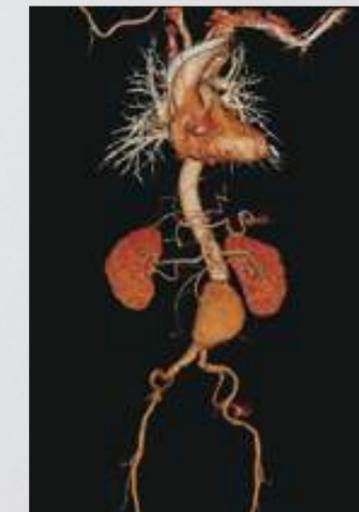


Zero-click workflows

Protocol integrated applications make complex exams easy and provide robust and reproducible results.

These include:

- ^{SURE}Subtraction automated bone subtraction
- MultiView automated MPR and MIP reconstruction
- AIDR 3D Enhanced reconstruction



Quality Care for Management

Whether you are starting a brand-new venture with optimal investment, or expanding your business to reach new horizons, you need equipment that's easy-to-use, reliable and guaranteed to deliver a strong return on investment.

Aquilion Start is built with your business in mind. It is cost and space efficient, easy to setup and suited to a range of medical environments, from city-based hospitals to small rural clinics.

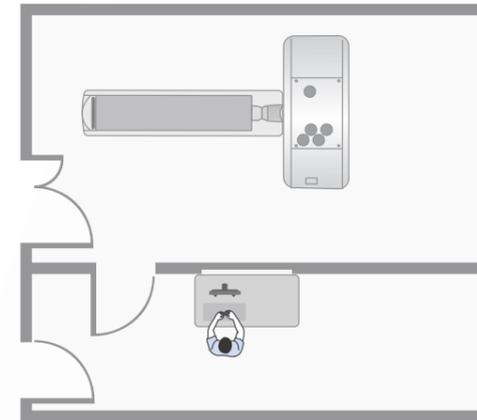
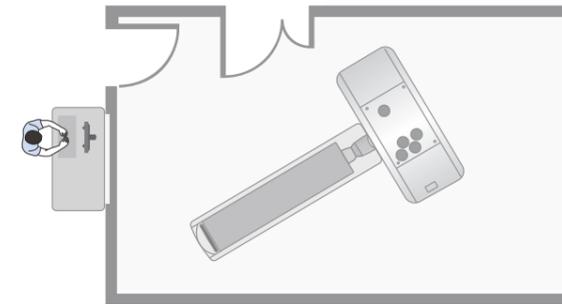
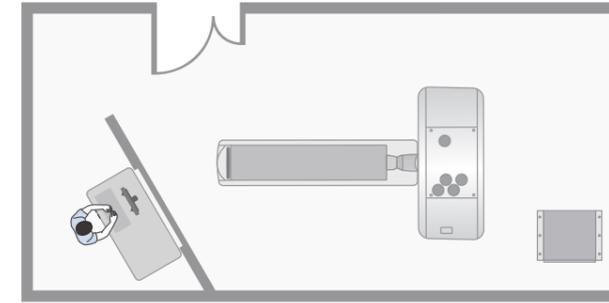


Save space

Aquilion Start has been thoughtfully engineered to meet today's economic challenges. With a gantry design focusing on a smaller installation space and lower energy consumption, Aquilion Start gives you more space to work in.



Minimum Footprint
9.8 m²*



Aquilion Start's small footprint enables flexible site planning options.



* Option

Save power

Aquilion Start incorporates a host of innovative adaptive power management technologies, helping you decrease energy consumption and reducing running costs while minimizing your environmental footprint.



Save time

Aquilion Start's new minimal-click installation reduces software installation time and minimizes downtime during maintenance and upgrades.

up to **70% reduction**



Calibration Time

30% reduction



Software Installation Time

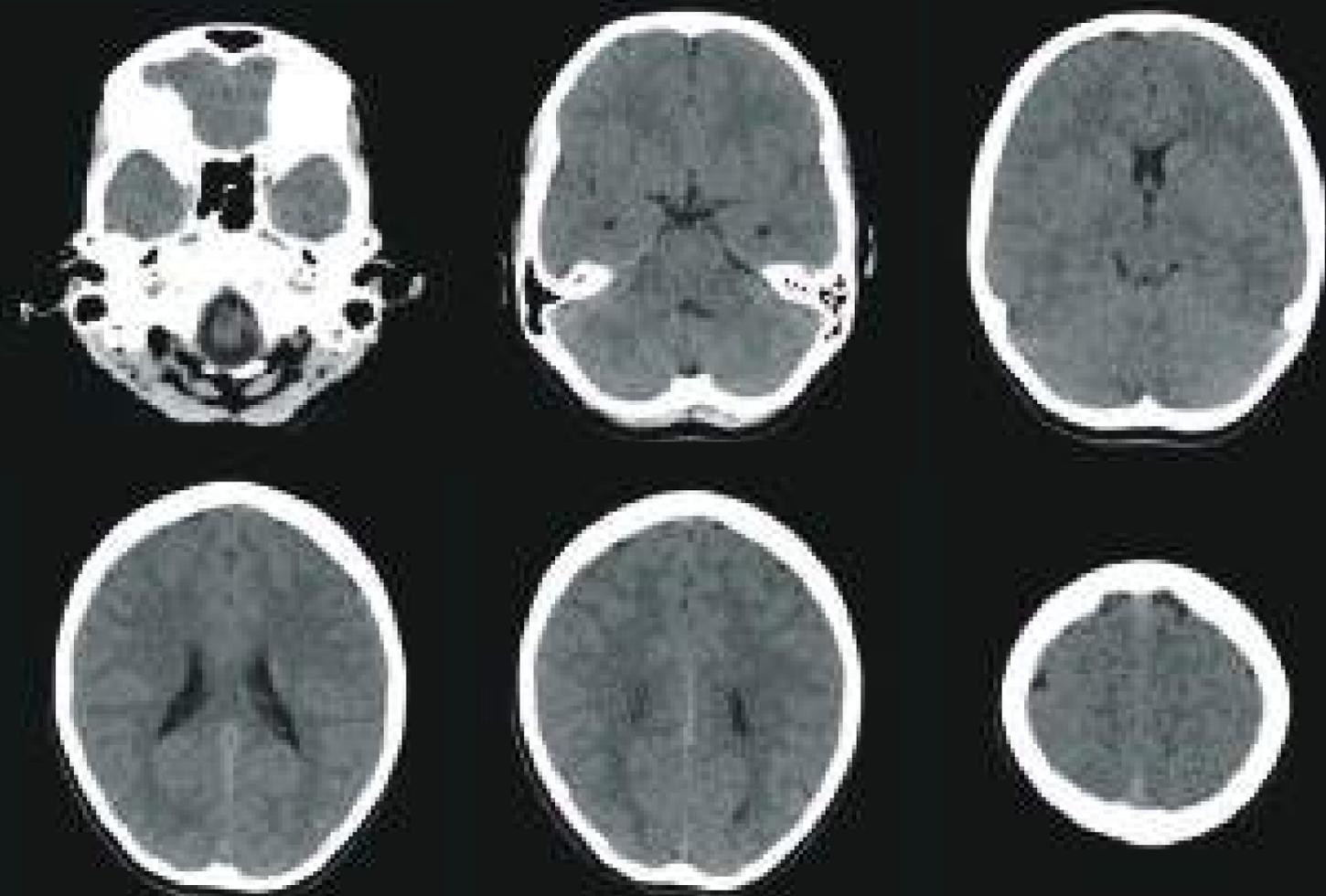
25% faster



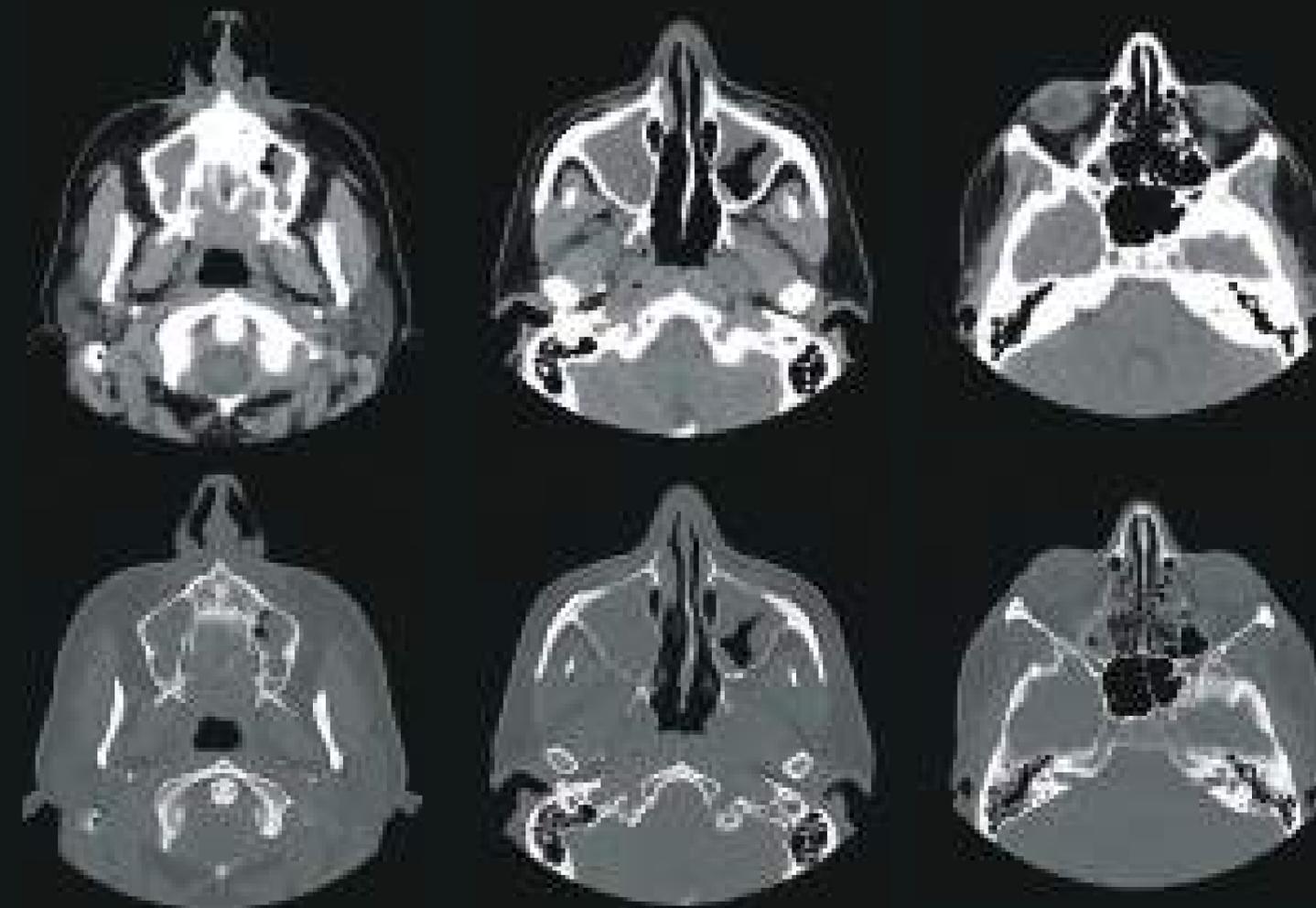
Start-up Time



Head

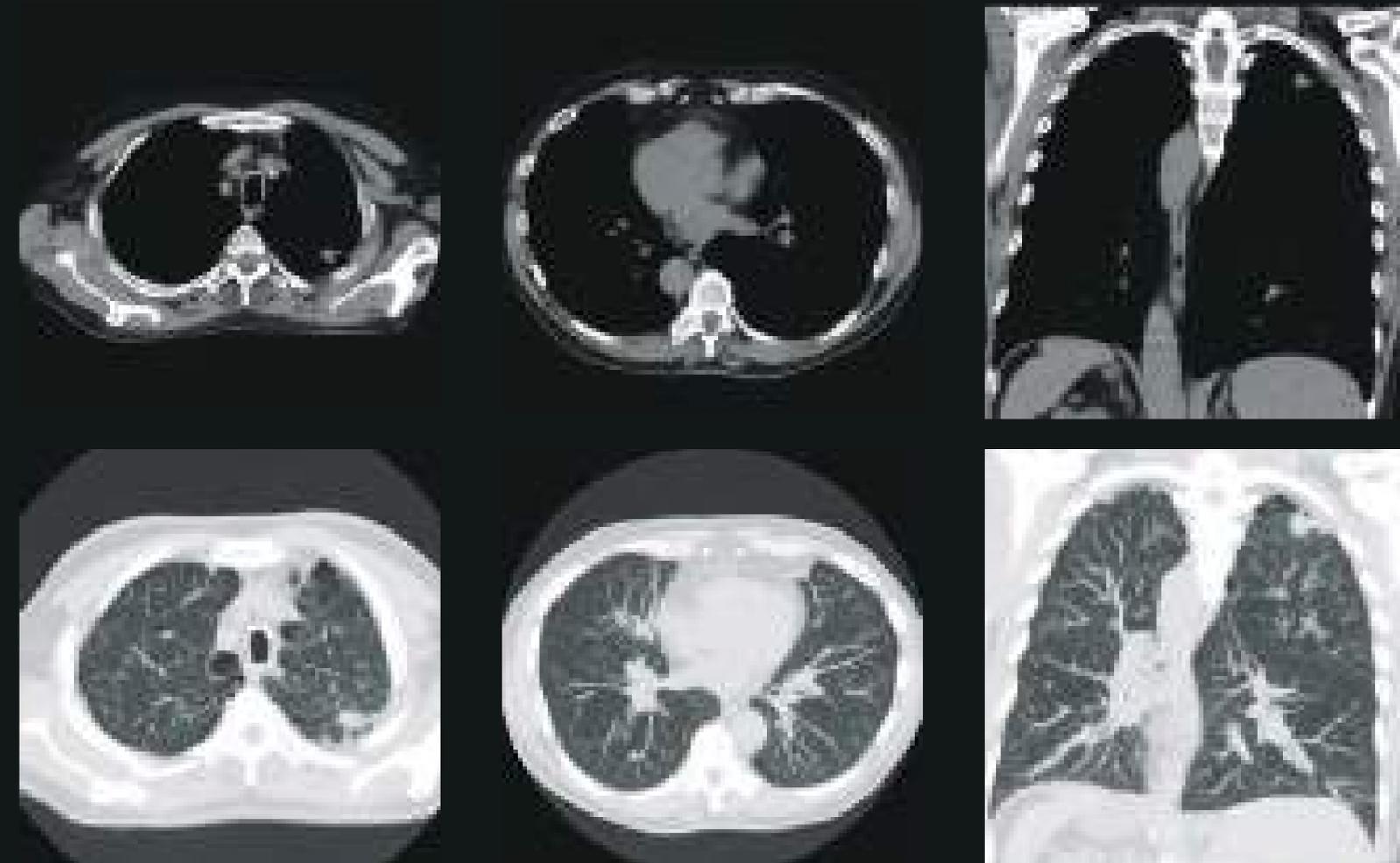


Angled reconstruction brain scan performed with Flex e-Tilt demonstrating excellent gray and white matter differentiation.



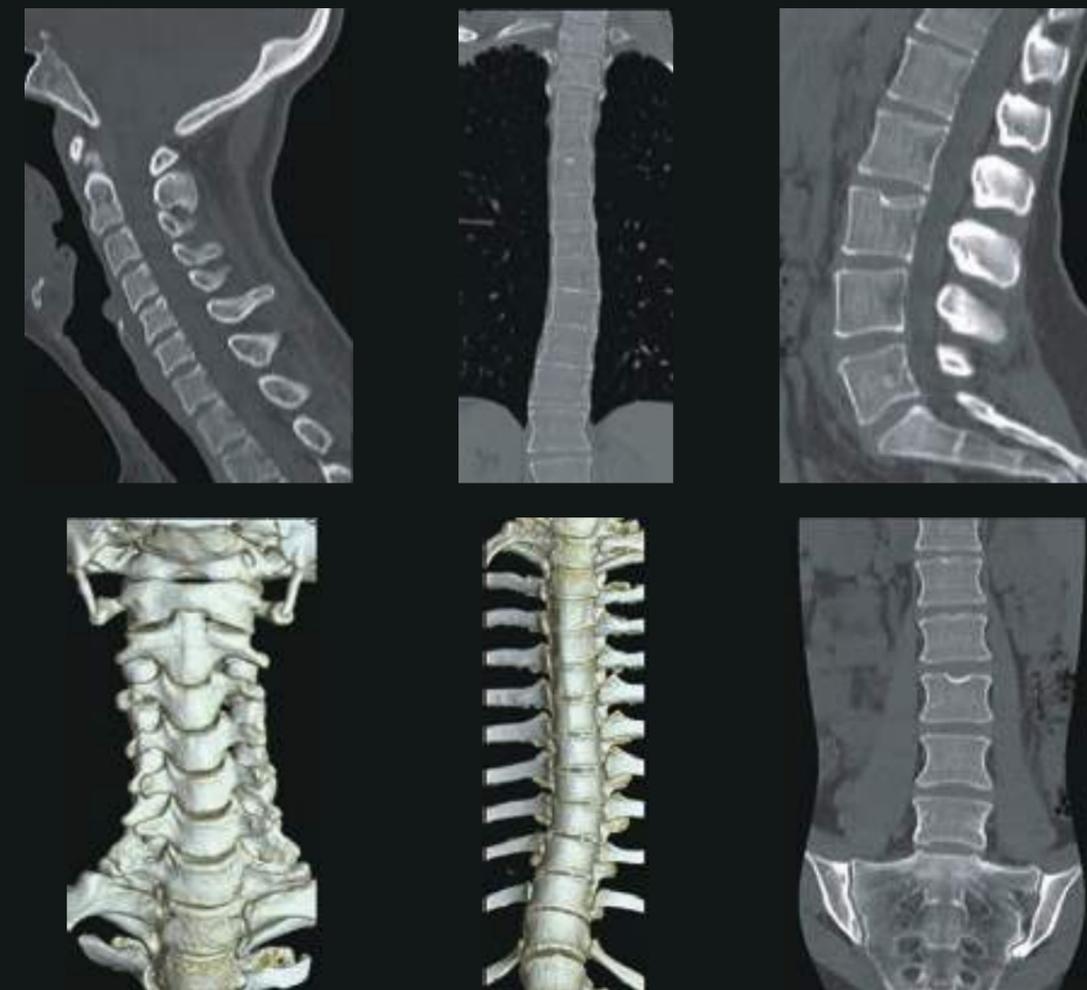
Routine sinus scan demonstrating mucosal thickening in the right and left maxillary sinuses.

Chest



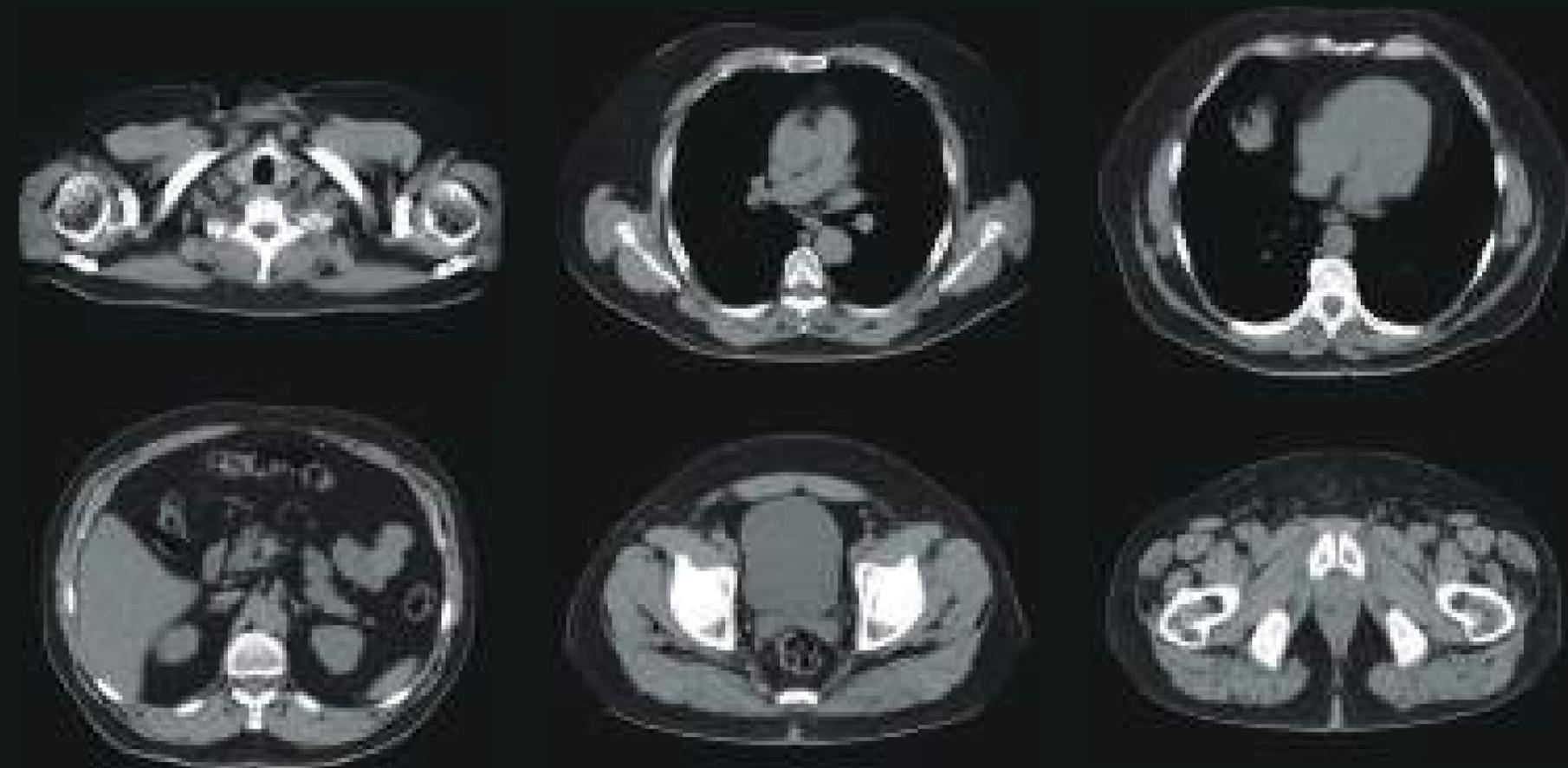
Chest examination with automatically generated multiplanar reconstructions depicting a mass in the apex of the left lung.

Vertebral Column

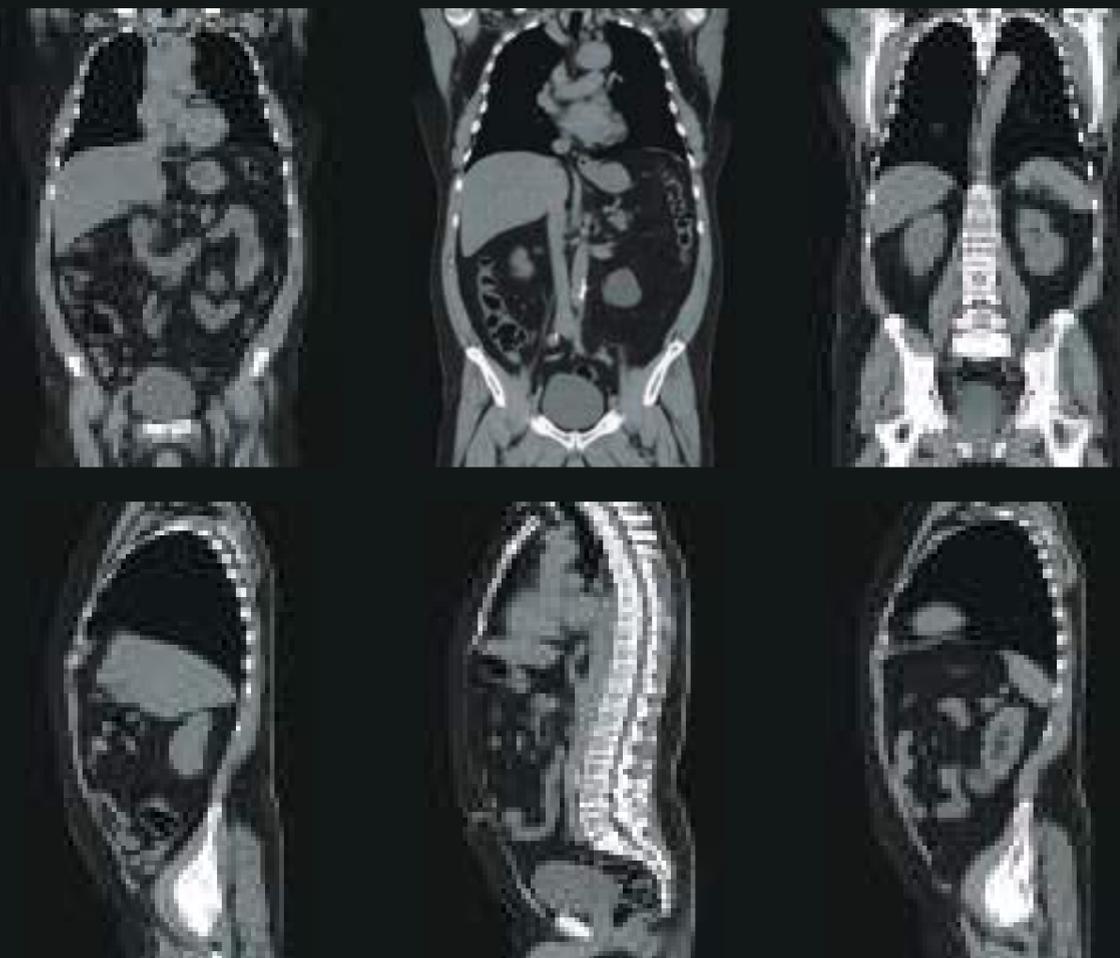


Whole spine CT examination depicts scoliosis of the lower-thoracic spine convex to the right.

Body

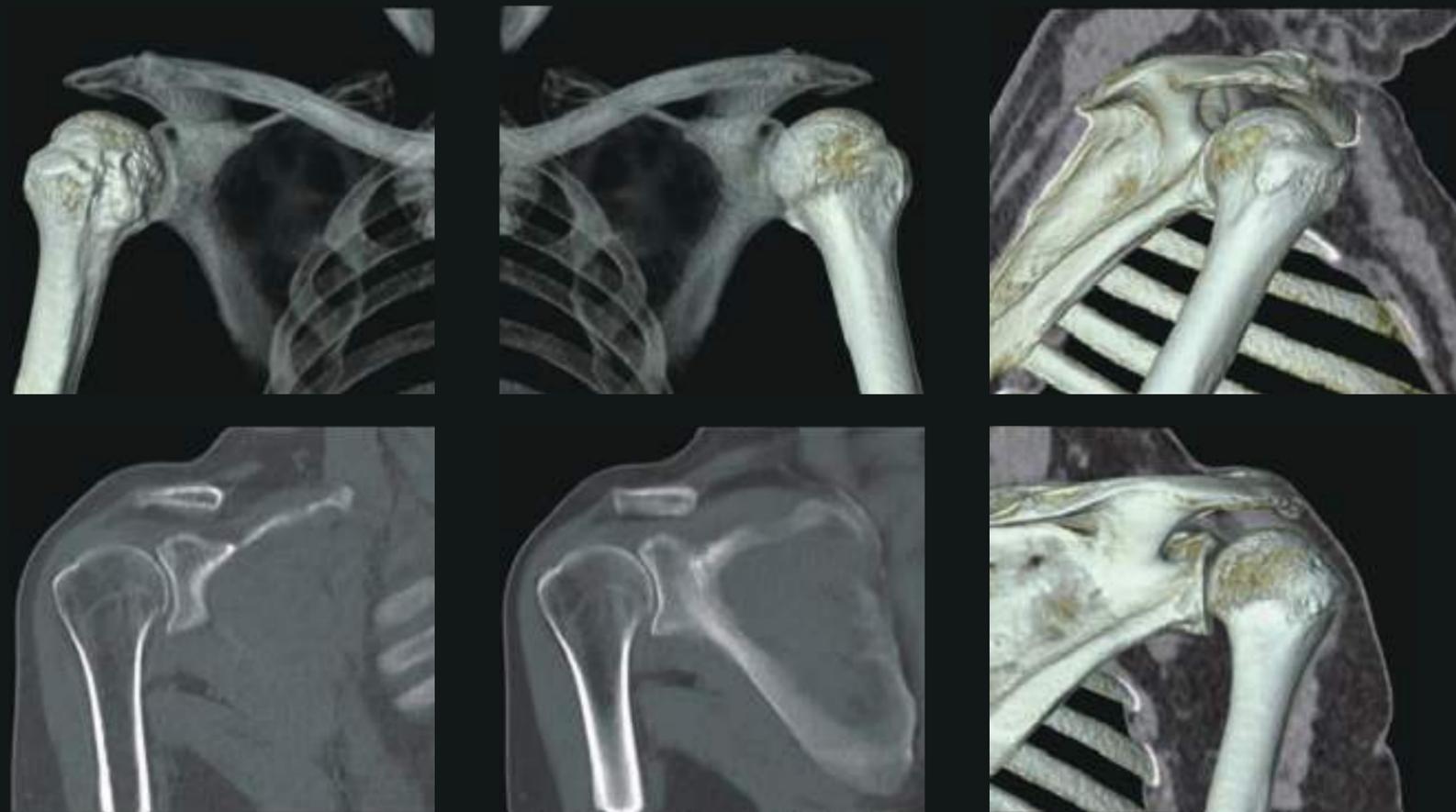


Rapid examination of the entire chest, abdomen and pelvis is performed in a single helical scan.
SURE Exposure modulates mA to ensure uniform image quality with minimal patient dose.

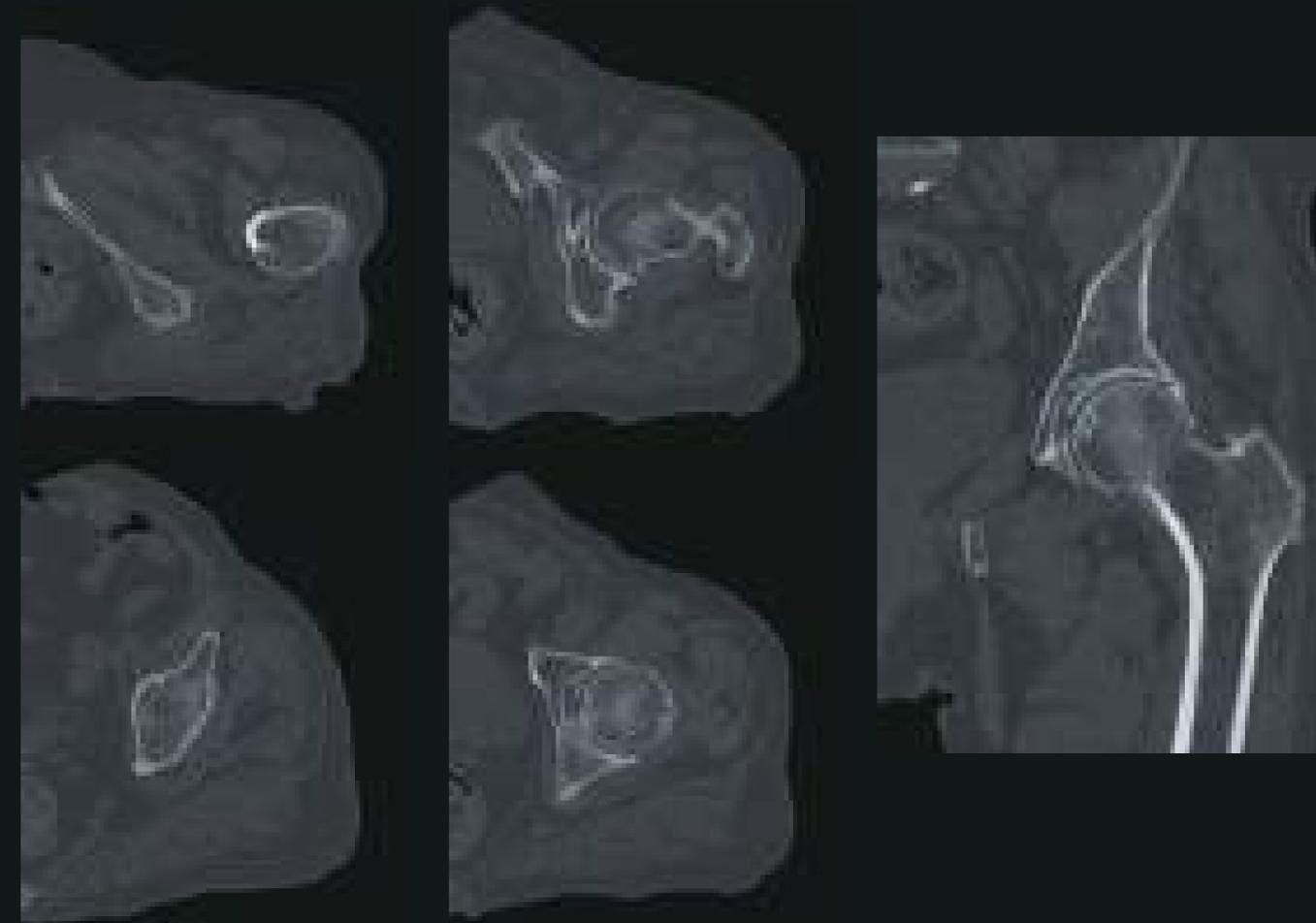


Increased clinical confidence with automatically generated coronal and sagittal reconstructions.

Musculo-Skeletal



Clearly detailed images of the shoulder are ensured with AIDR 3D Enhanced Iterative reconstruction, which overcomes beam hardening artifacts without increasing radiation doses.



Super Resolution (SR) enhances the detail of bone reconstructions in the hip for a fast and more confident diagnosis.

Musculo-Skeletal



Super Resolution (SR) bone reconstructions clearly show the osteoid osteoma of the distal left femur.



Easily generated 3D volume rendered images of the right ankle provide an excellent means to communicate findings to referring physicians.



Main specifications		
Detector		PUREVISION detector technology
		16 / 32* ¹ slices
Gantry	Rotation time	0.75 s / 1.0 s / 1.5 s
	Bore aperture	78 cm
	Tilt	Flex e-Tilt
Patient couch	Max. load	220 kg
	Max. scan range	183 cm (long couch)
Reconstruction speed		Up to 15 fps
Reconstruction	Iterative reconstruction	AIDR 3D Enhanced
Installation	Power capacity	50 kVA
	Min. installation space	9.8 m ² (short couch)* ¹
Image quality	Spatial resolution	18.0 lp/cm at MTF 0%* ²

*¹ Option
*² For reference

Clinical results may vary due to clinical settings, patient preparation and other factors.
Due to local regulatory processes, some of the products included in the brochure may not be available in each country.
Please contact your sales representative for the most current information.



Aquilion *start*

Quality care for all

Aquilion start

Canon

CANON MEDICAL SYSTEMS CORPORATION

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

Canon Medical Systems Corporation meets the Environmental Management System standard ISO 14001.

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Made For life