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ABOUT UIH

Shanghai 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.

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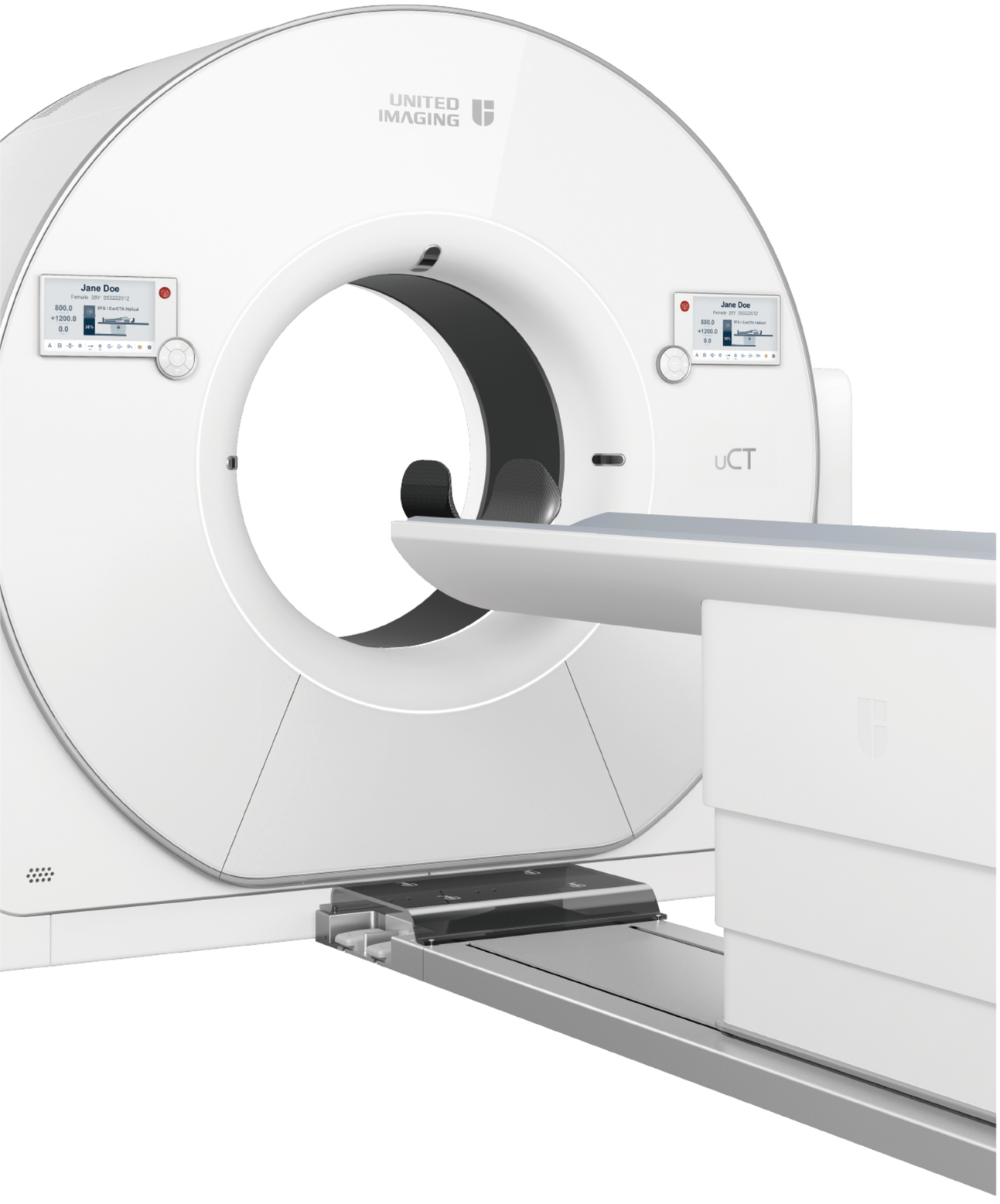
uCT 960+

**Attainable Intelligence.
Simply Masterful.**



uCT 960+

Leading technology platform, performance parameters are setting the bar for what's expected in a CT scanner.

16cm
Coverage Z-detector

320
Rows

640
Slices

0.25s*
Rotation Speed

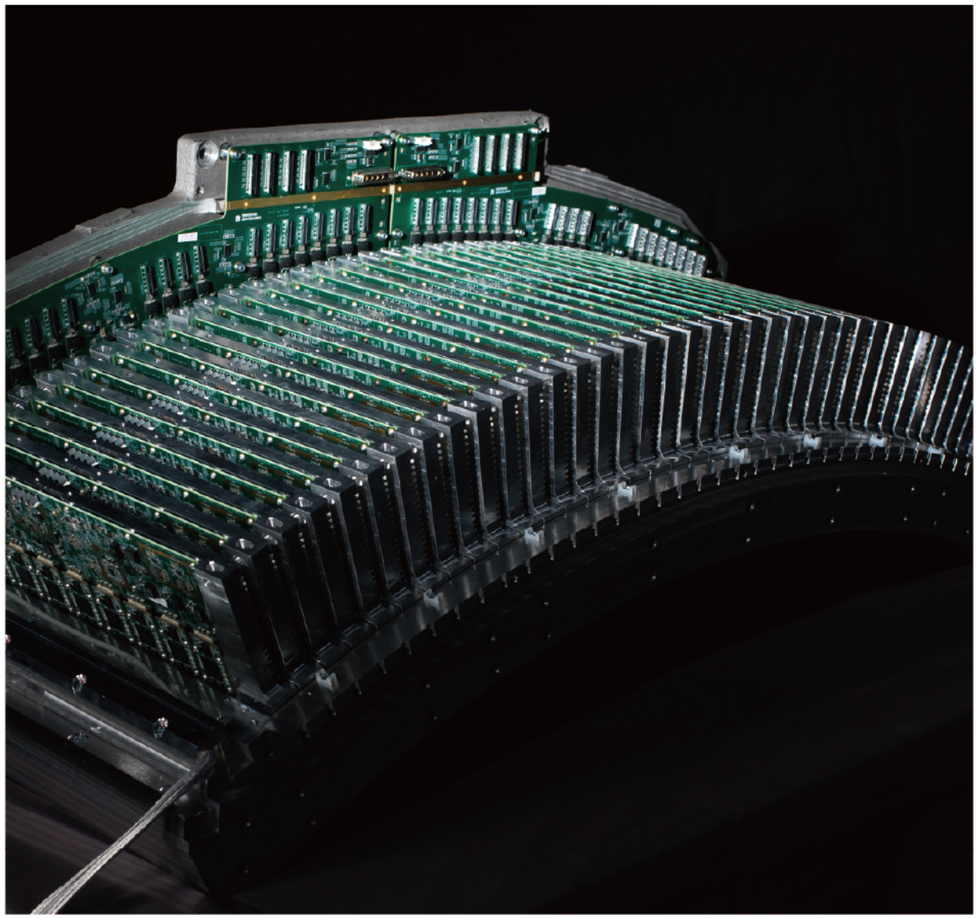
uAI
Platform

82cm
Gantry Aperture

※0.25 s* is optional

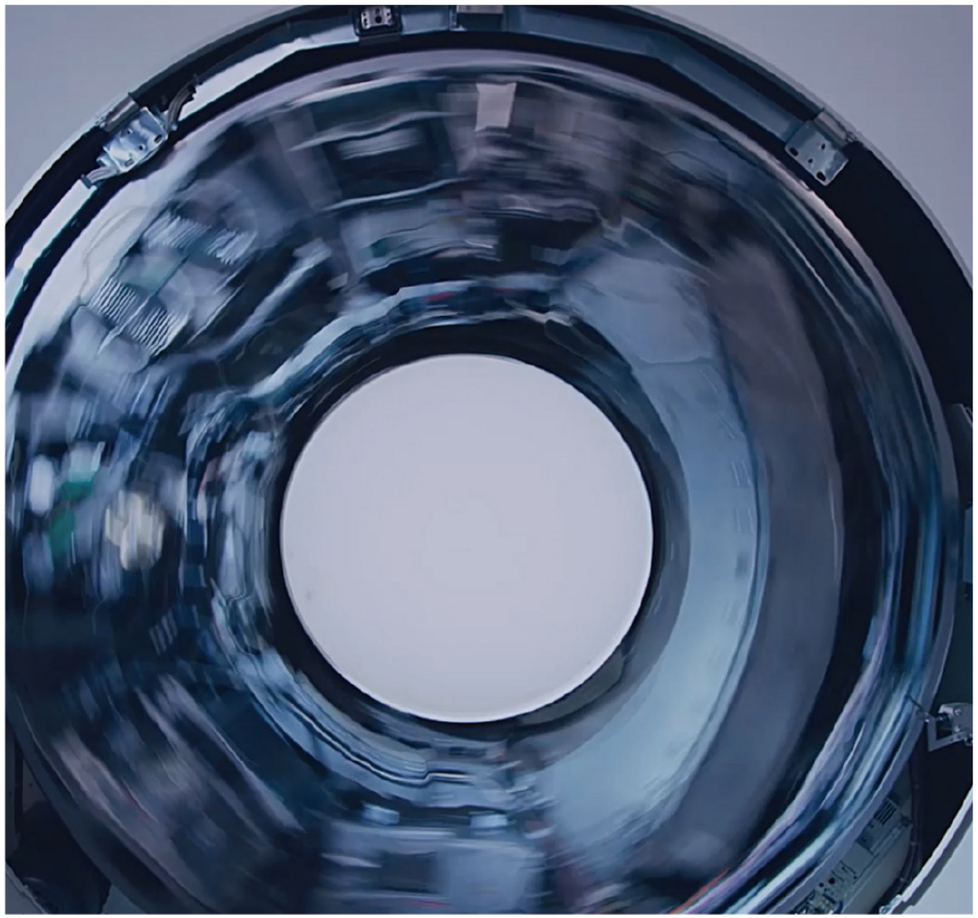
16 cm z-axis detector coverage with High Resolution and Ultra-Low Noise

- 16cm Wide Z-detector，0.5 mm Detector Acquisition in all FOVs
- Through-silicon-via (TSV) Technology for ultra-low noise
- 3D Anti-Scatter Grid manufactured with 3D printing technology for accurate shielding of scattered photons
- Real 3D Full Reconstruction Technology designed to mitigate the cone beam artifacts associated with systems



Rotation speed **Freeze** the Motion in Cardiac Imaging

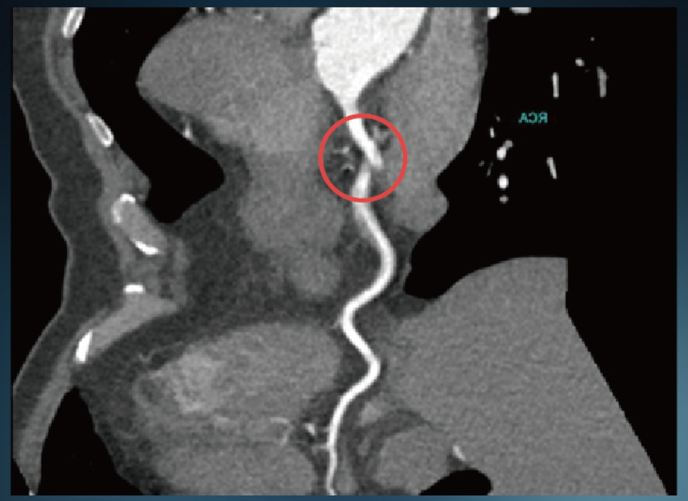
To deliver superior temporal resolution, freeze the motion in cardiac imaging, and enable 0.25 second rotation speed, we have a one-piece casted gantry structure integrated with a direct drive motor system providing precise rotation speed control.



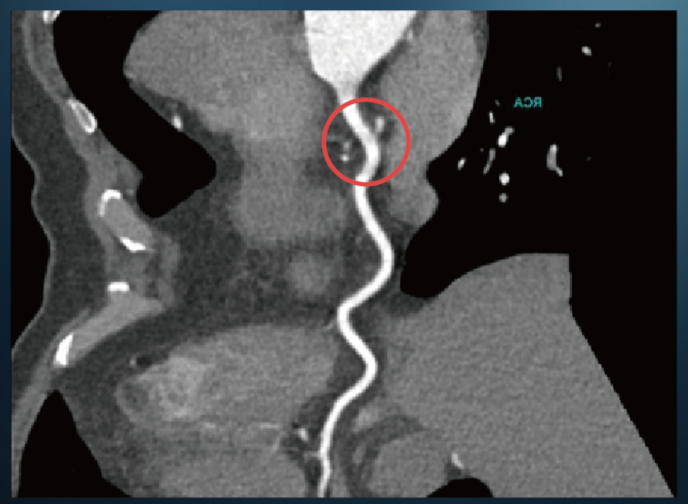
uAI CardioCapture

Using an intelligent motion correction with an AI-empowered coronary artery algorithm, we have improved the temporal resolution to 25 milliseconds.

Original Image



After uAI CardioCapture



Challenges of precise patient positioning

Paitent positioning

Patients differ significantly in size, height, and weight, so manual positioning can be tedious and time consuming operator time. Furthermore, technicians differ in their experience and skill levels. The 3D Camera system makes patient positioning fast and accurate even across various workflows and different patient dimensions.

Optimal patient dose and image quality

Setting the scan range too long can give the patient excess dose. Setting it too short or at the wrong location can result in rescanning, inconsistent dose and poor image quality. The uAI Vision Easy Positioning system make setting the scan range fast, accurate, and automatic -- streamlining your workflow.

uAI Vision - 3D Camera

uAI Vision 3D Camera

Captures the patient's shape, positioning, and height in three dimensions

Compact, light weight and elegantly designed

3D, 360° camera with no constraints on poses/patient positioning

Plug & Play,
AI computation within the unit

Robust system trained using million of patient datapoints

One-step, self-calibration that can be performed by customers

uAI Vision – AI Empowered Scan Navigation

uCT 960+ with the uAI Vision scan navigation system provides an efficient, standardized and personalized scanning experience for each patient.

uAI Vision Features

uAI Easy-Positioning
Single-click patient positioning with precise scan range locations based on the selected protocol.

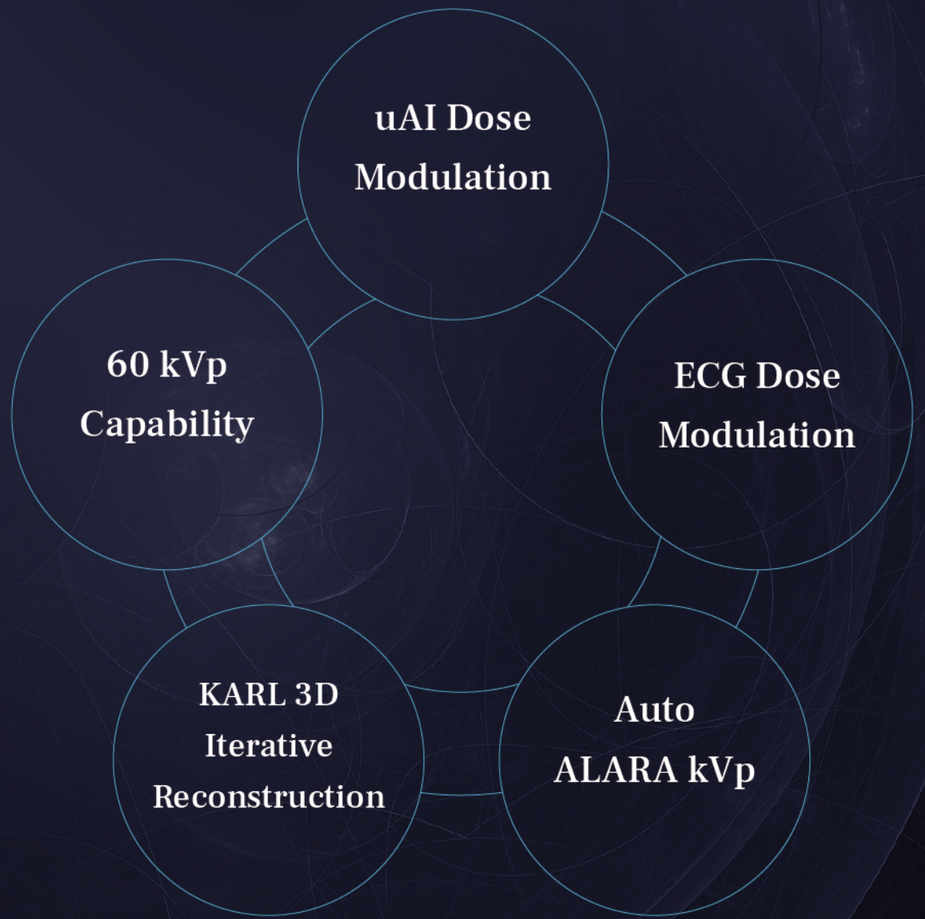
uAI Easy-ISO
Image quality is optimized taking into account the patient's surface dose distribution for every exam

uAI Vision Benefits

Personalized CT Imaging
Real-time digital models for every patient utilizing deep learning technology in three dimensions.

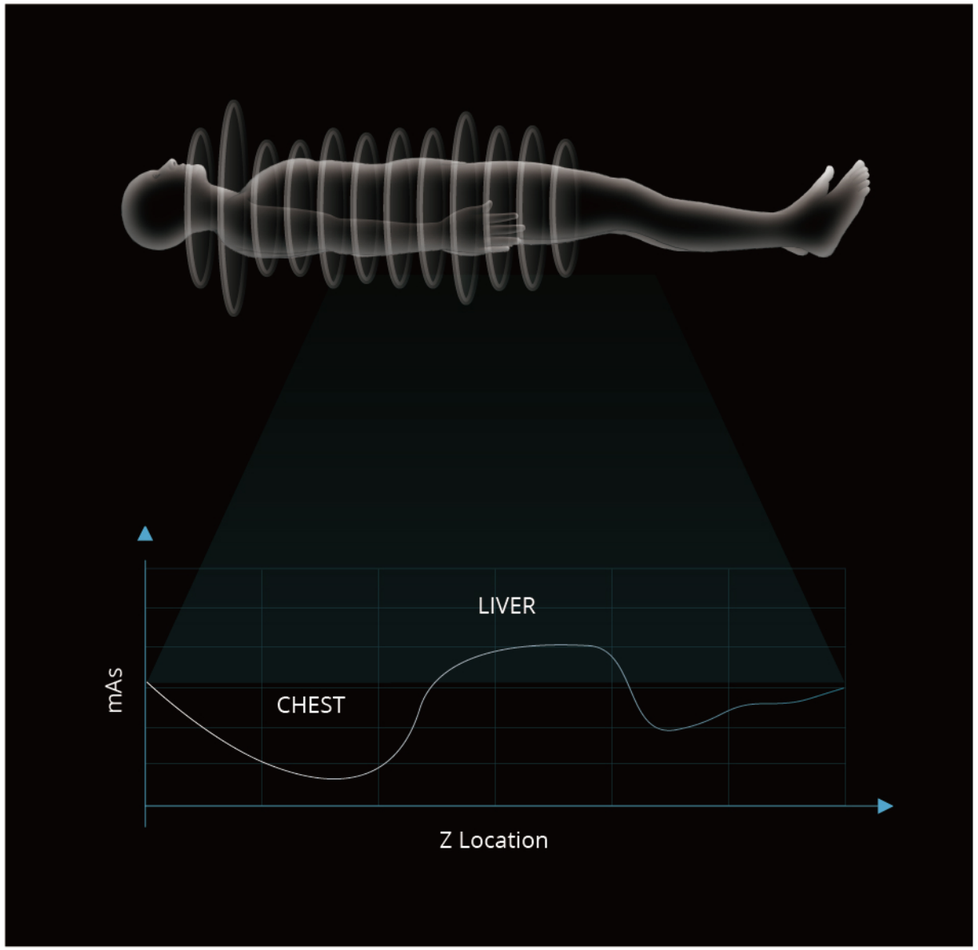
Flexible Patient Positioning
Patient anatomical structures can be identified

Dose Reduction Technologies



uAI Dose Modulation*

Automatic recognition of the chest and abdomen with an AI-based technology allowing a more optimal noise and optimized dose for the entire patient.



uAI Dose Modulation* is optional

Comprehensive Clinical Solutions

As an ultra-premium 640-slice CT scanner, uCT 960+ features 16 cm z-axis detector coverage,0.25s rotation speed, an ultra□wide 82 cm bore, and a 700 lbs. table weight capacity. Using industry-leading AI-empowered technologies, it launches the era of intelligent imaging, offering precise imaging and ease of use throughout the entire clinical spectrum.

Challenges of coronary CTA

High heart rate

Intelligent motion correction with coronary artery extraction for precise movement tracking.

Arrhythmia

An abnormal R-R wave could provoke an incorrect acquisition making additional artifacts.

Inability to hold breath

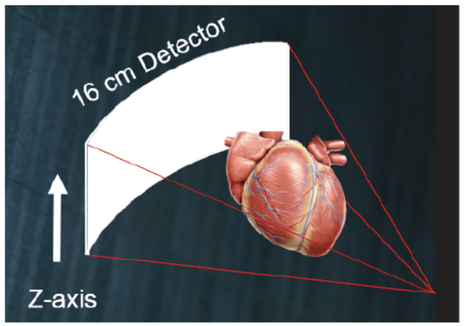
The patient's inability to hold his breath causes the image artifacts.

High doses

Patients bearing ultra-high dose when receiving the cardiac imaging

One-beat coronary CTA solution

160 mm whole heart coverage with 0.25 s rotation speed
to achieve robust, low dose and high quality cardiac imaging within one heart beat



Intelligent workflow for cardiac scan

CardioAssist
Patient‘s heart rate assessment during the scanning simulation and automatic providing of appropriate gating

Cardiac Imaging
One beat scan mode
Real-time irregular beat detection and rescan

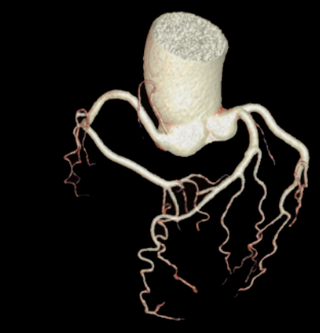
CardioXphase
Automatic best phase reconstruction based on the assessment of coronary artery motion

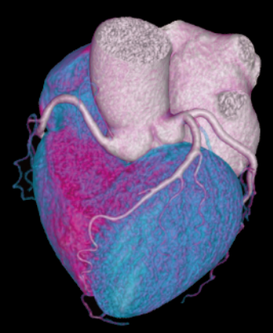
CardioCapture
Intelligent motion correction with an AI-empowered coronary artery algorithm for precise movement tracking

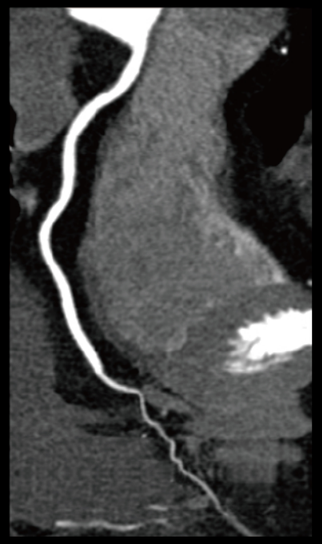
Cardiovascular

One-beat Cardiac Scan

Severe Arrhythmia 52-238bpm
Scan type: Axial – One-beat

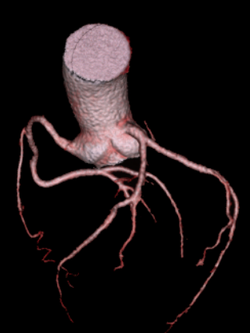






ECG Report			
Phase	Avg HR	Min HR	Max HR
E Phase	97 bpm	52 bpm	238 bpm

High heart rate with myocardial bridges 99-104bpm
Scan type: Axial – One-beat



ECG Report				
Phase	Avg HR	Min HR	Max HR	Avg R-R
75%	102 bpm	99 bpm	104 bpm	586 ms

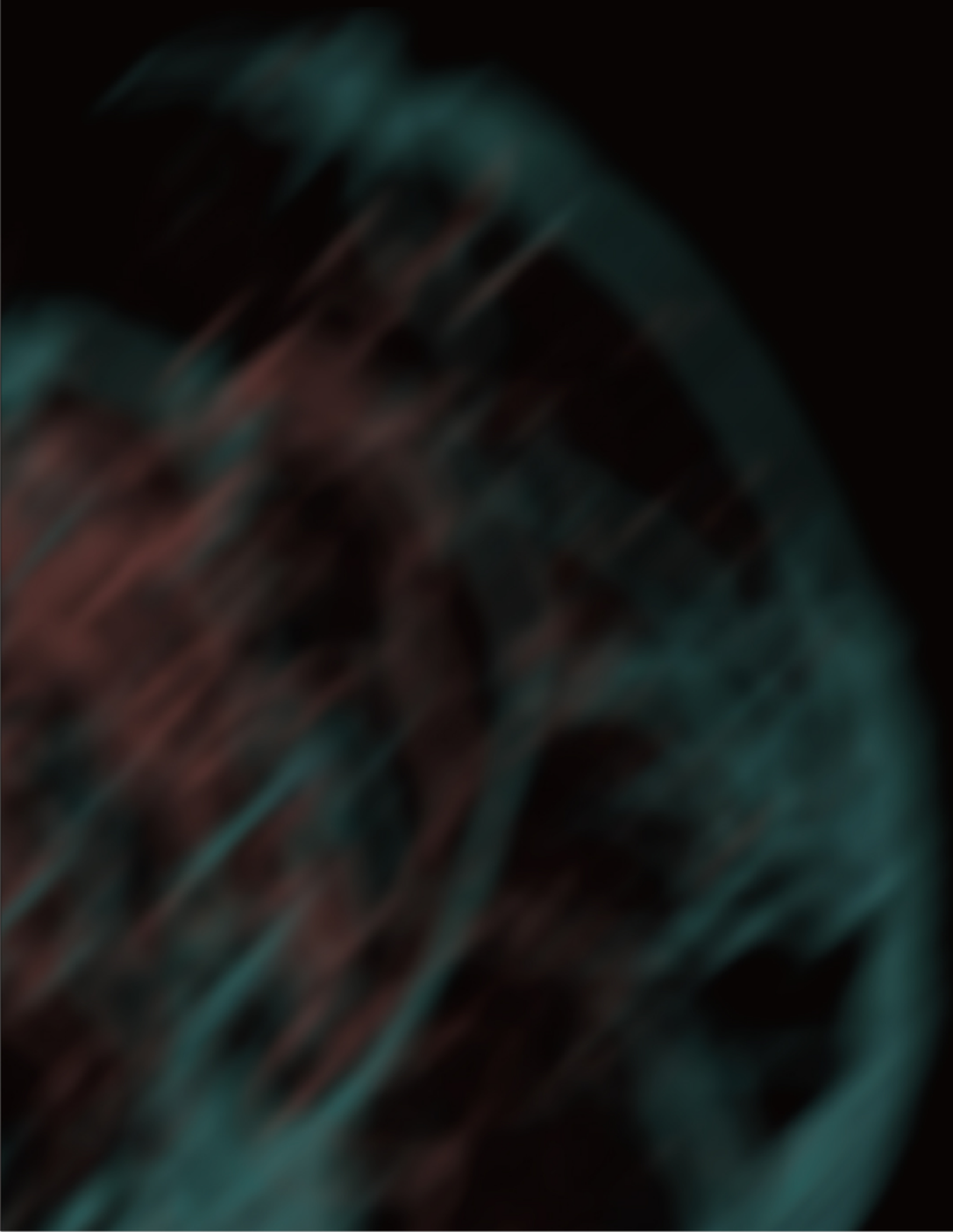
Cardiovascular Imaging

One-stop cardio-cerebral vascular

One-stop cardio-cerebral vascular with just a single contrast injection.
The intelligent post-processing applications assists efficient diagnosis.

Triple Rule Out

One stop acquisition for the evaluation of coronary arteries,
pulmonary artery and aorta for examination.

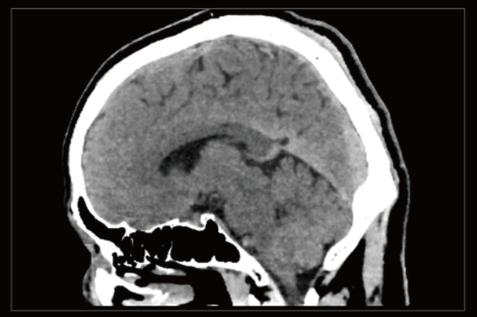


Stroke

Our one-stop 4D stroke imaging solution provides comprehensive information from anatomical structure to functional measurements delivering the fastest care and allowing the physician to confidently mitigate the stroke.

NCCT

With 16 cm z-coverage, a single scan covers the whole brain.

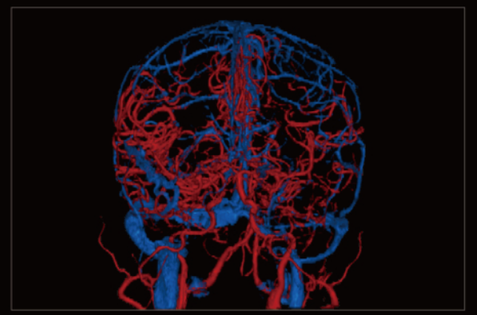


CTA

The arterial phase CTA images can be extracted from 4D dynamic angiographic images.

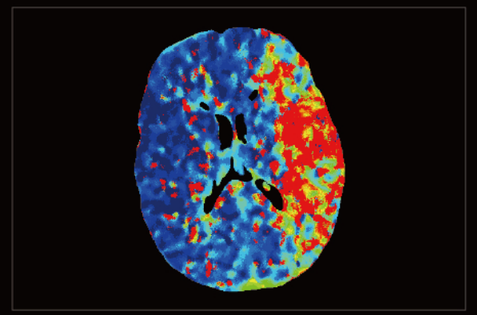
4D Dynamic CTA

Acquires 4D dynamic angiographic images, auto extraction and separation of arteries and veins.



CTP

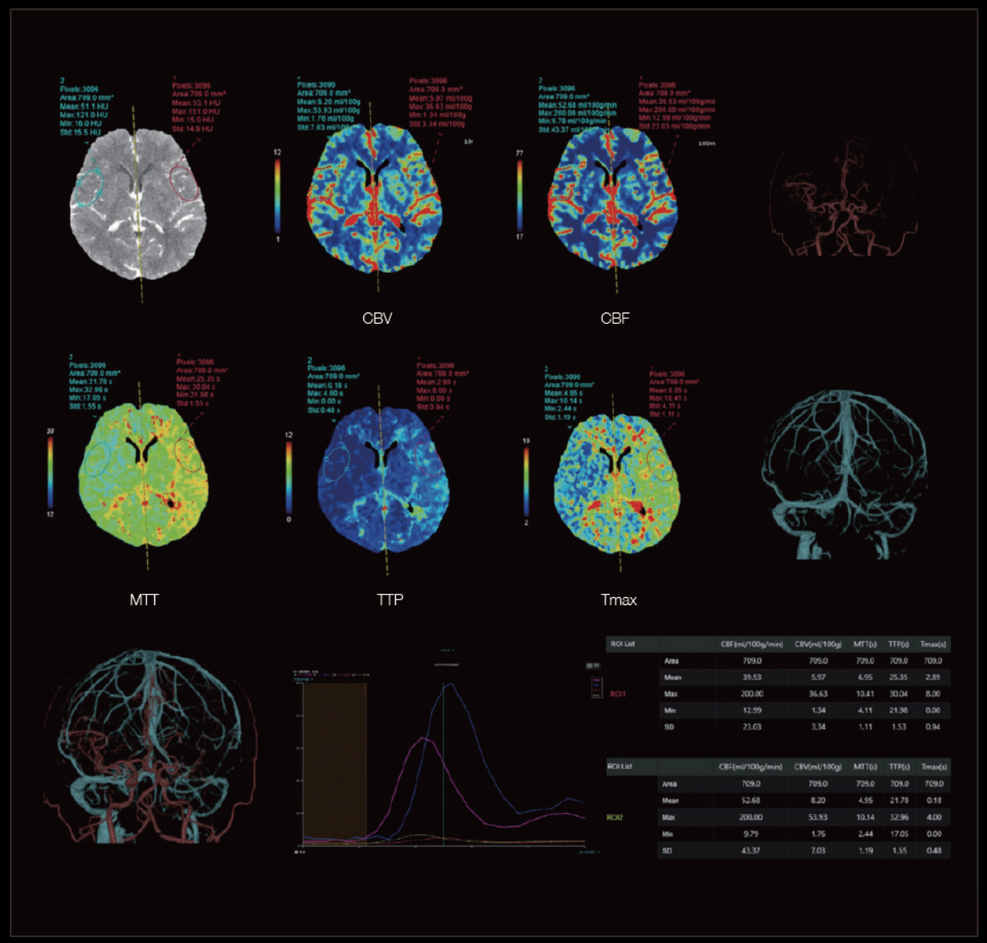
Automatically CBV, CBF, TTP, MTT, and Tmax for functional evaluation with more confidence.



4D stroke imaging solution

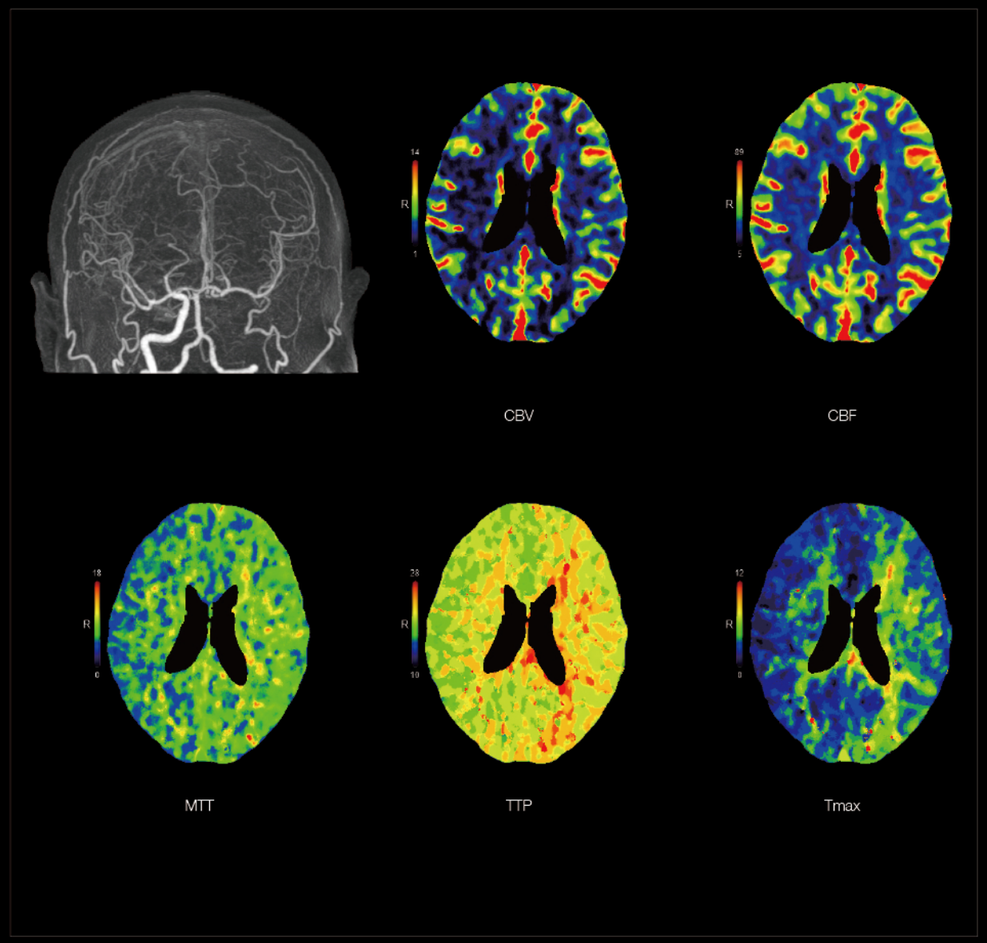
A 4D dynamic vascular and cerebral perfusion examination performed with one injection

Perfusion study which automatically extracted arteries and veins providing CBV, CBF, MTT, TTP, and Tmax perfusion data to create a ROI time density curve and one-click generation of parameters. ROI evaluation parameters can be exported in CSV format.



One-stop low-dose whole brain perfusion imaging

Intelligent automatic acquisition of multiple perfusion parameters including CBV, CBF, TTP, MTT, and Tmax in one click



Oncology

uCT 960+ provides multi-dimensional evaluation for more precise diagnosis by using technologies such as Dual-energy, Stationary perfusion and Dynamic perfusion (40 cm range supported).

Dual-Energy Scan*

With dual energy scans, uCT 960+ can significantly expand applications for quantitative and functional measurement.

Stationary Perfusion Scan

uCT 960+ delivers an industry-leading 16 cm coverage providing whole organ perfusion without table motion. This function allows perfusion studies for brain, kidney, pancreas and other organs to provide uniform sampling along the z-direction.

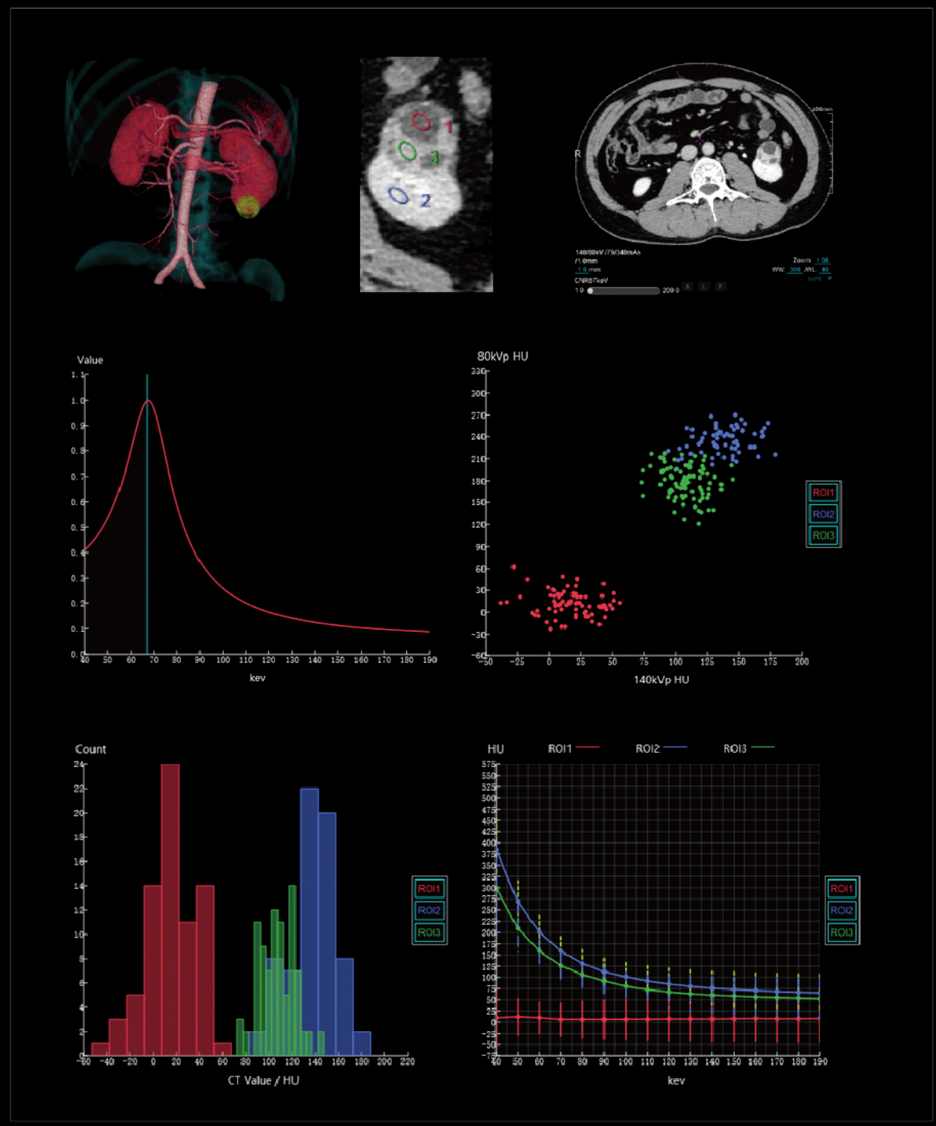
Dynamic Scans with up to 40cm z-coverage

uCT 960+ can provide dynamic scans with large z-coverage (up to 40 cm) using a variable pitch helix.

※Dual-Energy is optional*

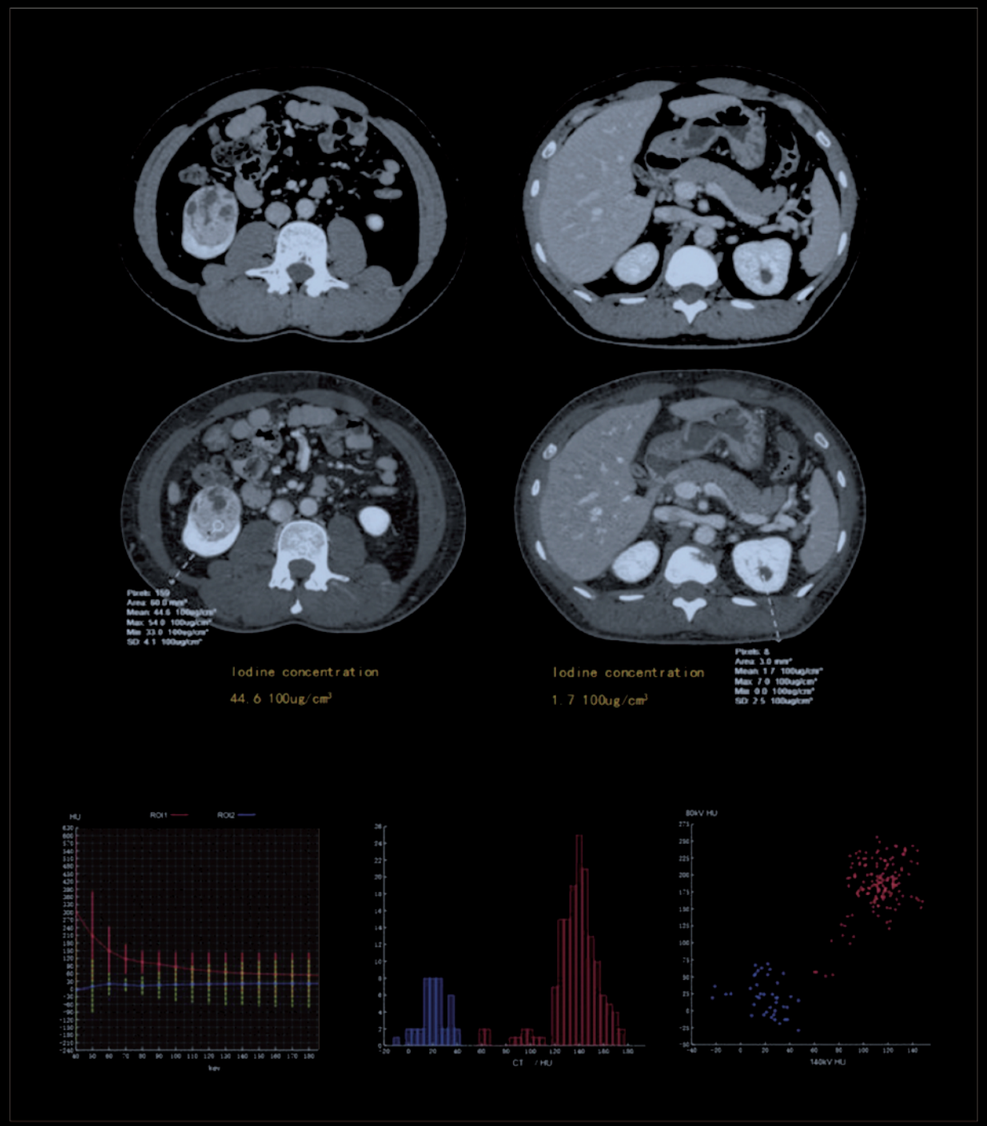
Oncology

Dual energy, Stationary perfusion, Dynamic perfusion and more precise diagnosis.



Dual-Energy Scan

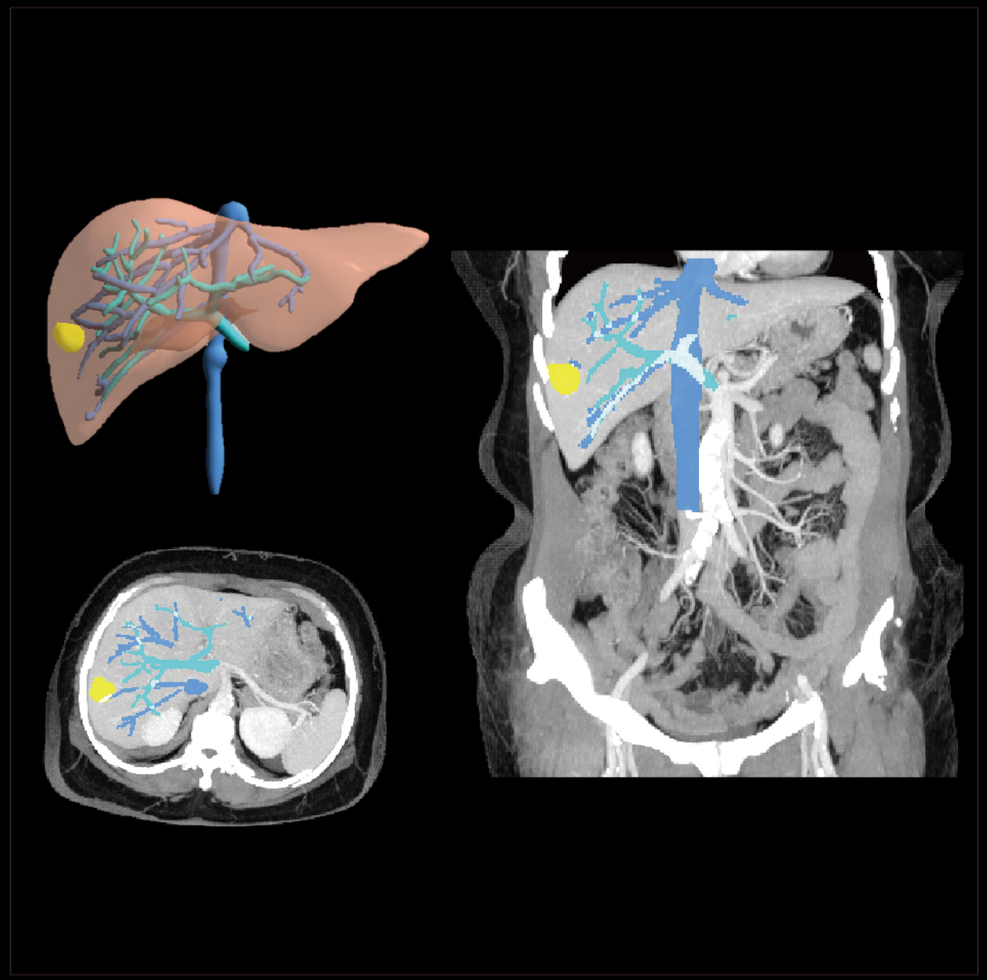
The spectral curves demonstrate the different of the bilateral renal lesions. The changes in iodine concentration show right renal cancer and left renal cyst.



Oncology

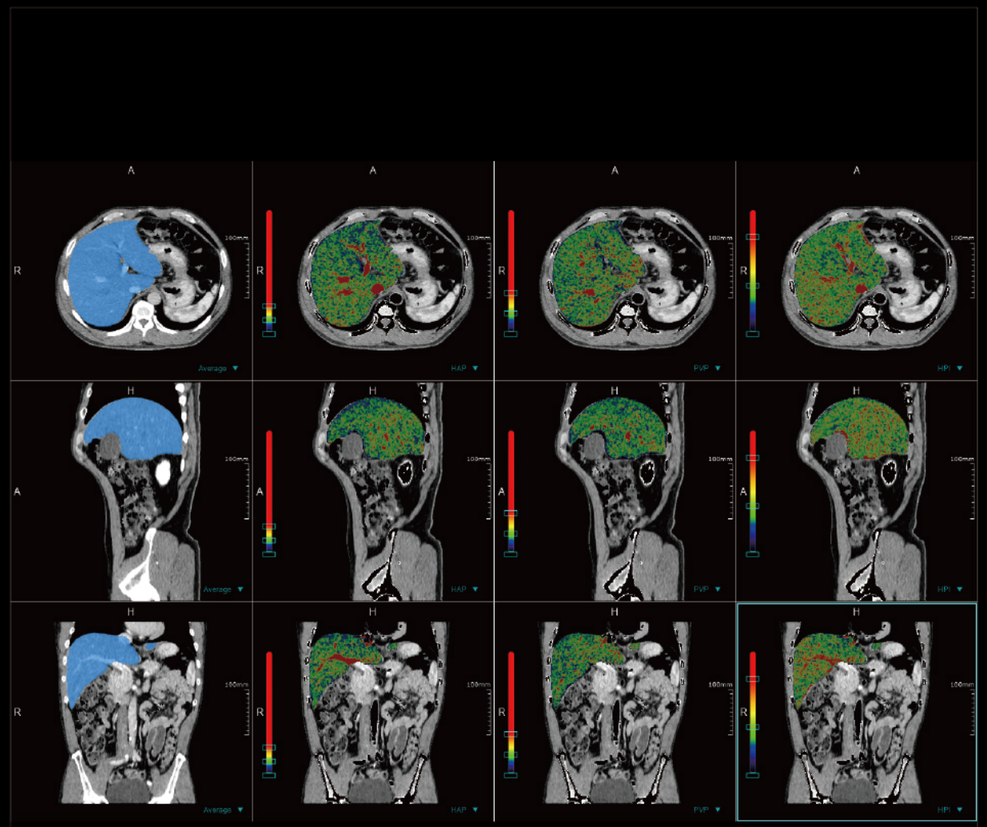
Liver surgery planning

It provides a three-dimensional image dataset for the establishment of liver surgery planning, provides a clear and comprehensive observation method for the distribution and interrelationship of hepatic veins, portal veins and tumor lesions, and assists liver resection surgery planning virtually.



40cm dynamic perfusion imaging

Dynamic perfusion scanning in the helical mode and a maximum of 40 cm scan range.



Emergency & Trauma

uCT 960+ whole body fast scans, providing imaging solutions with fast and multi-dimensional information for the clinical decision support in the emergency department.

Single Rotation Brain Imaging

The entire scan can be completed to minimize the motion artifacts caused by involuntary movement of trauma, geriatric or other patients.

One-Stop Acquisition For Triple-rule-out Examination

By combining one-beat cardiac scan with fast CTA scanning, uCT 960+ enables the evaluation of coronary arteires, pulmonary atery and aorta with only one exam.

Real Time 3D

Real Time 3D is an innovative technology that automatically produces MPR or VR preview images in real-time (along with the axial real-time preview images) as the acquisition is taking place.

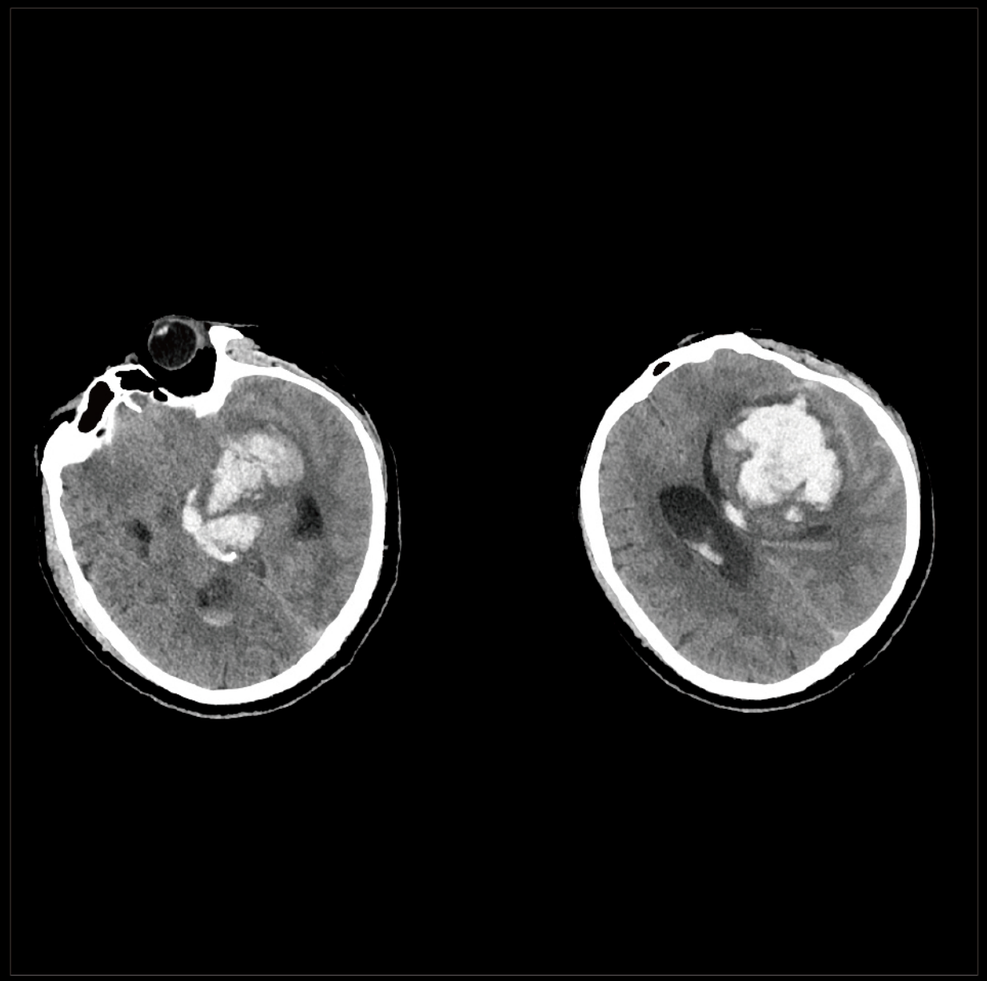
Intelligent and Precise Analysis

The advanced application platform greatly improves the efficiency of post-processing with comprehensive and accurate intelligent rib fracture analysis.

Emergency & Trauma

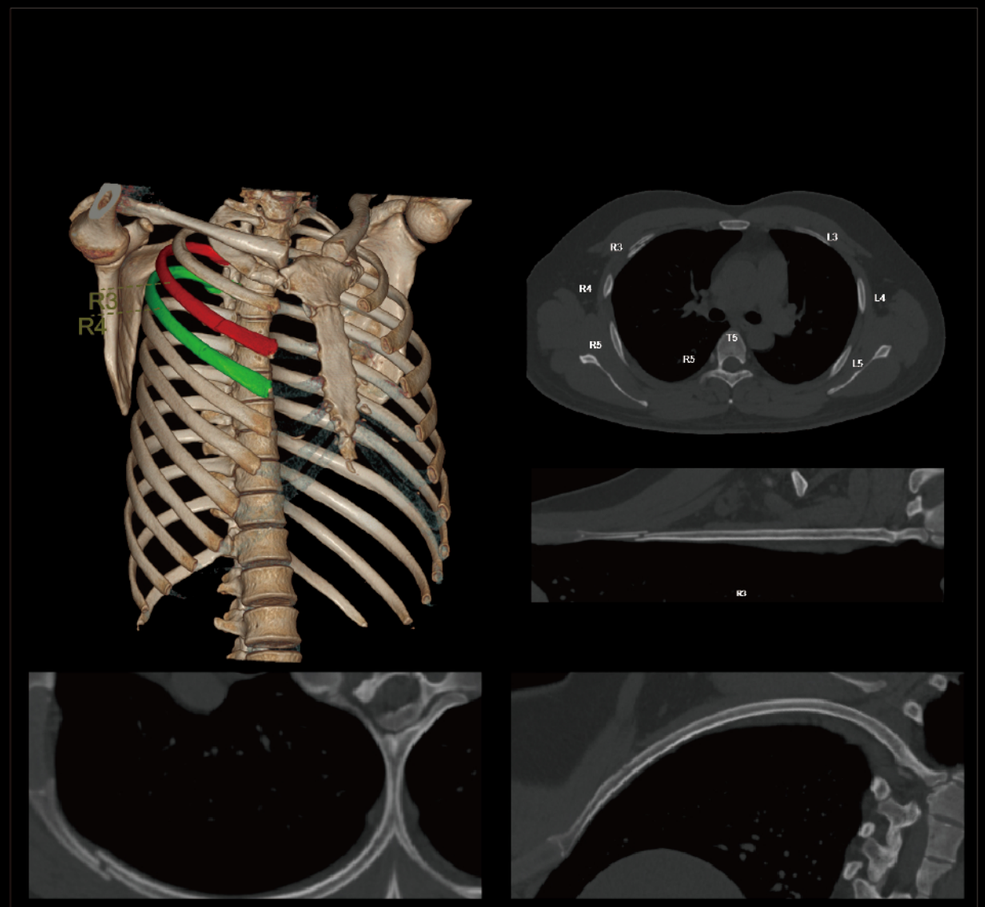
Brain scan in half a second

Whole brain coverage;
Low scattering artifacts at dose, clearly showing bleeding lesions.



Chest scan in one second

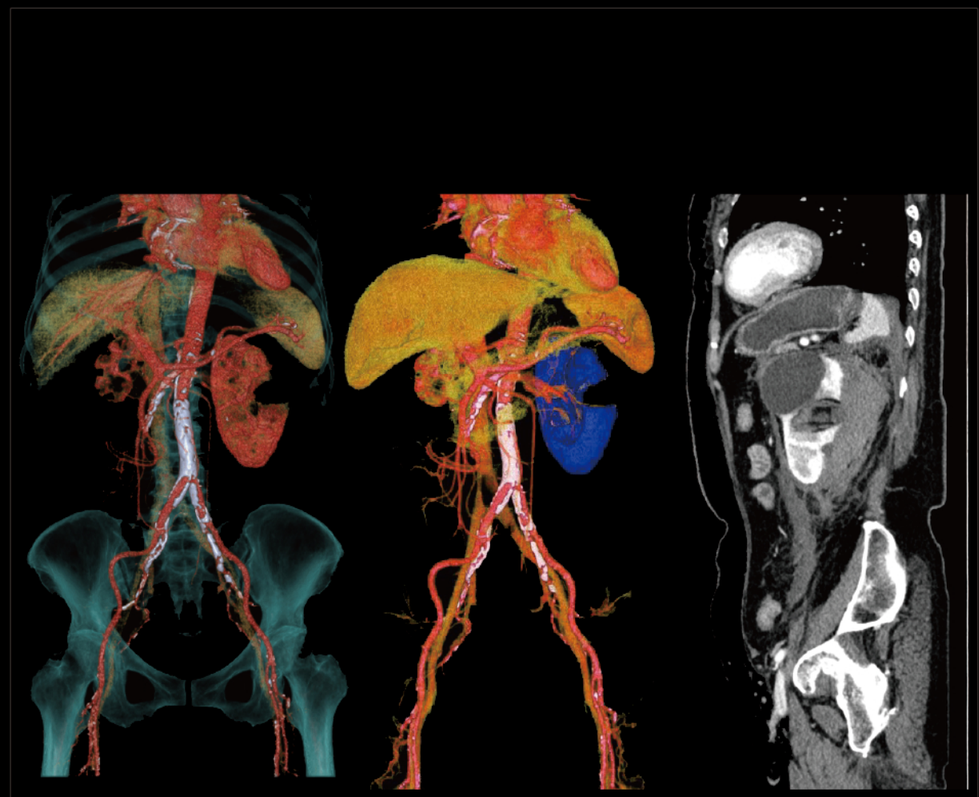
Automatic cutting, opening, straightening and automatic marking of ribs and boost for faster and more precise diagnosis.



Emergency & Trauma

Abdomen scan in 2 seconds

440 mm/s movement speed enables fast scan for large anatomic ranges.



Large range scan in 3 seconds

Fast helical scan mode, 3 seconds to obtain large range and high-quality images.

First-class experience

The 82 cm aperture provides a more comfortable examination experience and a flexible operation space.

Low Dose Technology

60 kVp scans reduce radiation dose while maintaining image quality especially for smaller adults and pediatric patients.

High patient throughput

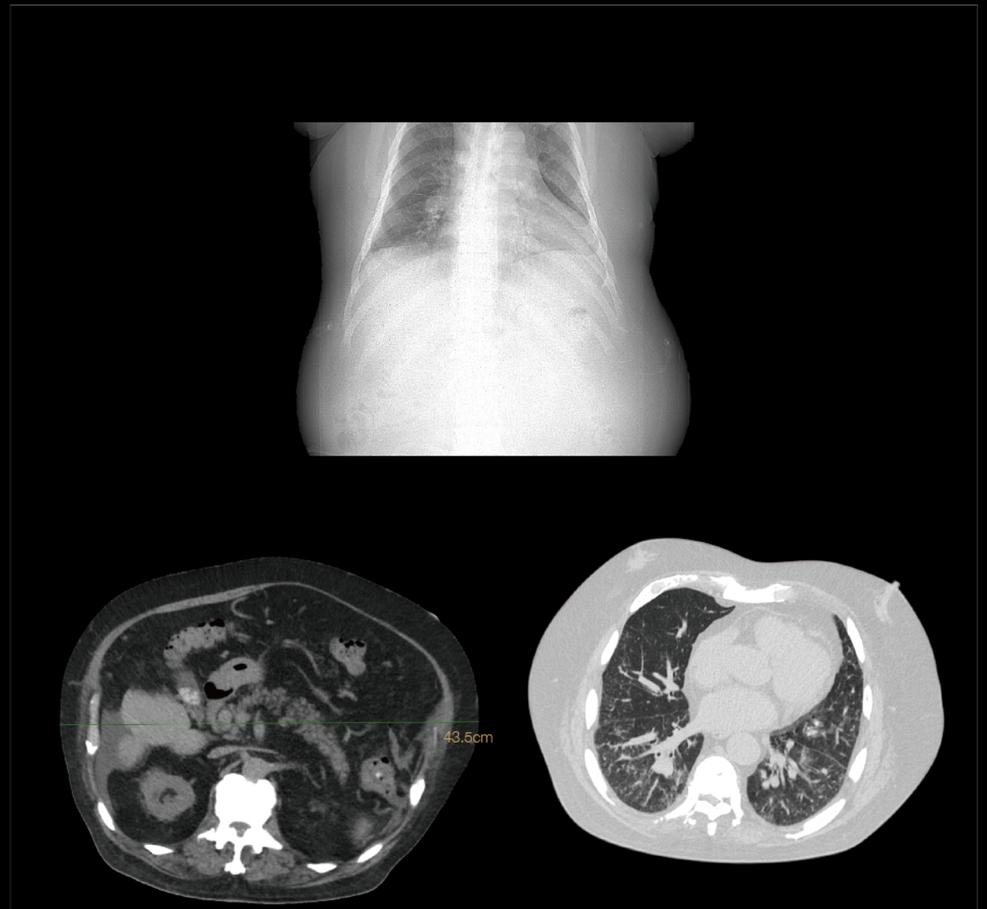
Combining a powerful platform and AI-empowered workflow, uCT 960+ enables easy and accurate positioning with one click and automatically selects the scan range based on the scout, optimizing image quality and dose, thereby adapting to your growing department needs and works to support a large daily throughput while maintaining high image quality.

First-class Experience

60 kV scans can lower the radiation dose while improving image quality.

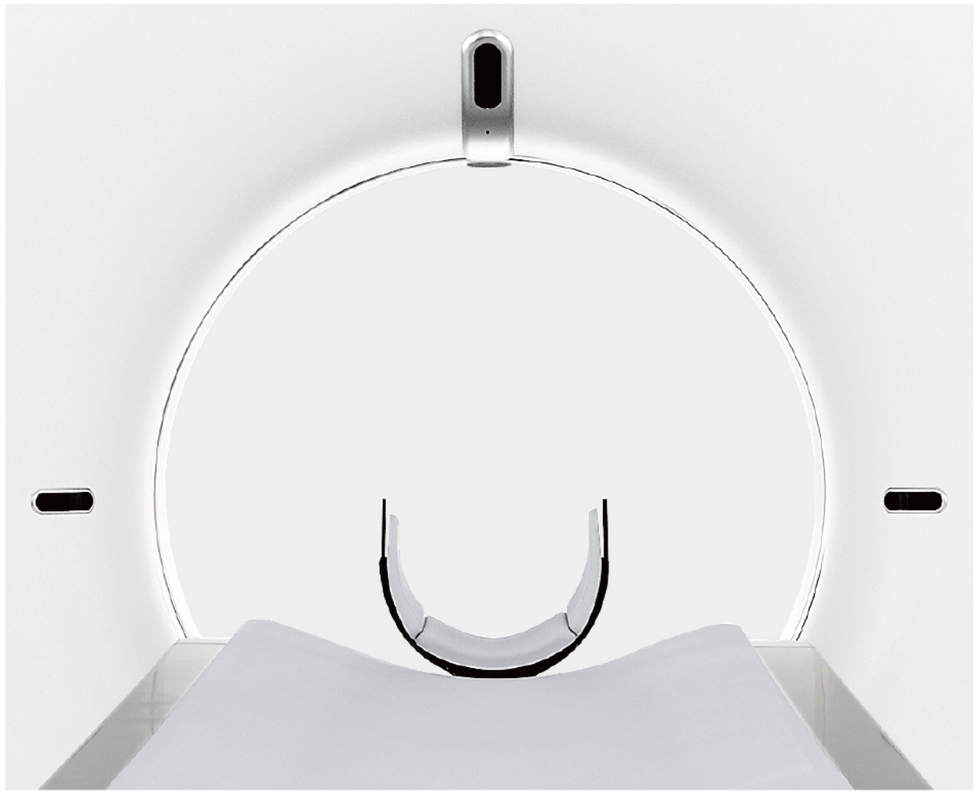
Scan Mode	kV	mAs/mA	Scan Time [s]	CTDIvol [mGy]	DLP [mGy*cm]	Phantom Type [cm]
Scout	120/120	40/40	16.7	0.05	2.70	Body 32
Axial	60	29	0.4	0.21	2.50	Body 32

uCT 960+ is equipped with a 82 cm aperture and a 318 kg maximum load capacity allowing flexible positioning for obese patients.



「User in Mind」 Design

Focusing on user experience, the uCT 960+ combines accurate operation with a lightweight and artistic design. We bring aesthetic enjoyment and ease of use to the technology, delivering trusted medical care in a way that respects the patient.



Pleasing Aesthetics

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

User-Friendly Design

The product design delivers comfort, safety, efficiency and ease-of-use. By applying ergonomic principles, the uCT 960+ combines innovative design with optimal functionality in order to provide the best possible user experience and optimize patient comfort during the examination.

Sophisticated Craftsmanship

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