MT Medical

Professional Animal Imaging Equipment Manufacturer



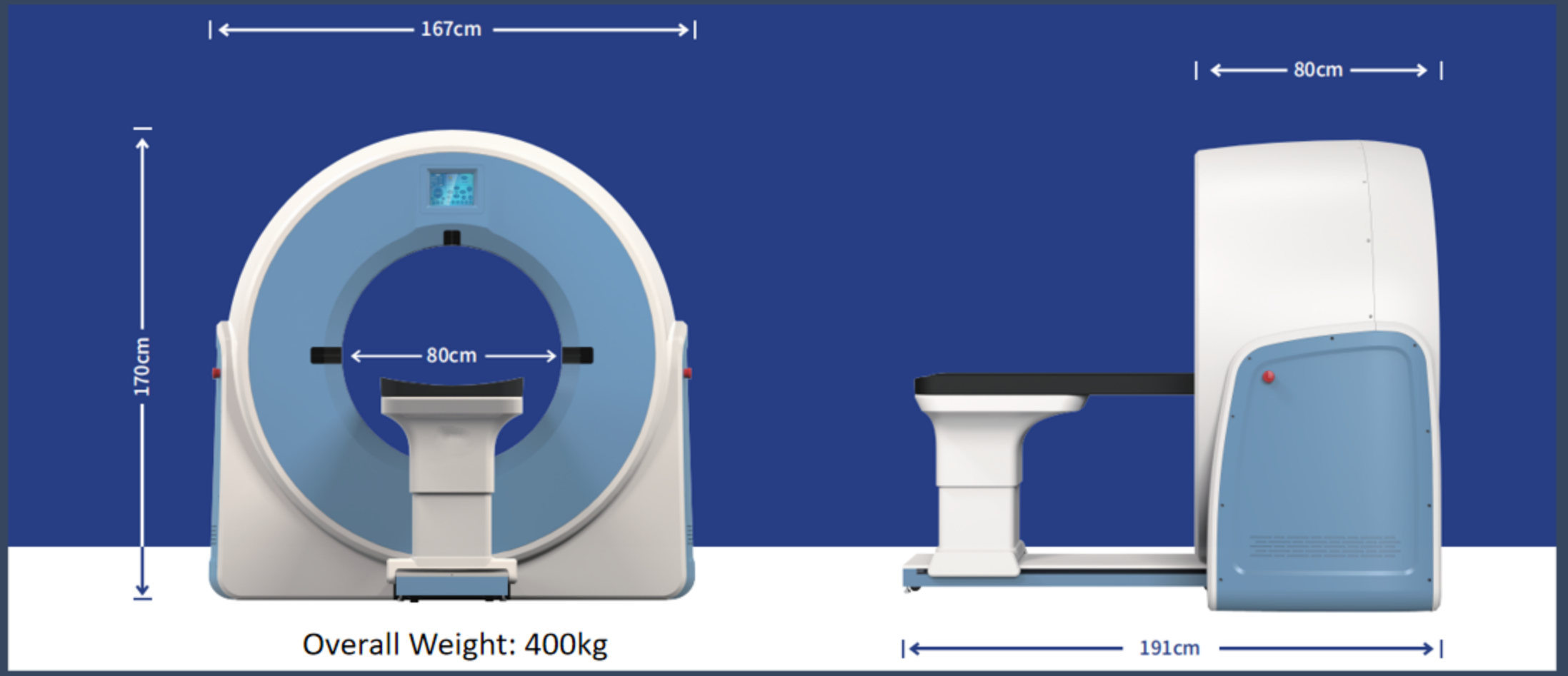
Product Introduction

1. Equipment Parameters
2. Product Features
3. Competitive Analysis
4. Imaging Effect

01

Equipment Parameters

Measurement

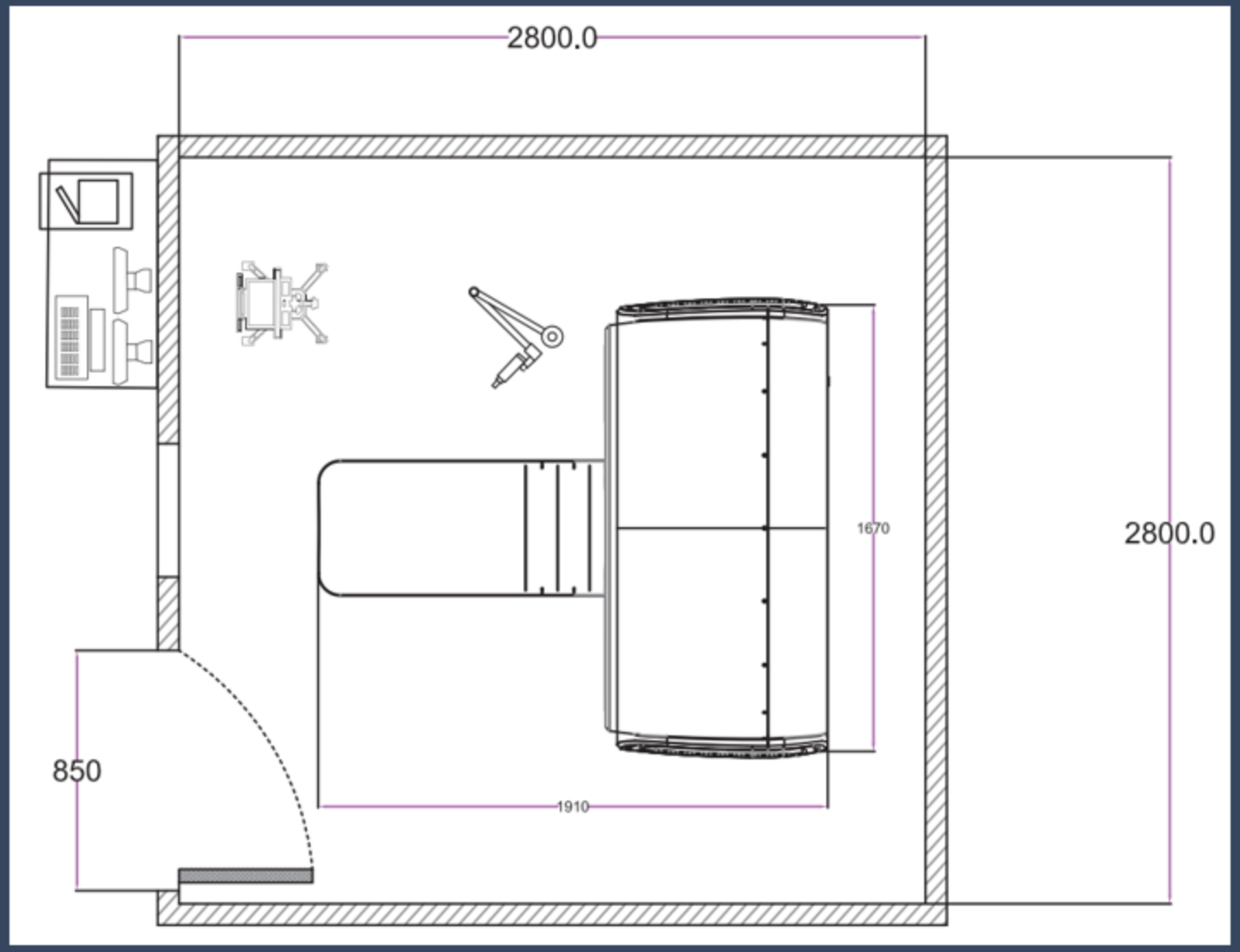


Overall Weight: 400kg



Packing Dimensions and Gross Weight:
Wooden Case 1: 180*65*110cm, Gross Weight 190kg
Wooden Case 2: 200*95*195cm, Gross Weight 580kg

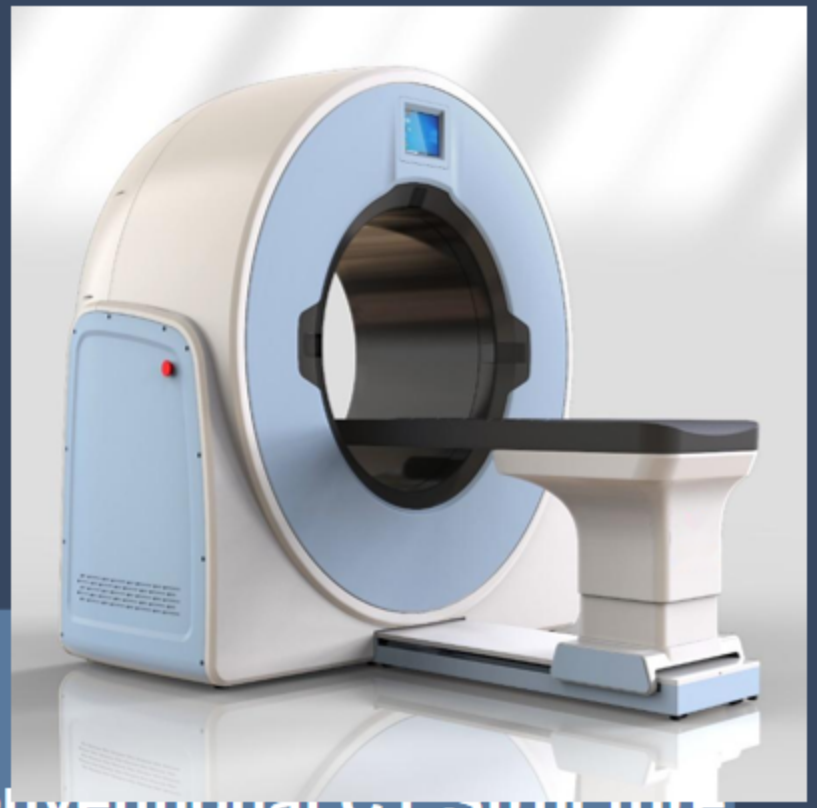
Site Planning



Feature	Specification
Voltage	Main Power Supply 220V±10%
Internal Resistance of Power Source	≤0.5Ω
Frequency	60HZ±3HZ
Power Source Capacity	15kW
Power Cord	8mm²
Lead Shielding Room	3mm Lead Equivalent
Temperature Requirements	20℃-35℃
Relative Humidit	10%-85%
Air Pressure Range	700-1060hPa

*If the mains voltage is 110V, an additional transformer needs to be equipped.

Scanning Parameters-Vetist 3



Conventional CT Structure

Integrating CT, DR, and dynamic DR in one unit, meeting all X-ray diagnostic needs for animals

Product Specifications	
Product Function	CBCT, Dynamic DR, Static DR, Dental Panoramic, DSA (upgradable)
Gantry Structure	O Type
CT Maximum Radial Field of View	Φ40cm
CT Maximum Longitudinal Field of View	72cm
CT Spatial Resolution	2.0lp/mm
Scan Aperture	≥80cm
CT Fastest Scan Time	4.5s
DR/Dynamic DR Imaging Field of View	35cm×26cm
DR/Dynamic DR Image Spatial Resolution	≥3.0lp/mm
External Dimensions	2.0m×1.7m×1.6m

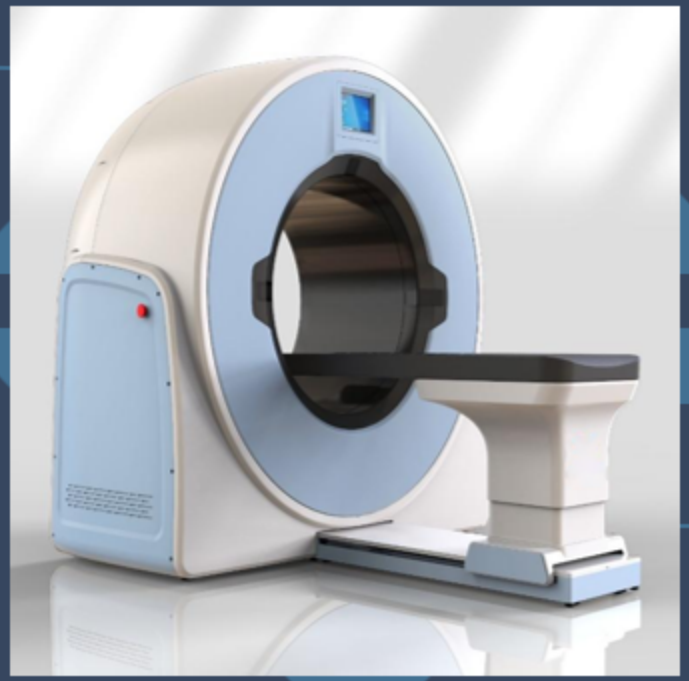
Scanning Parameters-Vetist 3

Scan Slice Thickness

Single circle with 600 slices, minimum slice thickness of 0.14mm, minimum reconstructive voxel size of 0.2mm, significantly increasing the detection rate of small lesions

Imaging Field of View

Maximum imaging diameter of 41.5cm, and maximum imaging length of 72cm



Scan Speed

Ultra-fast at 4.5 seconds, the fastest in the cone-beam CT field, leading the industry, with immediate scanning and review, enhancing the success rate of contrast capture

Scan Modes

Equipped with a variety of built-in scan modes, including high-precision scanning, ultra-fast scanning, and large field-of-view scanning

Detector Precision

Ultra-small pixel size of 0.14mm, ensuring clear imaging of fine structures

Product Advantages

Comparison between 16-Slice Spiral CT and Rayvision CBCT

Criteria	16-Slice Spiral CT	Rayvision CBCT
Image Quality	Spatial Resolution: 1.6 lp/cm Density Resolution: 3mm @ 0.3%	Spatial Resolution: 2.2lp/mm Density Resolution: 1mm@2%
Scan Aperture	60-78 cm	57.6-100cm
Overall Price	High	Less than half
Installation Time	1-2 months	1-2 days
Shielding Room Requirements	High radiation protection requirements, large space (generally 18m²), 380V Dedicated Electrical Grid	Standard DR protection, small space (7-9 m²), 16A/220V household power supply
Maintenance Cost	Very high	Less than one-third of 16-slice spiral CT
Functionality	CT only	Combination of DR, Dynamic DR, and CT

Product Advantages

1. Low Cost for Overall System
2. 15kW, 220Vac household power supply
3. Portable, Plug-and-Play
4. Low Cost for Key Components
5. Four imaging modes：
   CT, Dynamic DR, Static DR,
   Dental Panoramic, DSA (Upgradable)

Vetist 3

VS

1. High Cost for Overall System
2. Minimum 32kW, 380Vac
3. On-Site Assembly and Calibration
4. High Cost for Critical Components
5. Single CT Mode

Conventional Spiral CT

Product Advantages

1. Single Circle 600-Slice Images
2. Extra Large Imaging Field of View: 41cm
3. Imaging Speed: 4.5s, Instant Capture and Review
4. Unique Respiratory Suppression Technology, Significantly Reducing the Impact of Motion Artifacts on Images

VS

1.Up to 512-Slice Images
2. 30cm Imaging Field of View
3. Fastest Imaging Speed: 8s
4. No Respiratory Suppression Technology

Vetist 3

Competitors' CBCT

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Product Features

Function Introduction

One-click Automatic Triple-Phase Angiography

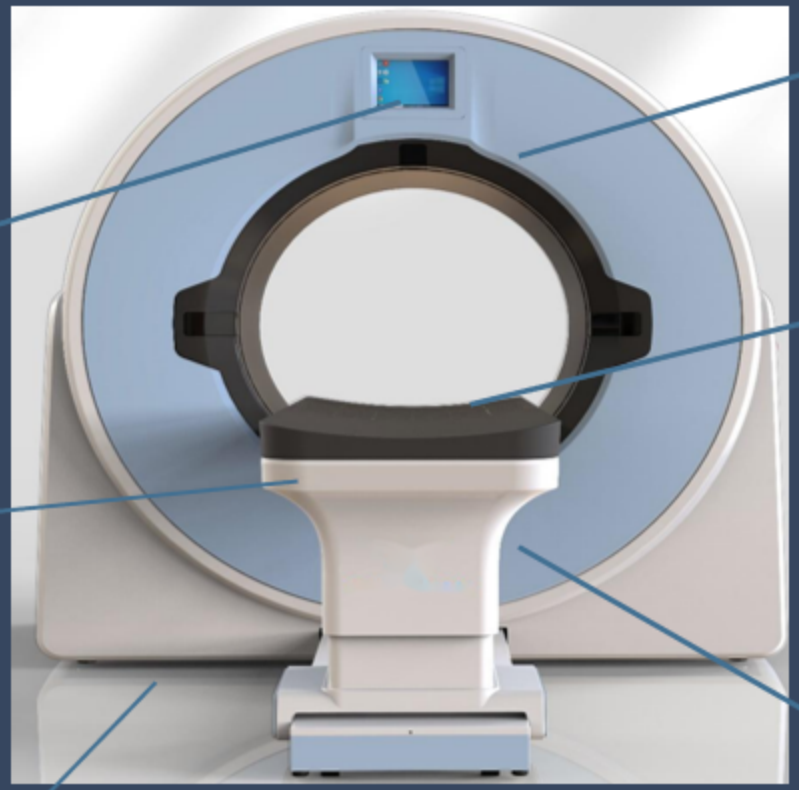
The entire series comes standard with automatic triple-phase angiography, supporting custom timing and arbitrary selection of areas for scanning and stitching.

High-precision radiotherapy-level fusion

Ensuring the safety and accuracy of whole-body multi-segment scanning

Ultra-Powerful Image Processing Tools

MaxMIP (Maximum Intensity Projection), MinMIP (Minimum Intensity Projection), multi-tissue fusion 3D rendering technology, curved planar reformation, and advanced image processing methods, etc.



Four-in-One Mode

Integrating CT, static DR, dynamic DR, and Dental Panoramic, meeting the conventional X-ray diagnostic needs for animals.

Large Aperture of 80 cm

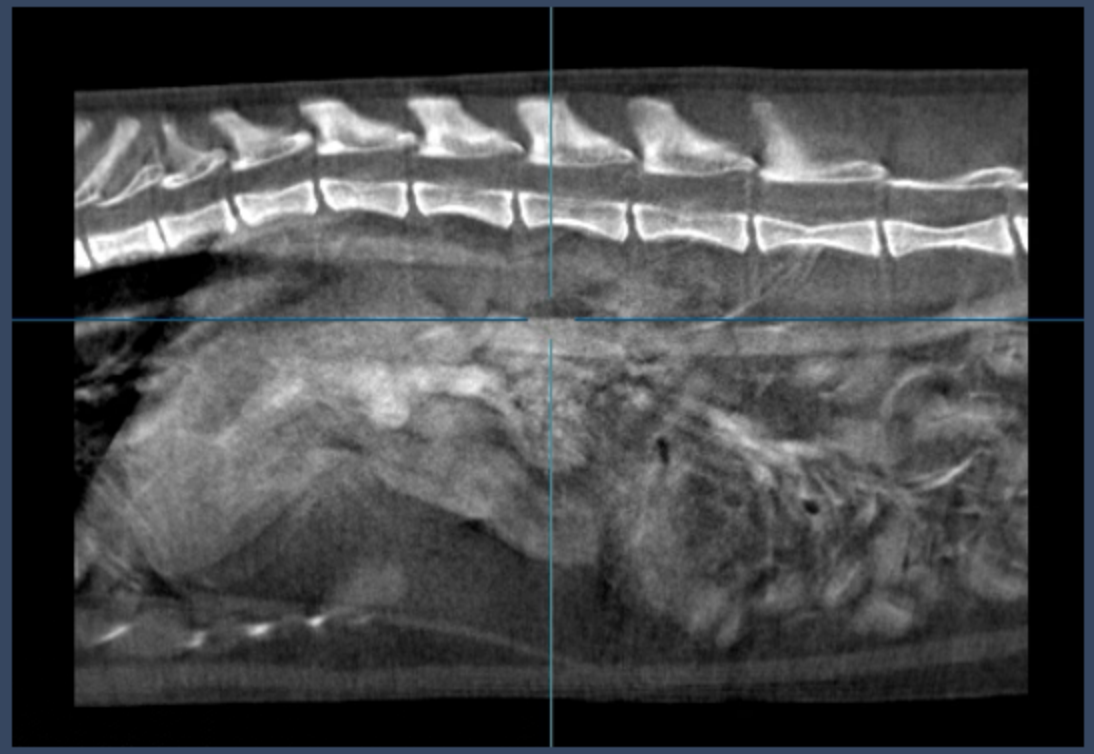
Effective imaging area: 40cm width × 72cm length

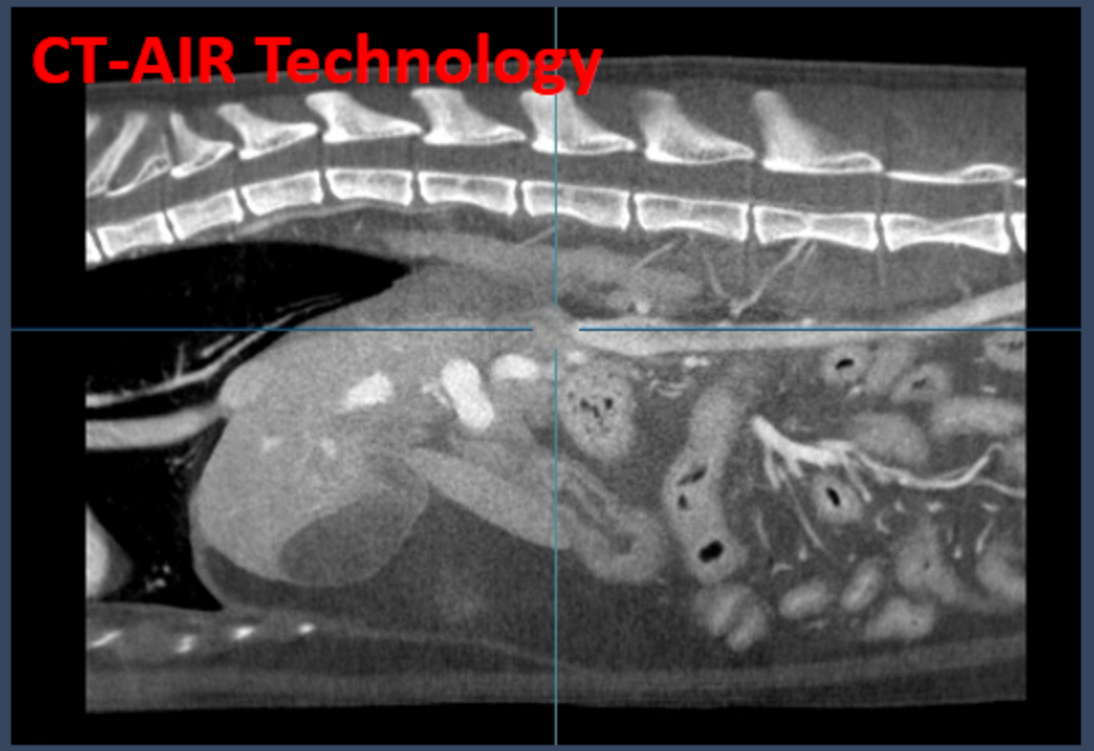
Innovative CT-AIR Respiratory Artifact Elimination Solution

- Greatly reduces motion artifacts in reconstructed images;
- No need for external respirators, clear images can be obtained by injecting propofol.

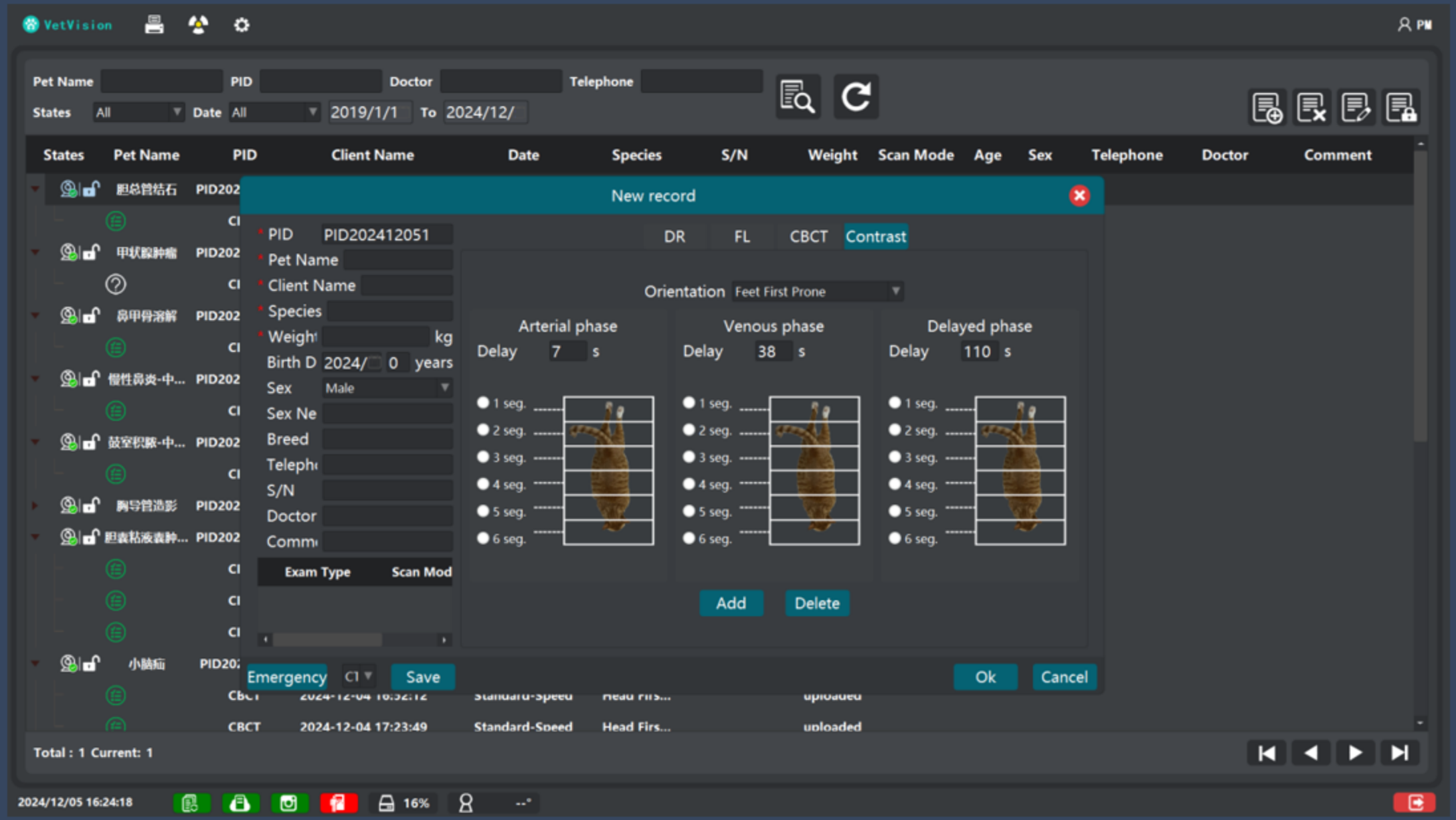
Animal Weight	0-2 kg	2-35 kg	35-70 kg
Imaging Quality	Ordinary	Superior	Quality Declining as Weight Increasing

Innovative CT-AIR Respiratory Artifact Elimination Solution

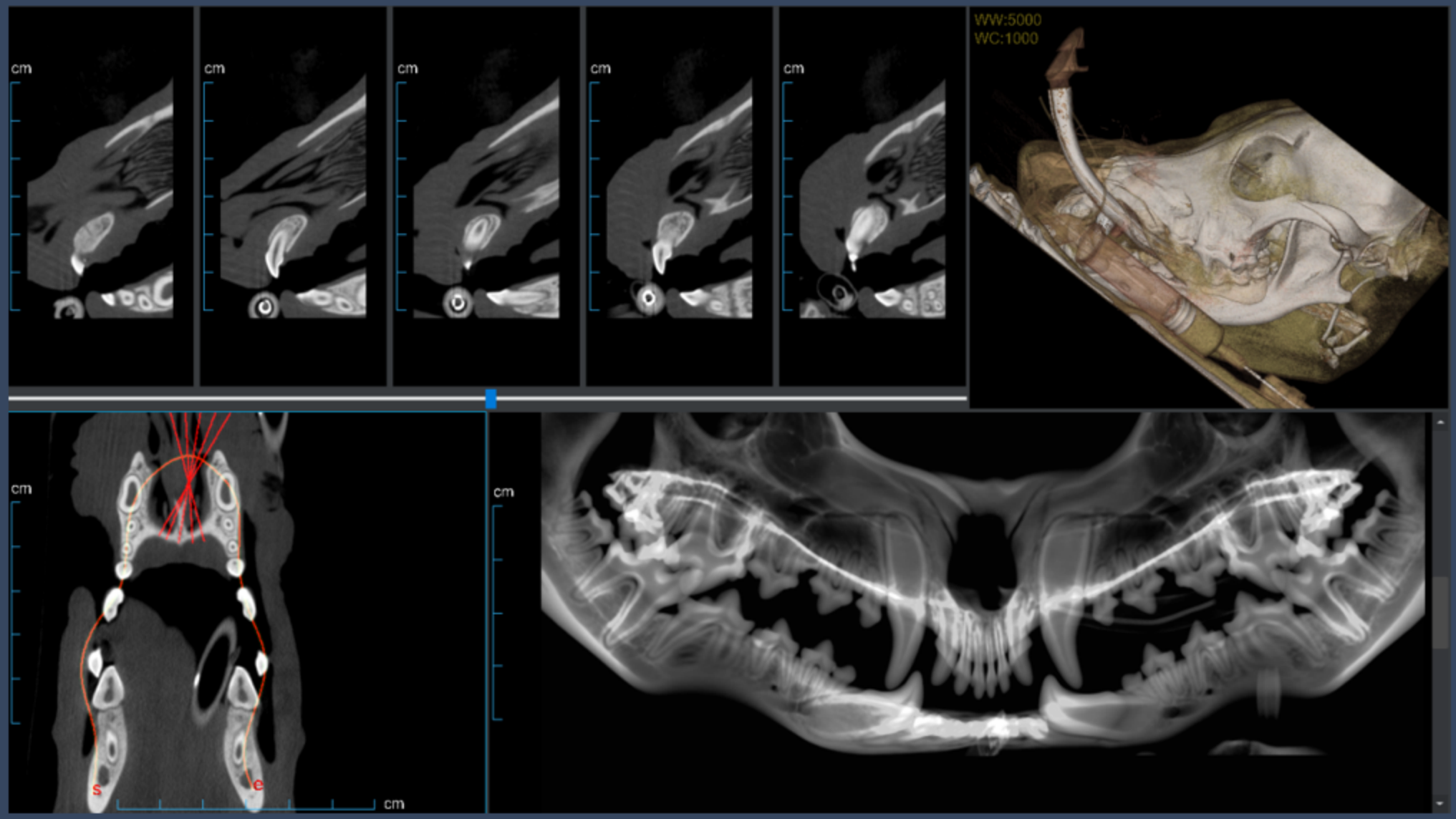




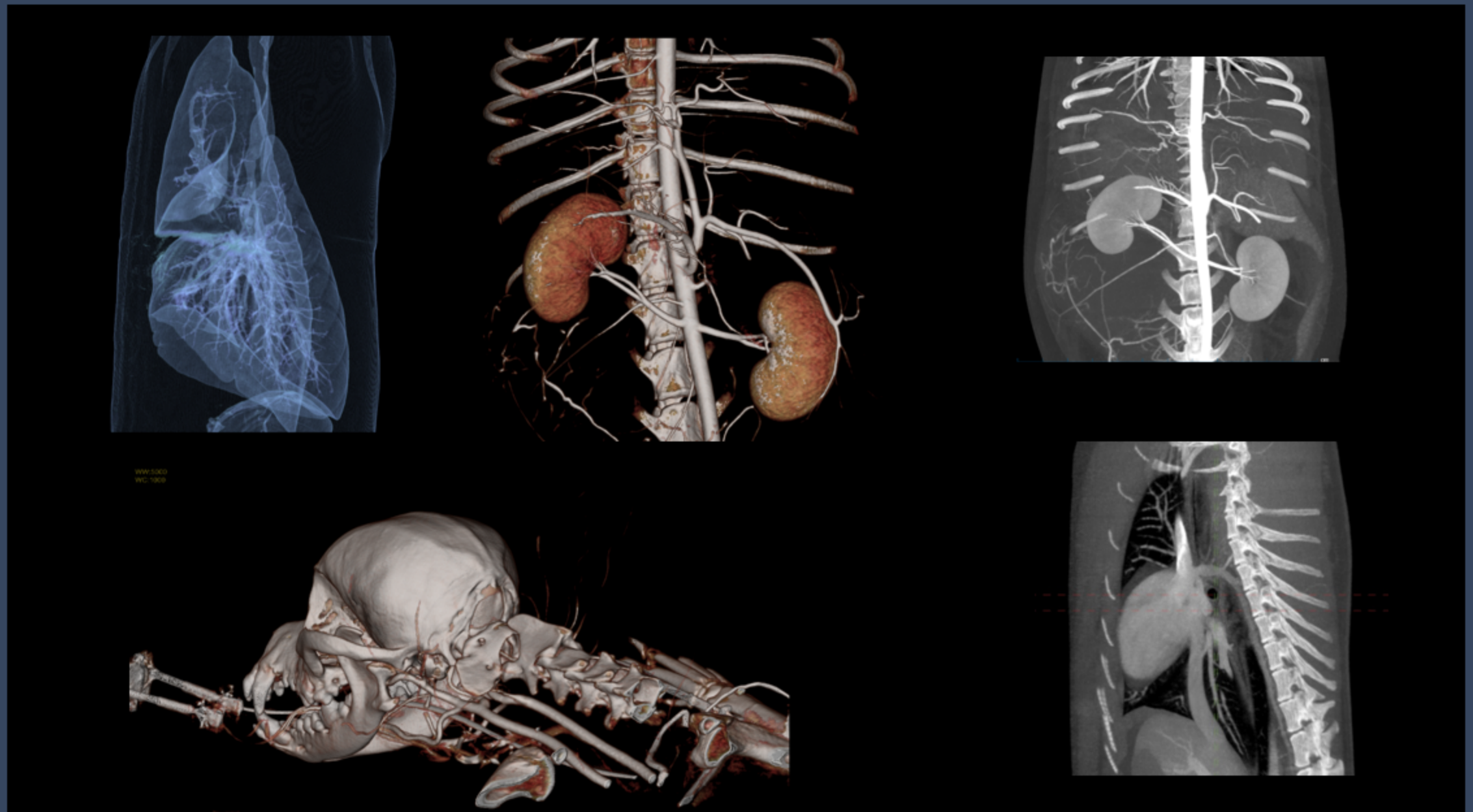
One-click Automatic Triple-Phase Angiography



Curved Planar Reformation (CPR) Technology



Powerful MIP (Maximum Intensity Projection) Capabilities and 3D Rendering



Performance Parameters

Product Function	CT, Dynamic DR, Static DR, Dental Panoramic, DSA (upgradeable)	
Gantry System	Gantry Structure	O Type
	Overall Dimensions	200 cm × 170 cm × 160 cm
	Bore	80 cm
	Nominal Power	15 kW
	Input Power	220 V AC, 50/60 Hz
	3D Laser Positioning System	Equipped
Scan Table System	Horizontal Movement Range	720 mm
	Vertical Movement Range	280mm
Scanning Parameters	CT Scan Layers	600
	Maximum CT Scan Width	40 cm
	Maximum CT Scan Length	72 cm
	CT Spatial Resolution	2.0lp/mm
	CT Scan Time	4.5s/8.5s/20s
	DR Effective Imaging Field of View (FOV)	35 cm X 26 cm
	DR Spatial Resolution	≥3.0lp/mm

Image Acquisition Software	Ultra-fast Scanning Function	Available
	Optimal Dose Control Function	Available
	Angiography Tracking Function	Available
	CT-AIR Respiratory Depression Function	Available
High Voltage and X-Ray System	Tube Anode Heat Capacity	150kj (200kHu)
	Small Focus Size	≤0.3mm²
	Large Focus Size	≤0.6mm²
Clinical Application Software	Multi-Planar Reformatting (MPR)	Available
	Multi-Planar Volume Reconstruction (MPVR)	Available
	2D Software Toolkit	Available
	3D Software Toolkit	Available
	Automatic Triphasic Angiography Function	Available
	Panoramic Simulation Toolkit	Available
	Report Printing Feature	Available
	DICOM Image Storage Feature	Available

03

Competitive Analysis

Competitive Product Analysis: Scanning Parameters

	Vetist 3	Vetease 3	Competitor
➢ **Animal Weight**	35kg	35kg	25kg
➢ **Scan Time**	4.5s	12s	8s
Imaging Length	72cm	72cm	15 cm, spliced to 80 cm (with extremely poor splicing precision)
➢ **Imaging Diameter**	10cm/24cm/42cm	24cm/42cm	30cm
Pixel Precision	0.14mm/0.28mm	0.28mm/0.42mm	0.278mm/0.417mm
➢ **Reconstruction Layers**	600	600	512
➢ **Reconstruction Layer Thickness**	Minimum 0.14mm	Minimum 0.14mm	Minimum 0.2mm
➢ **Three-phase Contrast Imaging**	Available	Available (with a weak arterial phase)	Available (with a weak arterial phase)

1. The scan time of Vetist 3 is the fastest in the industry, and it has more advantages in capturing the three-phase contrast imaging.
2. Vetist 3 can perform splicing at any position through the segments of the bed board. The splicing precision of the Rayvision series is 0.5 mm. Other products either have no splicing function or only support splicing at the initial position. For animals of different lengths, it is impossible to determine the accurate scanning range.
3. Vetist 3 has multiple field-of-view scanning modes, which can be applied to different clinical scenarios. The maximum field of view is 42 cm, and it can be used for imaging animals weighing up to 35 kg.
   Other products only have a single field of view and support imaging animals within 30 kg.
4. Vetist 3 can scan 600 layers of images in a single circle with a layer thickness of 0.14 mm.
   Other manufacturers can only scan 512 layers in a single circle with a layer thickness of 0.2 mm. Vetist 3 has a higher Z-axis resolution.
5. The detector of Vetist 3 has high precision, resulting in better imaging quality and more excellent detailed imaging.
6. From the analysis of the technical indicators of the detector, the image quality of other manufacturers only reaches the level of Vetease 3.

Competitive Product Analysis: Scanning Parameters

	Vetist 3	Vetease 3	Competitor
MinMIP	Available √	Available √	Unavailable X
MaxMIP	Available √	Available √	Unavailable X
MeanMIP	Available √	Available √	Unavailable X
Multi-tissue Hybrid Rendering	Available √	Available √	Single tissue
Scalpel instruments	Available √	Available √	Unavailable X
Advanced Imaging Functions	Available √	Available √	Unavailable X
CT-AIR Mode	Available √	Available √	Unavailable X
Scan Mode	High precision, extremely fast speed and large field of view	Fast and with a large field of view	Single mode (30 cm)
Splicing Function	Six-segment splicing, with a total length of 72 cm	Four-segment splicing, with a total length of 72 cm.	No segmentation, Only determining the initial position, Not supporting custom scanning range, Poor splicing precision

1. The Rayvision series comes with the MIP (Maximum Intensity Projection) function as a standard feature. Our software allows users to directly utilize these functions for film reading and diagnosis.
   In contrast, other manufacturers need to export DICOM files and then use third-party tools for film reading.
2. The Rayvision series is also equipped with advanced imaging functions as standard, including bone processing, soft tissue processing, image refinement processing, bed plate removal, metal artifact correction and other advanced functions.
   Other manufacturers do not have such capabilities and thus are unable to carry out personalized optimization of images.
3. In terms of the splicing function, the Rayvision series supports customizing the scanning area. It adopts the standards of radiotherapy for equipment debugging, with a splicing precision of 0.5 mm, leaving basically no splicing marks.
   However, the splicing algorithms of other manufacturers have poor effects, low splicing precision and are unable to customize the scanning range.
4. The entire Rui series is equipped with the CT - AIR function as a standard. It can greatly reduce motion artifacts without the use of anesthesia and

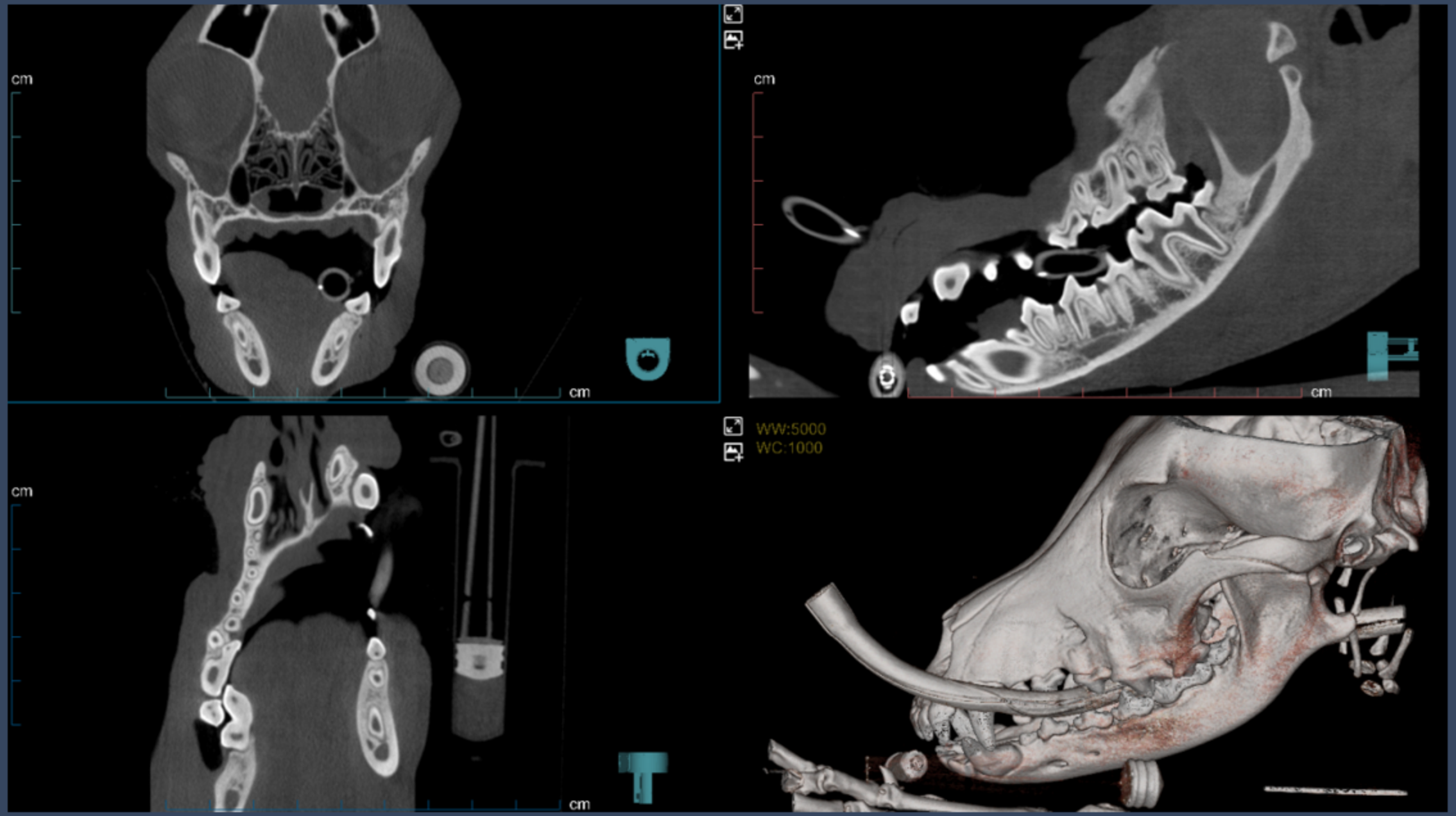
04

Imaging Effect

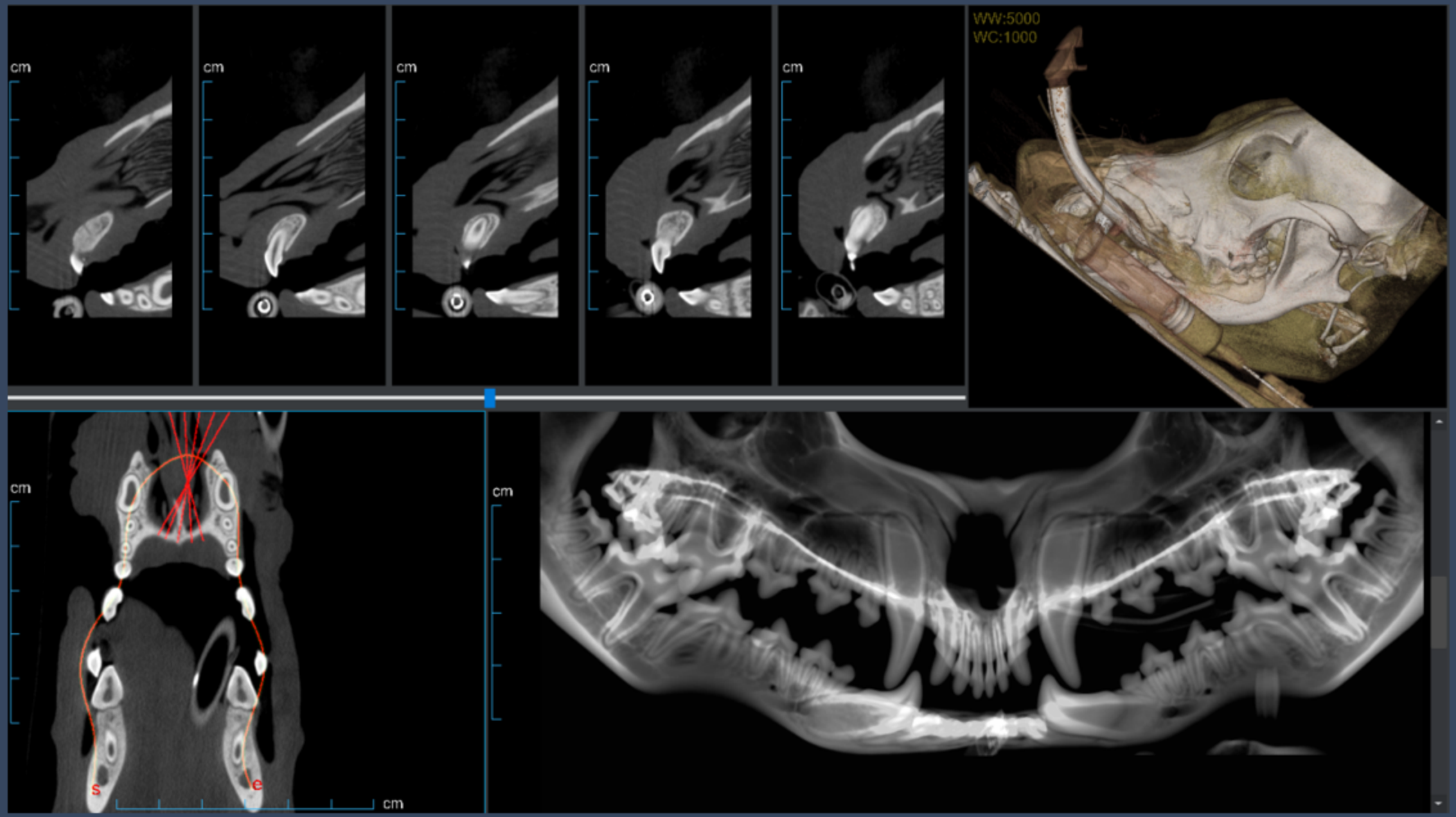
Clinical Application Range

Part	Case
Head and Neck	Hydrocephalus, Brain Herniation, Rhinitis, Otitis, Middle Ear Effusion, Nasopharyngeal Stenosis, Tracheal Stenosis, etc.
Dental	Periodontitis, Periapical Abscess, Alveolar Bone Atrophy, Oroantral Fistula, Dental Bone Resorption, etc.
Thorax	Lung Abscess, Pulmonary Nodule, Compensatory Emphysema, Pneumonia, etc.
Abdomen	Abdominal Wall Hernia, Gallbladder Hydrops Cyst, Urography, Nephrogram, Bile Duct Stones, Enteritis, Renal Infarction, etc.
Vascular	Triphasic Abdominal Angiography, Extrahepatic Portosystemic Shunt, Persistent Right Aortic Arch, Vascular Malformation, etc.
Spine	Spinal Angiography, Disc Herniation Type II, Spondylosis, Ankylosing Spondylitis, Thoracic Vertebral Dysplasia, etc.
Oncology	Thyroid Tumors, Nasal Cavity Tumors, Ovarian Tumors, Renal Tumors, Pulmonary Masses, etc.
Other	Arthritis, Thoracic Duct Angiography, Periosteal Sclerosis, etc.

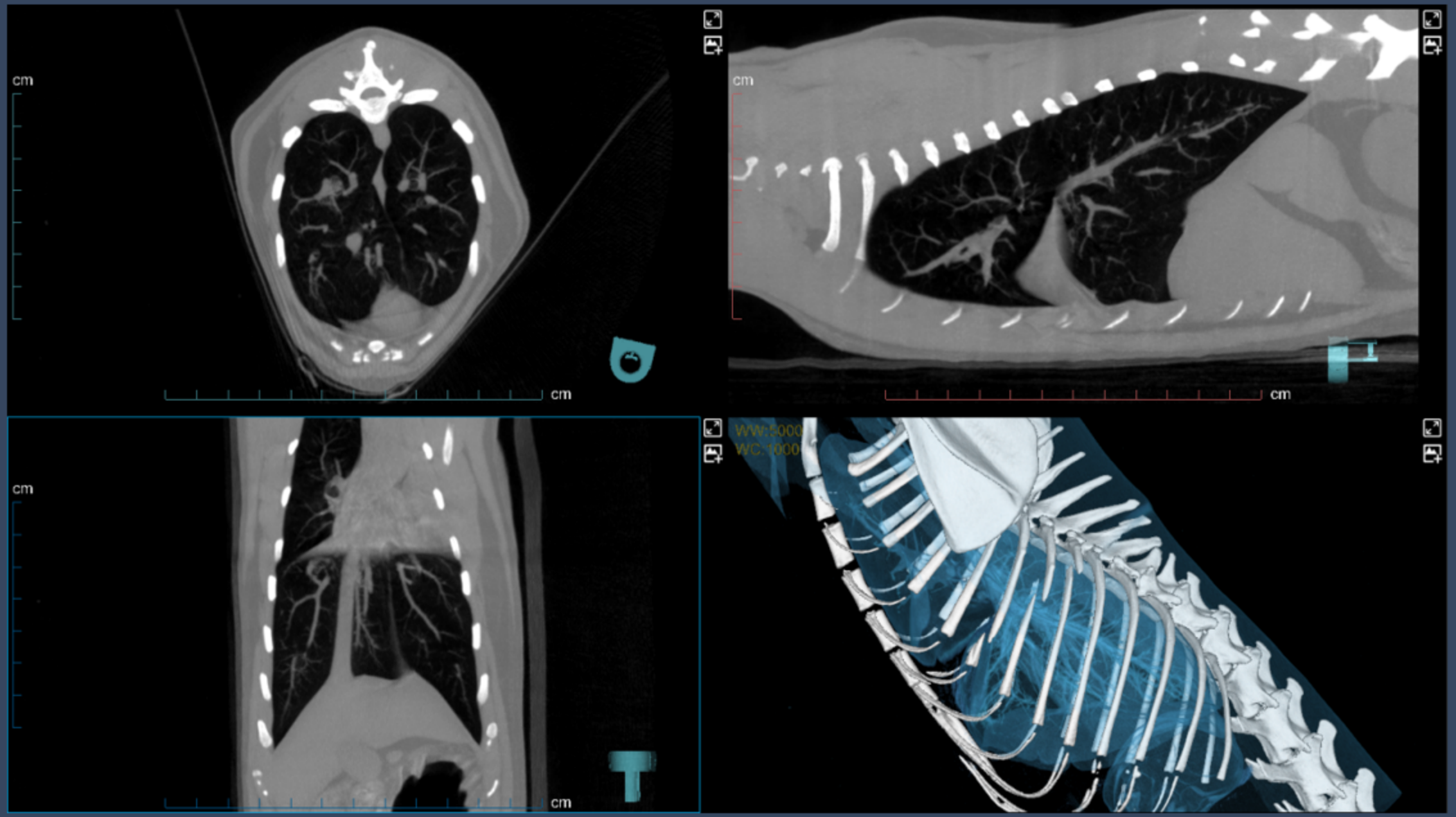
Dental Imaging



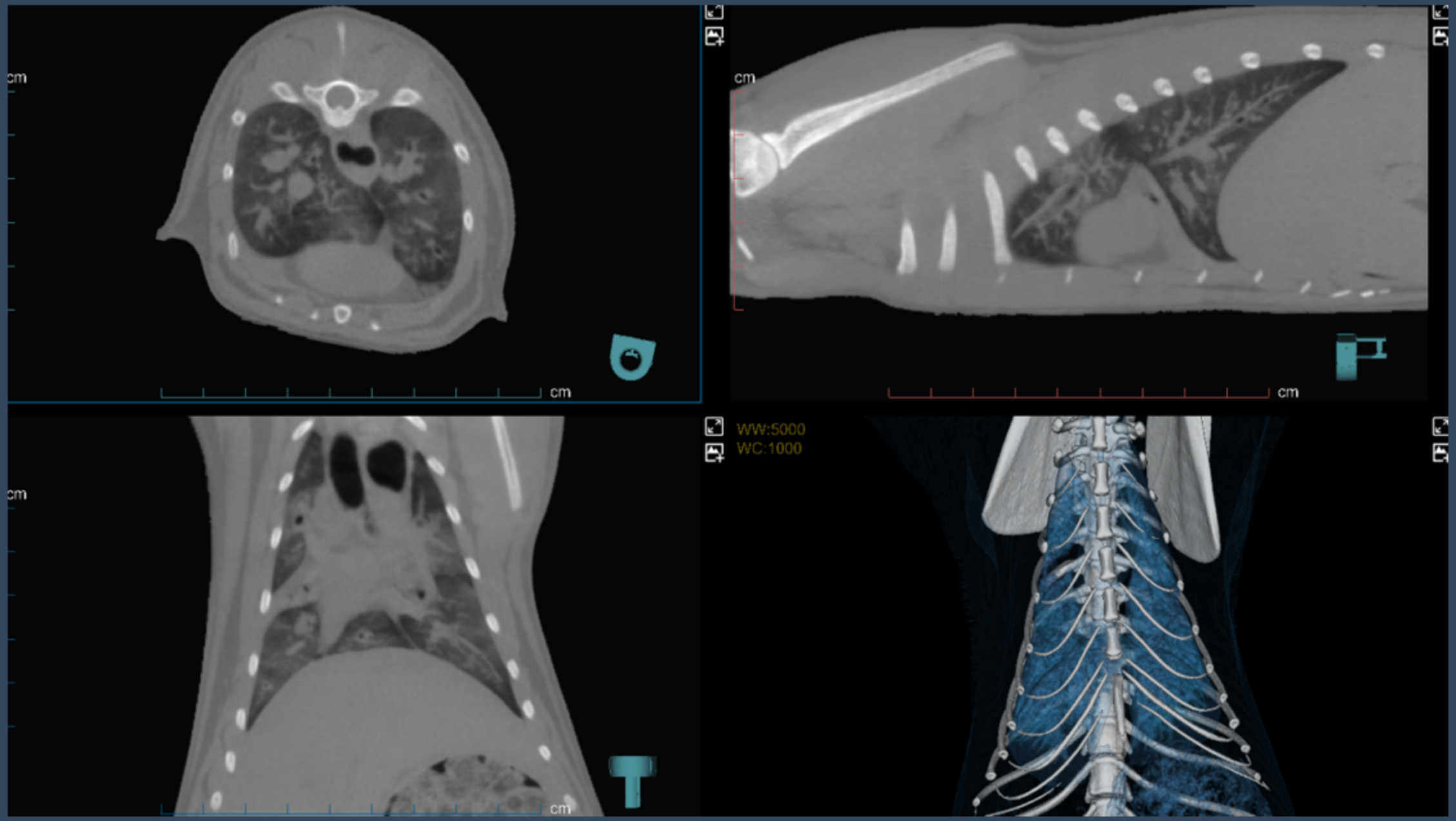
Dental Imaging-Panoramic



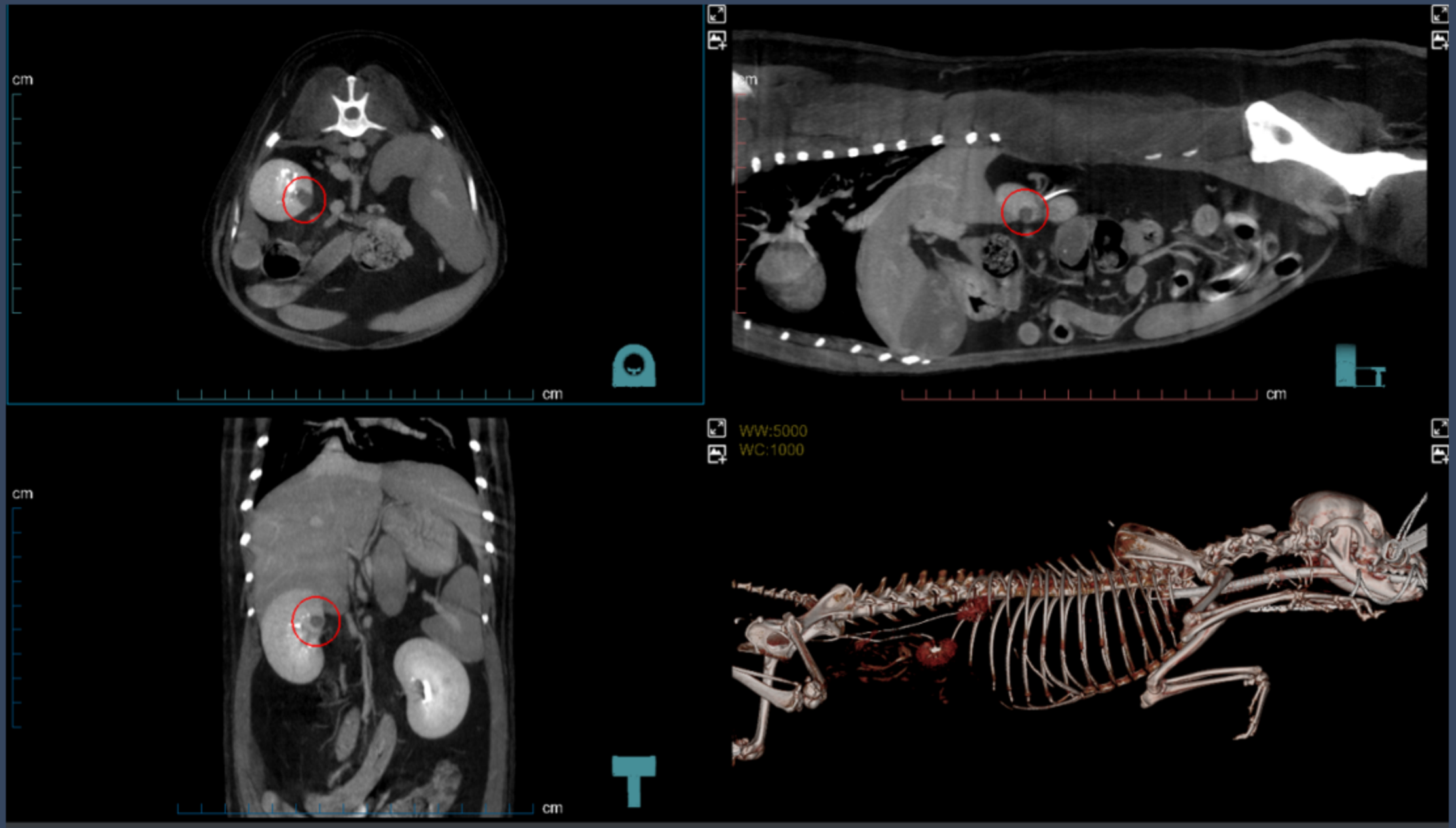
Compensatory Emphysema



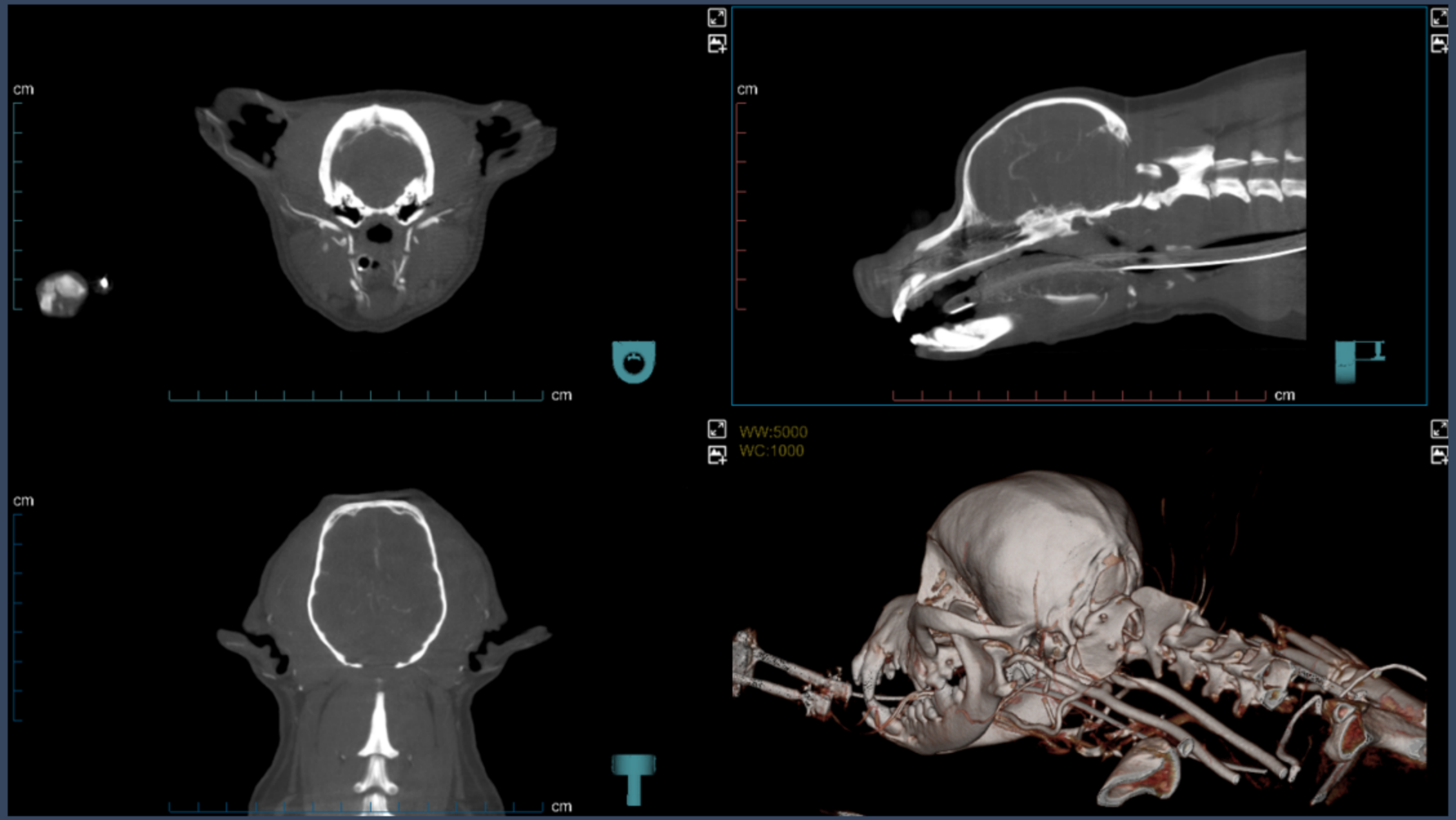
Lung Inflammation



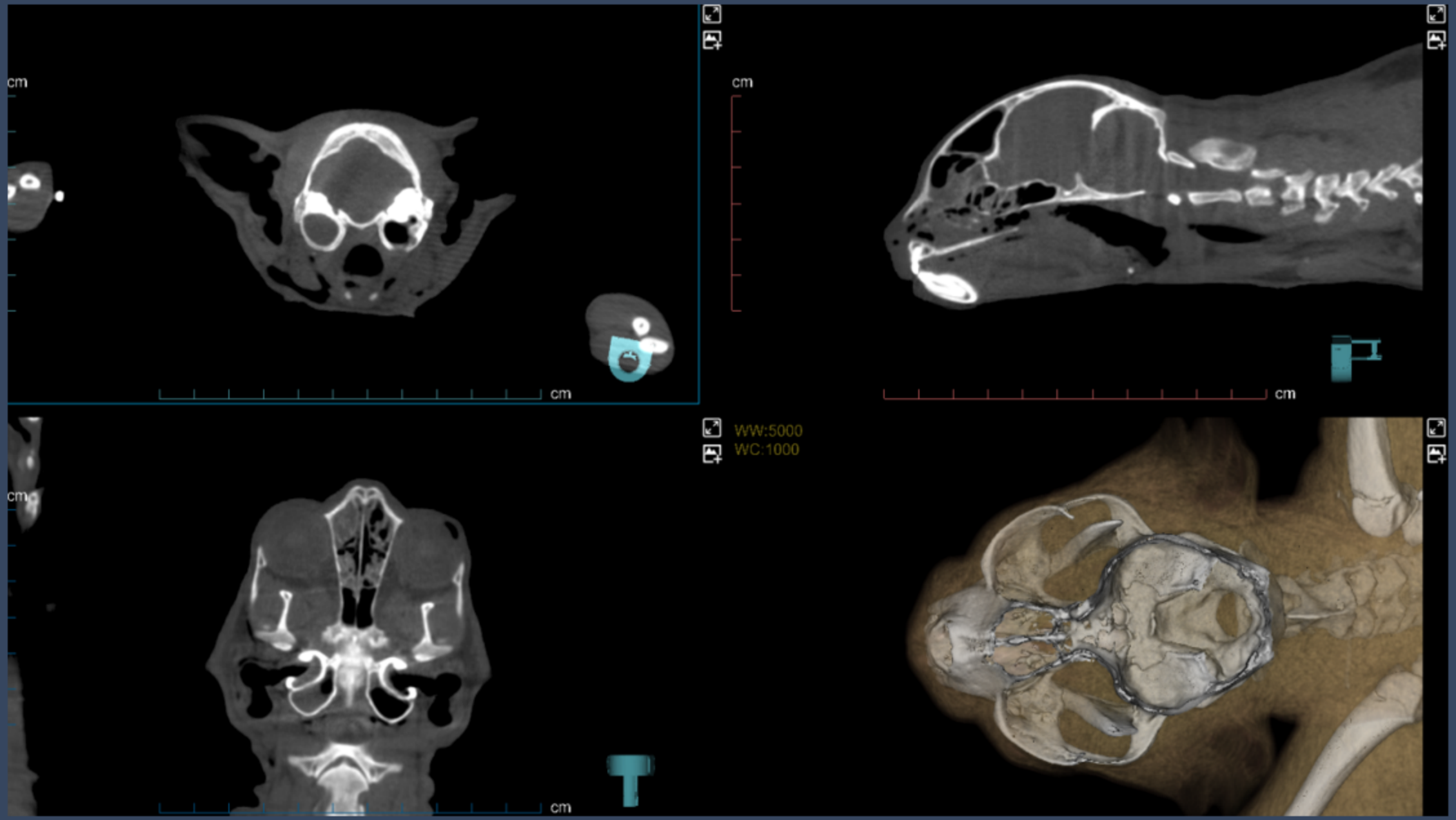
Renal Local Infarction



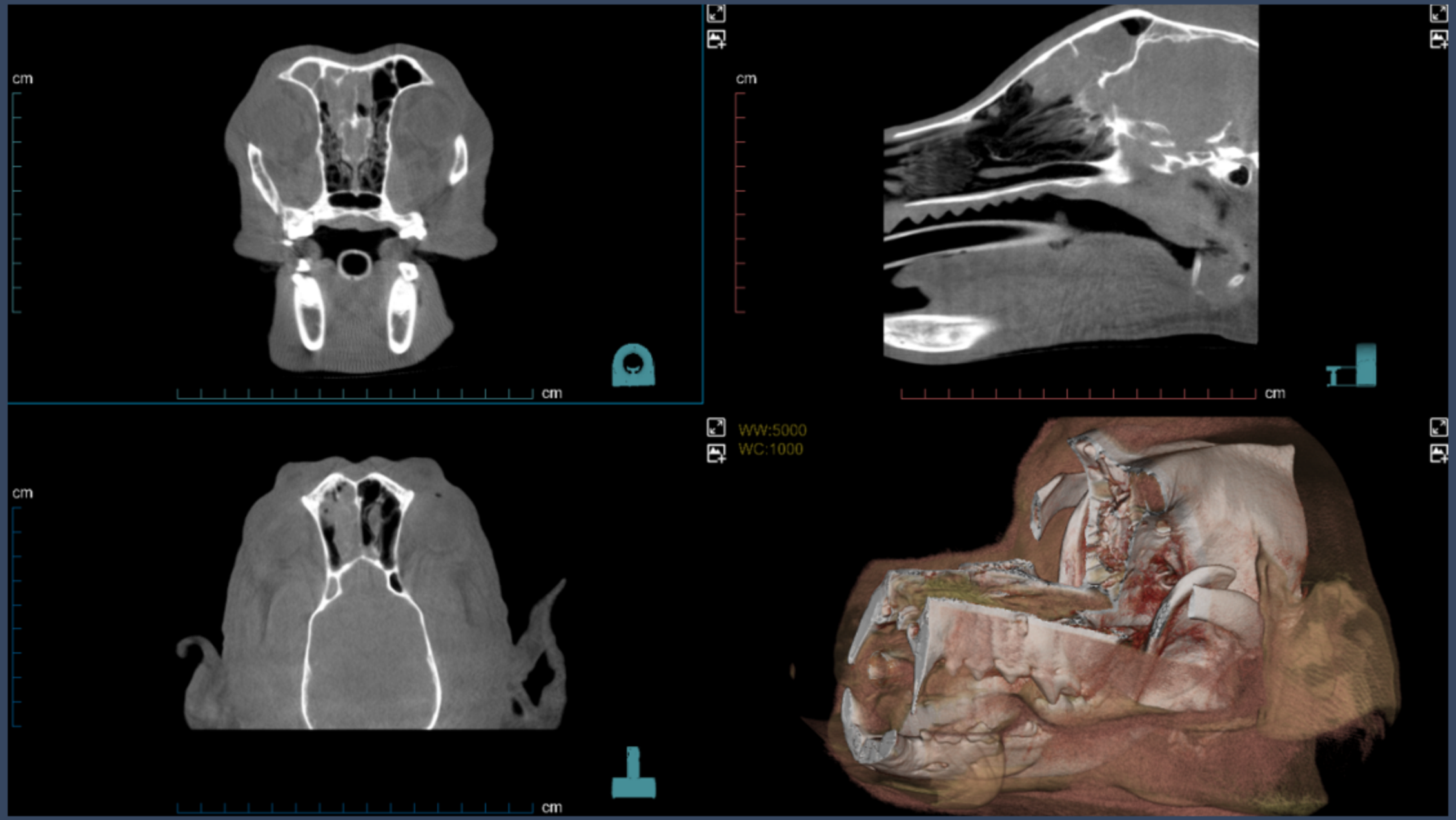
Occipital Bone Dysplasia - Brain Herniation



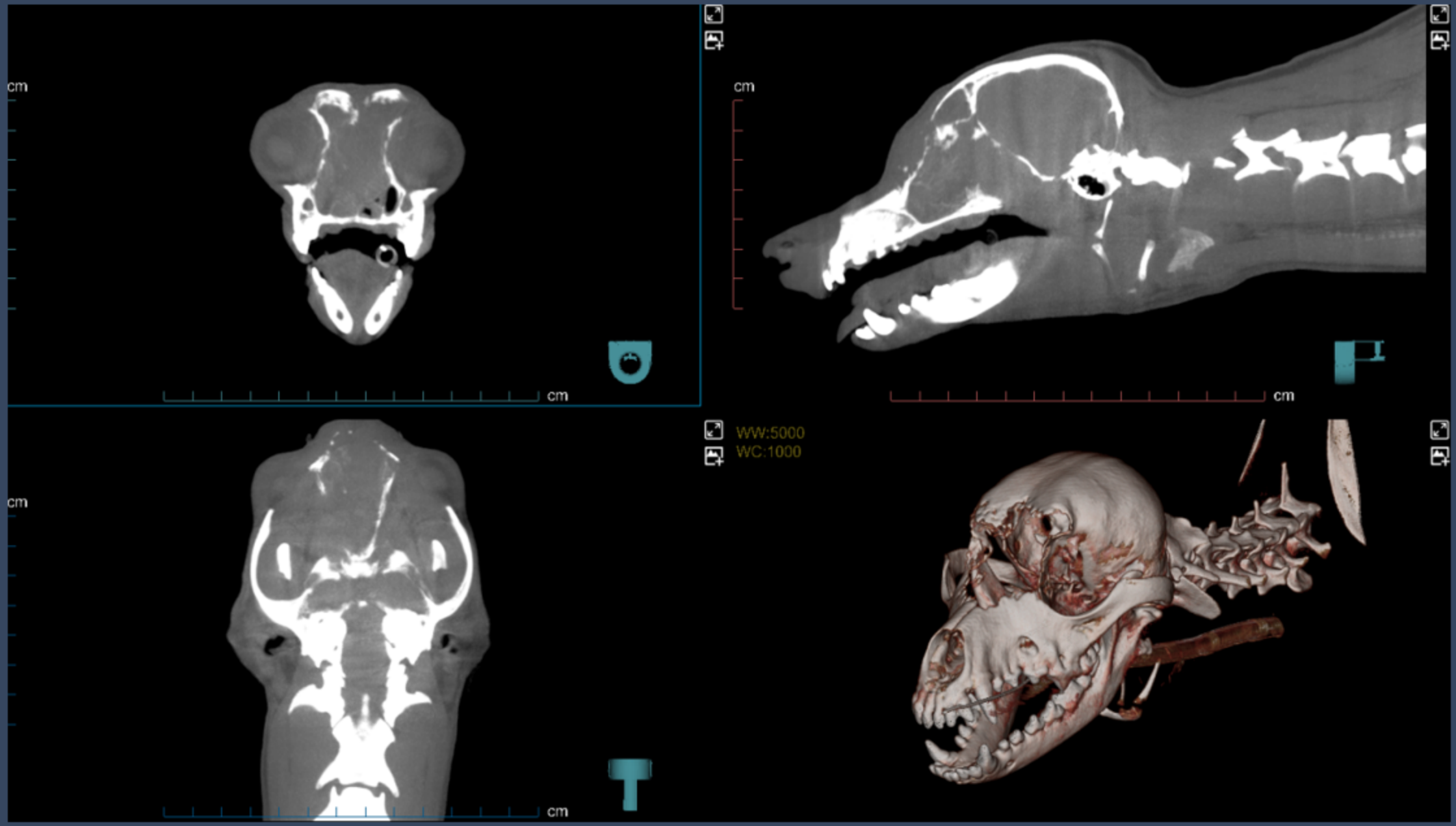
Empyema of the Tympanic Cavity



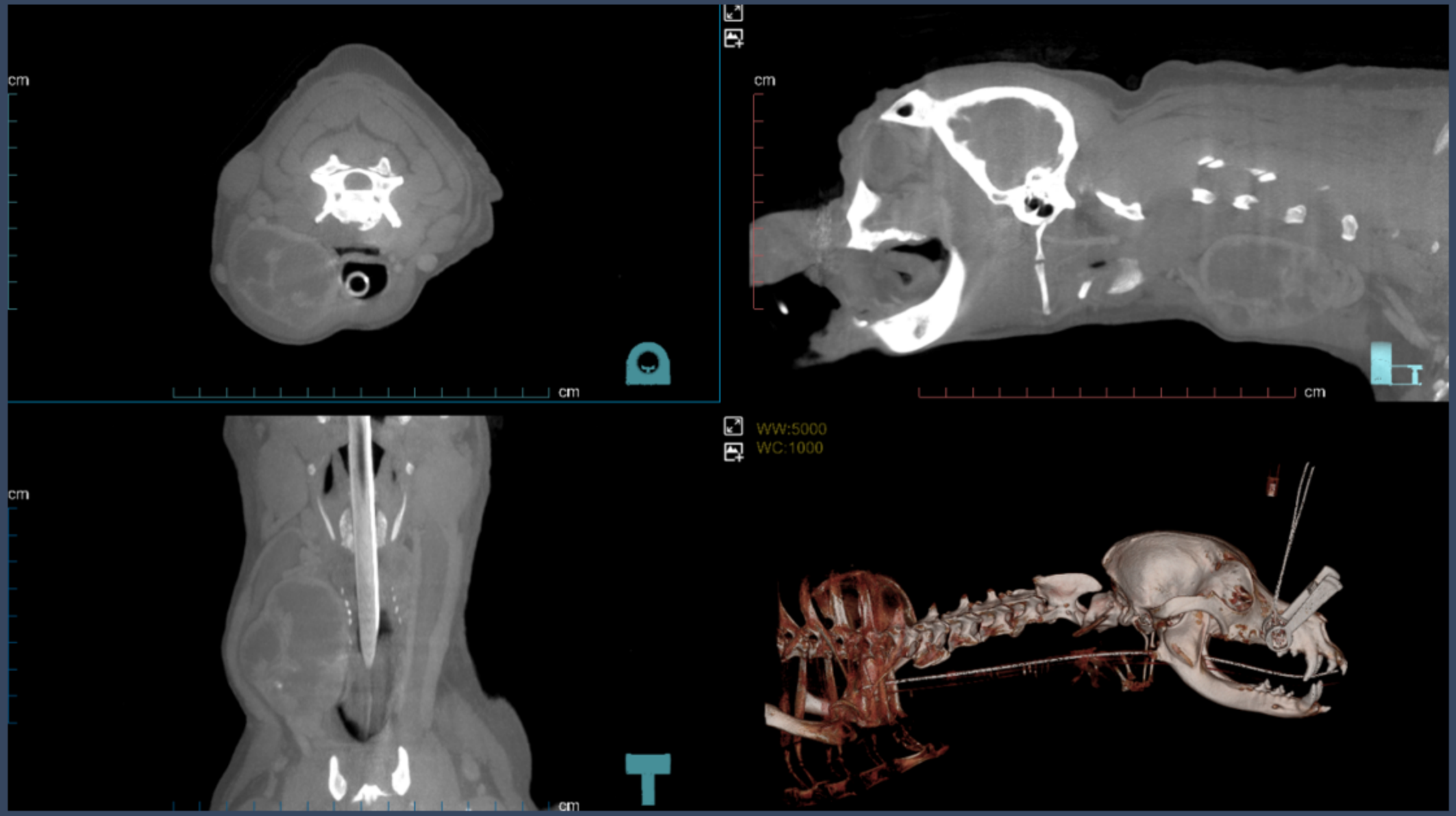
Chronic Rhinitis



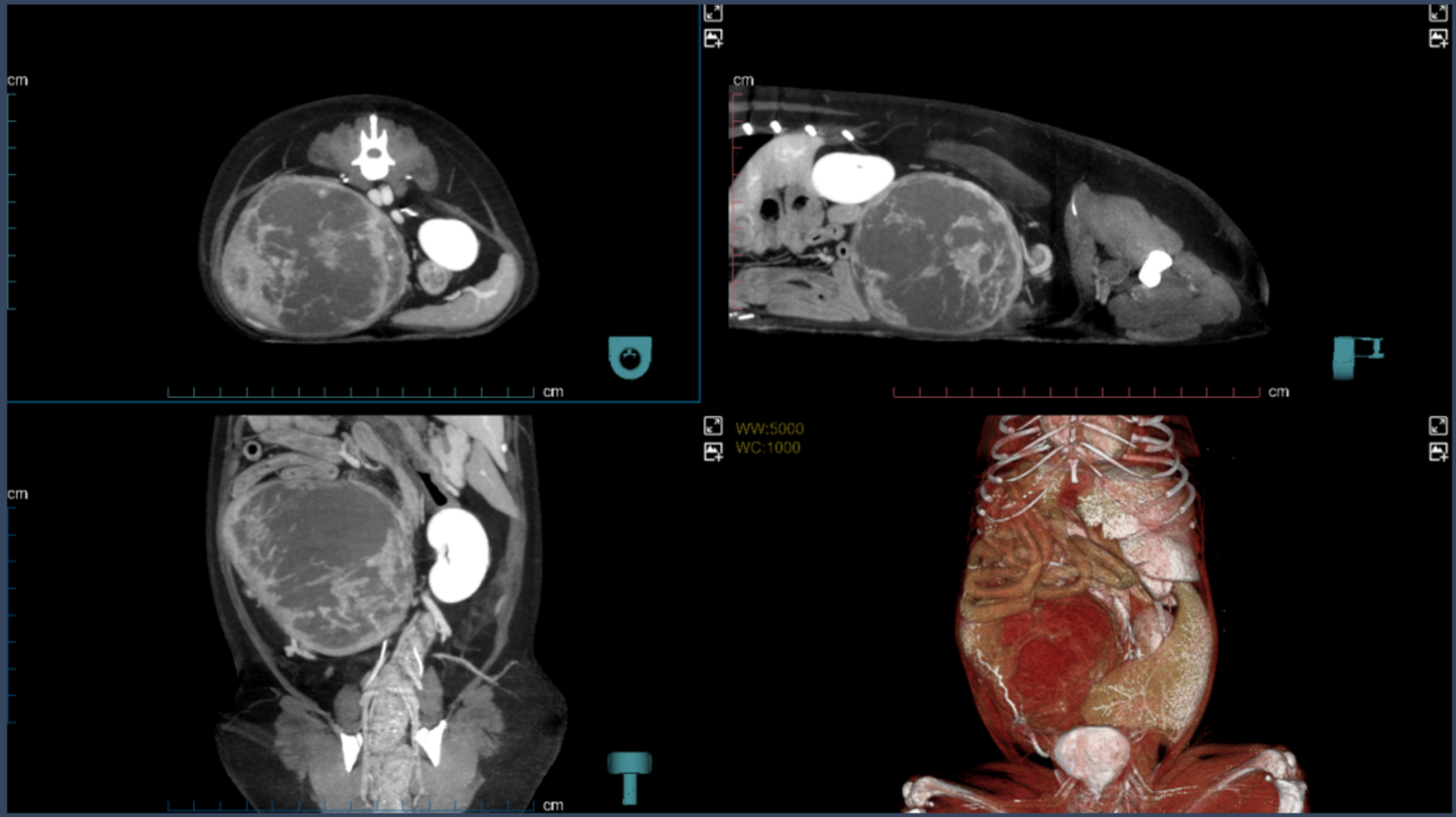
Turbinates Osteolysis



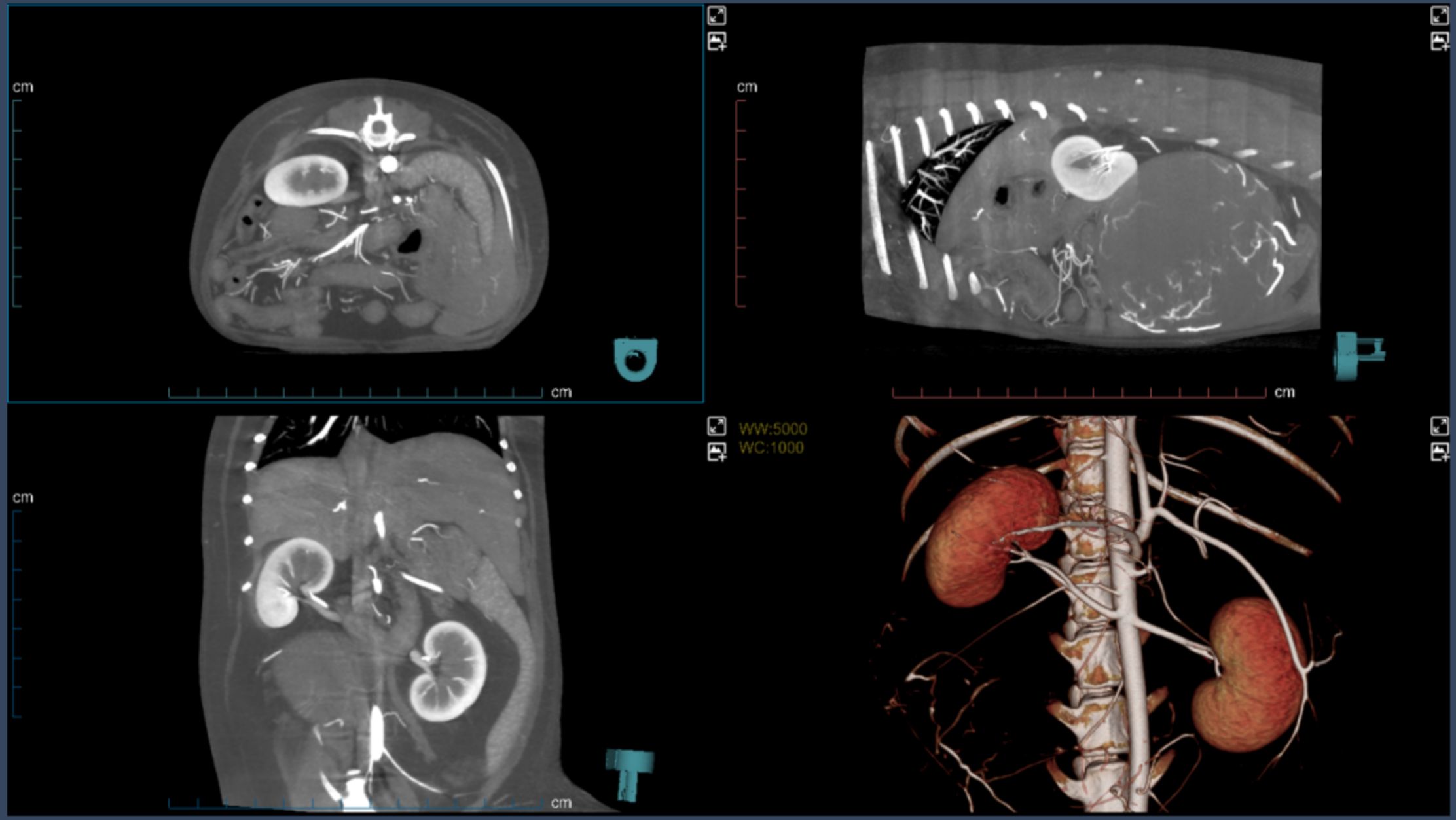
Thyroid Tumor



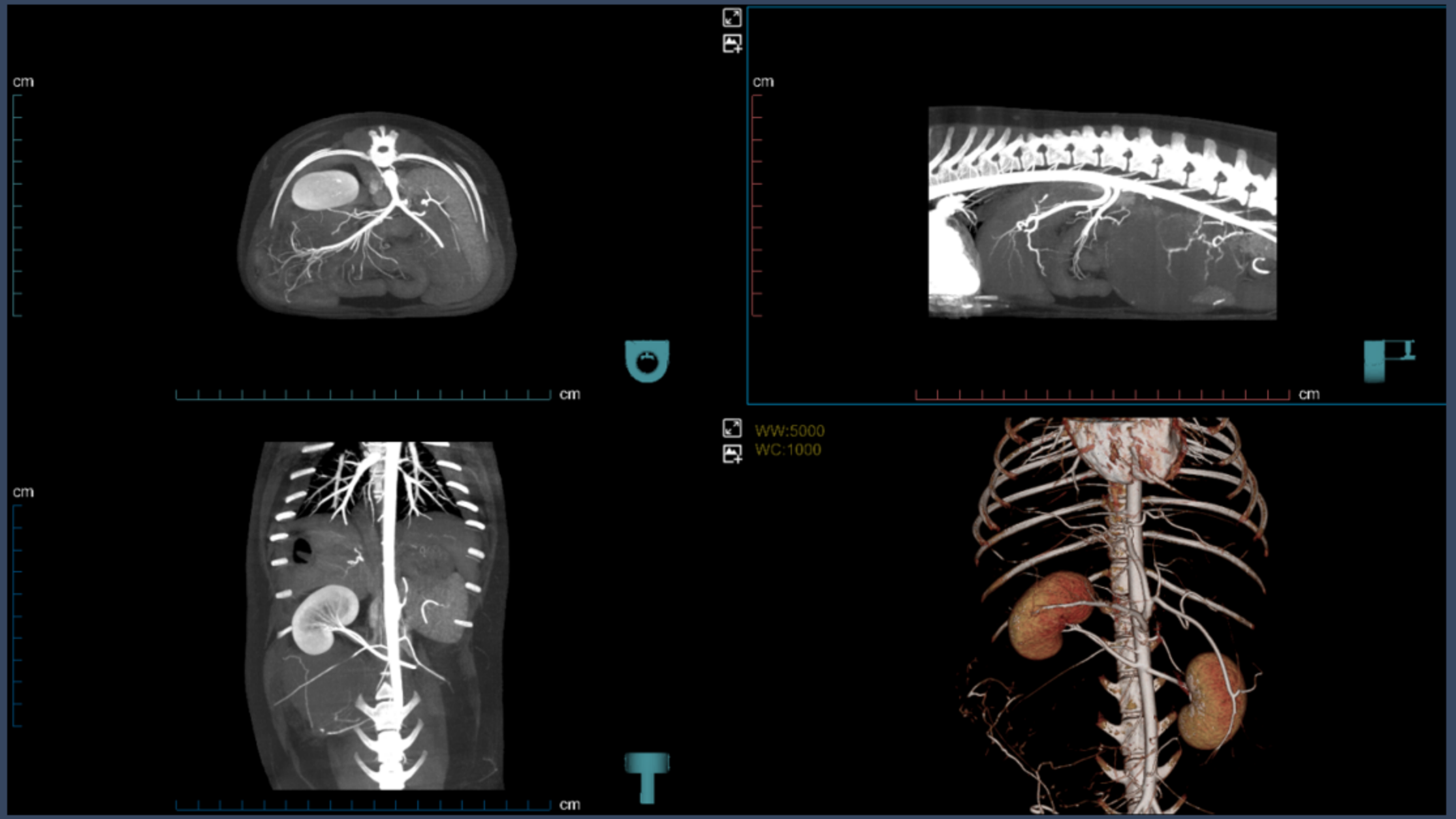
Uterine Fibroids



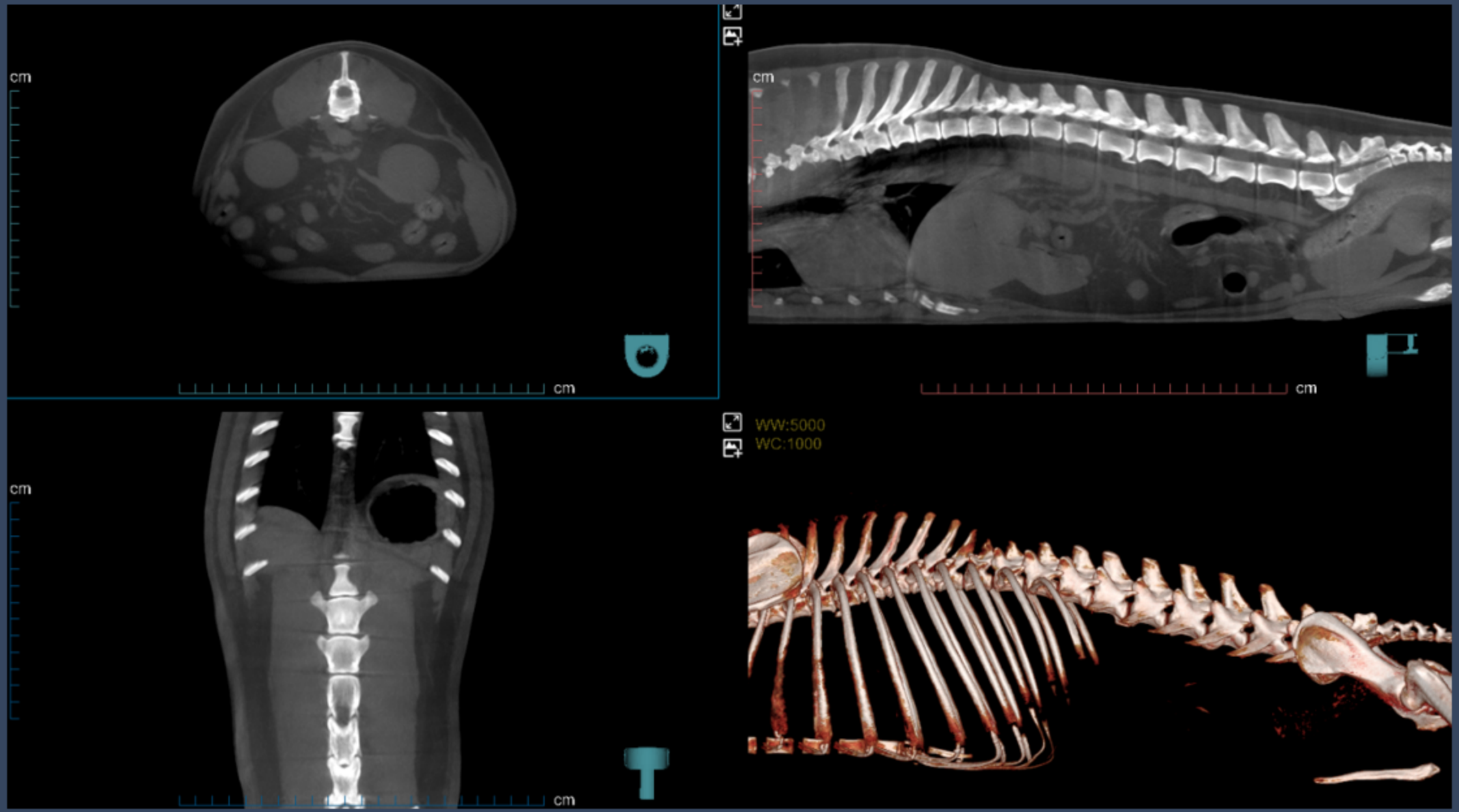
Nephrography



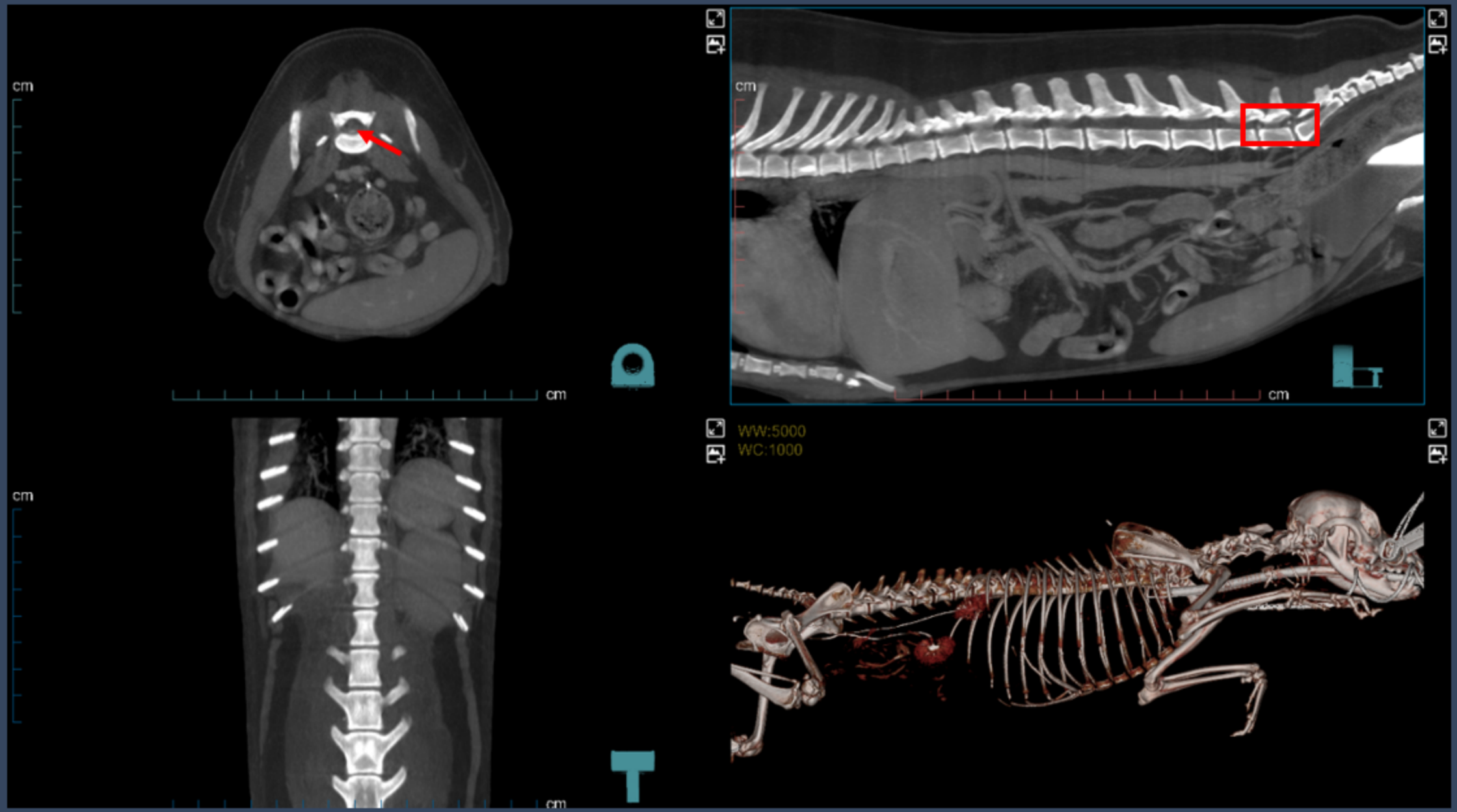
Maximum Intensity Projection (MIP) of Blood Vessels



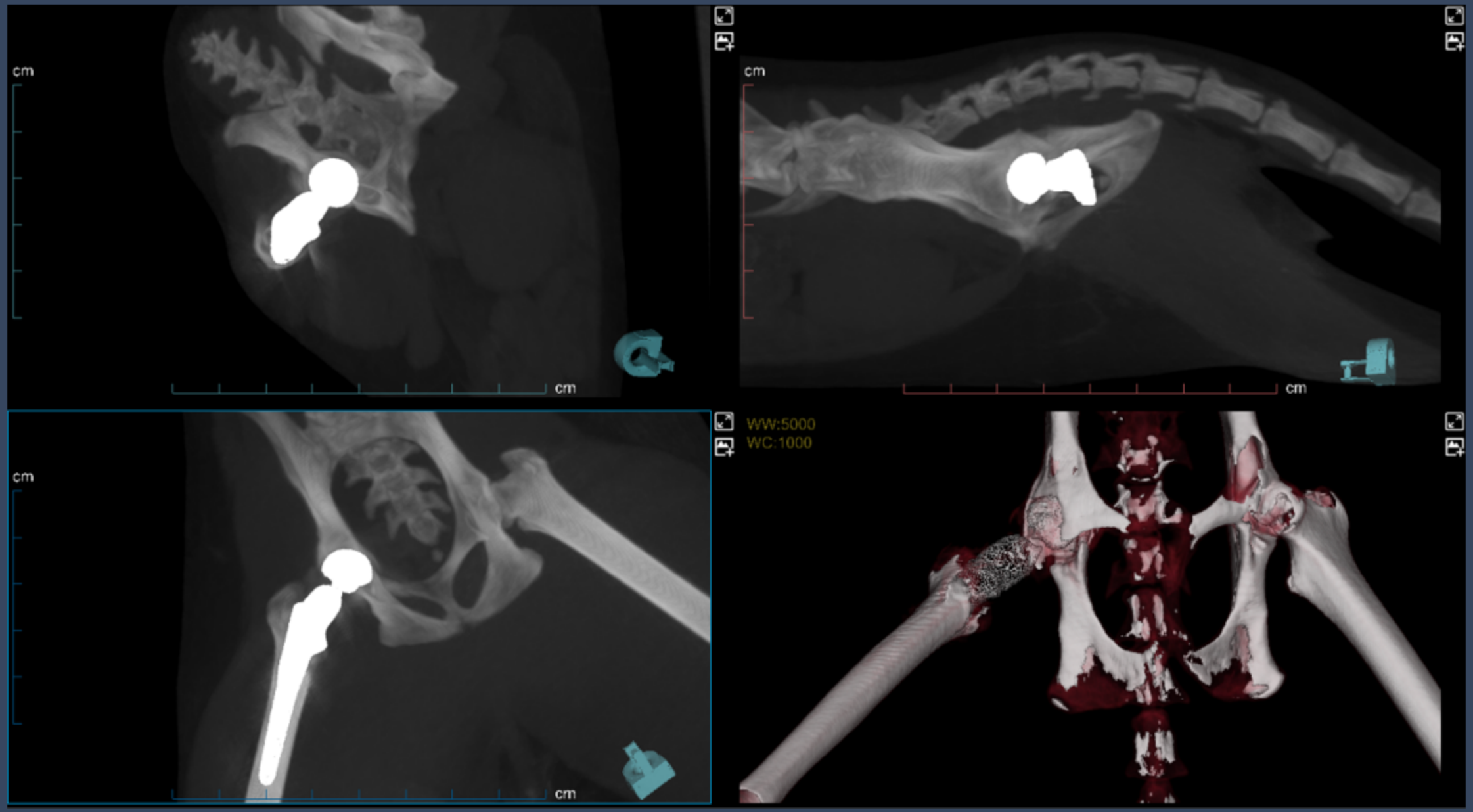
Spinal Hyperplasia



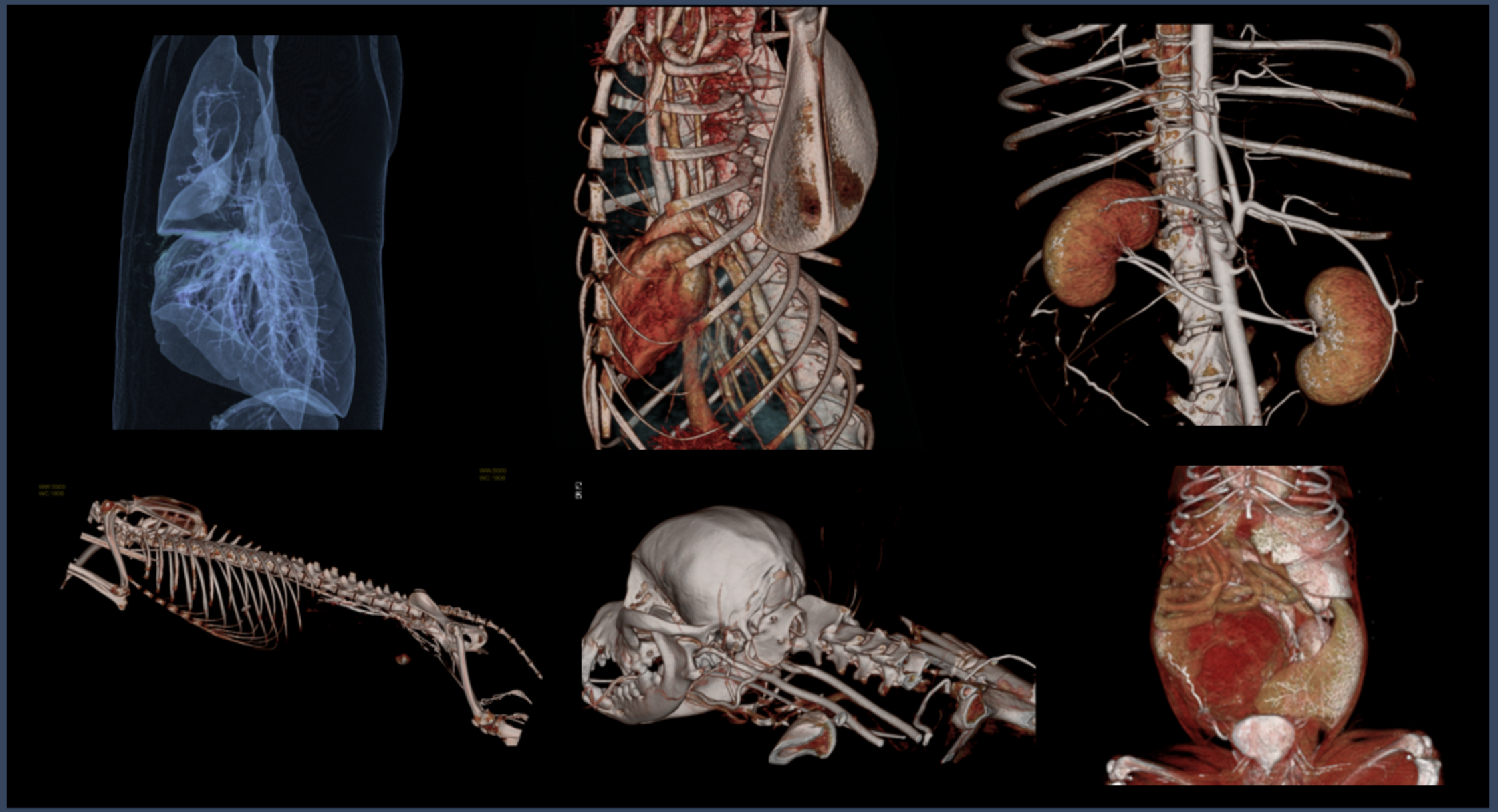
Disc Bulging



Arthroplasty



Volume Rendering（VR）





Thank you