

Shanghai United Imaging Healthcare Co., Ltd.



uCT 520

Insight. Encouraged.

uCT 520

uCT 520 is designed to bring customers more access to advanced technologies. The intuitive and intelligent workflow boosts efficiency and effectiveness of routine practices. The unique Z-Detector, along with various dose control techniques, help to image the patient with care. The system also shows outstanding financial performance with reliable components and multiple integrated advanced applications.

- **Workflow with Ease**
- **Imaging with Care**
- **Outstanding Financial Performance**



Workflow with Ease

Intelligent and automated operations for personalized care.

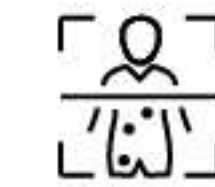




EasyRegister

The most frequently used protocols are sorted, updated and placed in the front page shortcut area, for easy selection.

Along with the pre-set patient positions, the patient registration can be completed with a few clicks of the mouse.

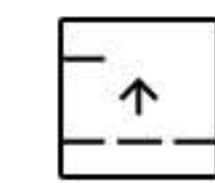


EasyScan

Intelligently plans the exam for individual patients.

Parameters such as the scan range, reconstruction FOV and gantry tilt angle are automatically adjusted.*

uDose automatically generates the optimized 3D dose distribution plan based on anatomic information.



EasyLogic

The system predicts the next user operation and is fully prepared prior to the command conducted, including tube preparation, gantry preparation and data pre-processing.

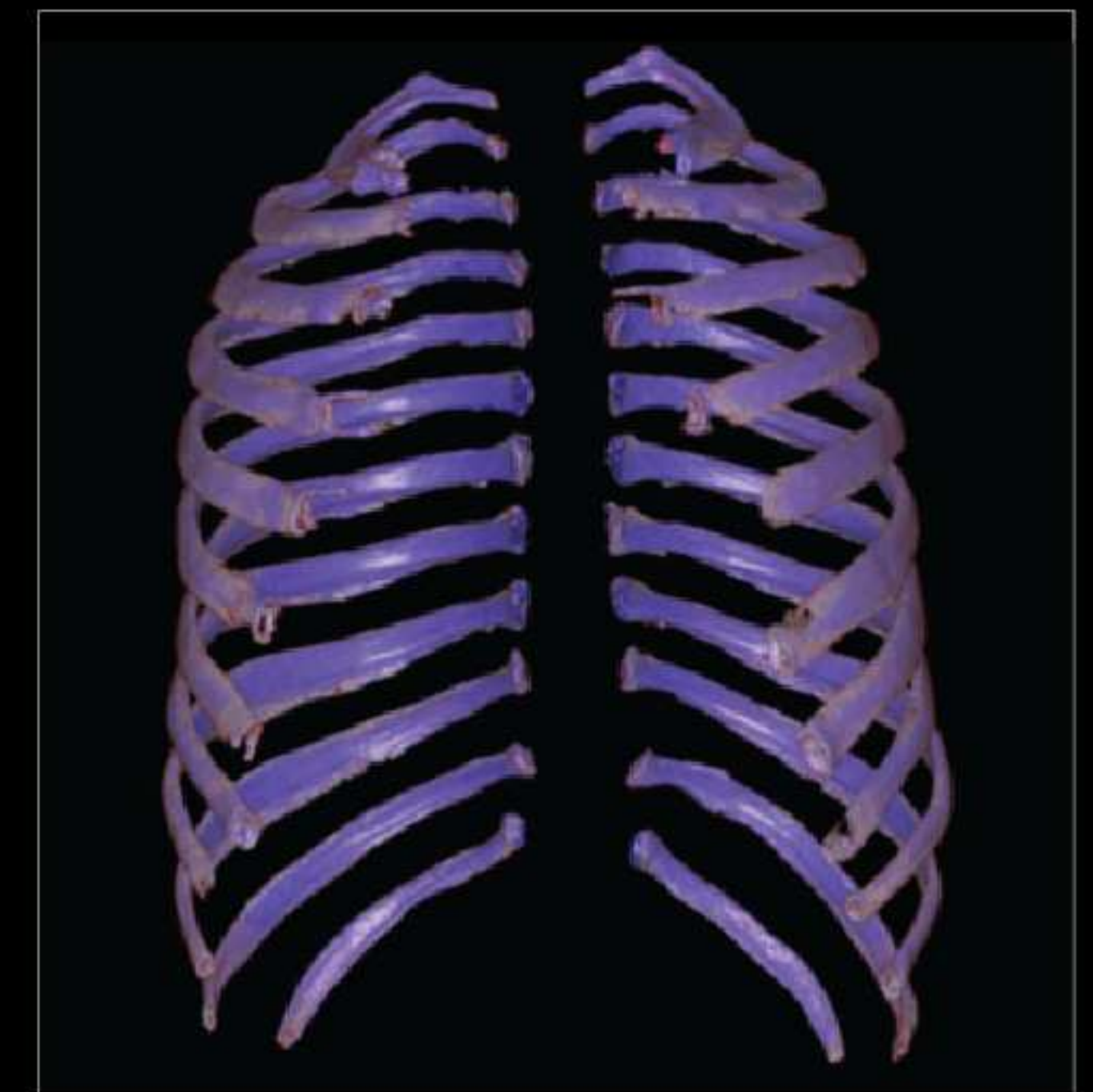
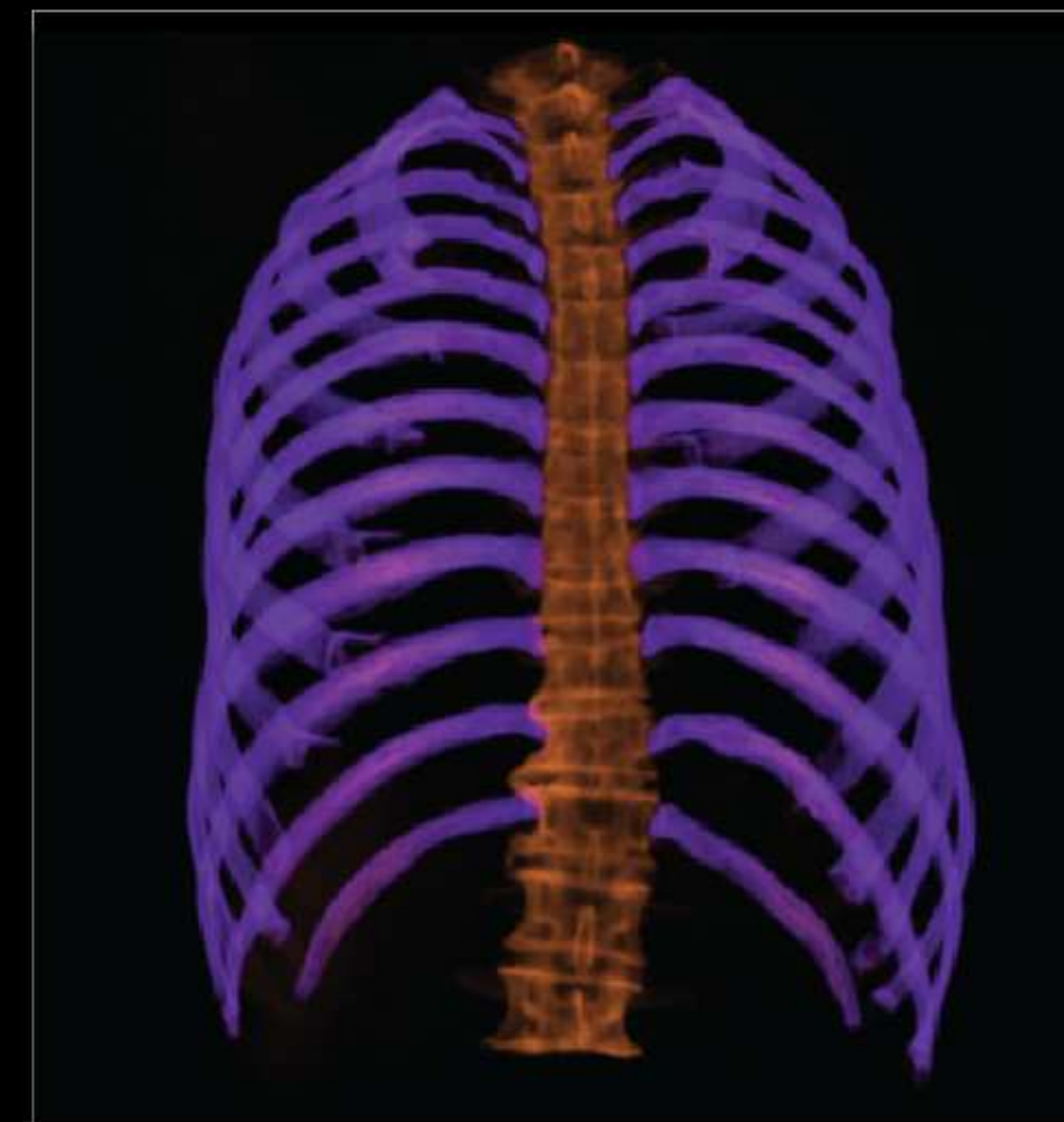
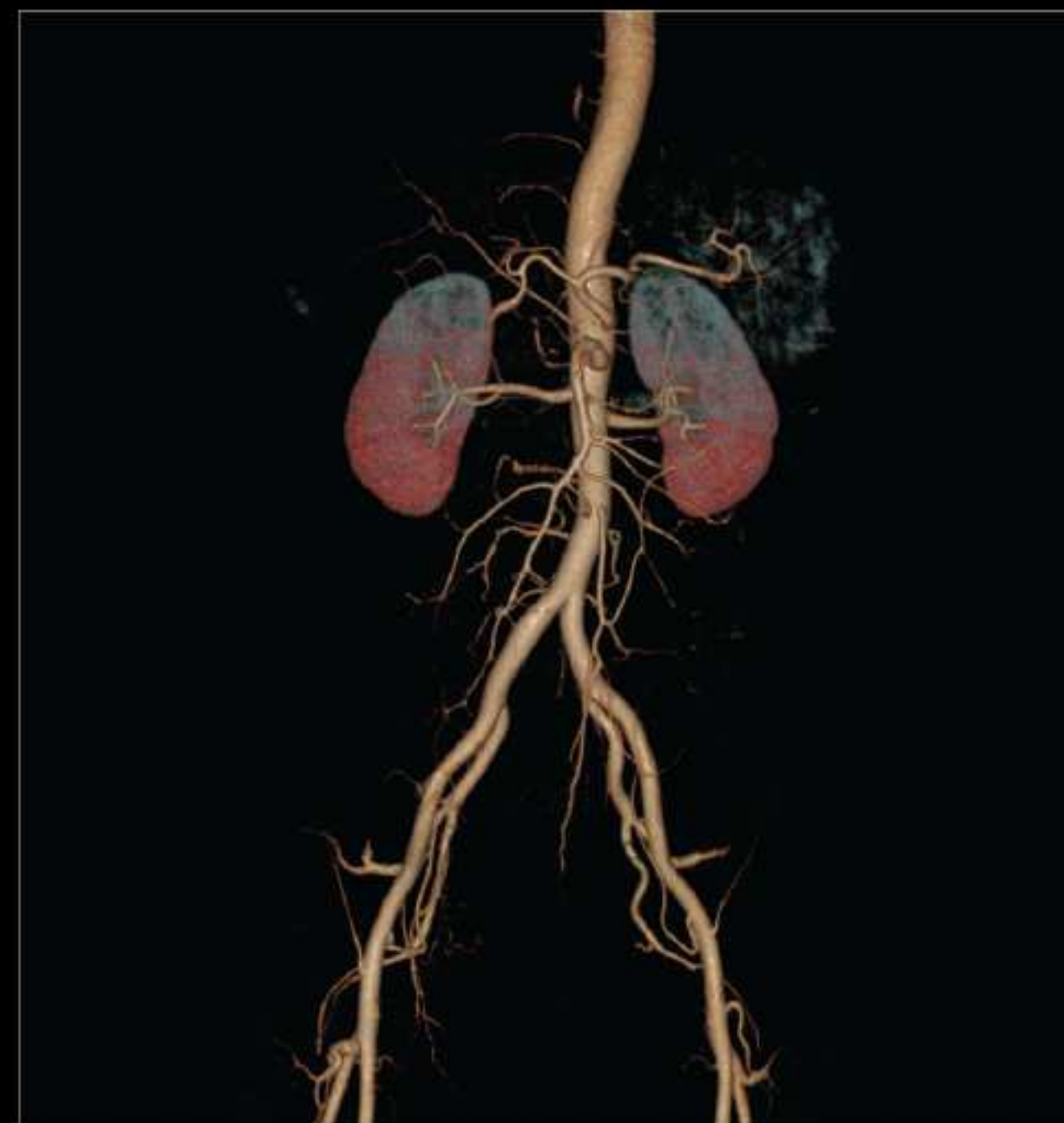
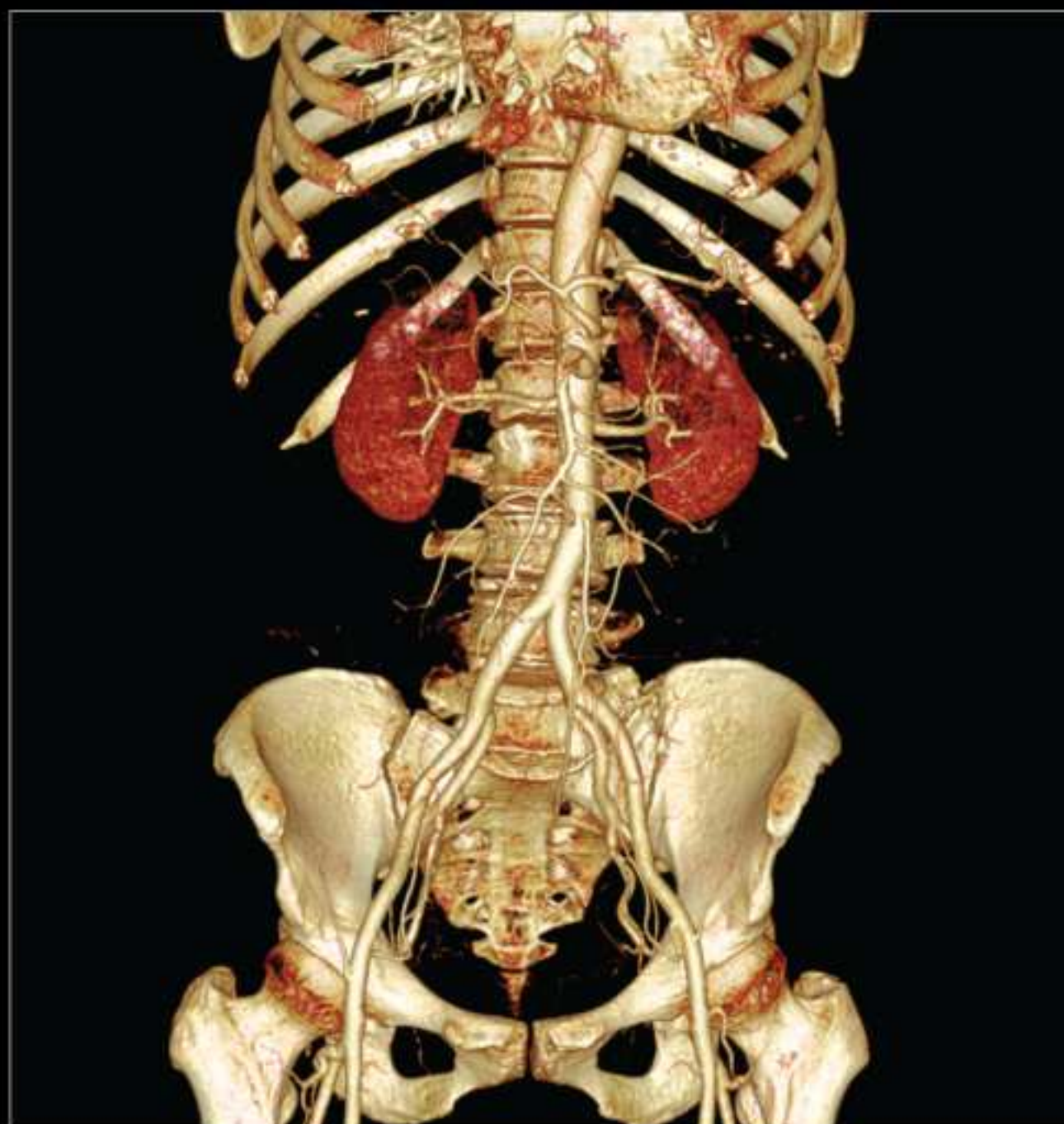
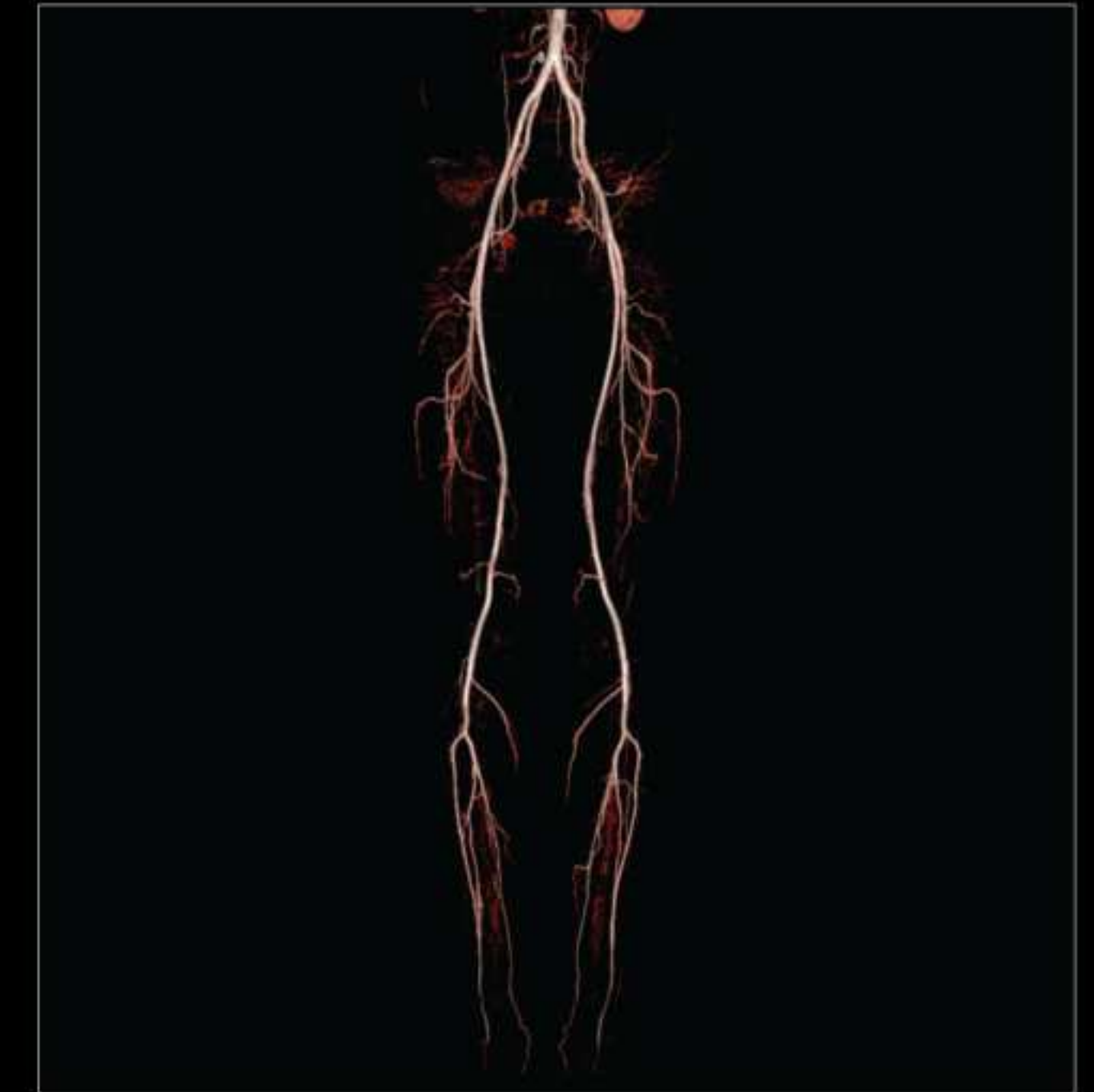
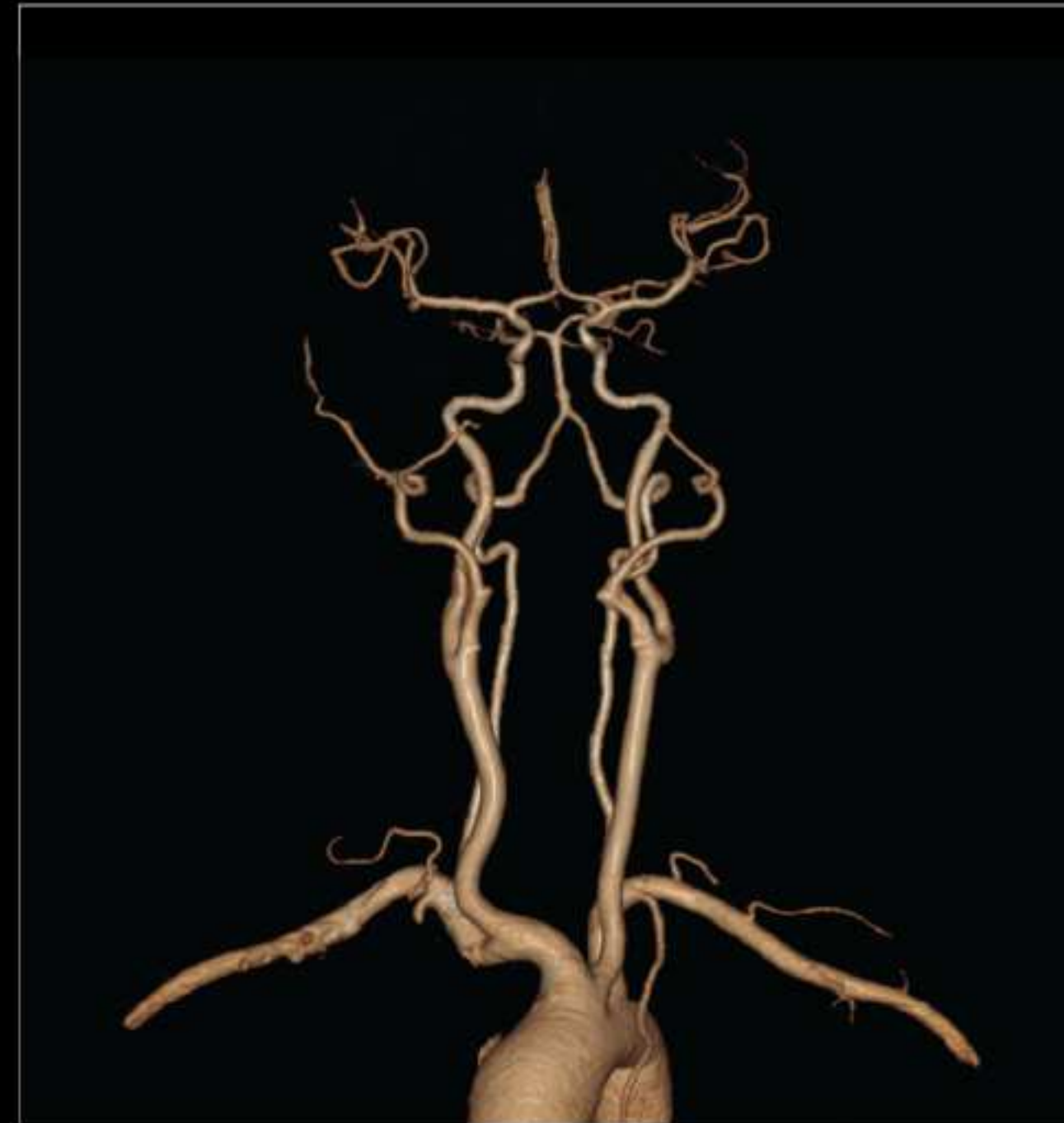
Minimizes the wait time between operation procedures and accelerates CT exam workflow significantly.

Easy Post-processing

As post-processing is considered to be part of the standard reconstruction task, uCT520 provides fast and reproducible results with minimal operations.

Single-click bone removal incorporates different algorithms to dedicated applications, including carotid CTA, body CTA and virtual DSA.

Single-click rib extraction automatically segments and displays the ribs from other structures. Diagnosis of rib fractures can be conducted with more efficiency.





Imaging with Care

Comprehensive dose control technologies
to deliver optimized dose plans.

Z-Detector Architecture

High Resolution and Ultra-low Noise



Fully Integrated Design

Innovative Through-Silicon-Via (TSV) Technology.

cm to μm level signal conducting path shortening.

Ultra-low noise signal output.



0.55mm Pixel Size

0.55mm high resolution acquisition in all FOVs and collimations.

22mm coverage in Z-plane.

34560 large number of detector elements.

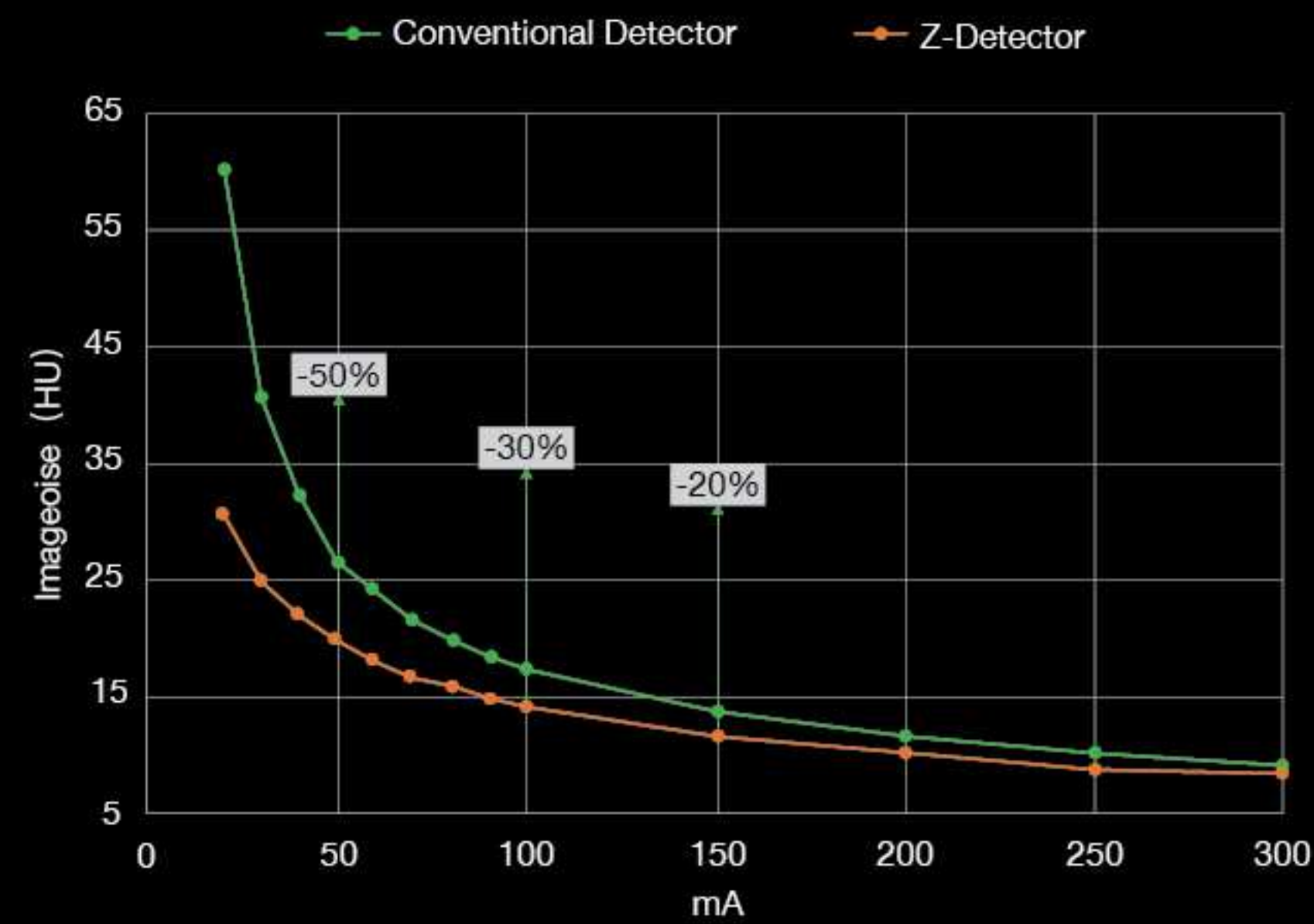
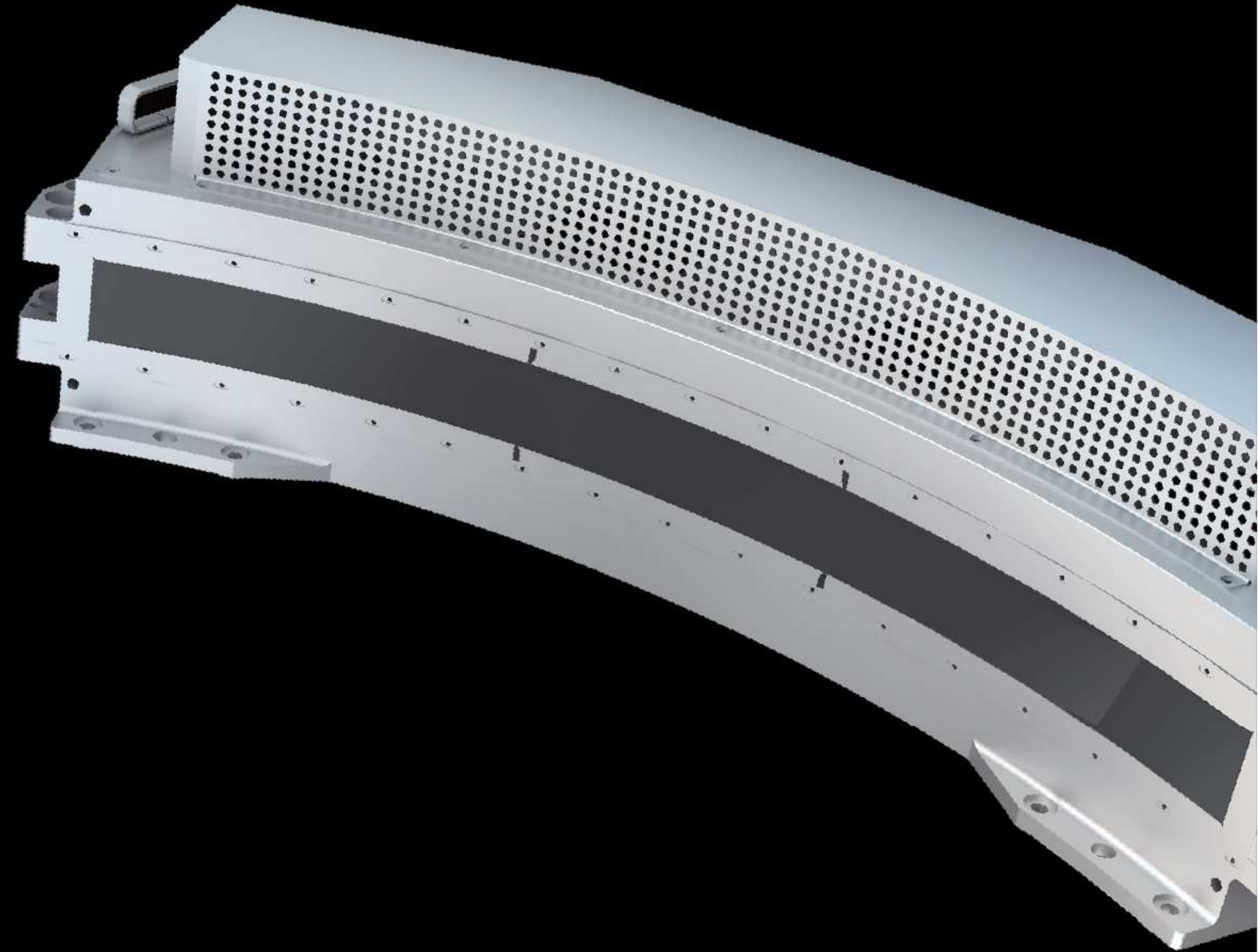
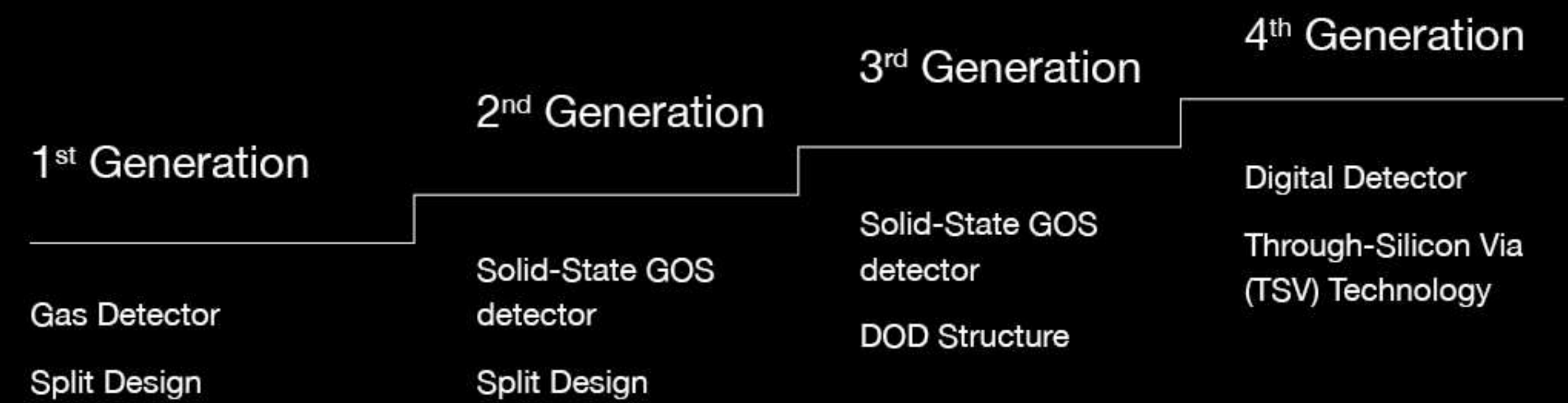
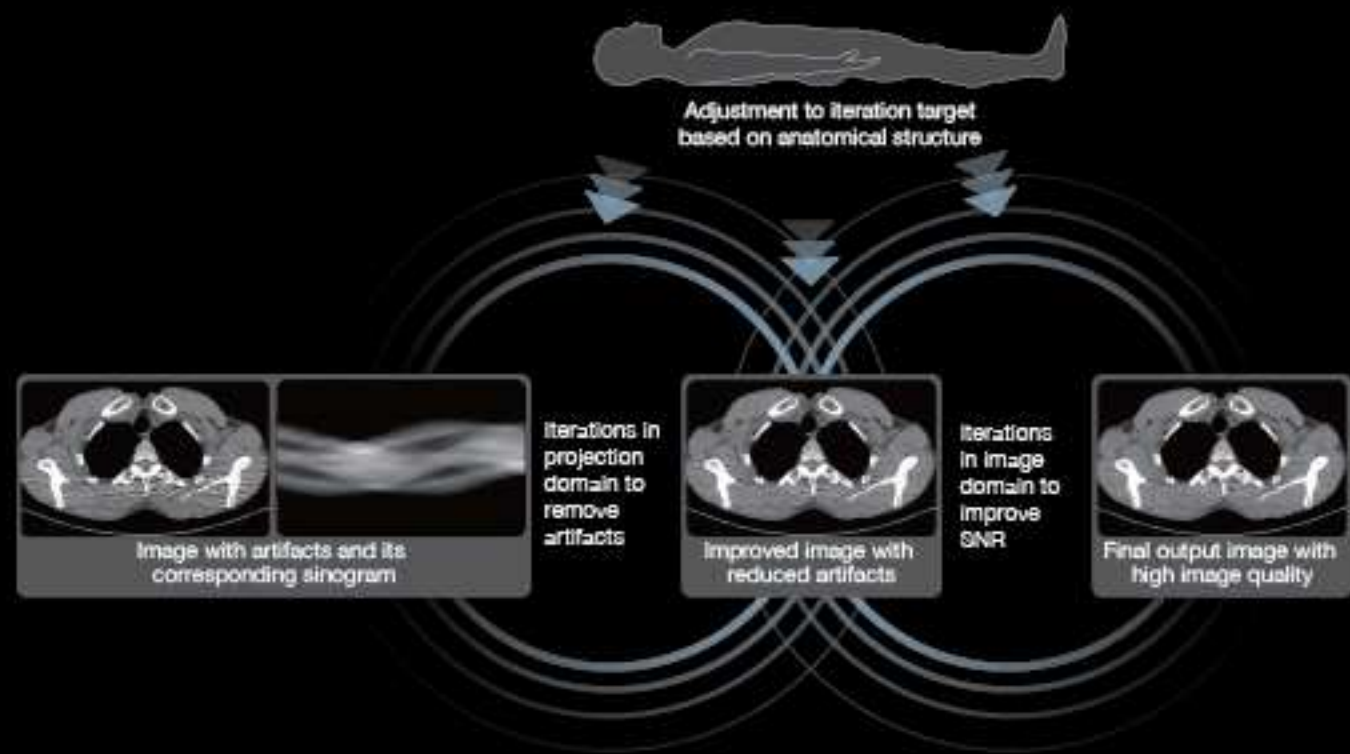


Image noise generated by Z-Detector and the conventional solid-state detector as measured and compared in CT scans using a 180-mm water phantom. The graph illustrates that a reduced noise level is obtained by Z-Detector within the entire range of mAs settings.



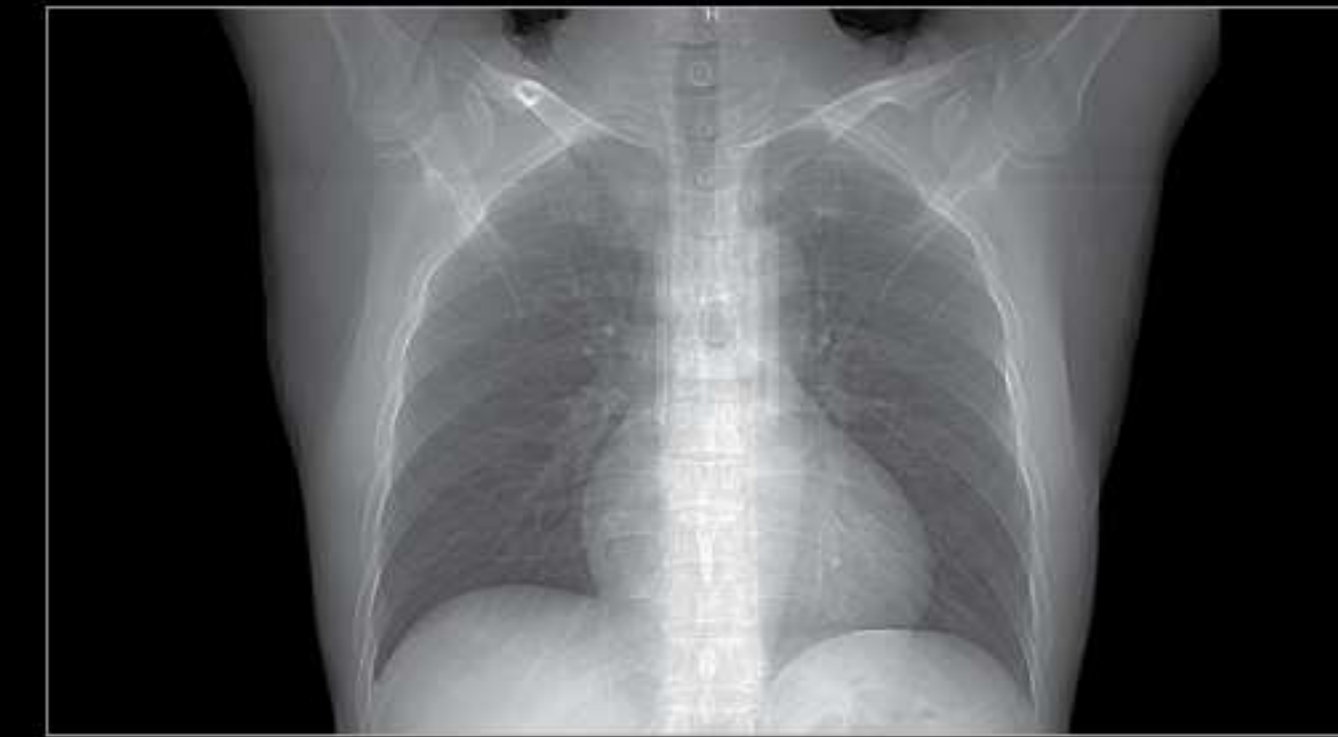
Comprehensive Dose Control and Monitor Technologies



KARL 3D Iterative Denoising

Performed in both the projection and image spaces.

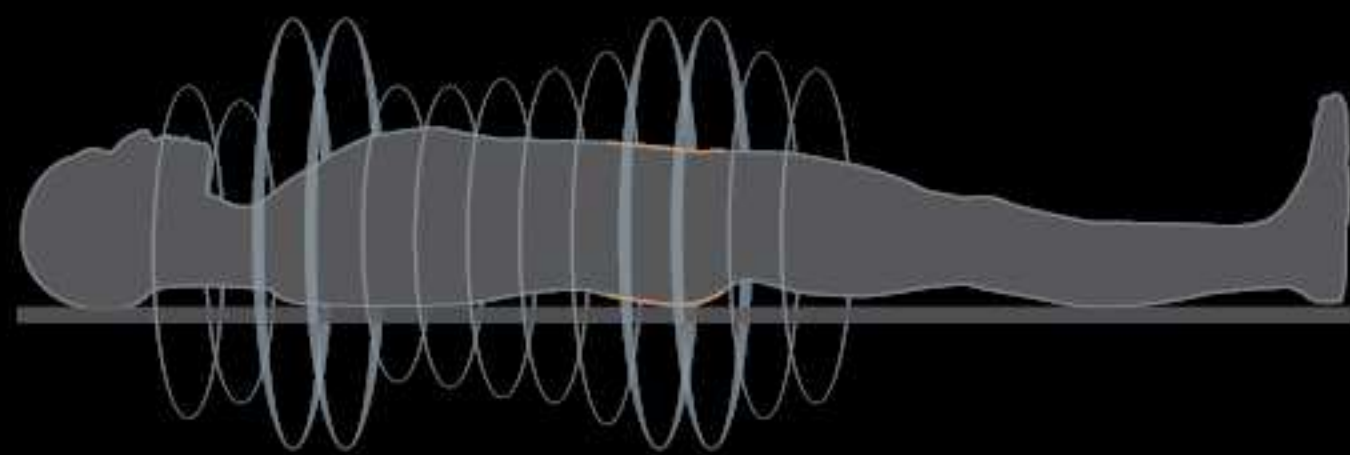
Reduces dose while preserving image quality.



Real Time Scout

Make scout scans more accurate.

Eliminates excessive radiation dose to the patient.



uDose 3D Dose Modulation

Based on anatomic structure information.

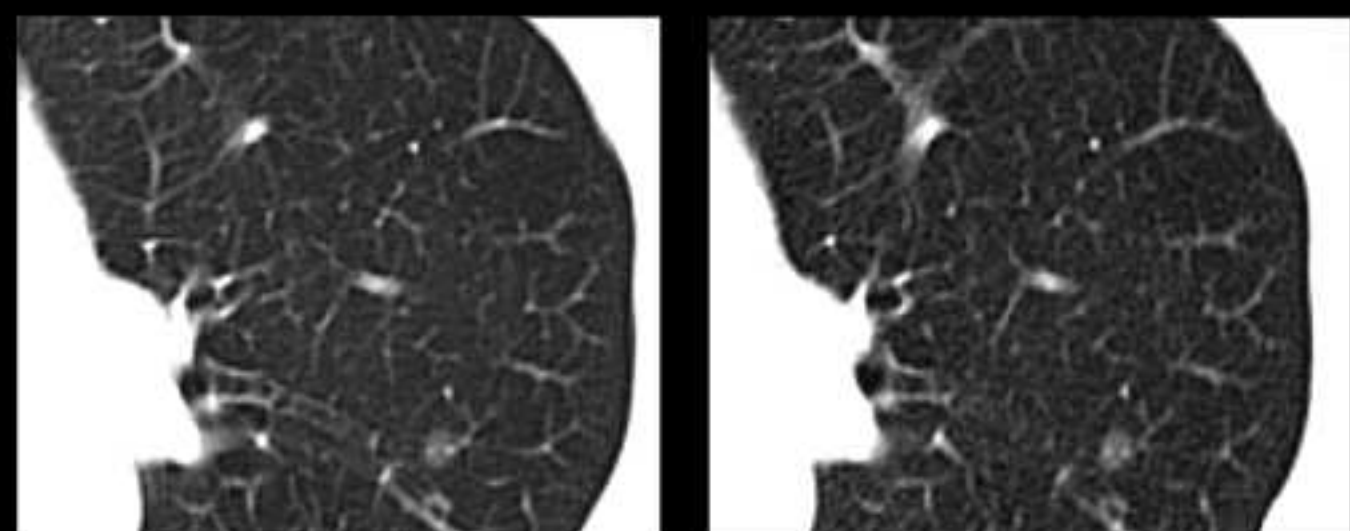
Optimized 3D dose distribution plan.



Dose Warning

Individually set for every protocol.

Compliance with NEMA XR29 standards.



70kV

120kV

70kV Scan Mode

70kV Dose reduction for small BMI or younger patients.

Increased contrast of iodine based agents.



Structured Dose Report

Complying with DICOM standards.

Seamless connection to third-party dose tools.

Outstanding Financial Performance

Reducing total cost of ownership for operation.





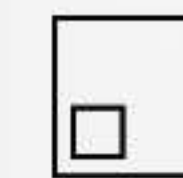
Reducing Total Cost of Ownership



Reliable Components

Light-weight tube with reliable design and good serviceability.

Self-cleaning carbon brushes for improved reliability of the slip-ring.



Small Footprint

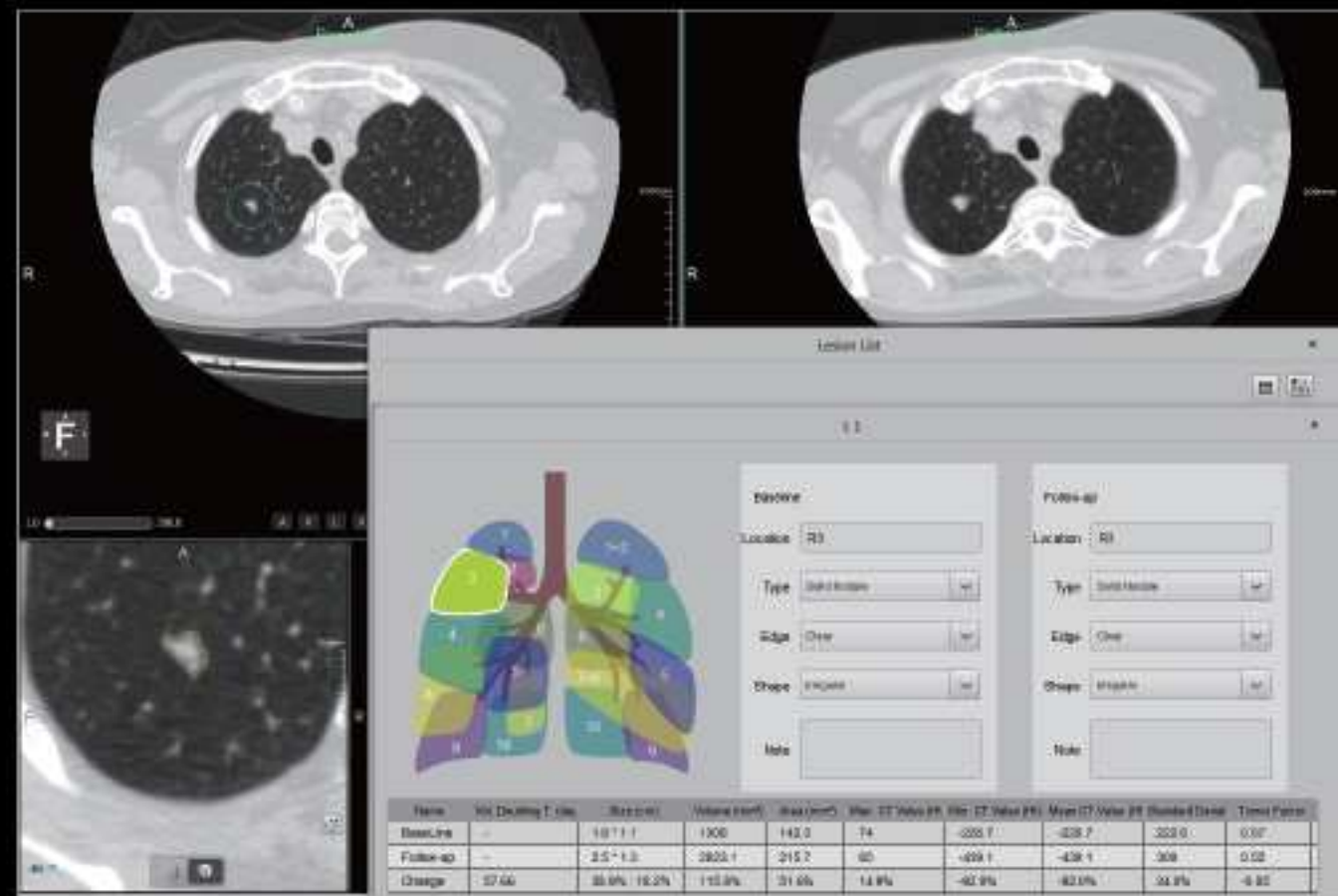
The uCT 520 requires a minimum installation area of 9m².



Go Green

Switching the system into uECO mode during night or when the system is not busy saves 30% power compared to conventional stand-by modes.

Integrated Advanced Applications on the Console



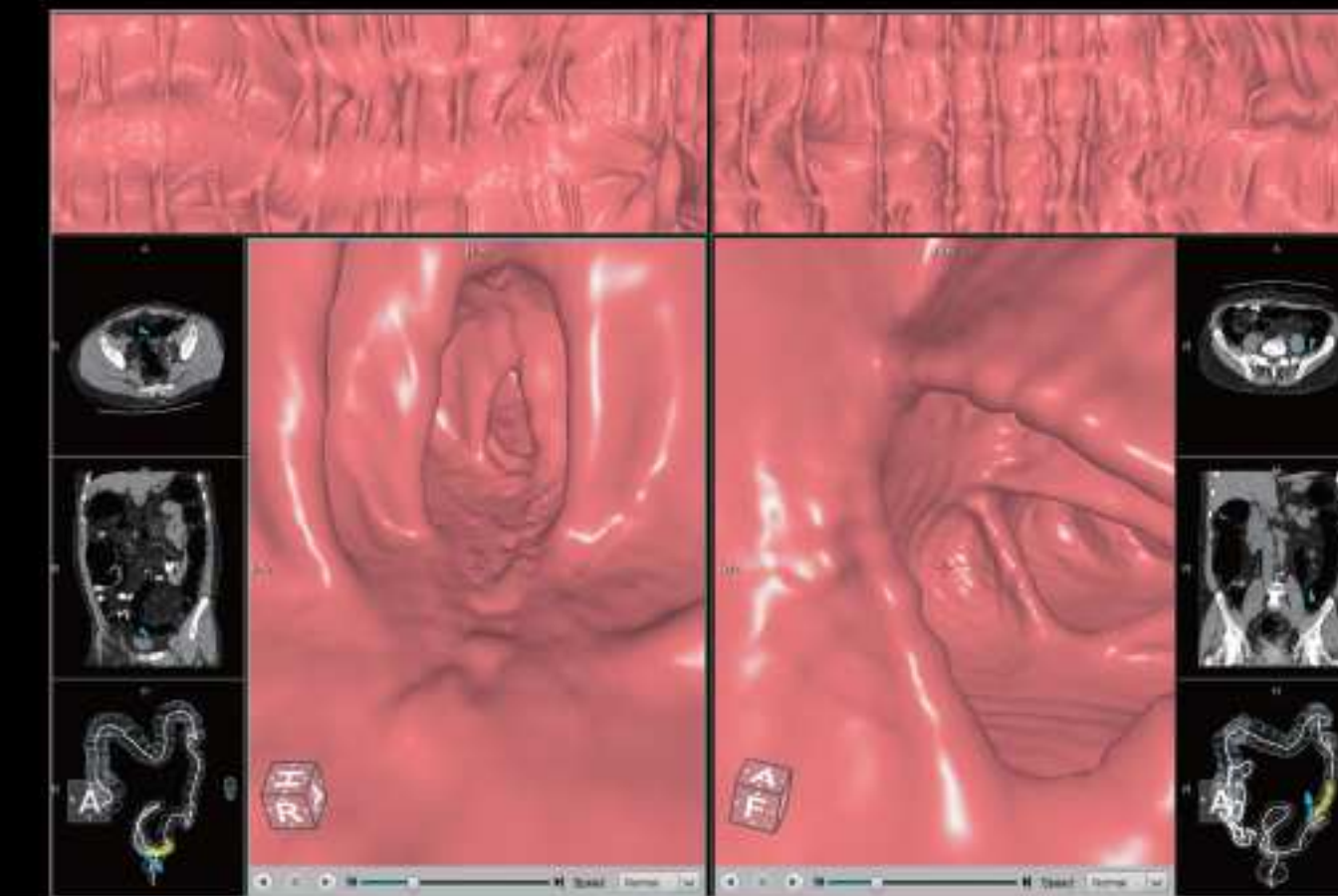
Lung Nodule Analysis*

Assist detection, segmentation, and measurement of nodule.

Nodules quantitative analysis.

Follow-up analysis.

One-step structured report.



CT Colonoscopy*

Automatic colon segmentation.

Electronic colon cleansing.

Virtual endoscopy.



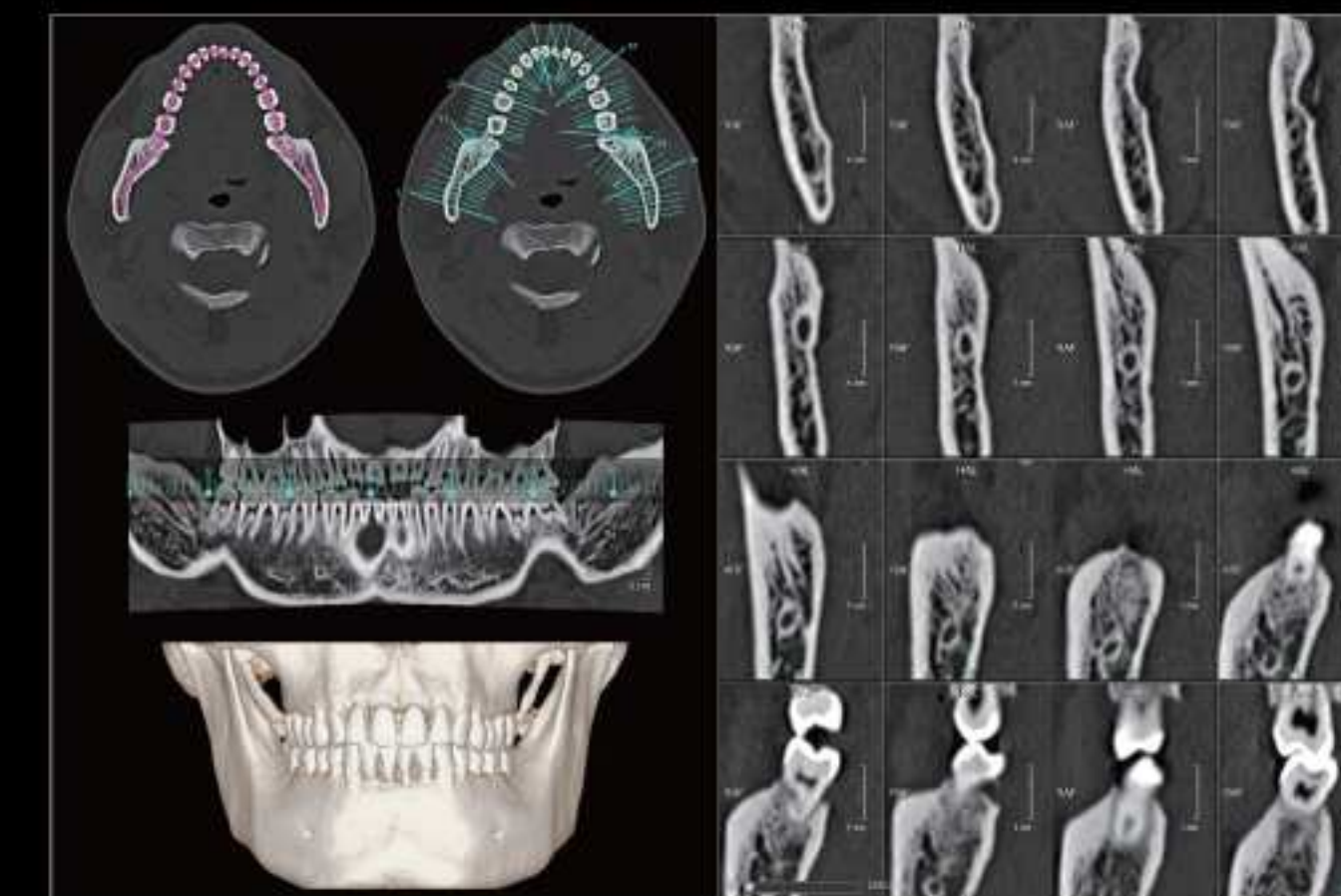
Lung Density Analysis*

Pulmonary Lobe Extraction.

Pulmonary Density & Volume Measurement.

Bronchial Wall Surface/Diameter Measurement.

Quantitative Data Analysis and Export.



Dental Analysis*

Plotting Panoramic Curve.

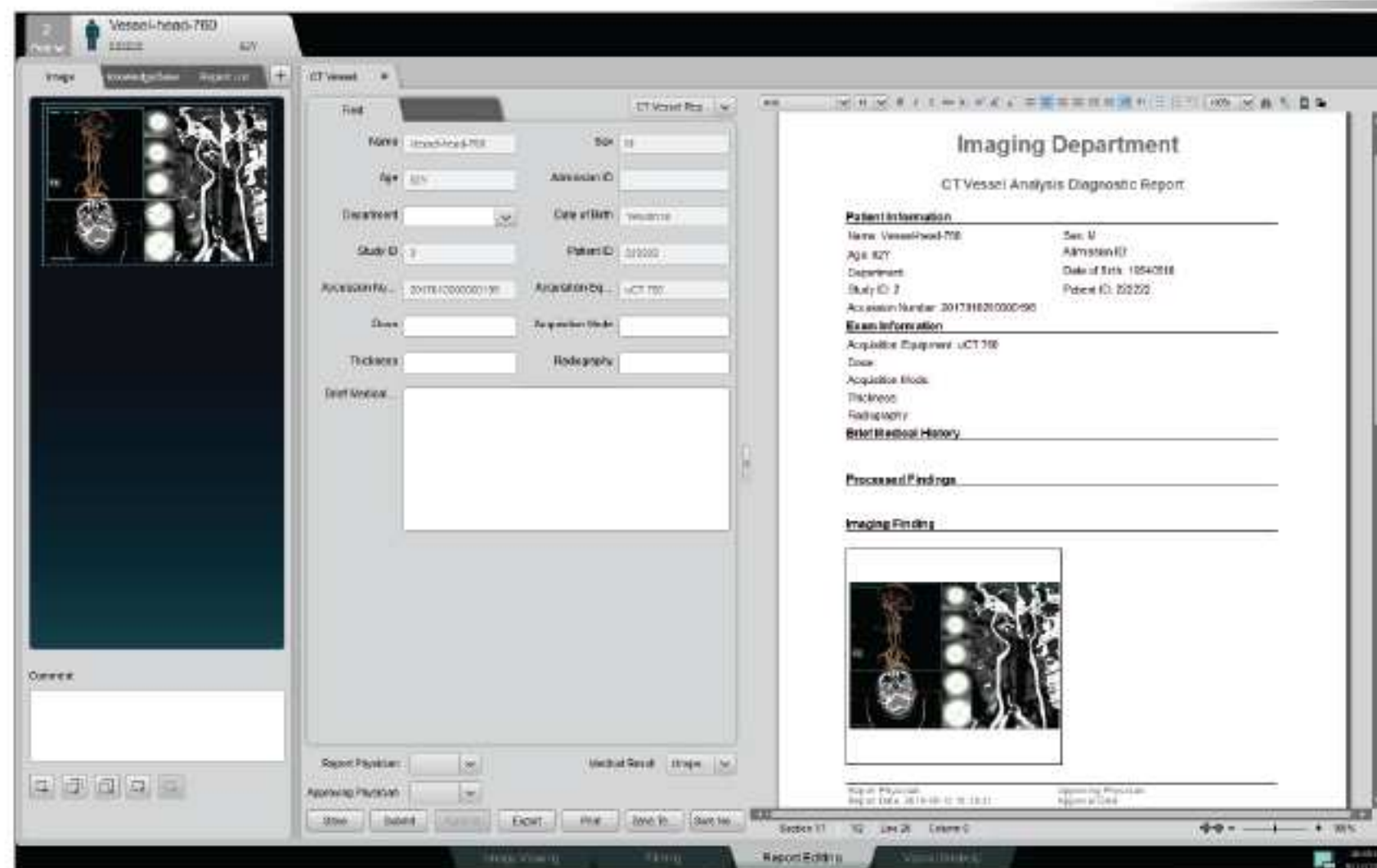
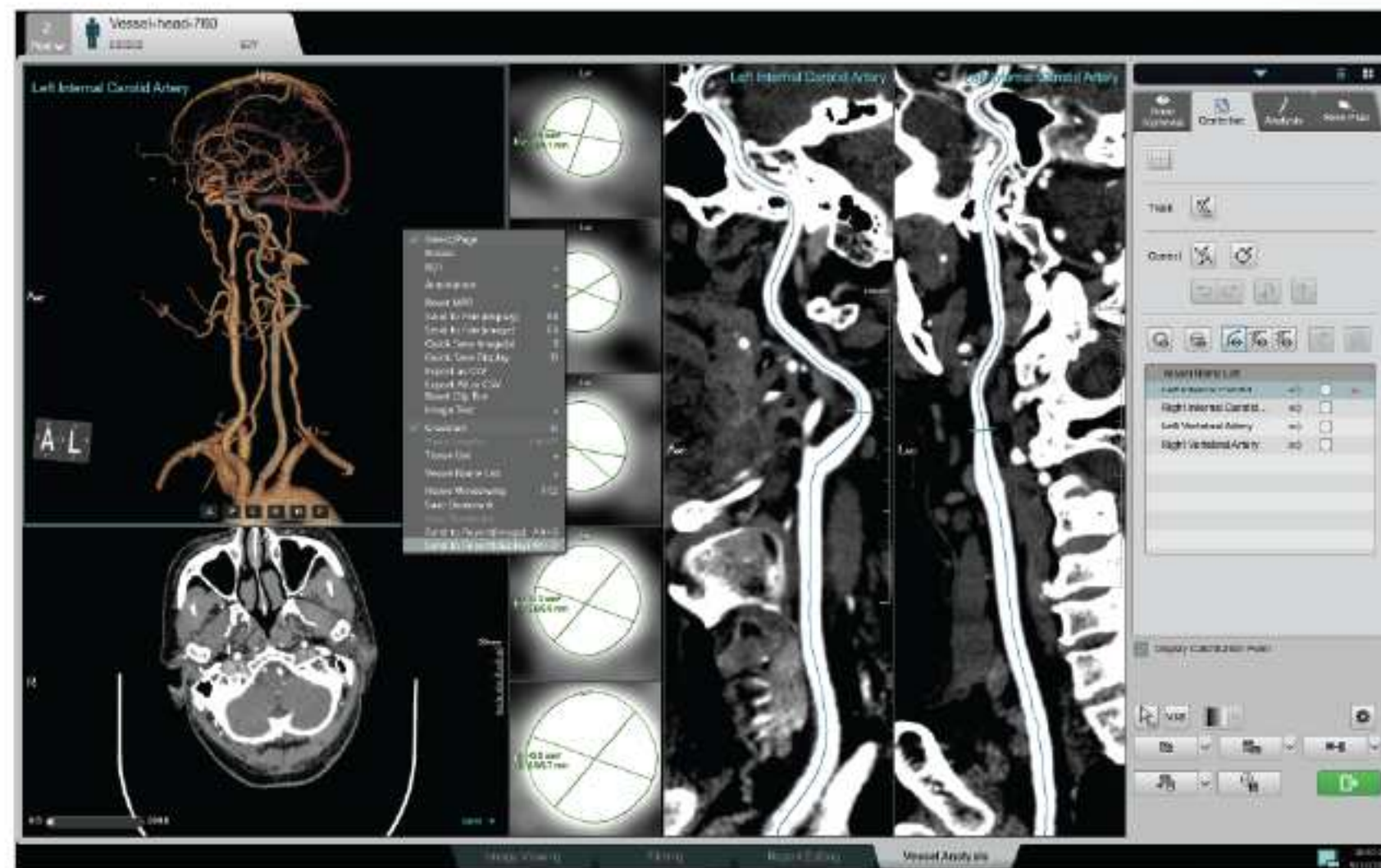
Marking Nerve Lines.

Sectional View Analysis.

Integrated Report System on Console

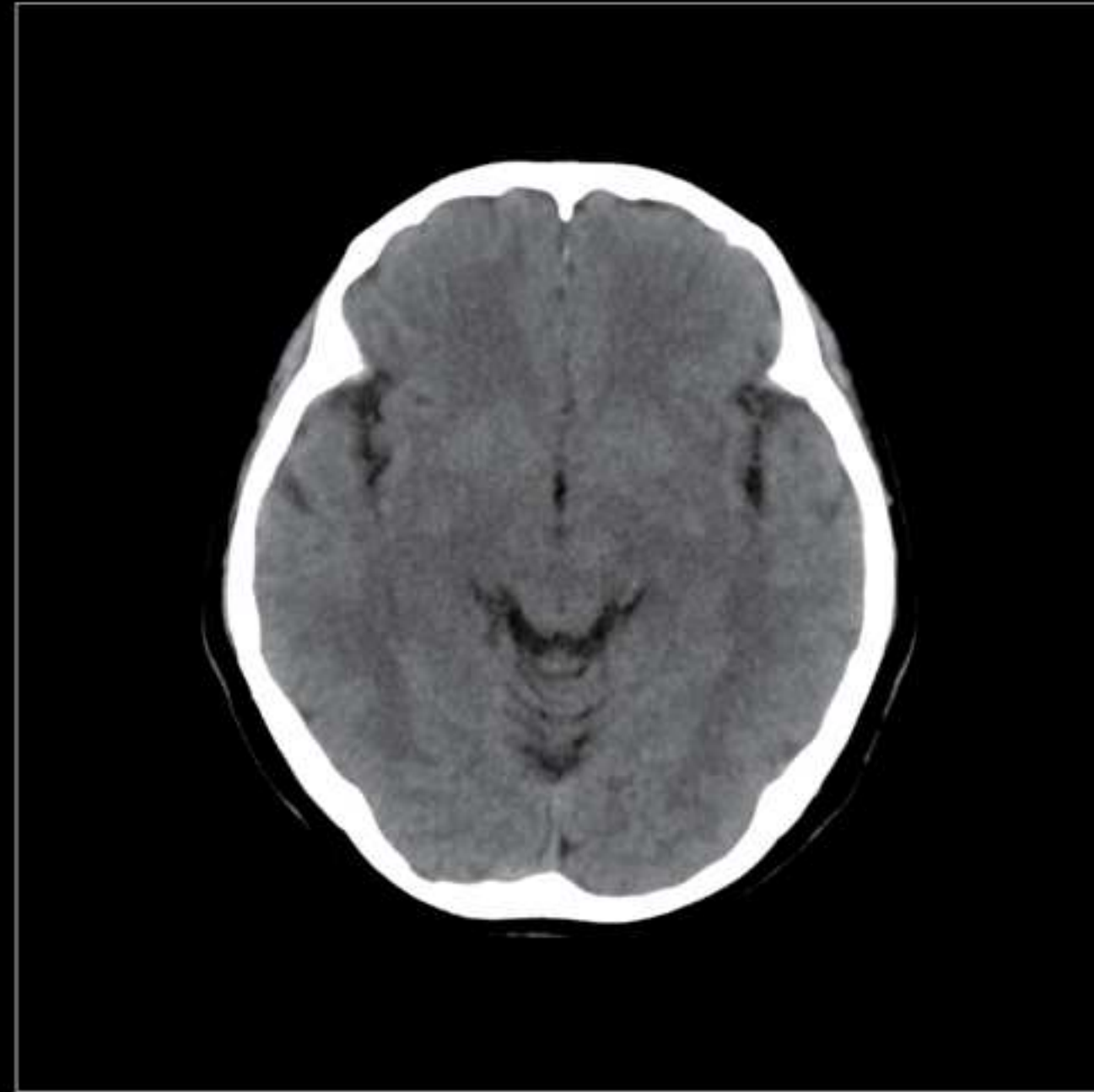
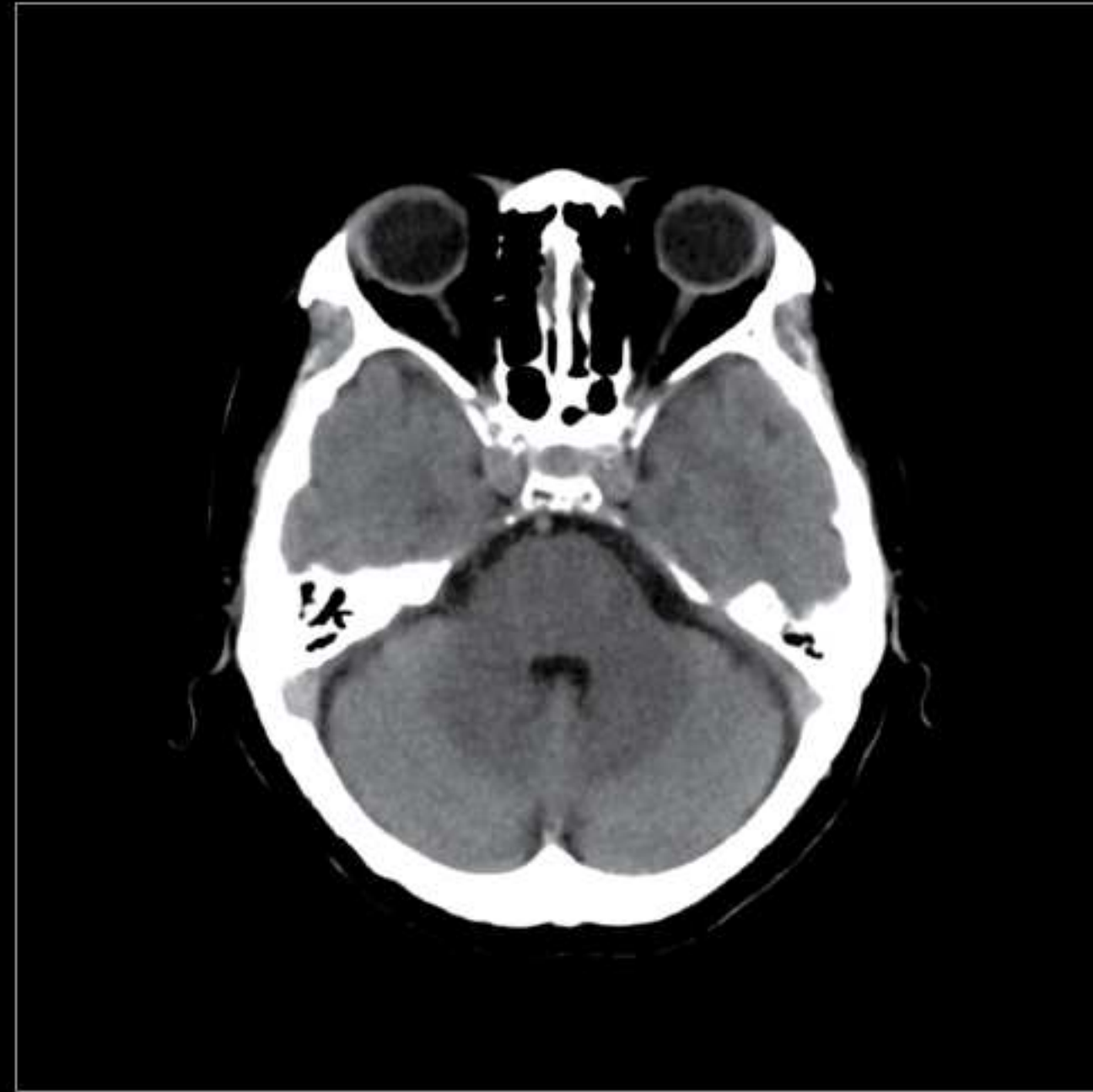
uCT 520 offers a customizable report system with a comprehensive set of documenting and archiving tools.*

This reduces manual and duplicated operation procedures, shortens report turnaround time and helps to optimize your daily workflow.

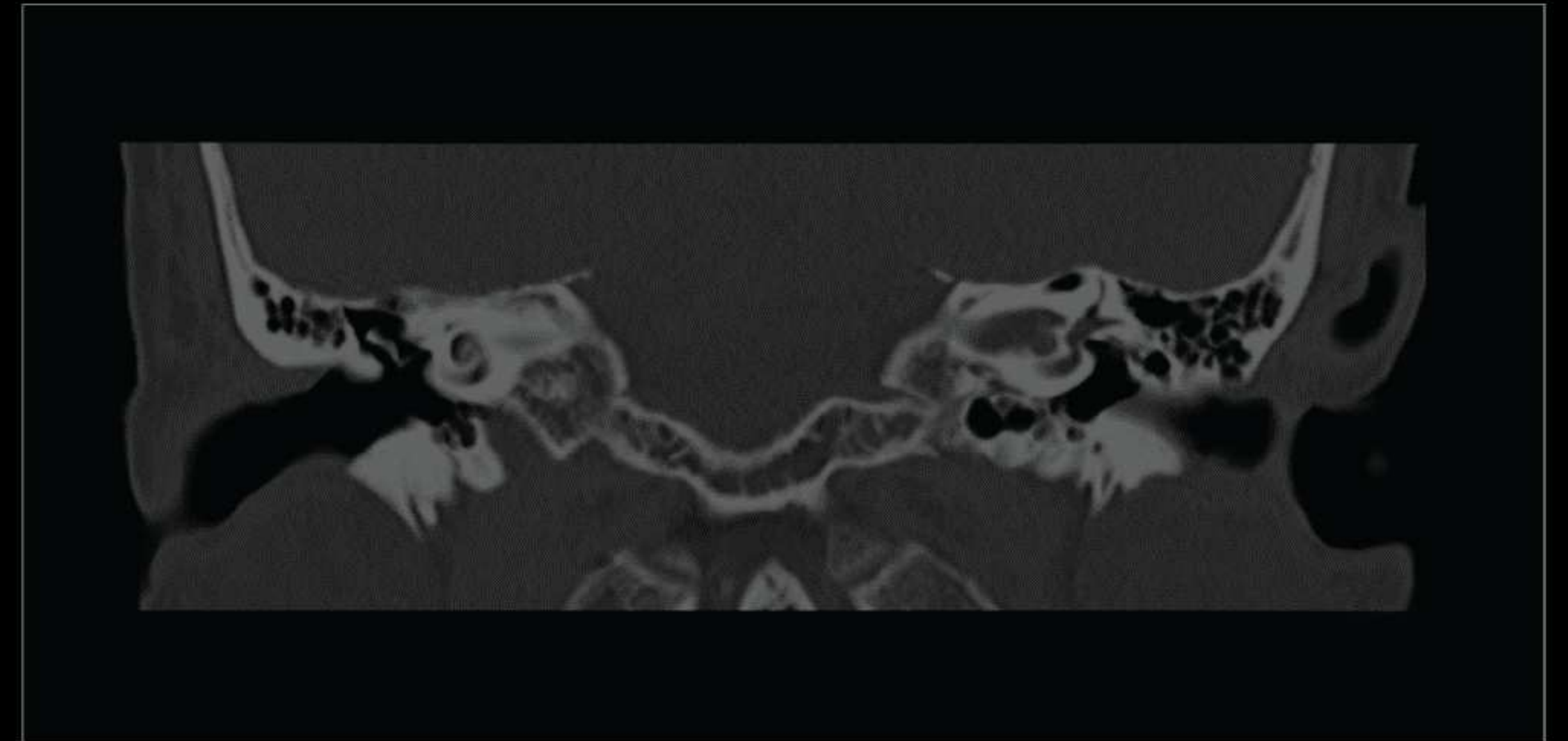
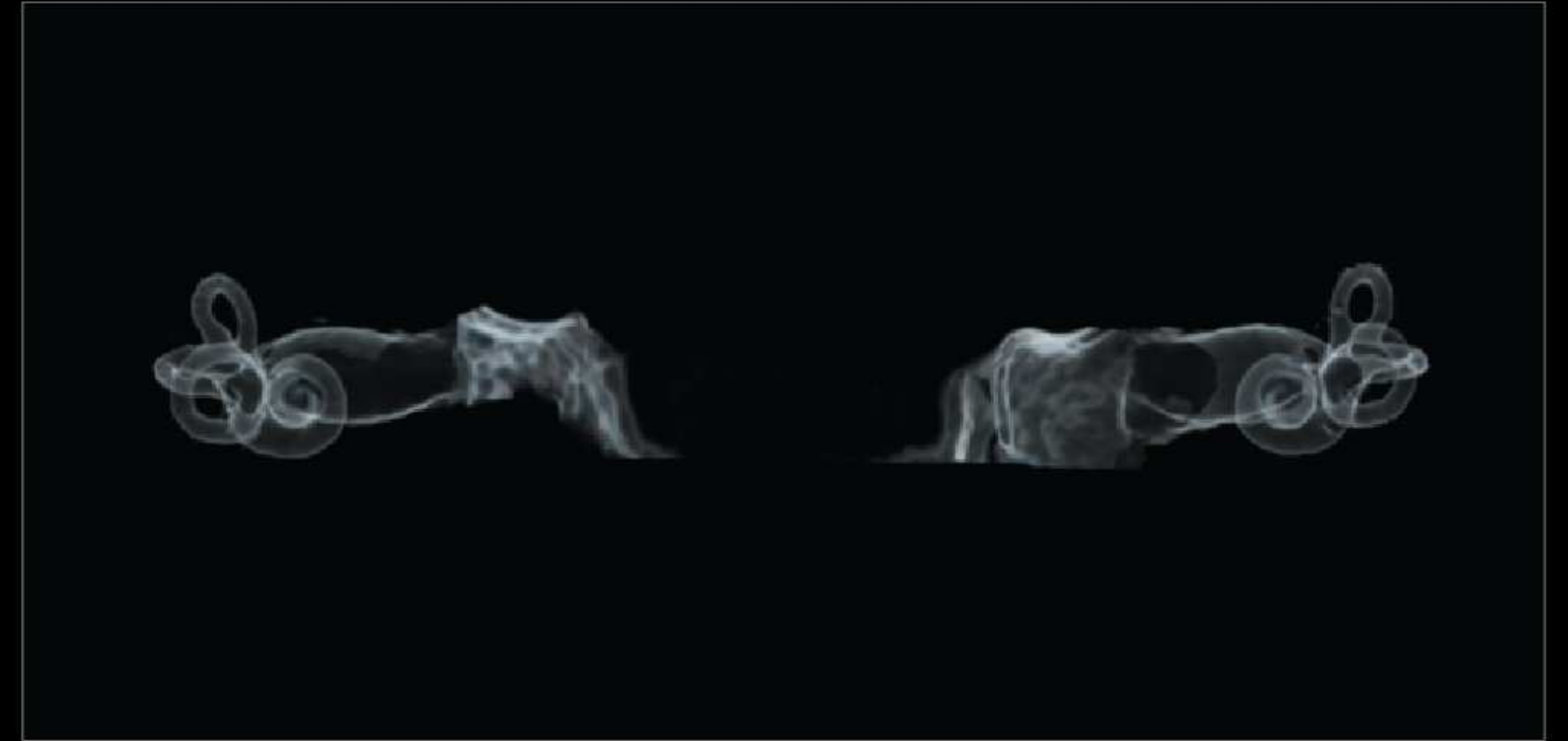


* Optional

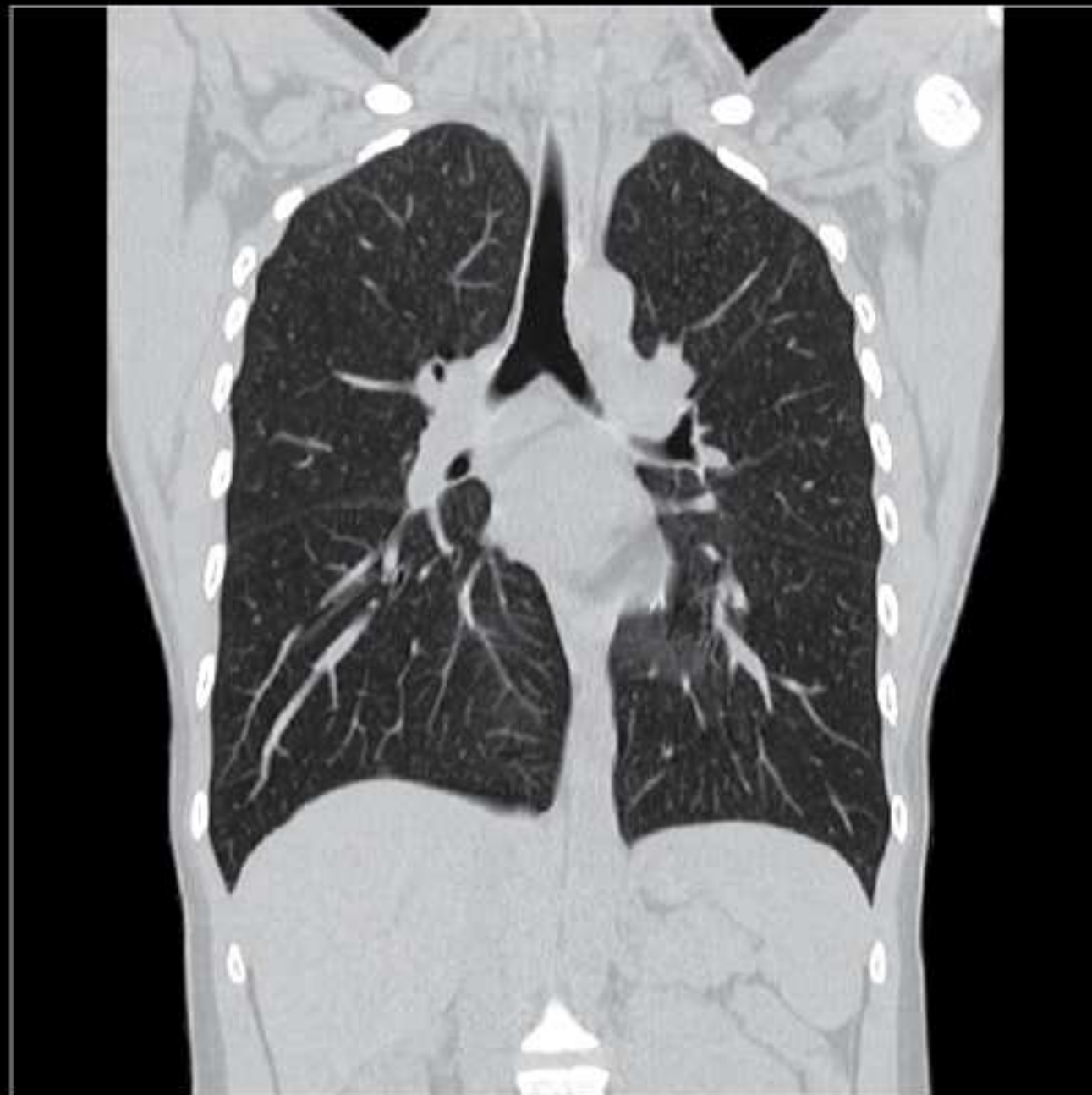
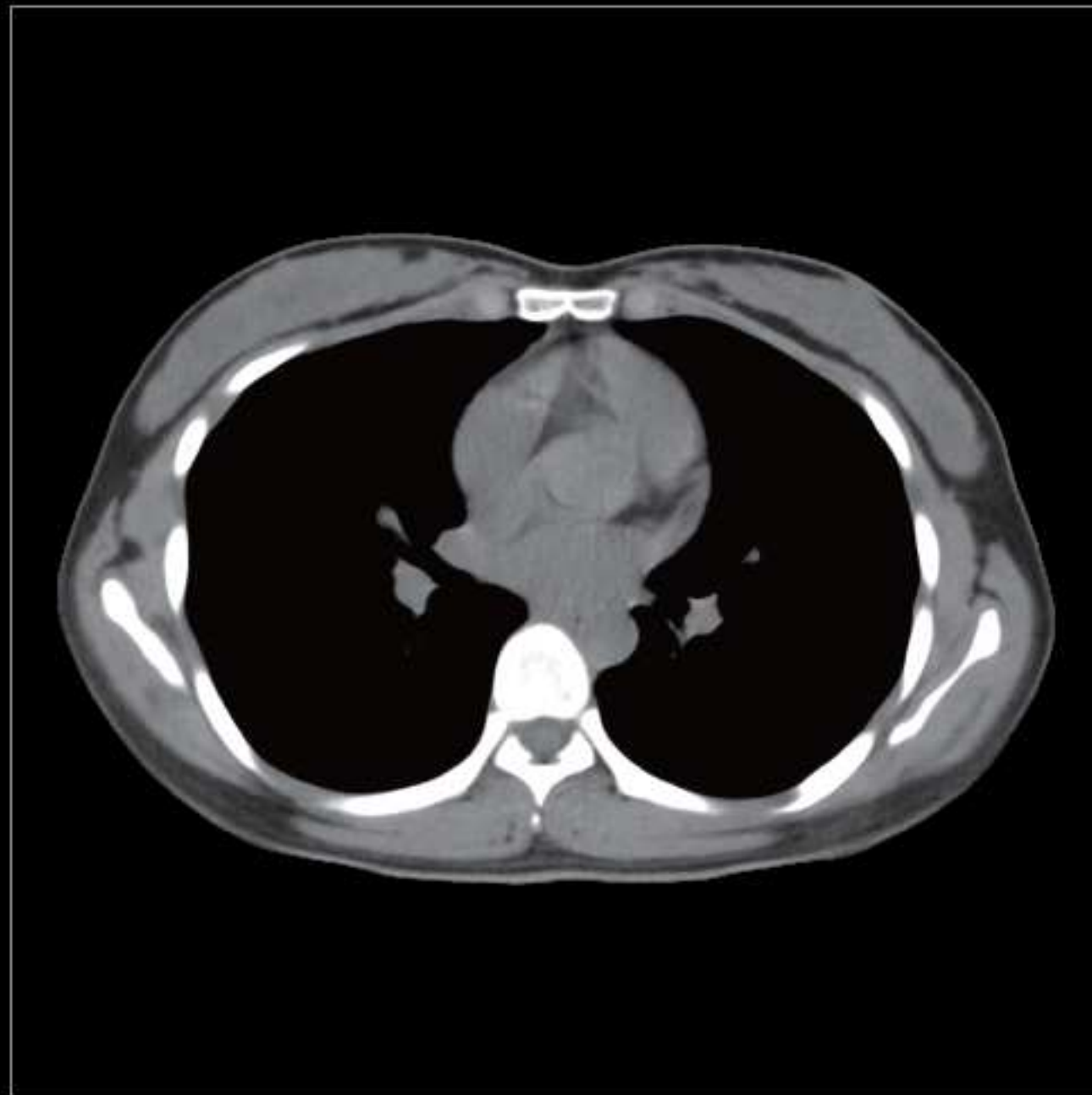
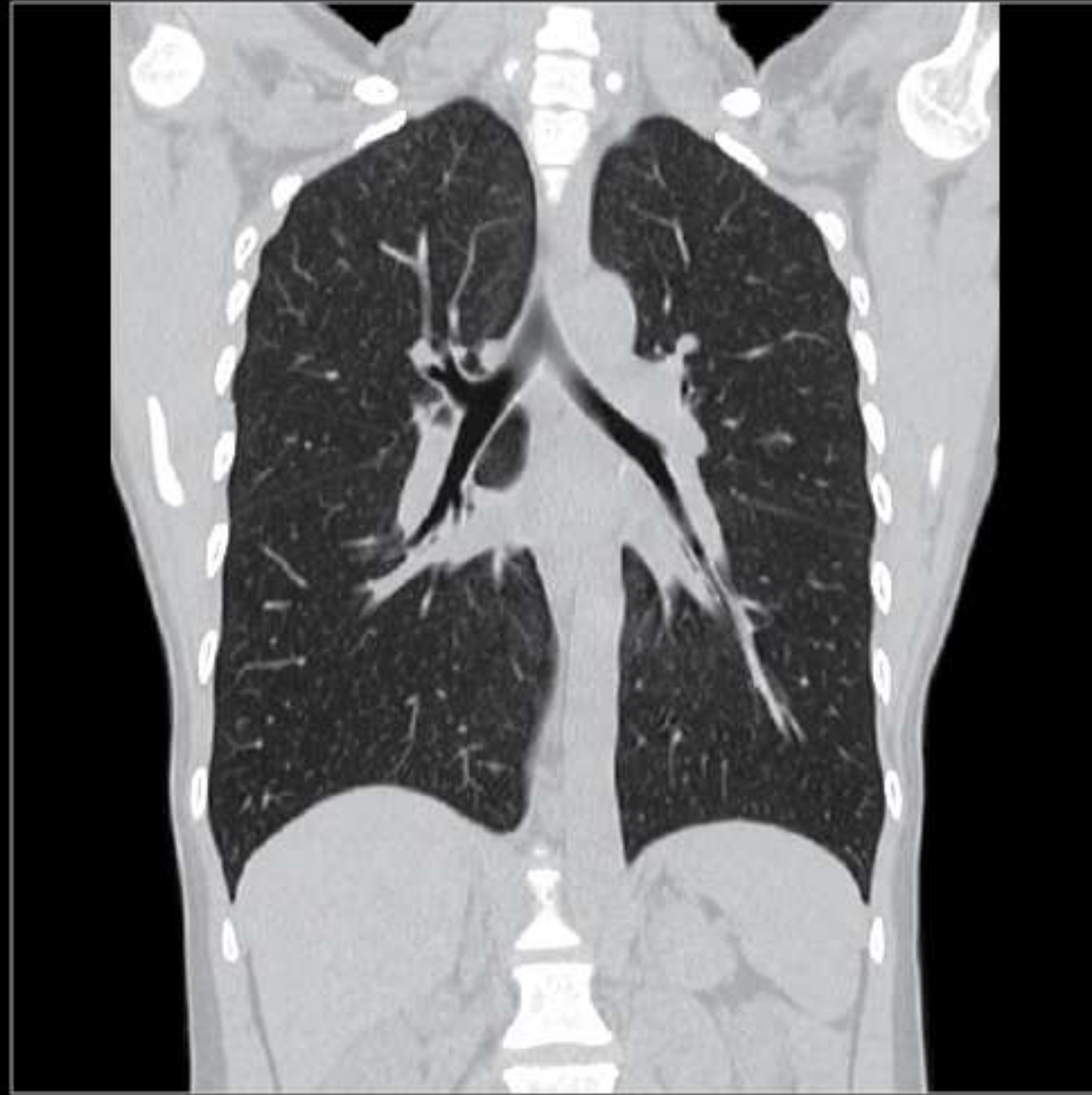
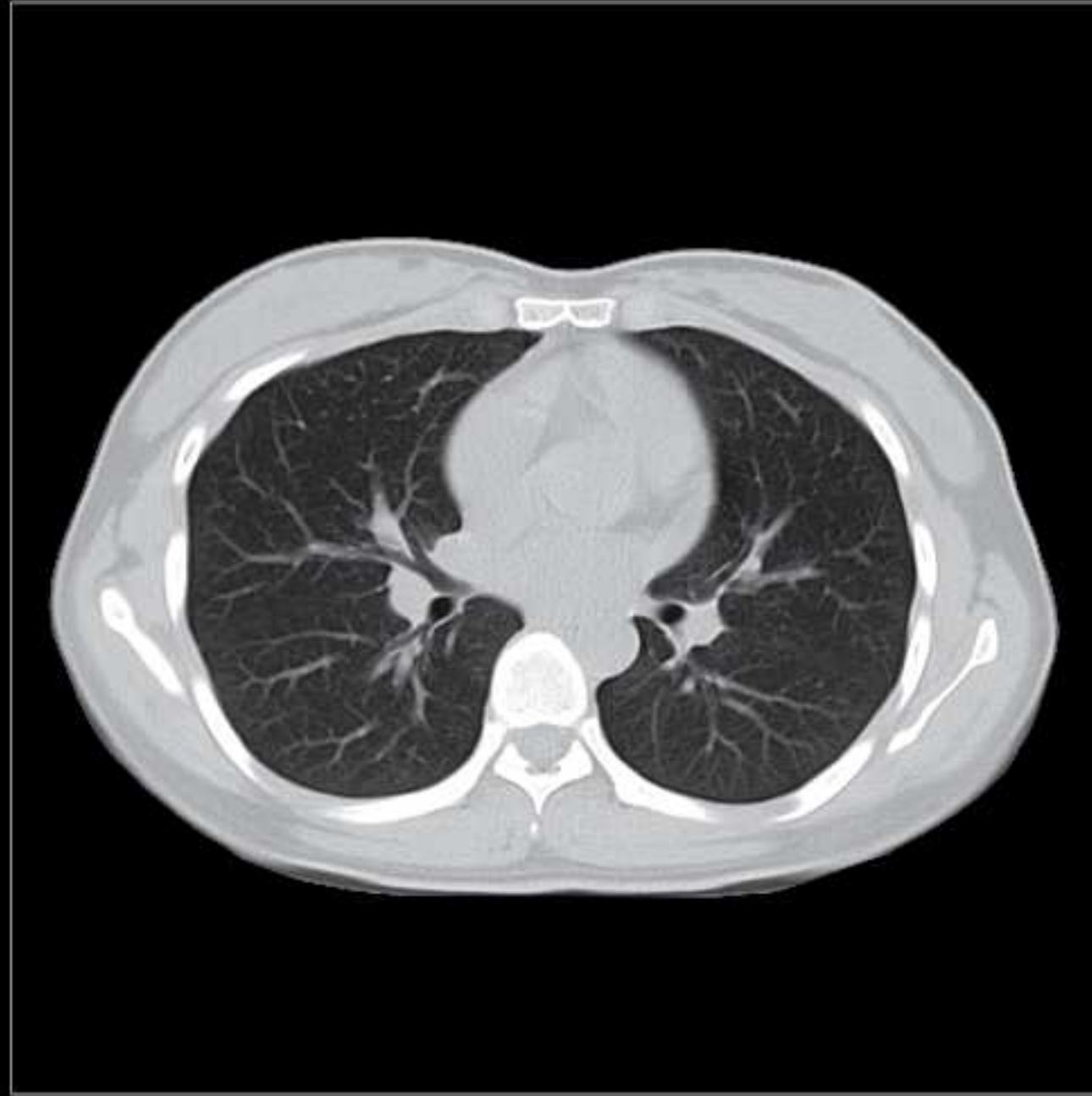
Clinical Images



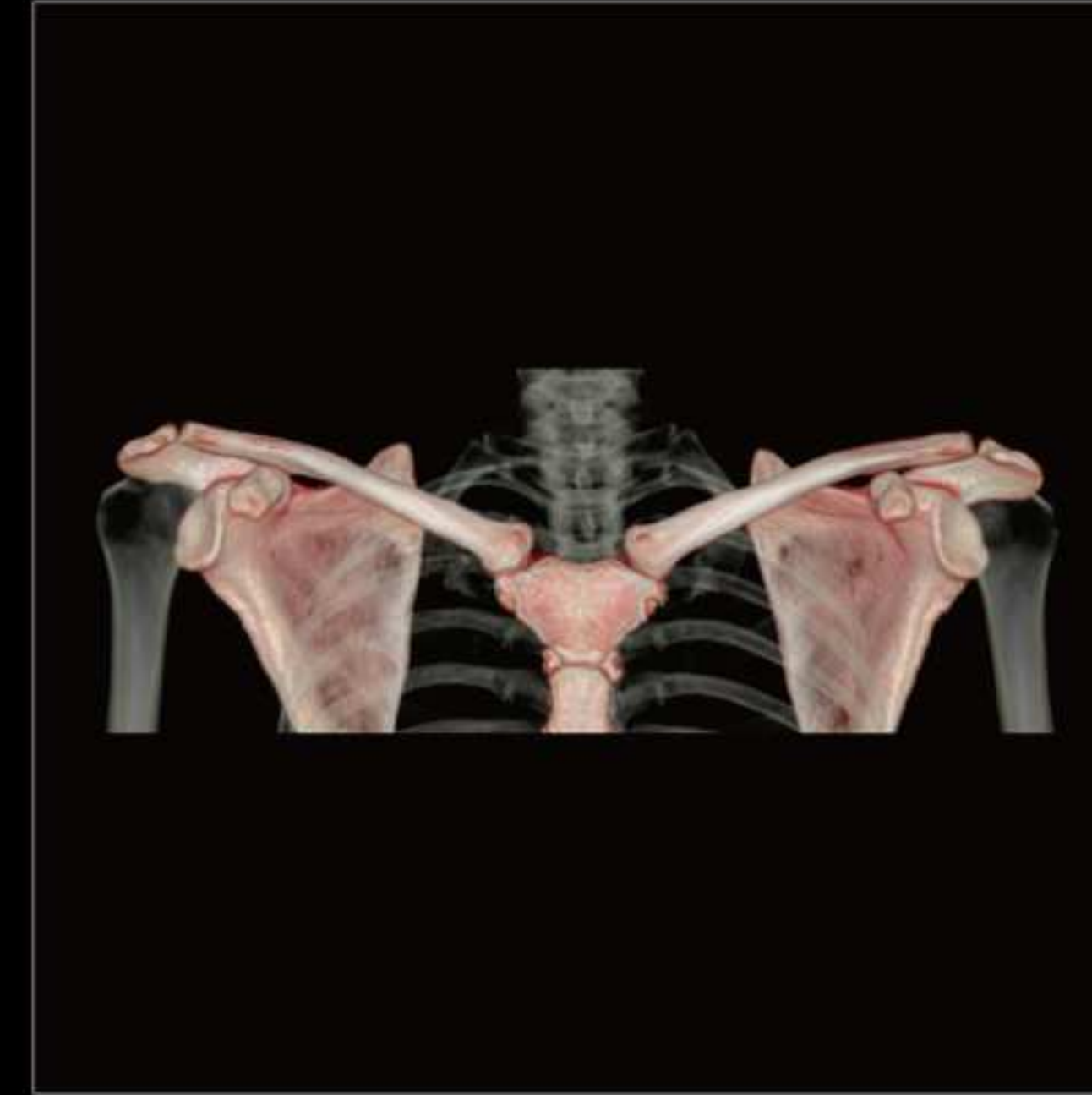
The Z-Detector helps to reduce image noise and improve the delineation of grey-white matter.



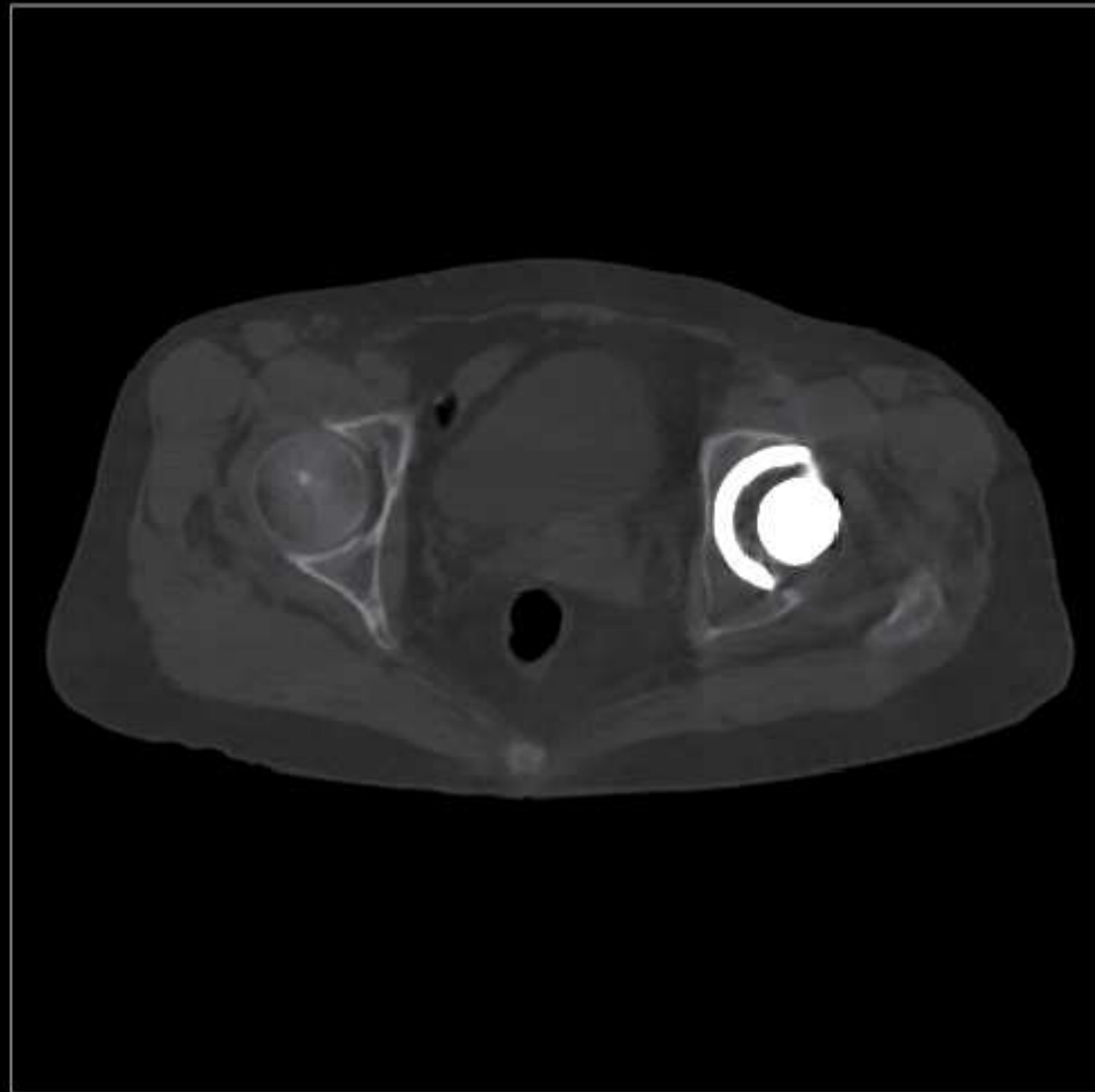
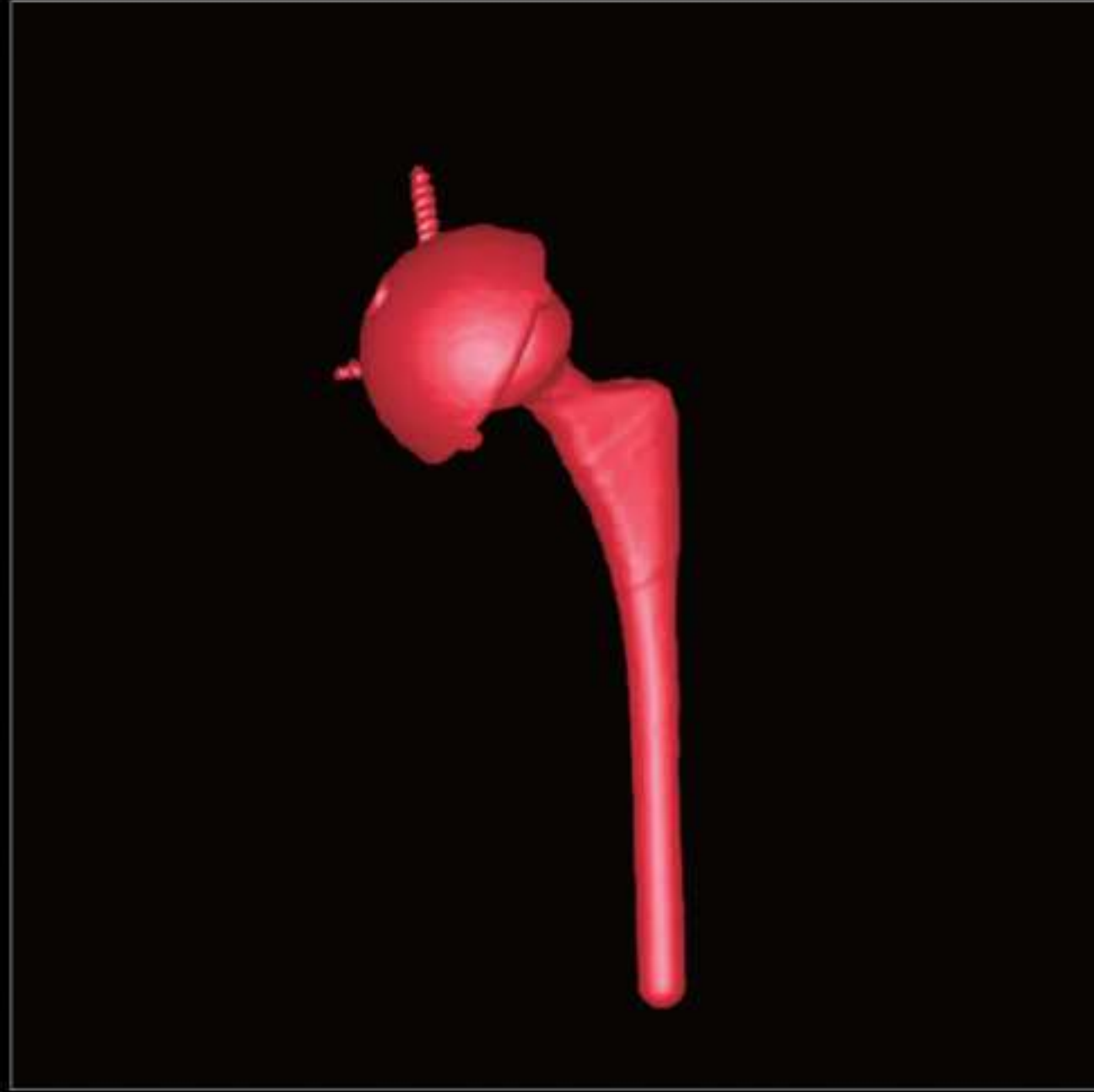
0.55mm images show fine details of the inner ear.



The 22mm coverage detector helps to reduce scan time and respiratory motion artifacts.



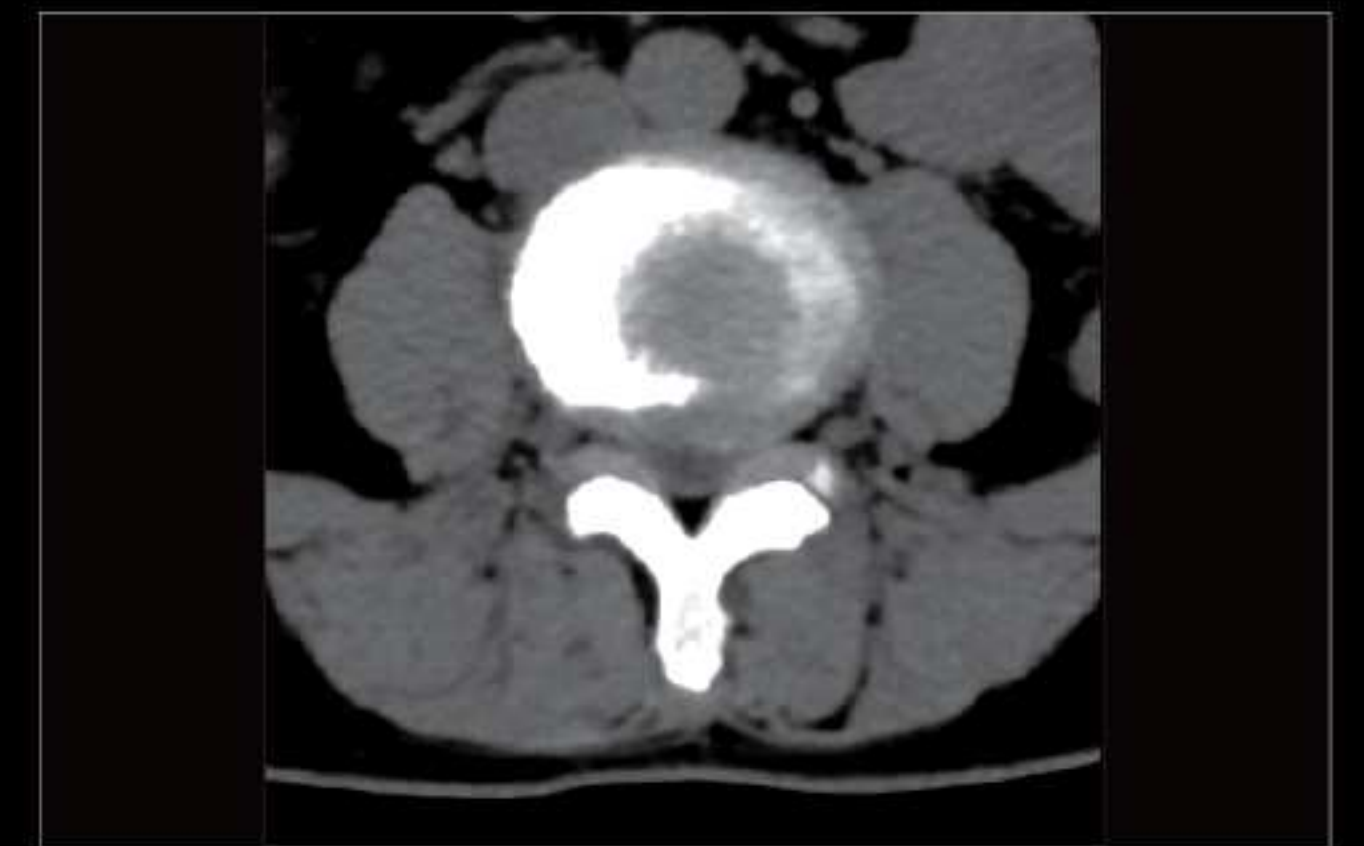
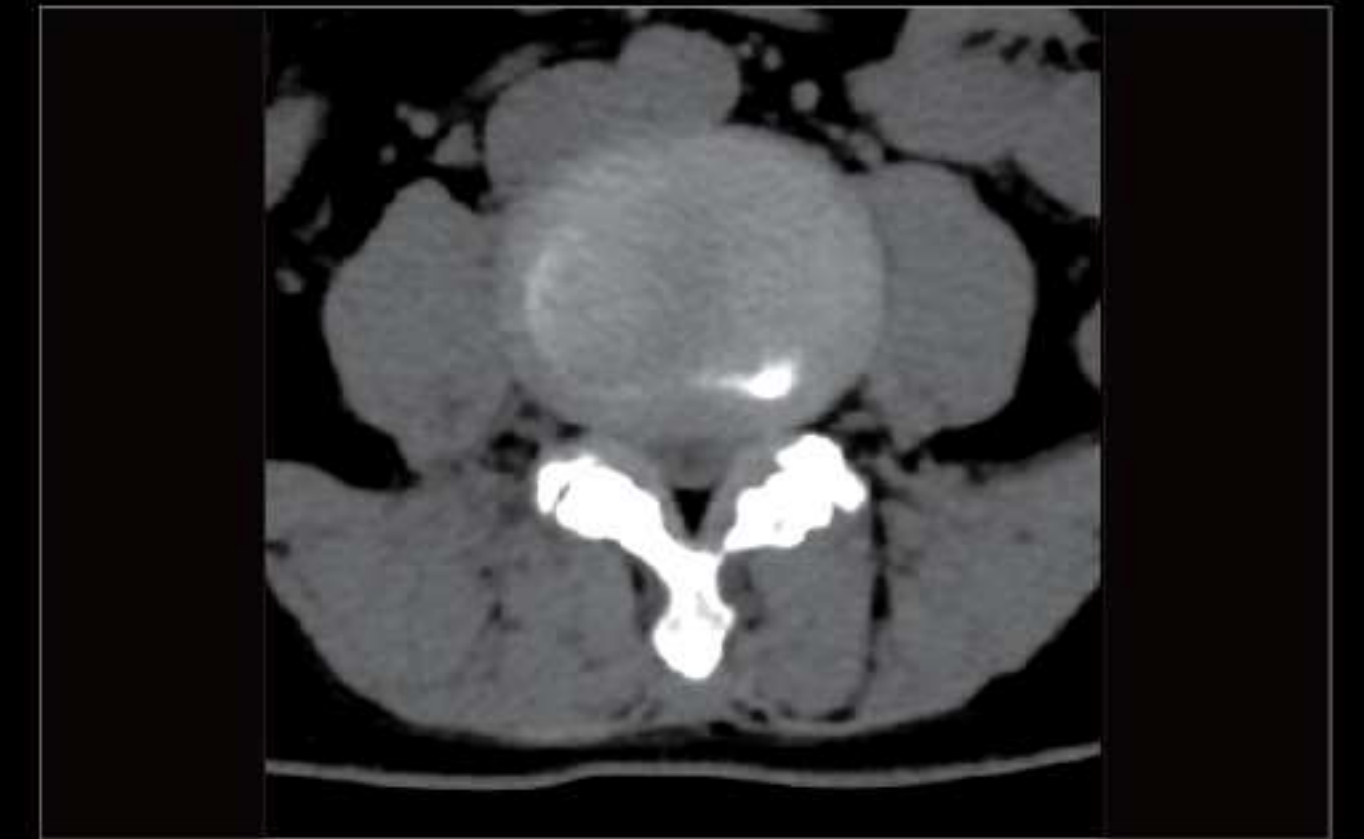
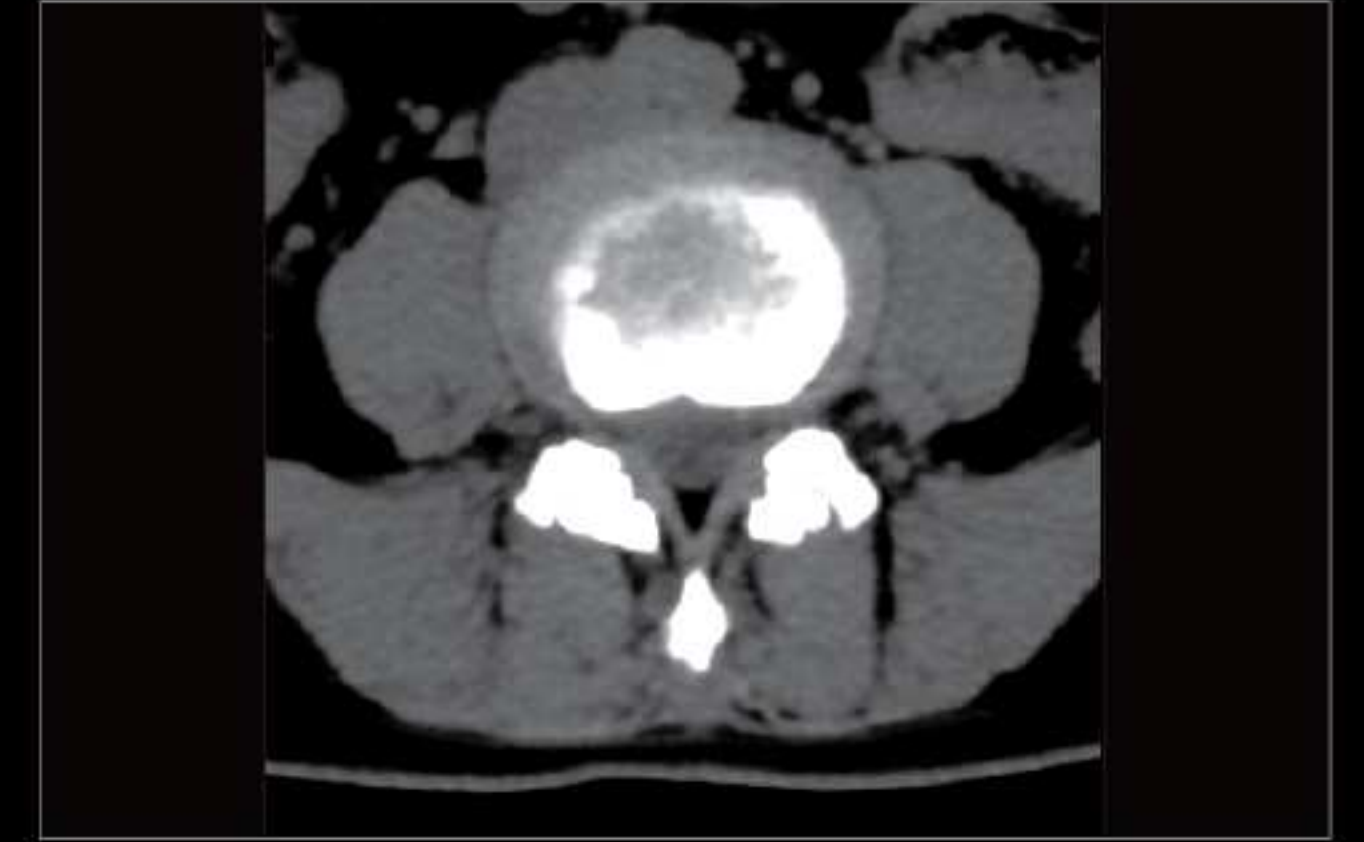
High resolution 3D joint imaging.



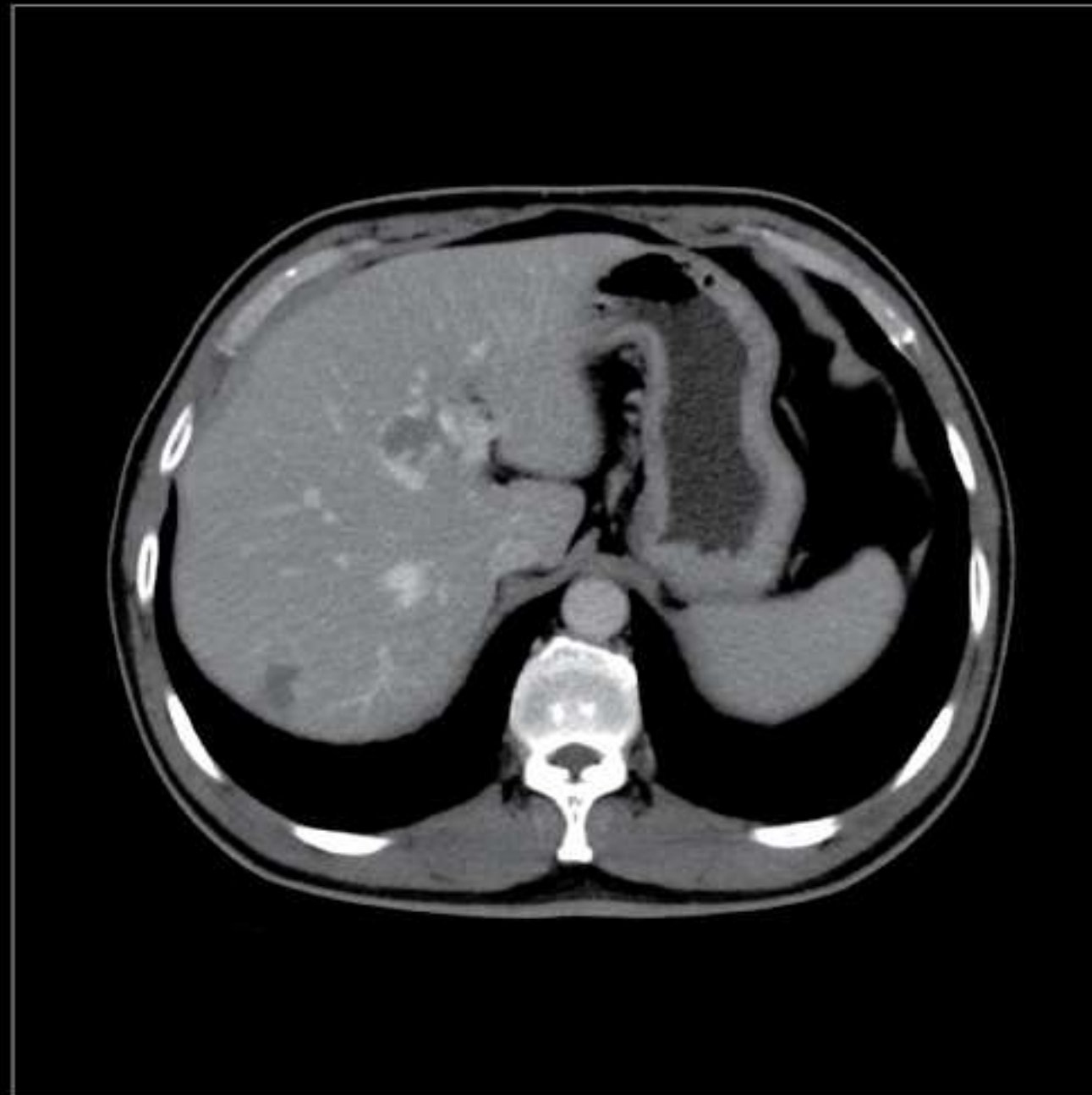
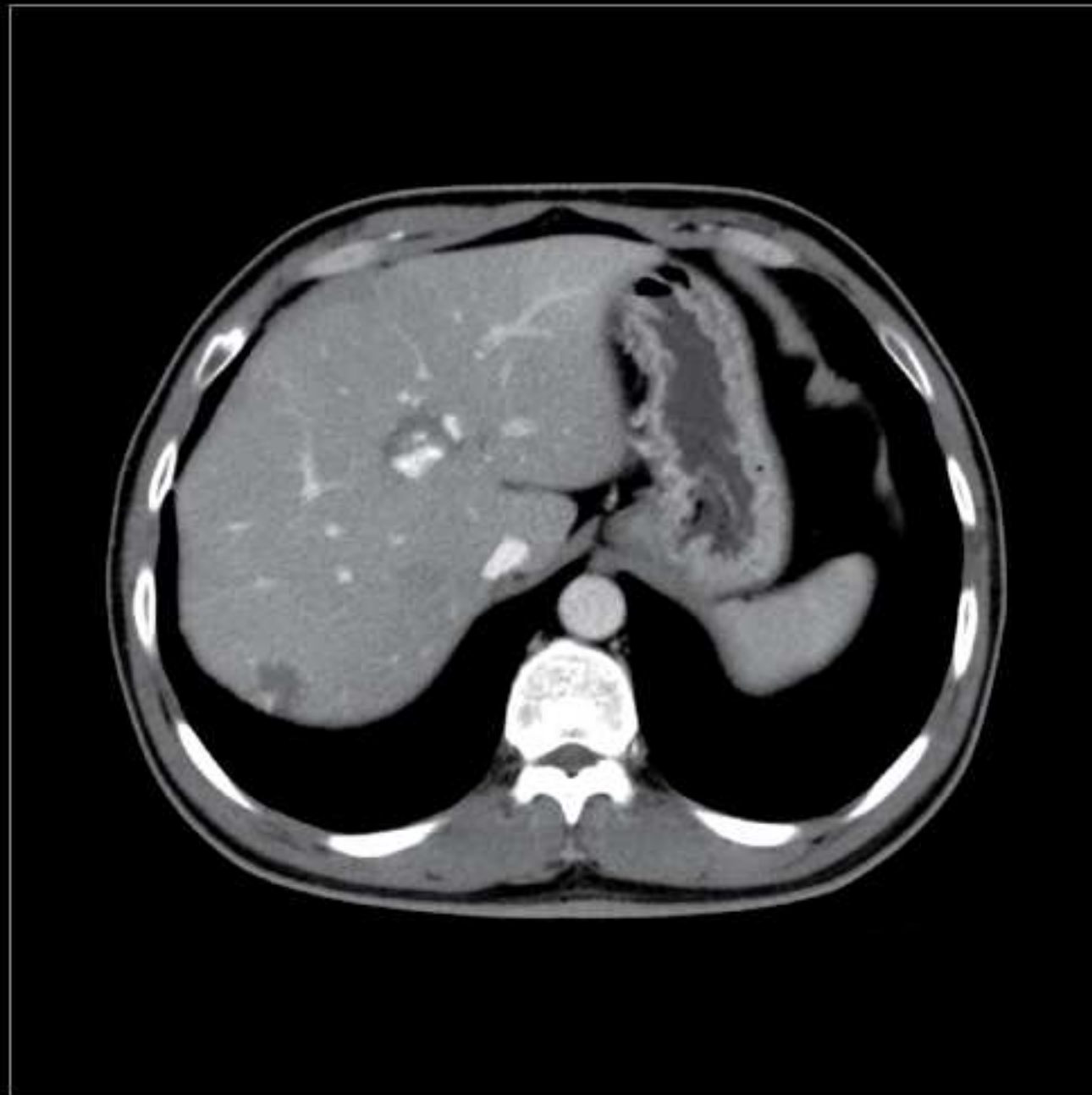
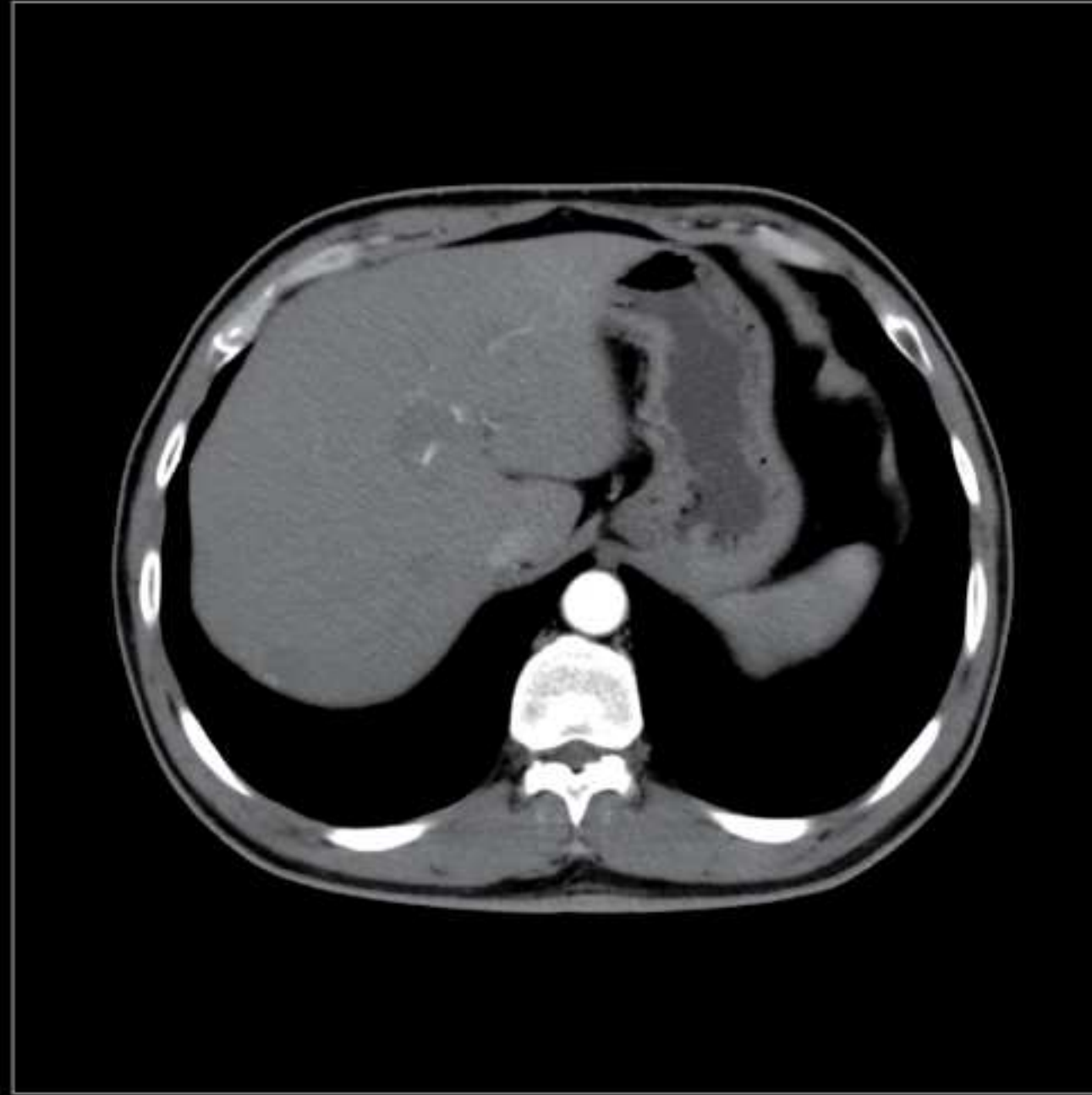
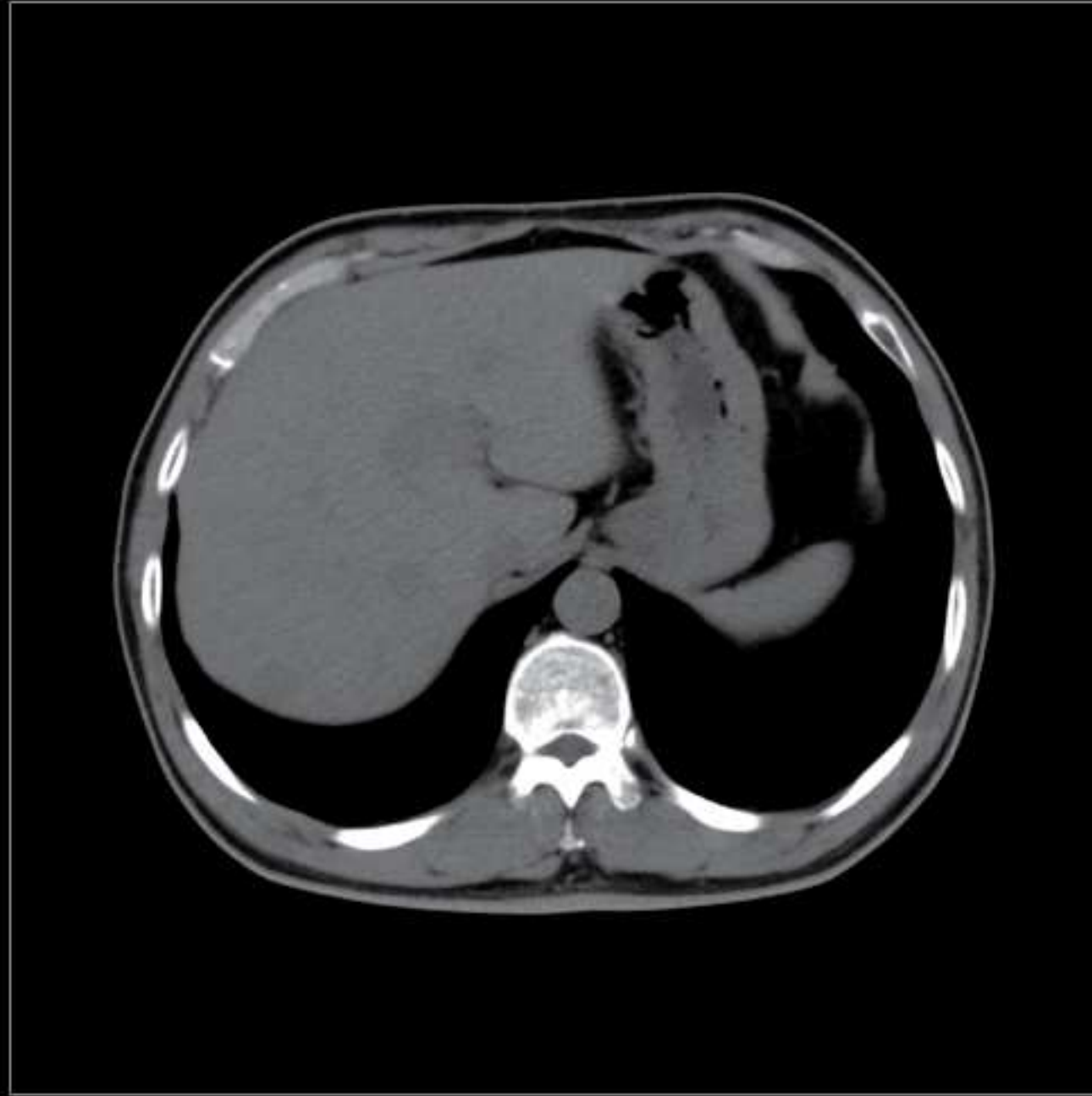
MAC (metal artifact correction)* greatly suppresses artifacts induced by metal implants.



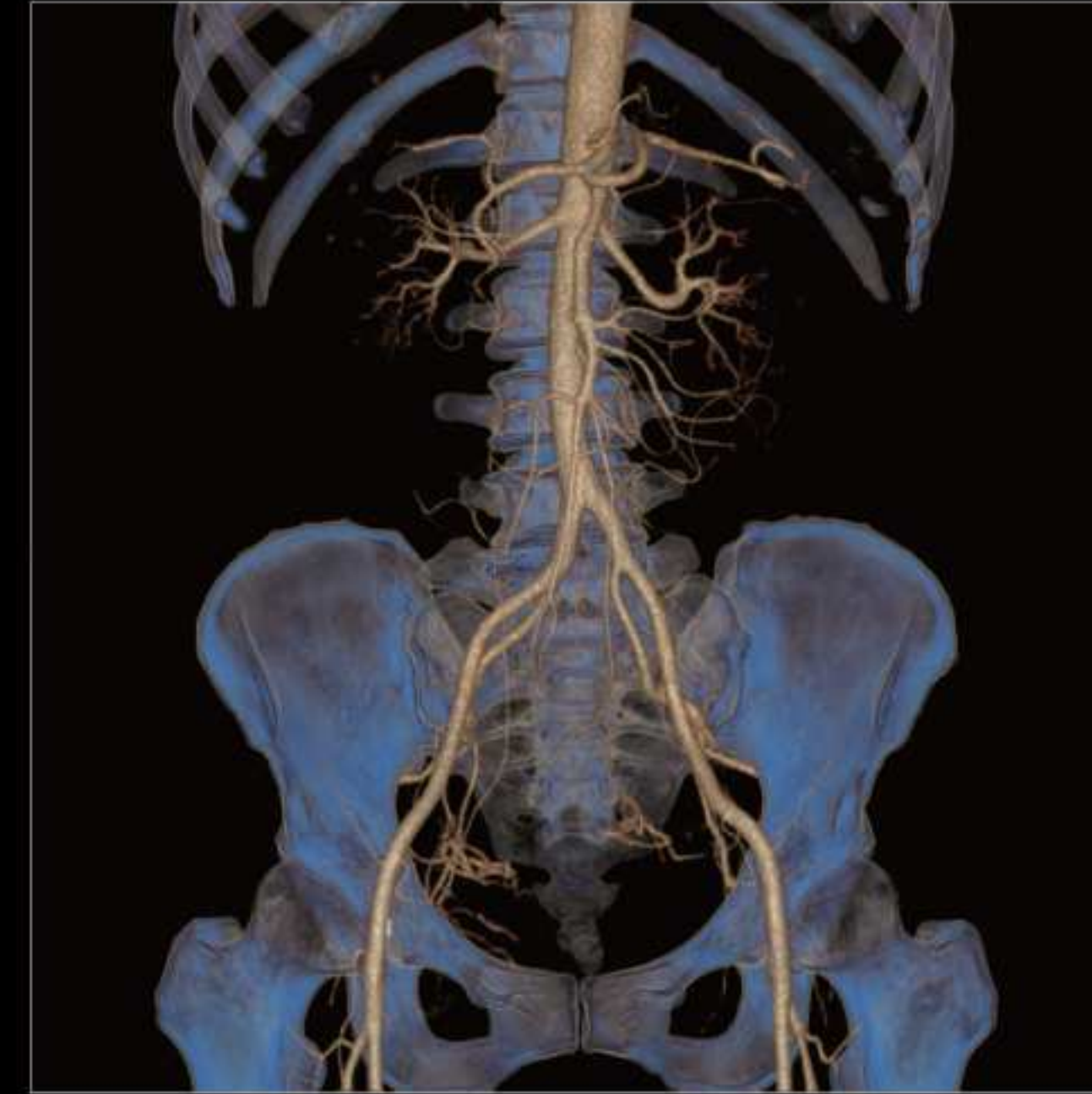
Clear visualization of the L3-L4 lumbar disc herniation.



* Optional



Blood supply of the hemangioma clearly viewed in the multi-phase contrast scans.

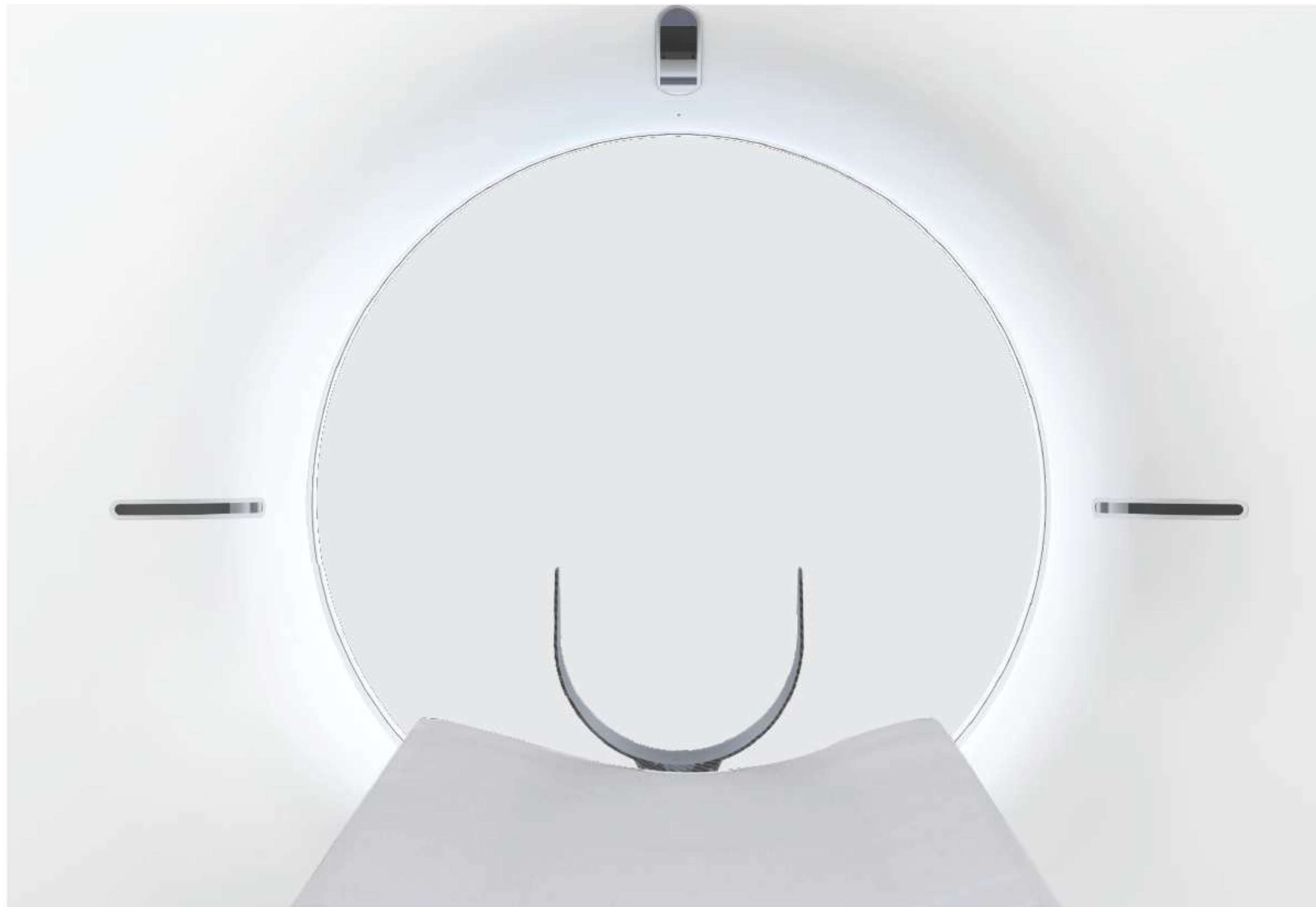


Detailed and quick observation of distal vessels with single-click bone removal.



"User in Mind" Design

Focusing on user experience, uCT 520 combines precise operation with a lightweight and artistic design. We bring aesthetic enjoyment and ease of use to the technology, delivering care, trust and respect through our design.



Aesthetic Pleasure

Our design scheme integrates eastern aesthetics with minimalism, presenting a seamless fusion of traditional and modern styling.

User-friendly Design

Our product design ultimately aims to deliver comfort, safety, efficiency, and ease-of-use. By applying ergonomic principles, we combine innovative design with perfect functionality in order to provide the best possible user experience, optimizing patient comfort during every examination.

Sophisticated Craftsmanship

Driven by the tenets of lightweight and precision design, we fine-tune every technological detail to embody the spirit of craftsmanship in every product.

