

Canon



Aquilion *Lightning*

Trusted Performance.
Smart Investment.

SP package



High performance, highly economical
Increased productivity and patient safety
Maximum clinical capabilities



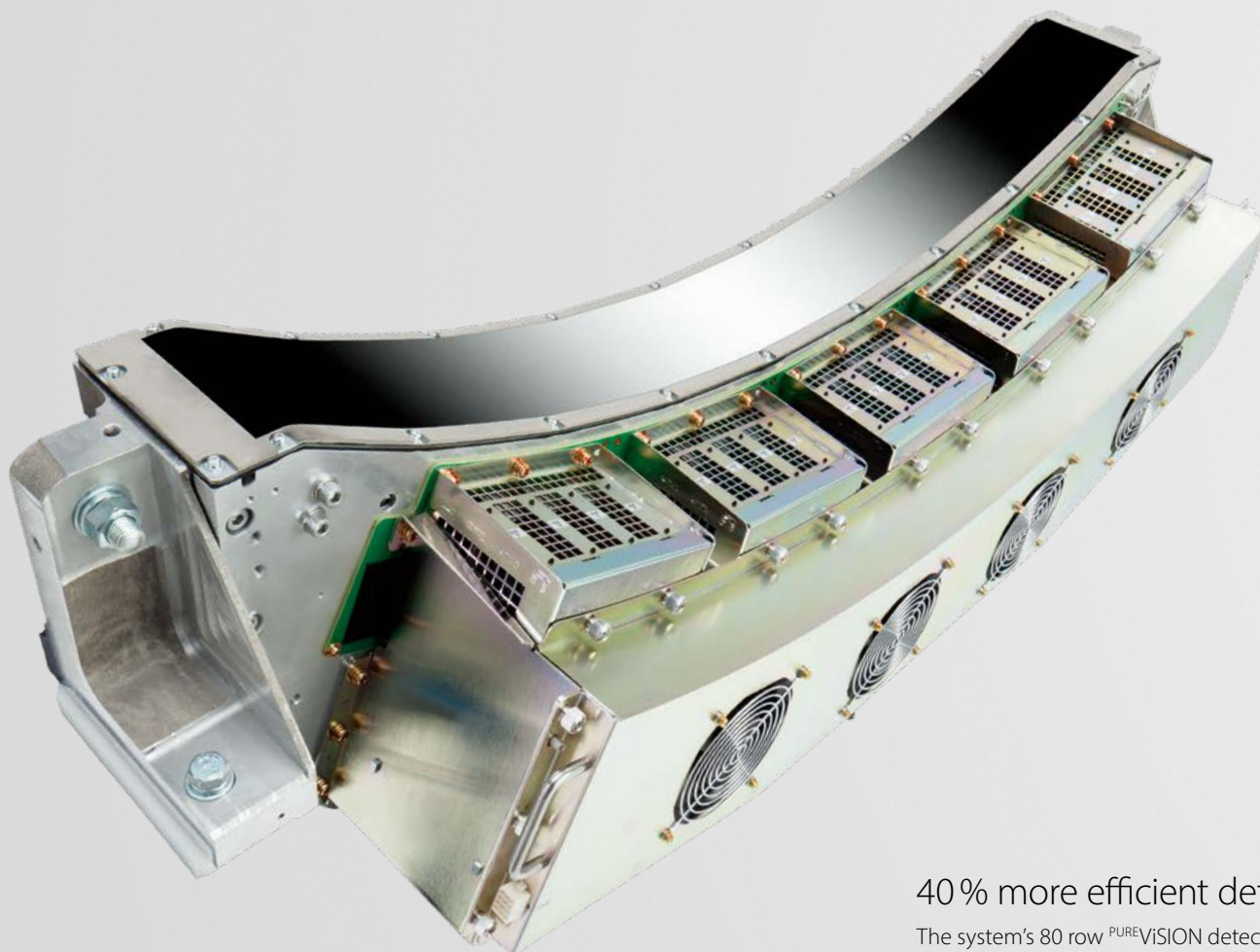
Are you looking for a CT scanner that helps provide better care and safer imaging in a compact, affordable package? The Aquilion Lightning™/SP package delivers just that.

The system is designed to operate reliably and efficiently, producing high-quality images that help speed up diagnosis and treatment in a busy environment.

Aquilion Lightning/SP package – a smart investment.

High performance, highly economical

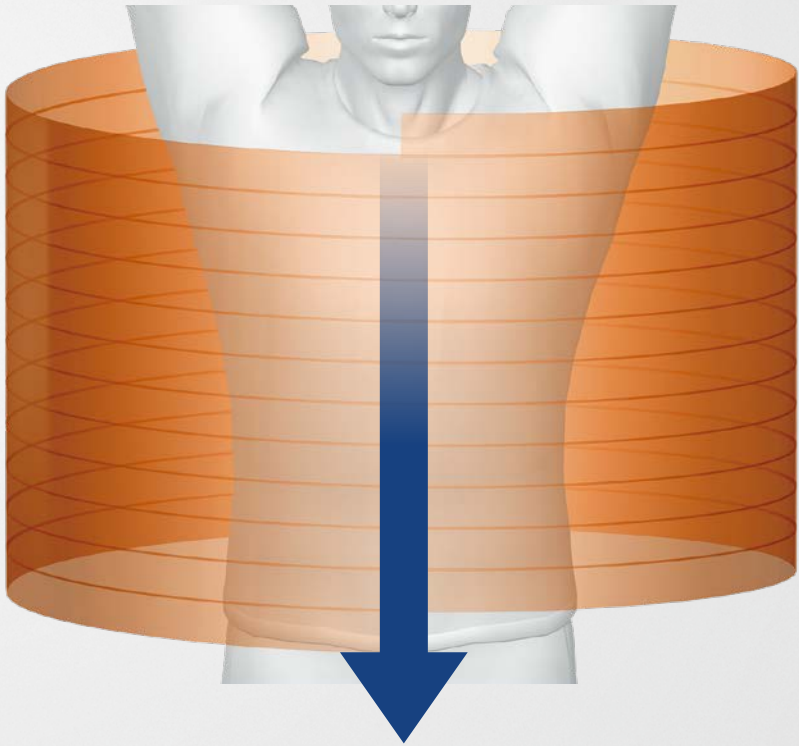
The Aquilion Lightning employs cutting-edge technology to optimize patient care and to accelerate clinical decision-making. Innovative features ensure that you can acquire high-quality images routinely at very low patient dose.



40% more efficient detector

The system's 80 row ^{PURE}ViSION detector with industry-leading 0.5 mm element size delivers razor-sharp, fully isotropic images in all planes. By making more efficient use of X-rays, the innovative ^{PURE}ViSION detector allows you to minimize patient dose while improving image quality.

**20%
FASTER**



Fast ultra-helical scanning

Shifting from 64 to 80 detector rows with up to 160 slices with the Aquilion Lightning/SP package results in shorter scan times with reduced iodine volumes, less motion artifacts and higher quality imaging.



**Low dose
chest**

**Standard dose
liver**

**Low dose
pelvis**

Three examinations in one

Being able to change imaging parameters and table speed within the same exam saves time, dose and cost. Combining up to three protocols into one single scan helps you making excellent use of contrast media while reducing patient dose and motion artifacts.



Up to 25 % less energy consumption*

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

Helping you economize on space and energy consumption

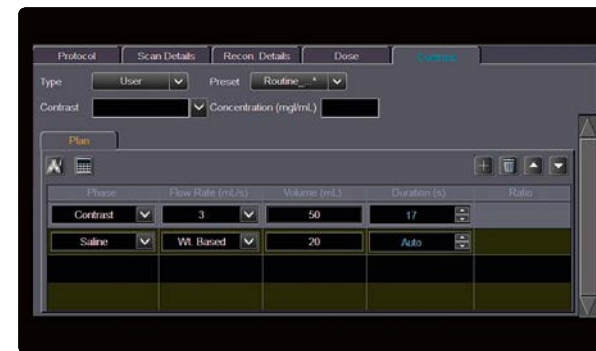
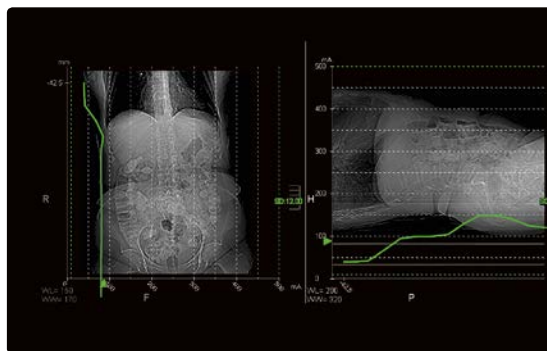
Aquilion Lightning has been thoughtfully engineered to meet today's economic challenges. With a gantry design focusing on smaller installation space and lower energy consumption, Aquilion Lightning provides you more space to work in.



Increased productivity and patient safety

Aquilion Lightning/SP package incorporates the latest hardware, software and reconstruction technologies allowing you to keep pace with your busy workload while maintaining the best image quality.

The system provides streamlined workflow from patient setup to diagnosis. A fast and efficient examination with automated minimal dose selection ensures both optimal imaging results and patient experience.



Exam Plan

Protocol selection

After patient registration Aquilion Lightning/SP package selects the correct adult or child protocols automatically.

Dose check

Aquilion Lightning/SP package helps ensure that the radiation dose limit you defined cannot be exceeded to avoid unintended high dose levels.

Scan

SUREExposure™ 3D

This fully integrated automatic exposure control ensures optimum image quality for each patient at the lowest possible dose.

Real-time imaging

The system provides real-time imaging during the scan allowing you to monitor the result instantaneously – a valuable tool for saving scan time and radiation dose.

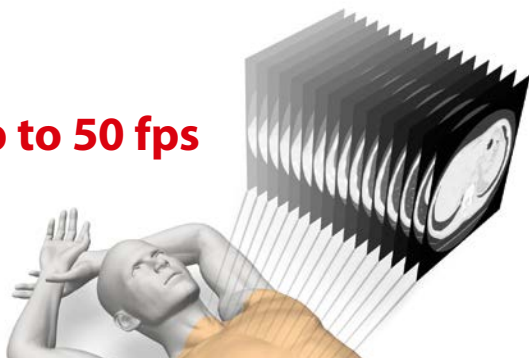
Contrast Management

By allowing contrast protocols to be added to your exam plan, flow rate and volume are automatically based on actual patient weight and exam type, while the injection is synced with the scan.

Automated kV selection

To further save iodine volume, SUREkV automatically uses the lowest kV setting for CTA examinations.

up to 50 fps



Reconstruction

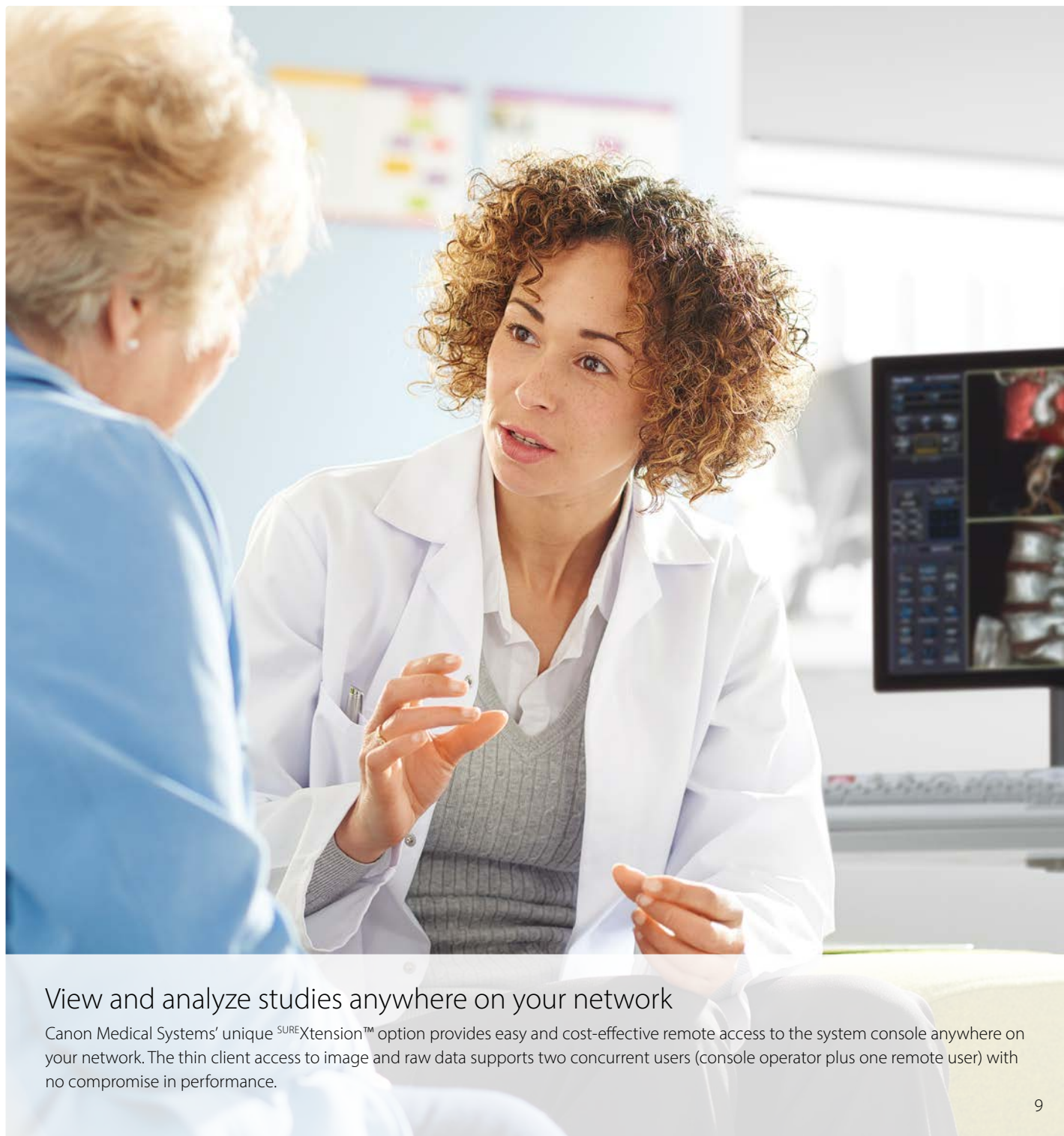
AIDR 3D Enhanced*

Canon Medical Systems' iterative reconstruction technology can be applied to all examinations resulting in dose reductions of up to 75% in daily routine.

Fast reconstruction**

With a reconstruction speed of up to 50 images per second** at full resolution rapid diagnosis and high patient throughput are facilitated.

*AIDR 3D Enhanced = Adaptive Iterative Dose Reduction 3D, **Option



View and analyze studies anywhere on your network

Canon Medical Systems' unique ^{SURE}Xtension™ option provides easy and cost-effective remote access to the system console anywhere on your network. The thin client access to image and raw data supports two concurrent users (console operator plus one remote user) with no compromise in performance.

Fast and efficient patient setup

The Aquilion Lightning gantry features design innovations improving the scan experience for patients while providing excellent operability and work safety for the technician.



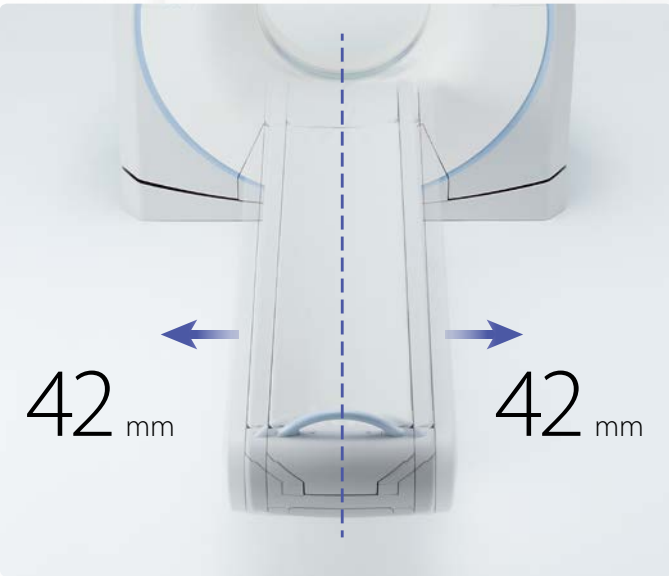
The i-Station display provides child-friendly exam instructions and gives operators feedback for breath-holding, ECG, scan parameters and patient ID.



The spacious 780 mm wide bore and 470 mm wide patient couch ensure comfortable scanning for even the largest of patients.



The couch top can be lowered to a minimum height of 312 mm for facilitating patient loading and transfer from a wheelchair or bed.



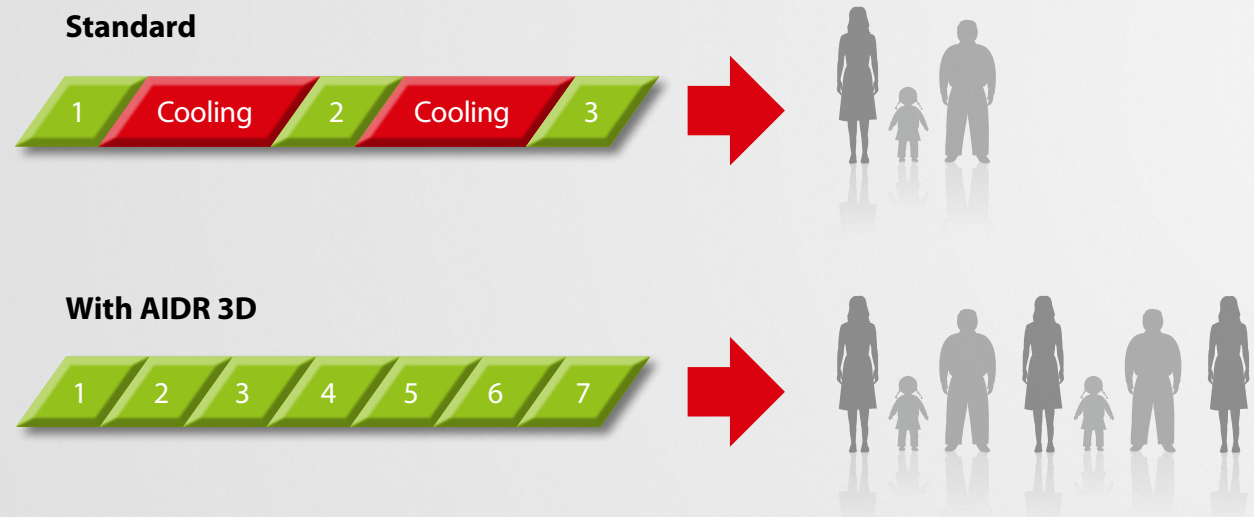
Tech Assist Lateral Slide* ensures safety and comfort by providing motorized positioning of the patient, reducing the risk of injury to the patient and the technologist.

*Option



Optimized clinical workflow

Aquilion Lightning / SP package is designed to handle even the busiest workloads with ease. The system's intuitive user interface guides you step by step through the examination with modern and easy-to-understand graphics and animations. A host of intelligent functions enable a fast and efficient workflow.

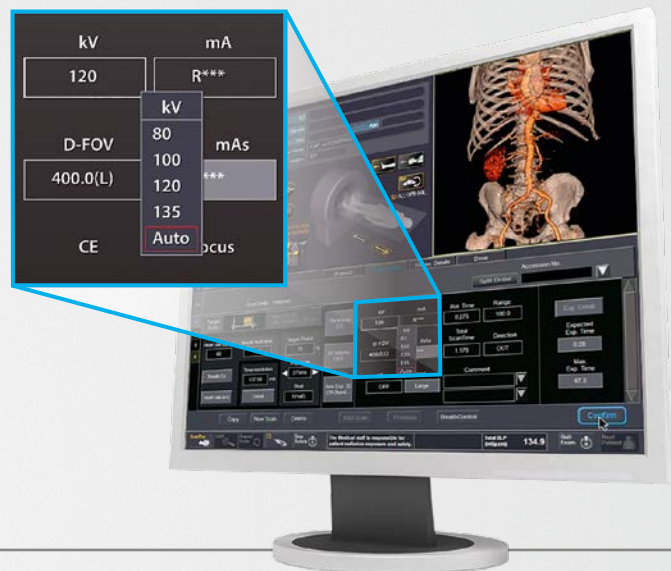


Non-stop scanning with Aquilion Lightning

The system's optimized low-dose performance helps you minimizing patient dose while allowing you to perform more exams in less time.

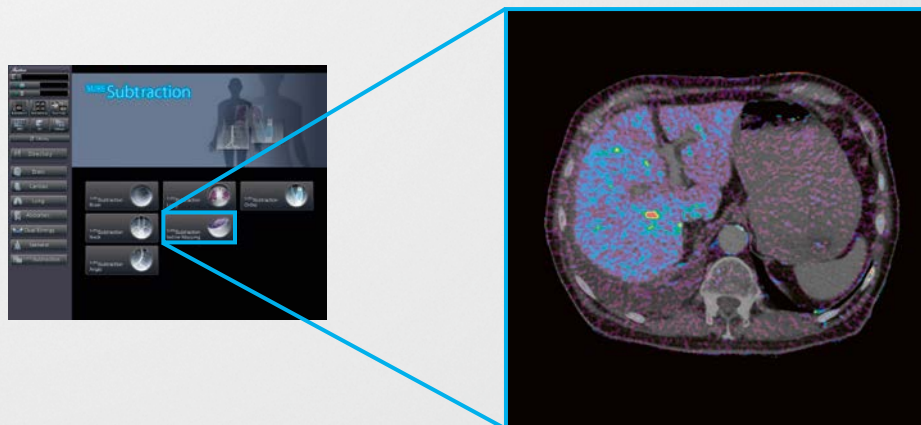
Automated kV selection

Aquilion Lightning allows for automated kV selection based on a patient's size and the clinical task selected. As part of Canon Medical Systems' ^{SURE}Exposure technology, this function can help optimizing the use of iodine contrast, decreasing cost and patient risk.



Zero-click workflows

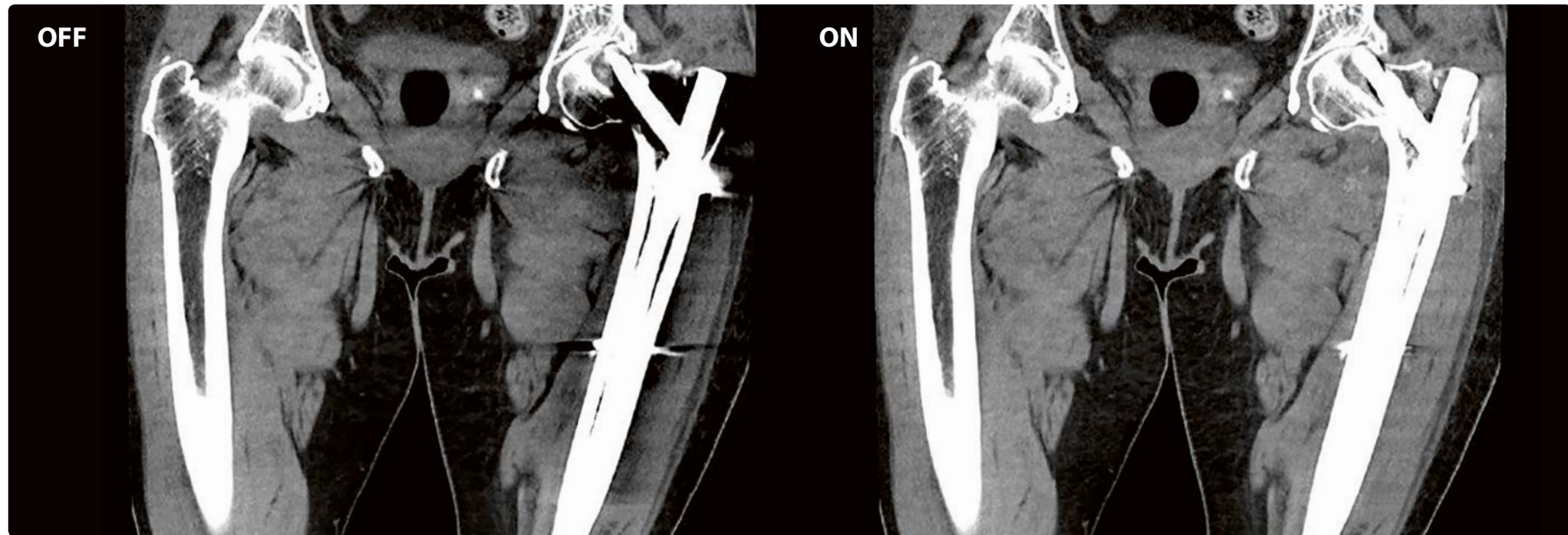
Fully automated functions such as Aquilion's Iodine Mapping, Easy 3D and Bone Segmentation tools allow you to diagnose with outstanding ease of use. The pre-rendered images can simply be selected from the thumbnail bar on the screen.



Maximum clinical capabilities

Aquilion Lightning/SP package offers a comprehensive suite of Adaptive Diagnostic solutions to make complex exams easier and to improve diagnostic precision and reproducibility.

Dose-neutral metal artefact reduction with SEMAR*



Canon Medical Systems' SEMAR utilizes a sophisticated reconstruction technique to remove artifacts caused by metal and improves visualization of the implant, supporting bone, and adjacent soft tissues for clearer and more confident diagnosis.

*SEMAR = Single Energy Metal Artifact Reduction

Solving your clinical challenge

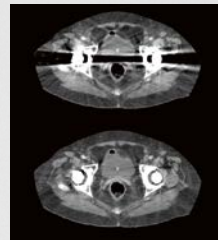
Adaptive Diagnostics
Clinical Solutions

SURESubtraction™**



Bone-free imaging

SEMAR



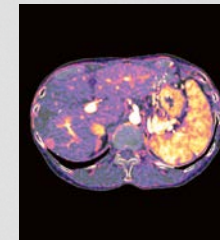
Metal artifact reduction

Dual Energy**



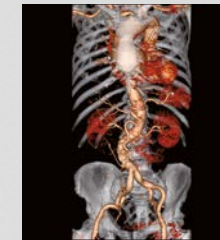
Tissue characterization

Iodine Mapping**



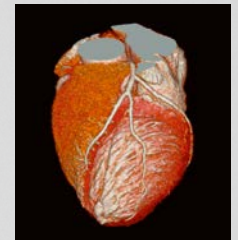
Lesion detection

3 phase vHP¹**



Prospective scanning

SURECardio™**



Arrhythmia scanning

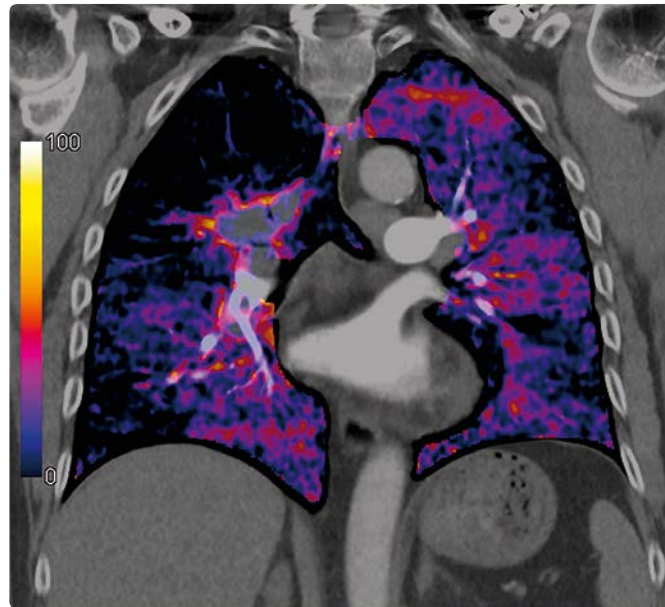
¹vHP = Variable helical pitch

Subtraction CTA**



Superior visualization in CTA with true subtraction of bone and calcification.

Iodine Mapping**



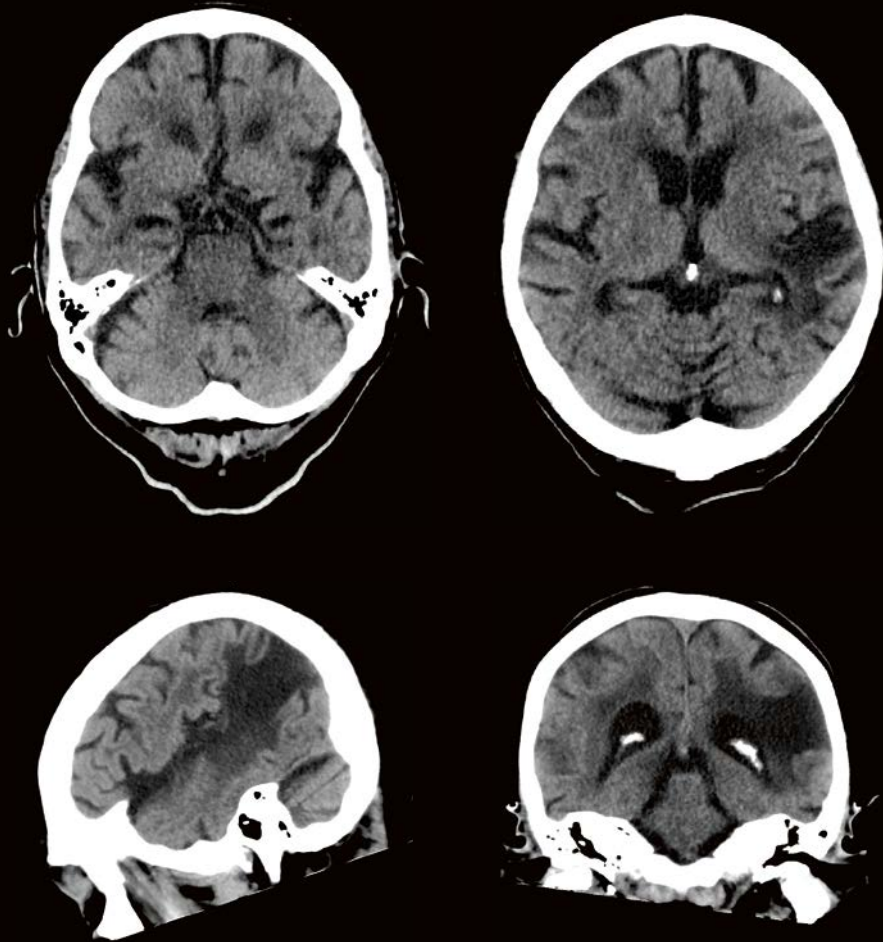
Clearly defined perfusion with color blood flow maps as a result of advanced registration and subtraction.

70 cm extended field of view**

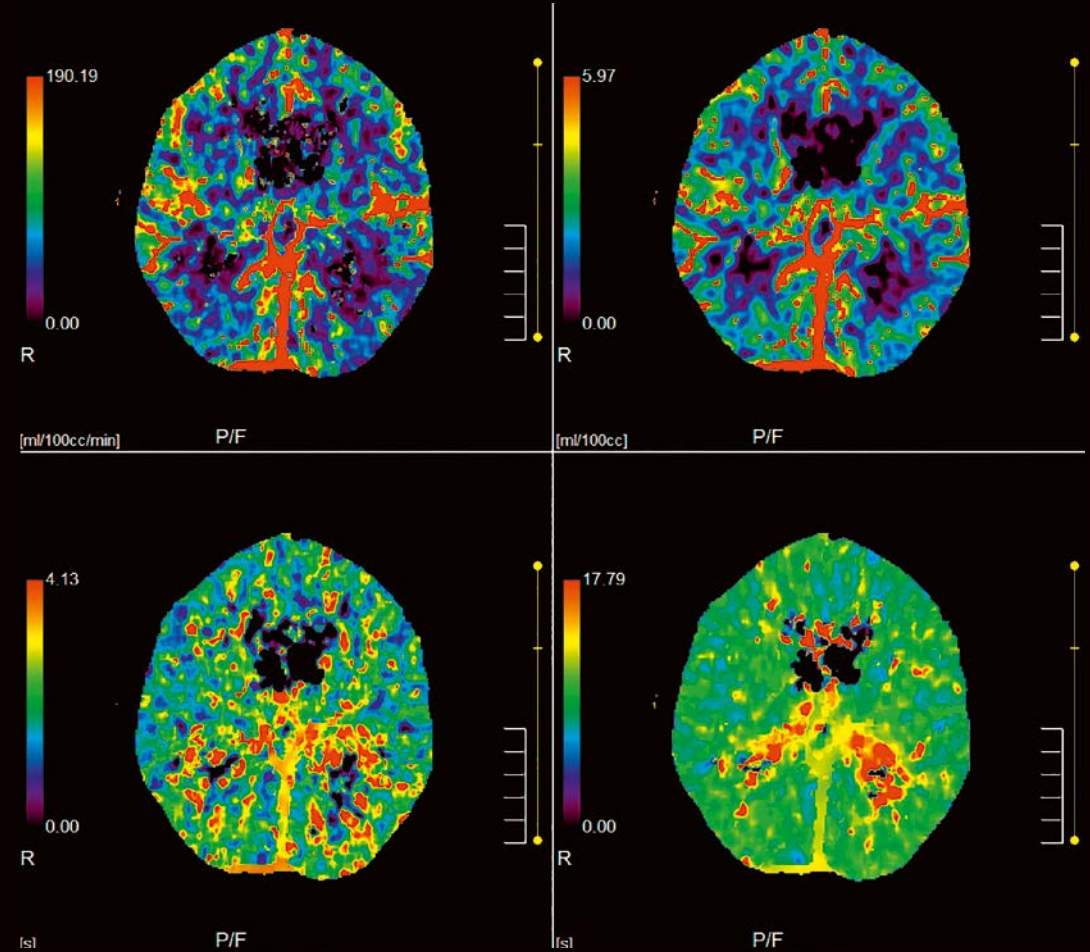


Provides a more accurate body outline for off-center imaging, very obese patients or radiotherapy planning.

Neuro imaging

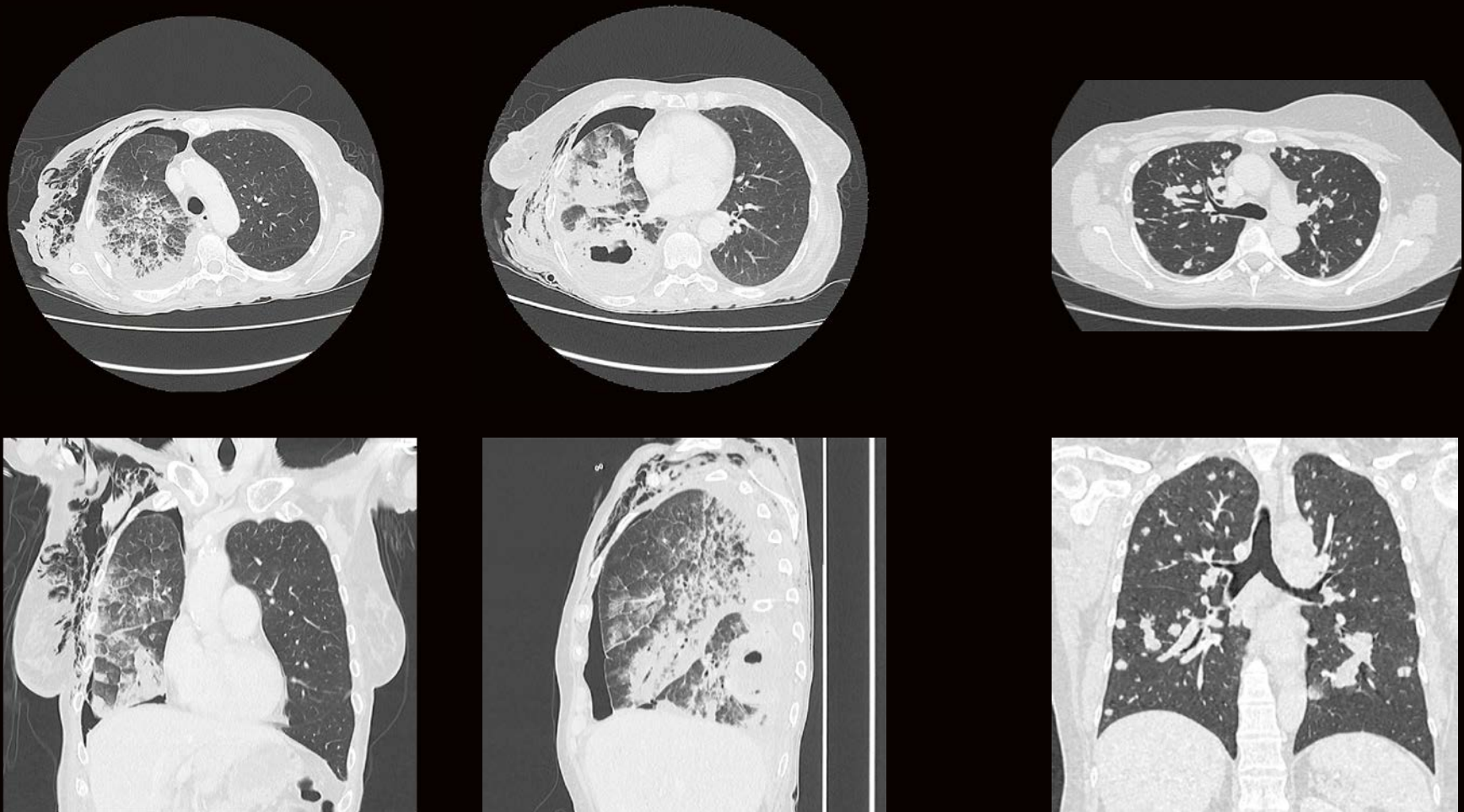


Superb brain image quality with clear grey-white matter differentiation and significantly reduced artifacts.



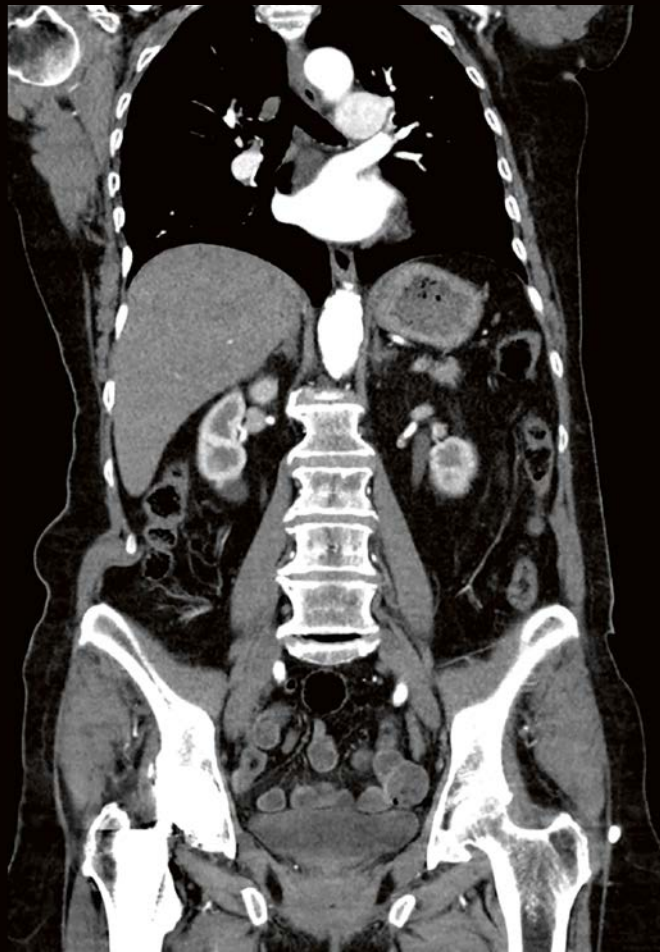
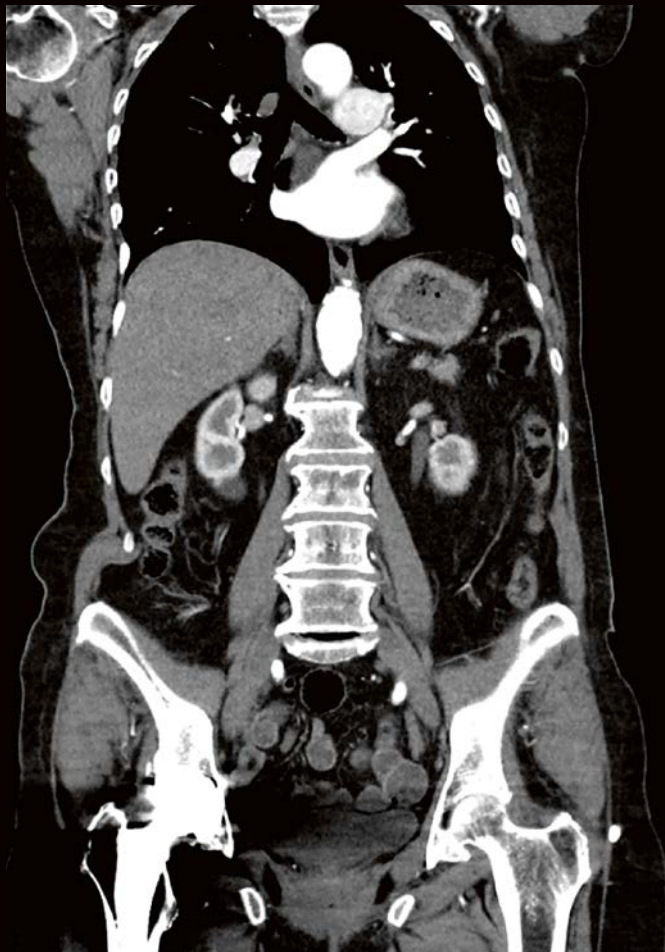
CBP for evaluation of patients with cerebrovascular disease.

Chest imaging

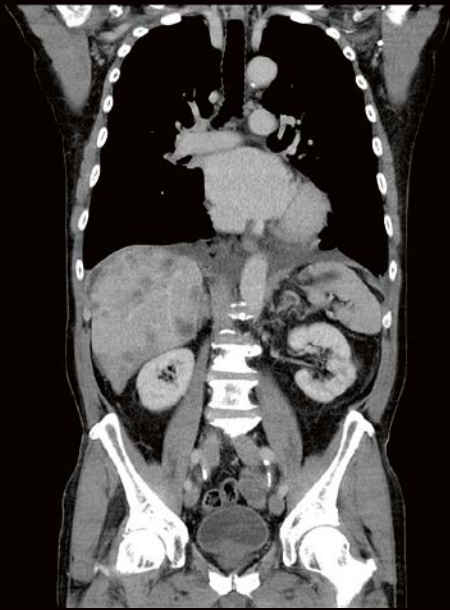
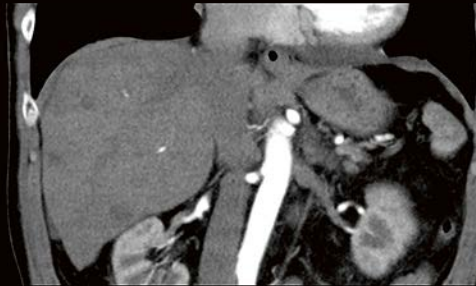
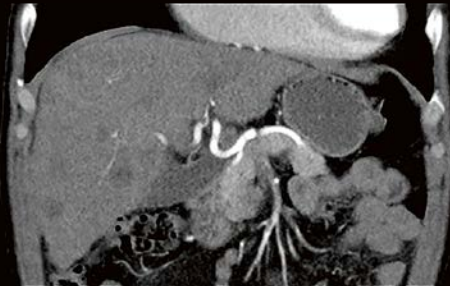


Fast and low-dose scanning of the chest allowing for superb image quality even in the most challenging patients.

Abdominal imaging

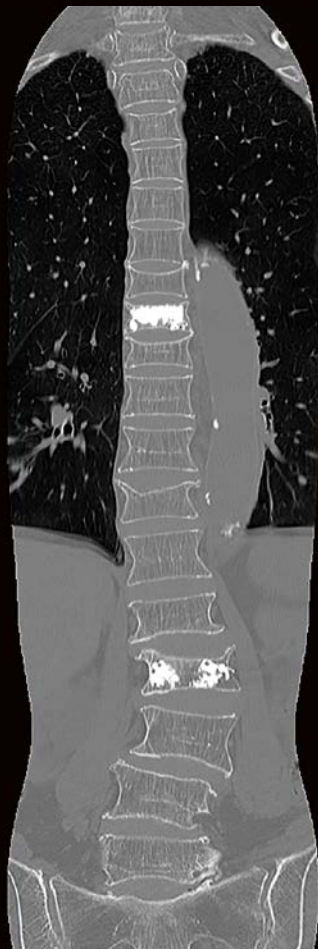


Eliminate metal artifacts in all your patients independent of the scan acquisition using SEMAR.

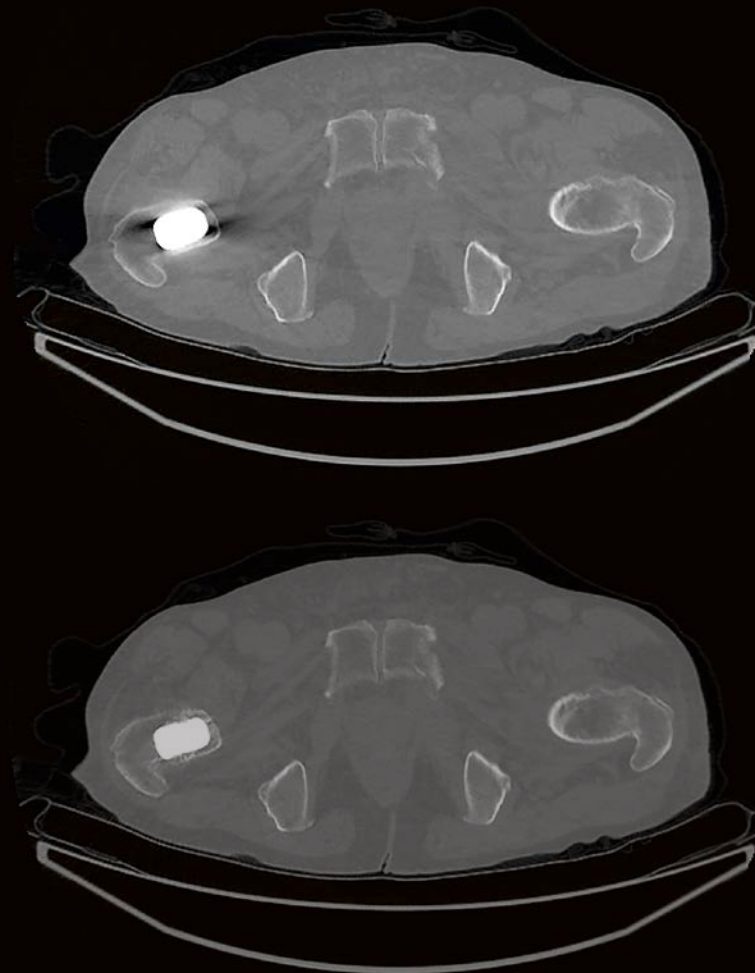


Reduce the amount of iodine with routine low kV scanning.

MSK imaging



Excellent visualization of bony structures thanks to the ^{PURE}VISION detector.



Eliminate metal artifacts without an increase in dose with SEMAR.



Outstanding image quality and fast reconstruction with fully iterative reconstruction; AIDR 3D.





Main specifications		
Detector		PUREVISION detector
		80 rows of 0.5 mm
Gantry	Rotation time	0.5
	Generator	50.4 kW / 112 kW equivalent
	Bore aperture	78 cm
	Tilt	± 30°
Patient couch	Max. load	205 kg / 300 kg*
	Max. scan range	150 – 200 cm*
Reconstruction speed	Helical	20 fps / 50 fps*
Reconstruction	Iterative reconstruction	AIDR 3D Enhanced
	FOV	500 mm / 700 mm*
Installation	Power capacity	72 kVA
	Min. installation space	9.8 m ² (short couch)

*optional



Aquilion Lightning



CANON MEDICAL SYSTEMS EUROPE B.V.

<https://eu.medical.canon>

©Canon Medical Systems Corporation 2018. All rights reserved.
Design and specifications are subjected to change without notice.
Model number: TSX-036A
MCACT0302ECA 2018-01 CMSE/Printed in Europe

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.

Aquilion, Aquilion Lightning, ^{SURE}Exposure, ^{SURE}Xtension, SEMAR, ^{SURE}Subtraction, ^{SURE}Cardio and Made for Life are trademarks of Canon Medical Systems Corporation. Secondlife is a trademark of Canon Medical Systems Europe. B.V. Other company and product names appearing in this document may be trademarks or registered trademarks of their perspective holders.

Disclaimer: Some features presented in this brochure may not be commercially available on all systems shown or may require the purchase of additional options. Please contact your local Canon Medical Systems representative for details.

Made For life