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**UNITED
IMAGING** 



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 preset patient positions, the patient registration can be completed with only a few clicks of the mouse.

EasyScan

Intelligently plans the exam for individual patients.

Clinical parameters (such as scan range, reconstructed FOV, and gantry tilt) are automatically adapted to the needs of the particular patient.

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

EasyLogic

The system anticipates the operator's needs and prepares itself to reduce delays including tube preparation, gantry positioning, and data preprocessing, in order to expedite the CT exam workflow.

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



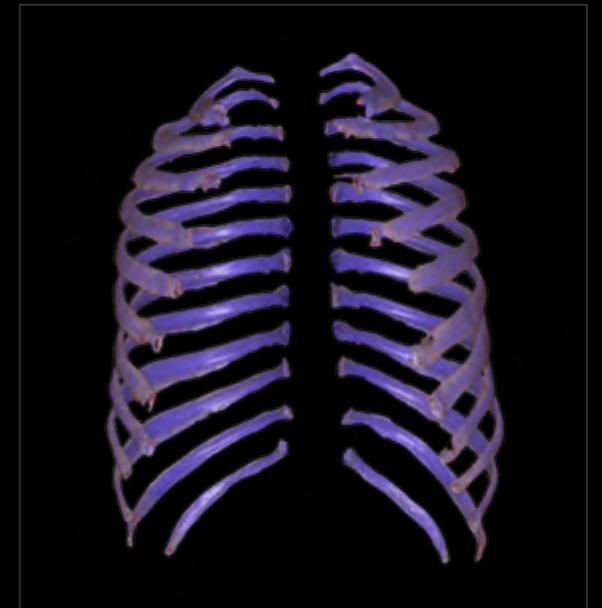
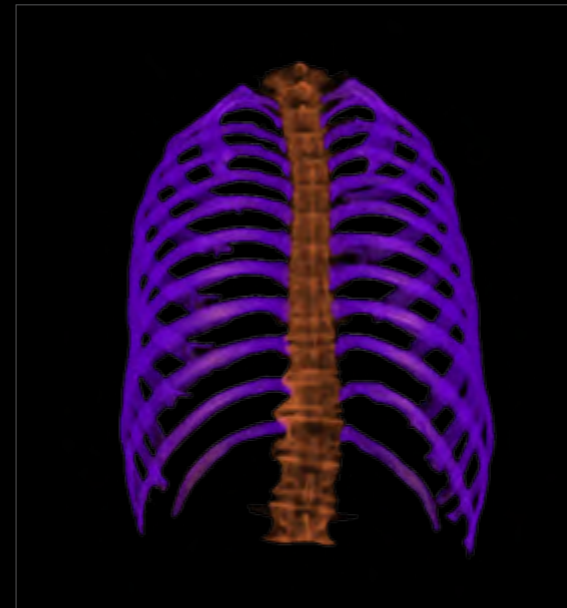
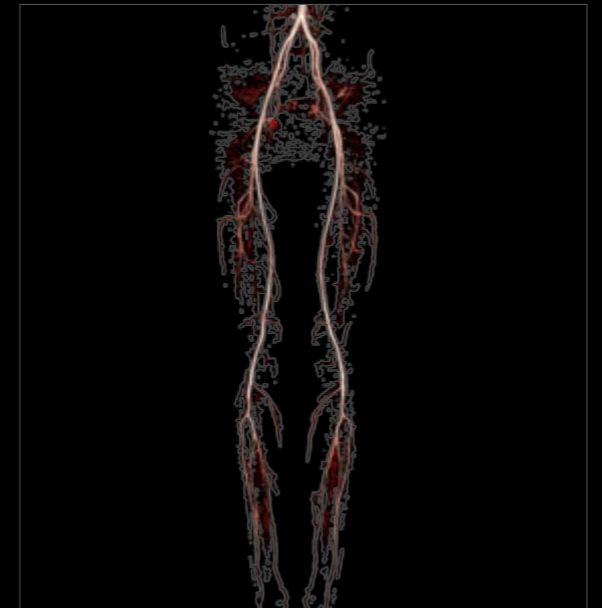
Easy Post-processing

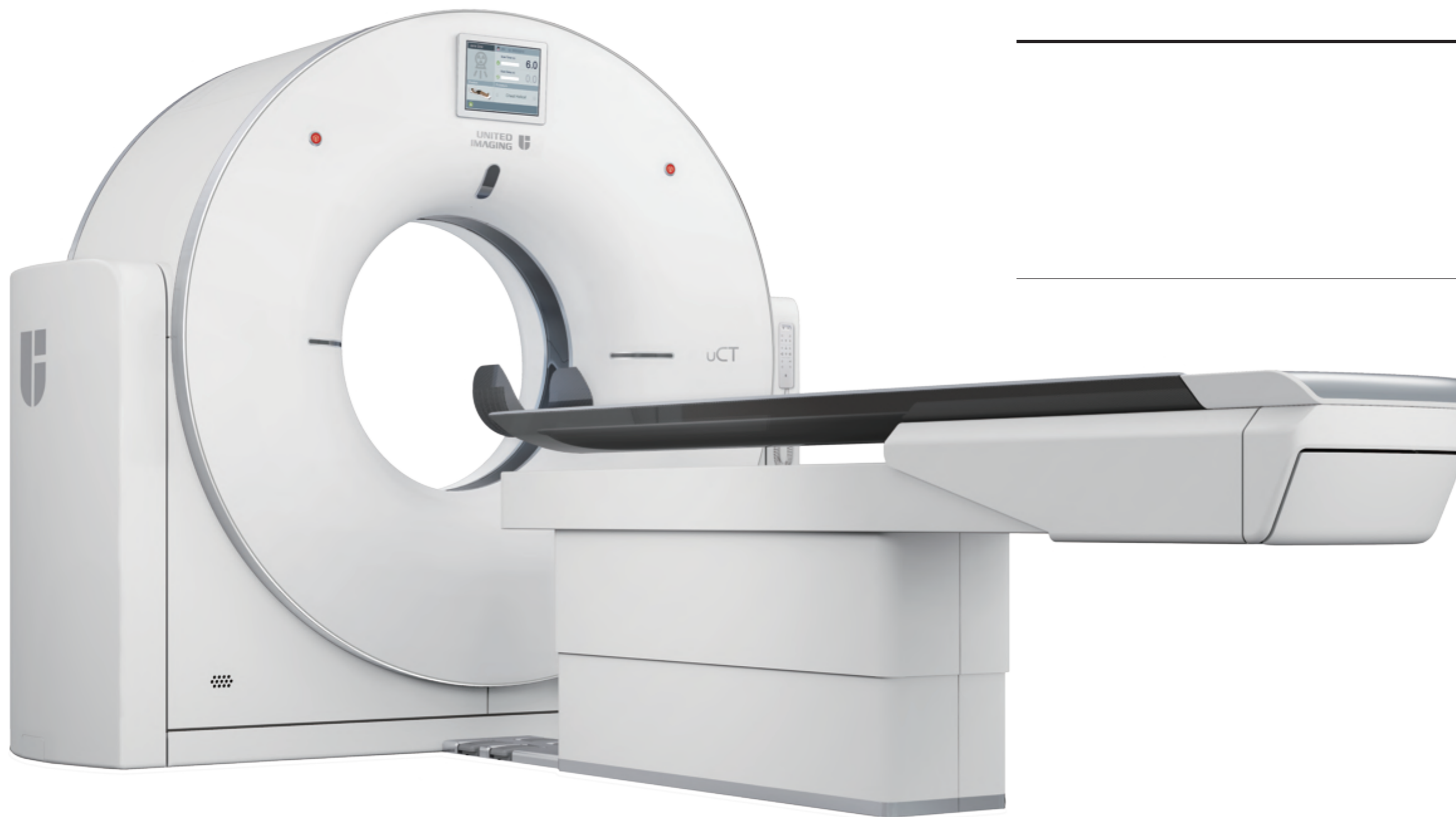
Post-processing is incorporated into the workflow as part of the reconstruction task. This allows uCT 520 to provide fast and reproducible results with minimal effort.

Single-click bone removal employs different algorithms that are tailored to different applications such as carotid CTA, body CTA and virtual DSA.



Single-click rib extraction automatically segments the ribs and displays them separately or with the associated anatomy allowing efficient diagnosis of rib fractures.



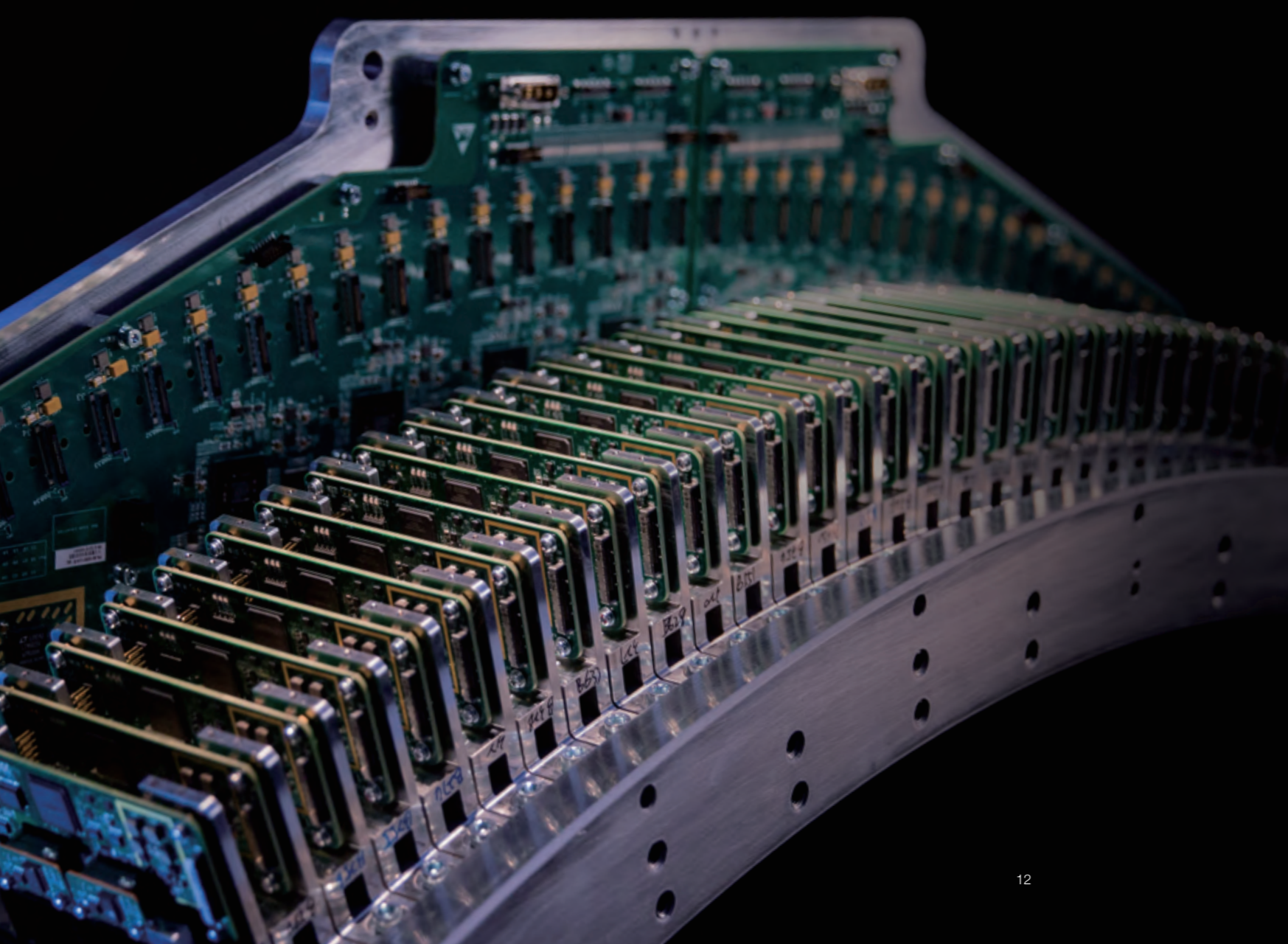


Imaging with Care

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.

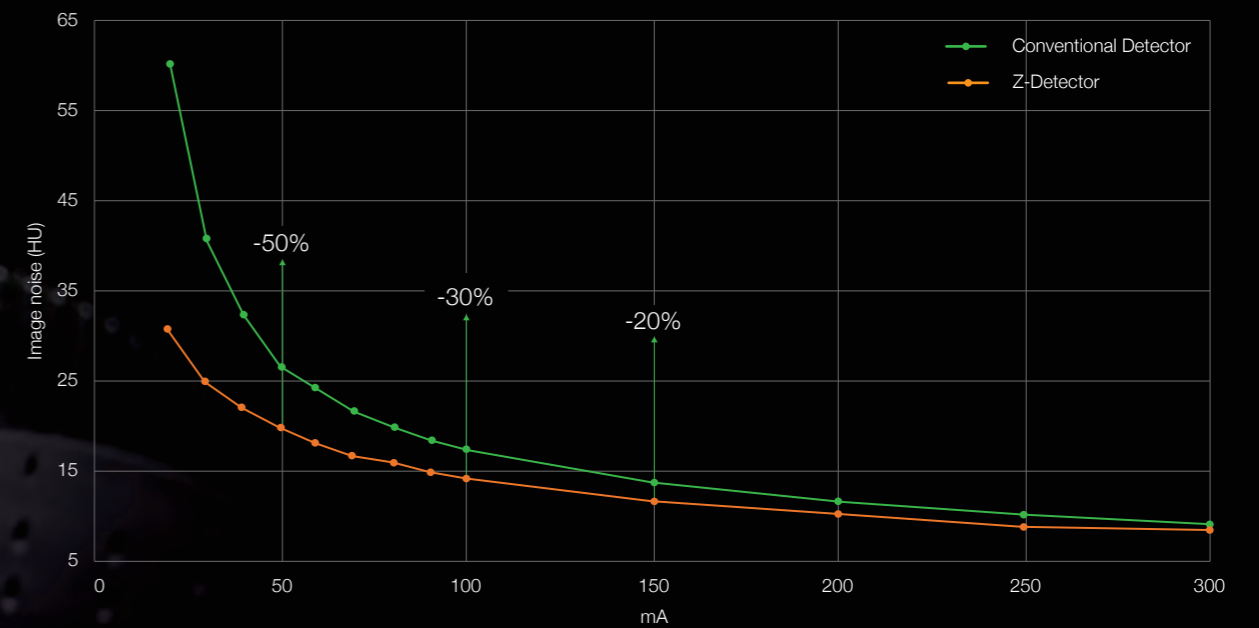


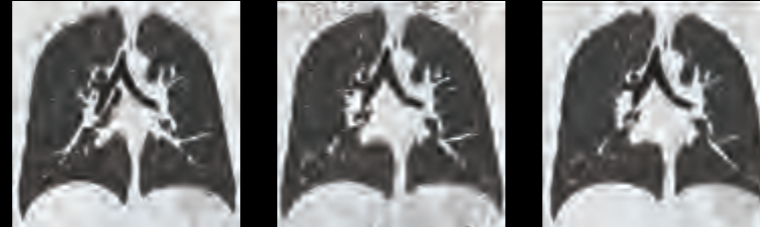
Image noise generated by Z-Detector and the conventional solid-state detector as measured and compared in CT scans using a 180-mm water phantom. The graph illustrates that a reduced noise level is obtained by Z-Detector within the entire range of mAs settings.

Comprehensive Dose Control and Monitor Technologies

KARL 3D Iterative Denoising

Performed in both the projection and image spaces.

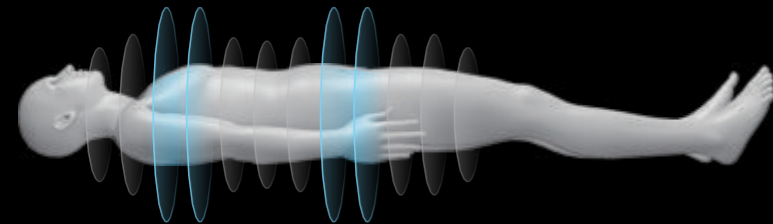
Reduce dose while preserving image quality.



FBP, 120kV, 150mAs

FBP, 100kV, 10mAs

KARL 3D, 100kV, 10mAs



uDose 3D Dose Modulation

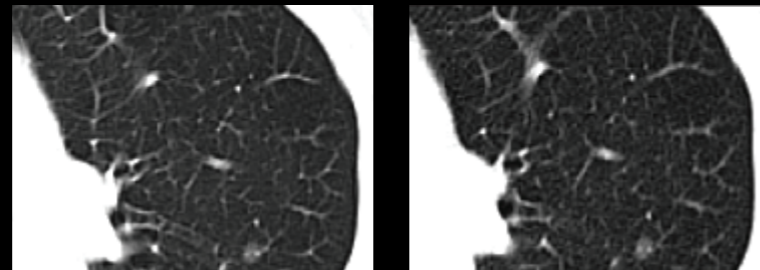
Based on anatomic structure information.

Optimized 3D dose distribution plan.

70kV Scan Mode

70kV Dose reduction for small BMI or younger patients.

Increase SNR for Iodine-based contrast agents.



70kV

120kV

Real Time Scout

Produce more accurate scout scans.

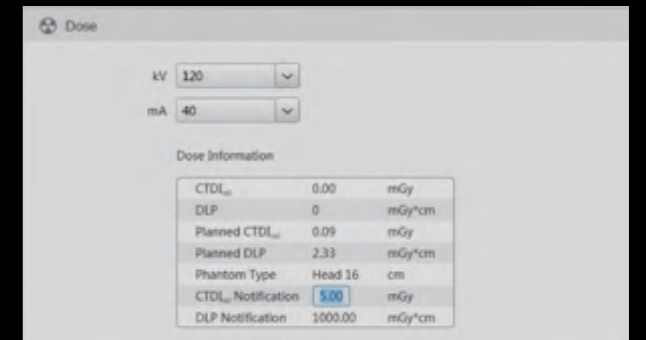
Reduce unnecessary radiation dose to the patient.



Dose Warning

Individually set for every protocol.

Compliance with NEMA XR29 standards.



Structured Dose Report

Compliance with DICOM standards.

Seamless integration with 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 slip-ring reliability.



Green Mode

Switching the system into uECO mode during night or when the system is idle saves 30% power compared to conventional standby modes.



Small Footprint

uCT 520 requires a minimum installation area of 9m².

Integrated Advanced Applications on the Console

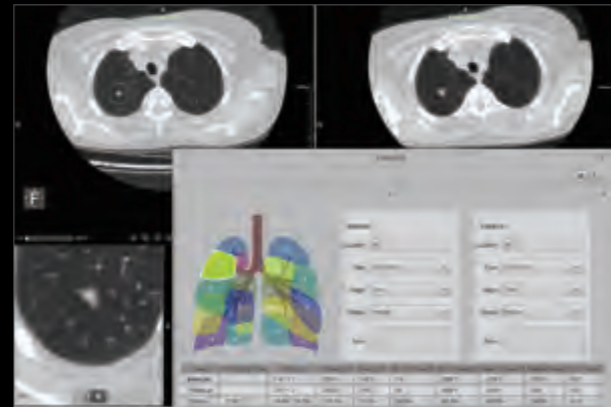
Lung Nodule Analysis*

Nodule detection, segmentation and measurement assistance.

Nodule quantitative analysis.

Follow-up analysis.

One-step structured report.

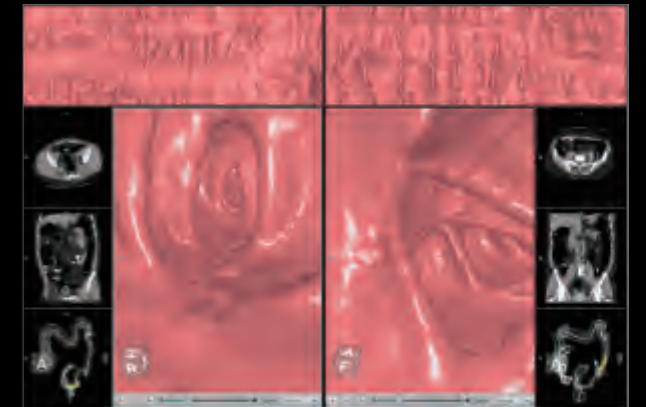


CT Colonoscopy*

Automatic colon segmentation.

Electronic colon cleansing.

Virtual endoscopy.



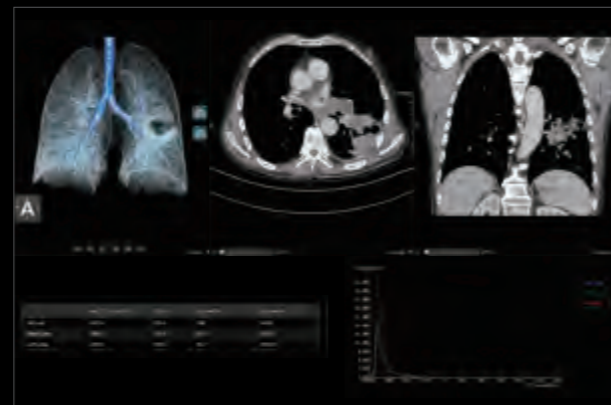
Lung Density Analysis*

Lung Extraction and Contour Editing.

Pulmonary Density and Volume Measurement.

Emphysema Ratio Quantification.

Quantitative Data Analysis and Export.

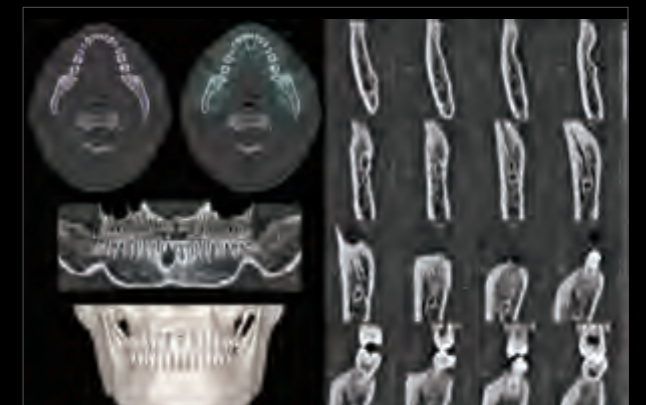


Dental Analysis*

Panoramic Curve Plotting.

Nerve Line Marking.

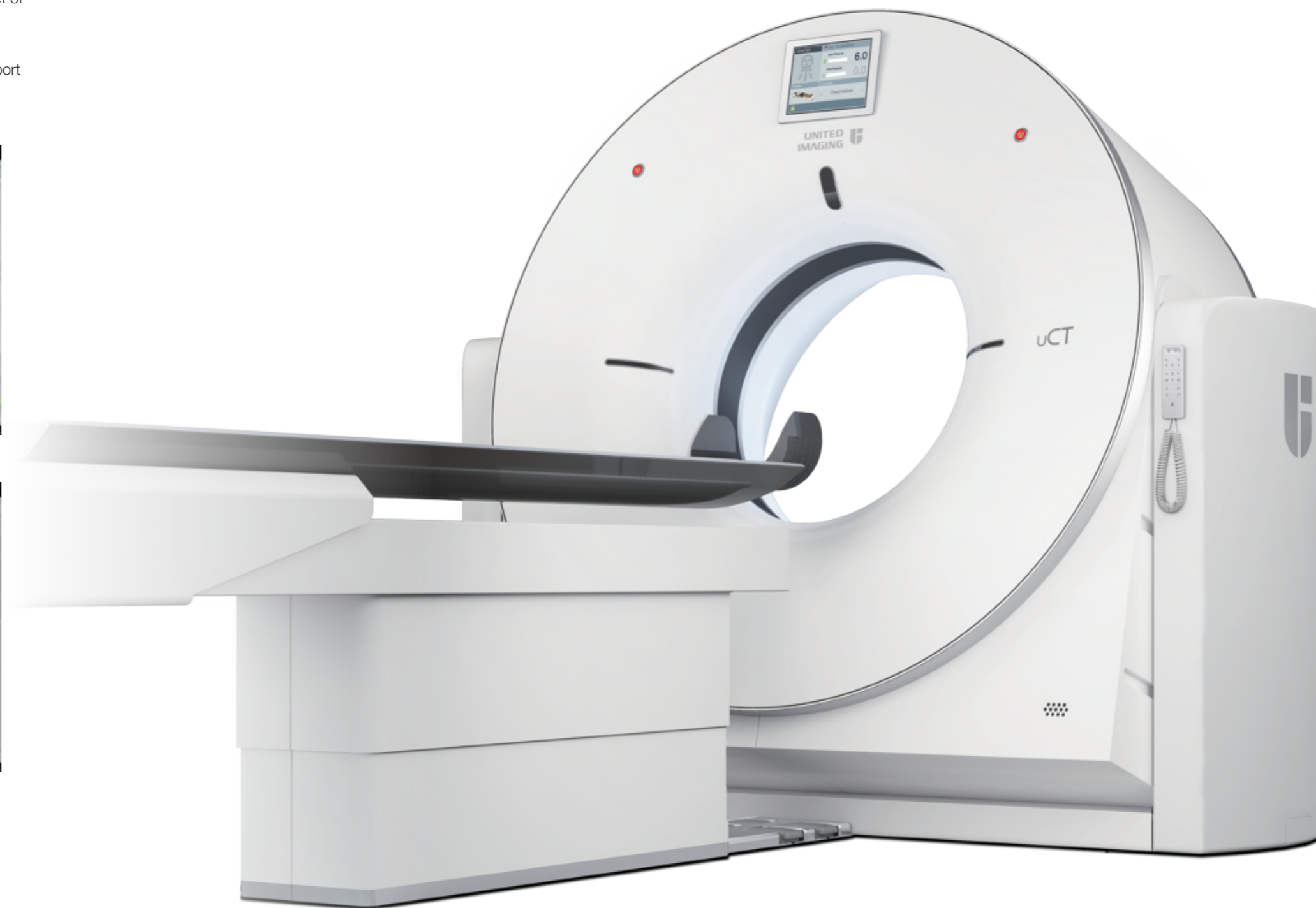
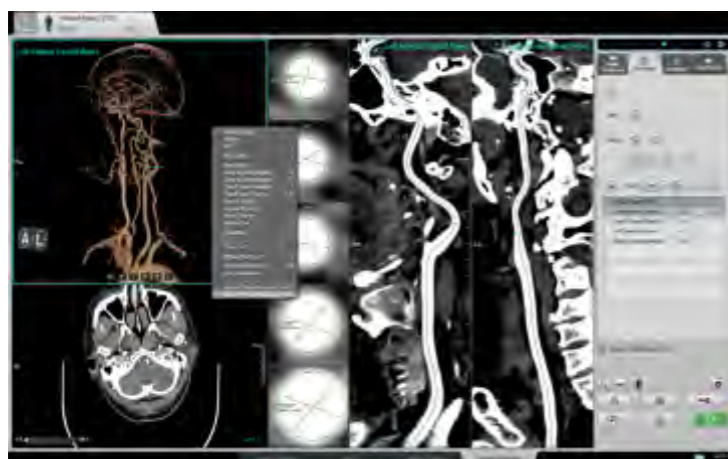
Sectional View Analysis.

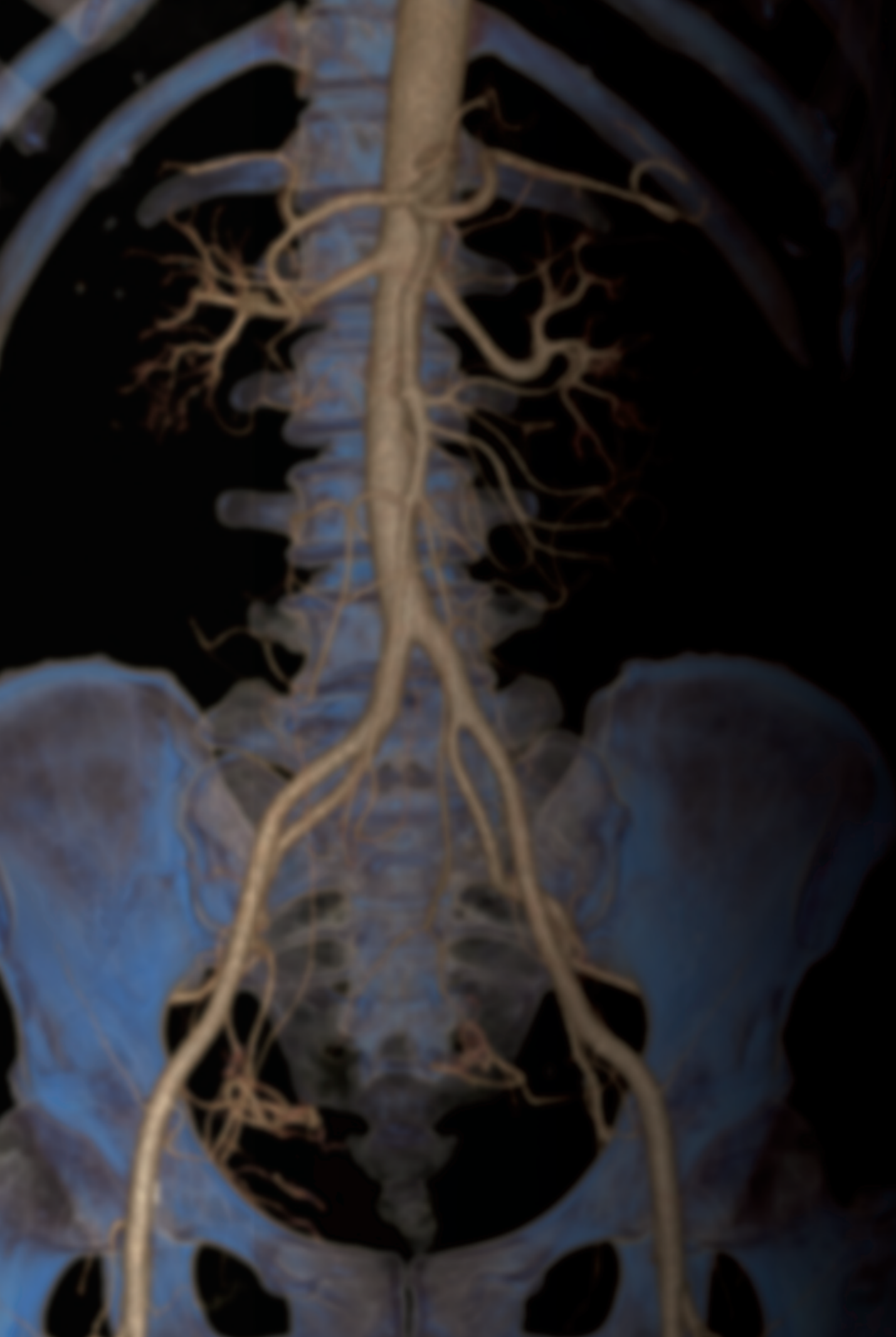


Integrated Report System on the Console

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

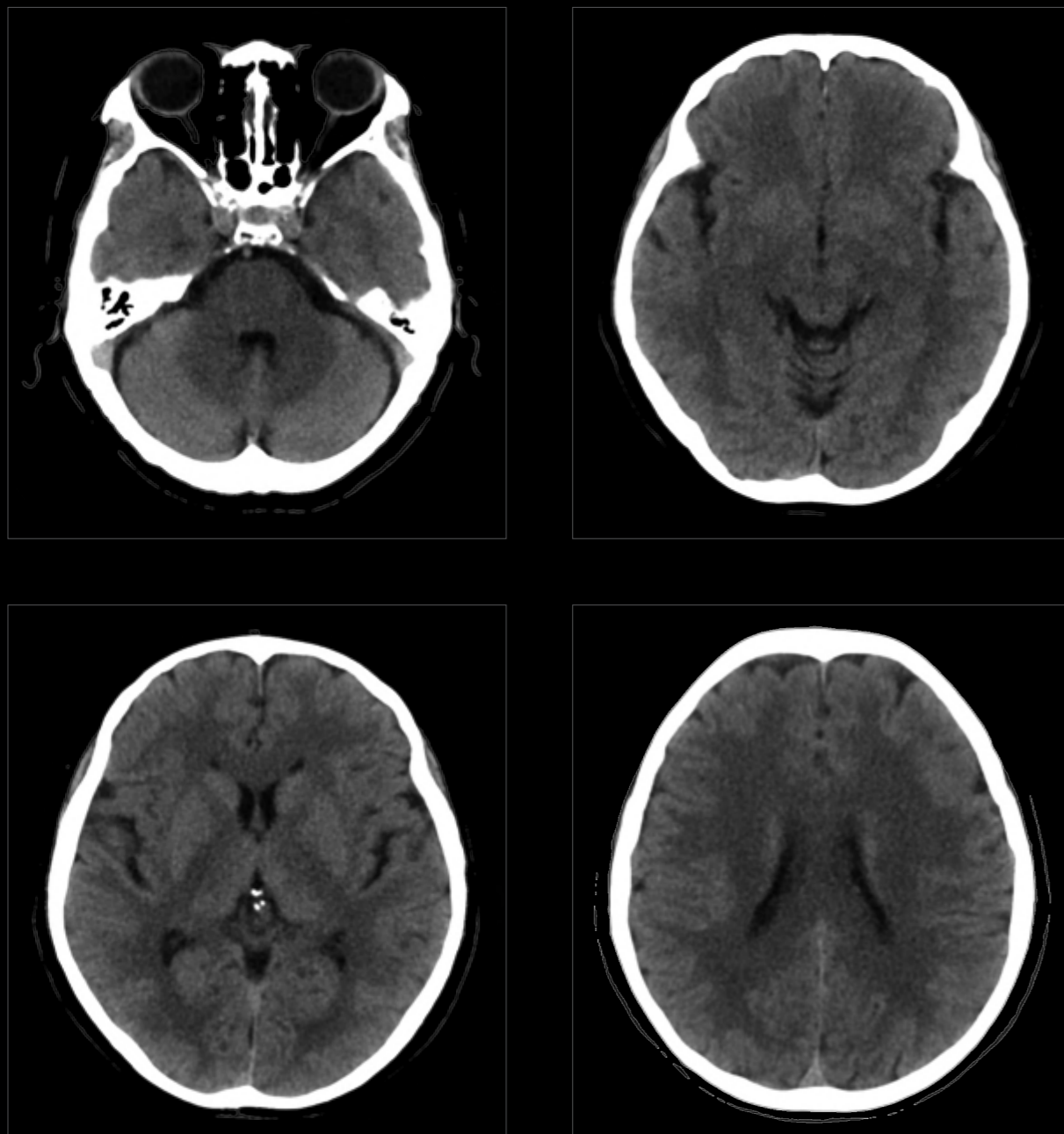
This reduces manual and repeated operation procedures, shortens report turnaround time and helps to optimize your daily workflow.



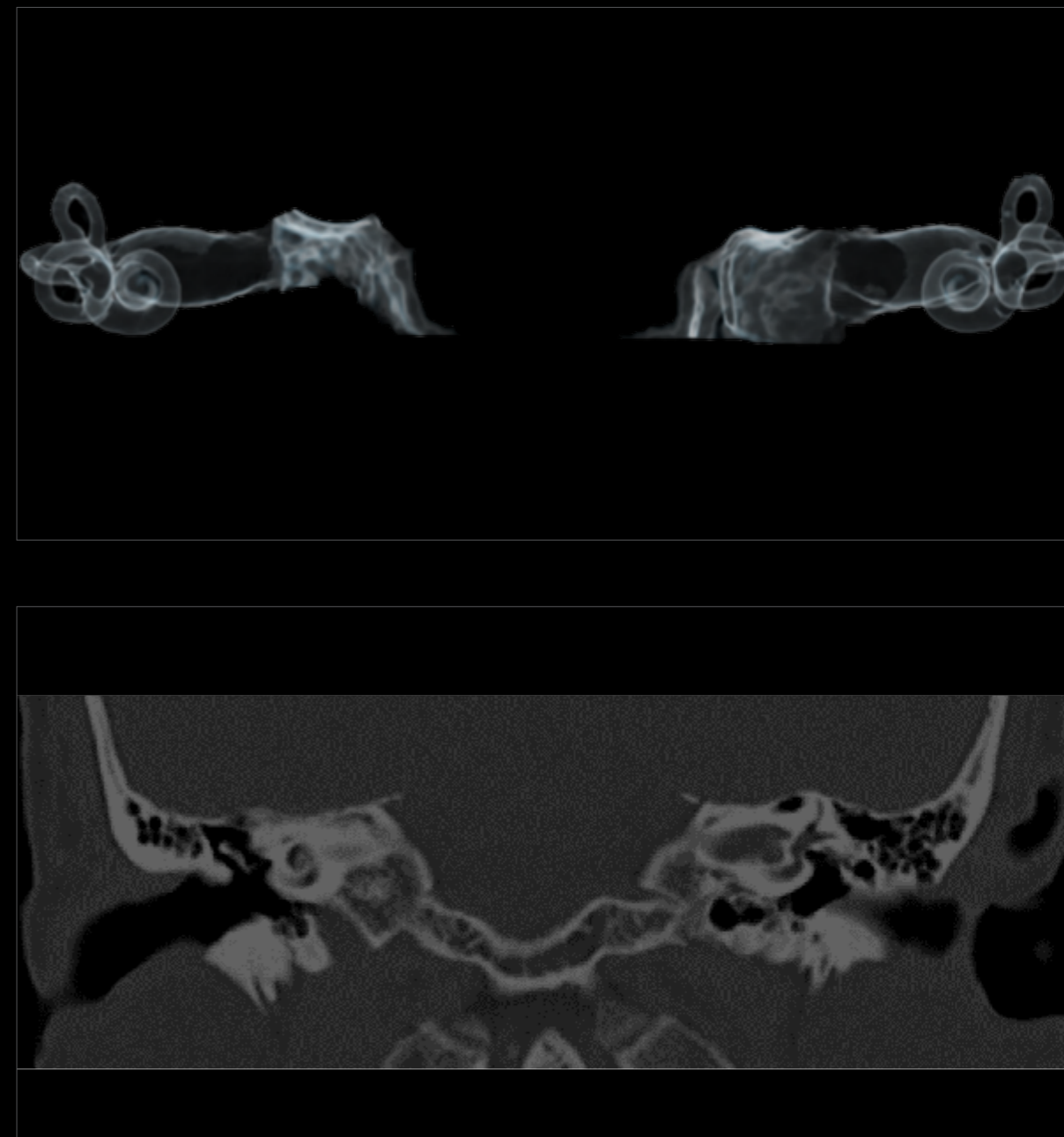


Clinical Images

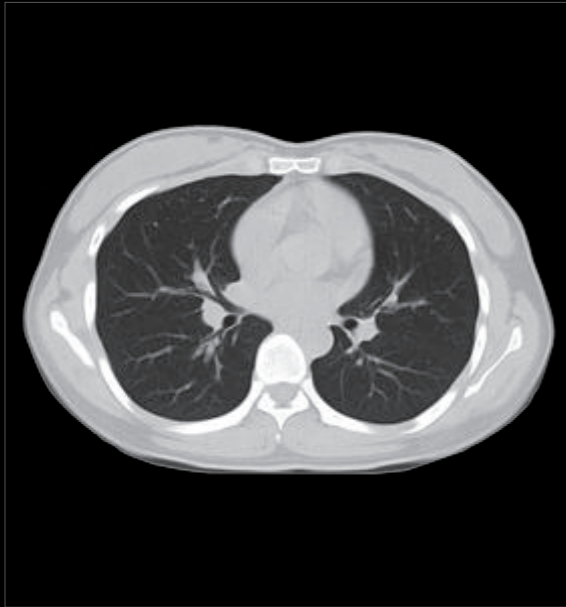
The Z-Detector helps to reduce image noise and improve the delineation of grey-white matter.



0.55mm images show fine details of the inner ear.



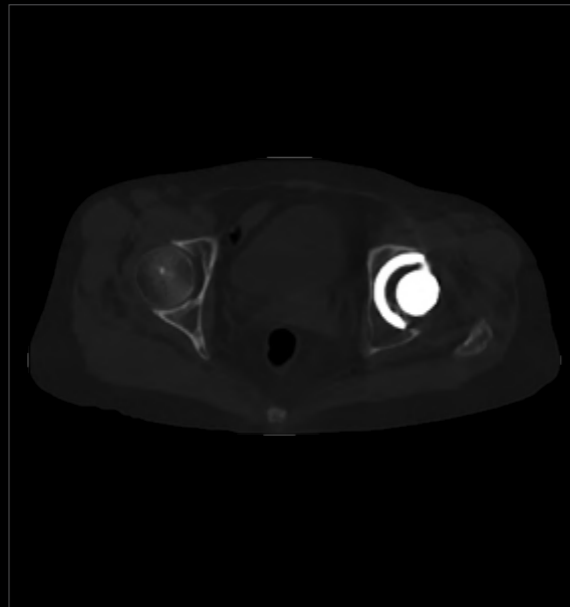
The 22mm coverage detector helps to reduce scan time and respiratory motion artifacts.



High resolution 3D joint imaging.



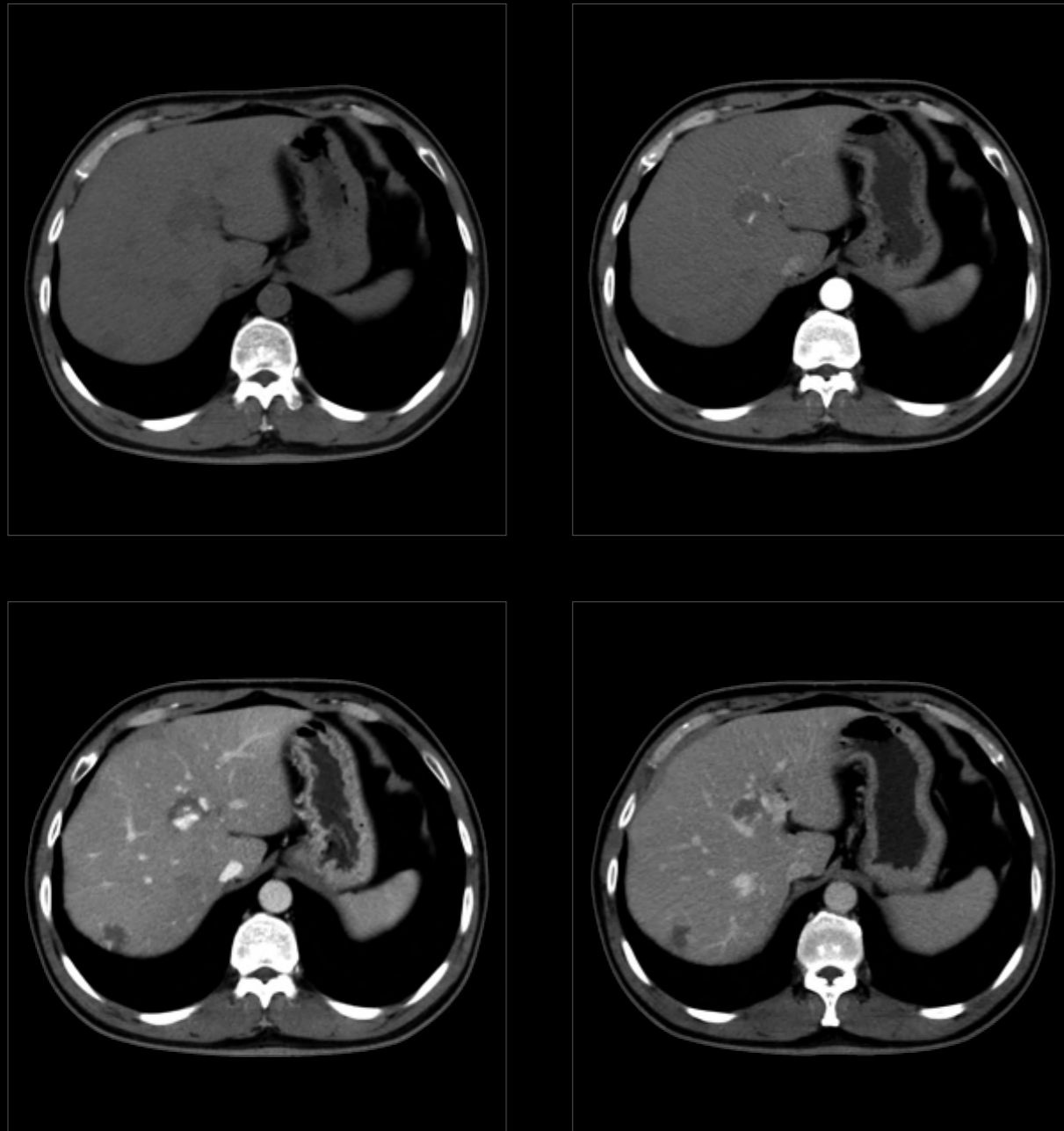
MAC (metal artifact correction)* greatly suppresses artifacts induced by metal implants.



Clear visualization of the L3-L4 lumbar disc herniation.



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

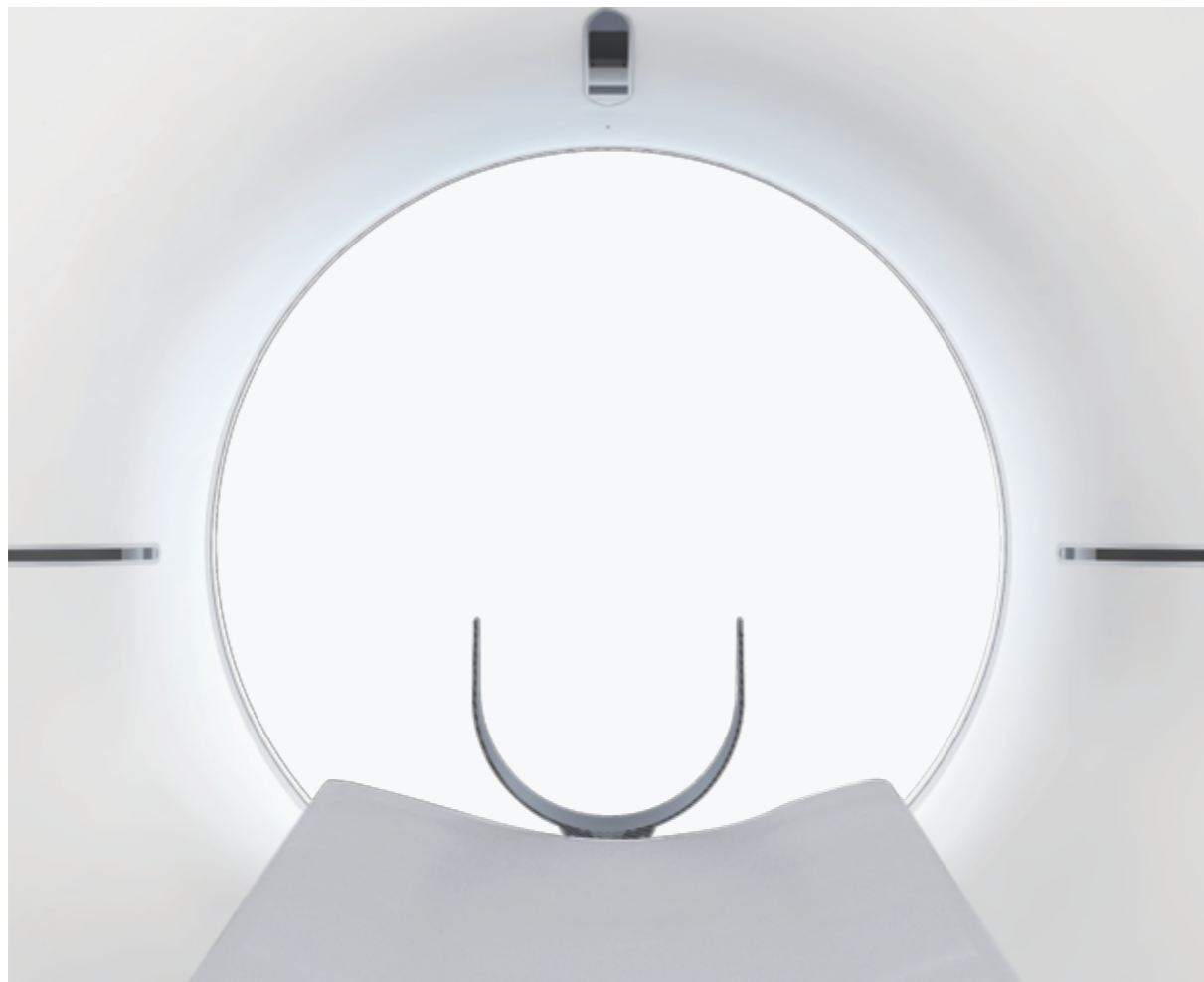


Detailed and quick observation of distal vessels with single-click bone removal.



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.

ABOUT UIH

United Imaging Healthcare Co., Ltd. develops and produces a full portfolio of advanced medical imaging and radiotherapy equipment and offers medical IT and intelligent solutions. Founded in 2011 and headquartered in Shanghai, the company has subsidiaries and R&D centers across China, US, and other parts of the world. Half of its 3,300 employees work on research and development. To date, more than 3,000 hospitals worldwide are using UIH products.

To learn more, visit <https://www.united-imaging.com>