

## Contacts

### Middle East

No. 705/706, Building 26, Al-Baker Building  
Dubai Healthcare City, UAE  
Tel: +971 4 4404885

### North America

14425 Torrey Chase, Suite 100  
Houston, TX 77014  
Tel: +1 281 453 1205

### Europe

No. 16 Shiji Road, Hunnan New District  
Shenyang China  
Tel: +86 24 8366 3996

### South America

No. 16 Shiji Road, Hunnan New District  
Shenyang China  
Tel: +86 24 8366 0761

### Asia & Oceania

No. 16 Shiji Road, Hunnan New District  
Shenyang China  
Tel: +86 24 8366 5682

### Africa

No. 16 Shiji Road, Hunnan New District  
Shenyang China  
Tel: +86 24 8366 0565

## Headquarters

Neusoft Medical Systems Co., Ltd.  
No. 16 Shiji Road, Hunnan New District,  
Shenyang, 110179, China  
Tel: +86 24 8366 3269  
Fax: +86 24 2378 2797

[medical.neusoft.com/en](http://medical.neusoft.com/en)



# NeuViz 16 Essence

NeuViz 16 Essence /Y16.10

**Neusoft**<sup>®</sup> Medical  
Systems



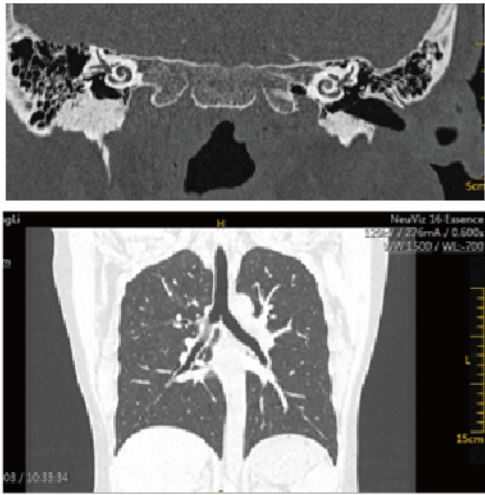
## Product Description

The NeuViz 16 Essence is the latest example of Neusoft's commitment to innovation and value. Technology once reserved for high end CT systems is now available in a 16 slice platform. Being able to afford this level of technology will allow clinicians to deliver a higher level of patient care.

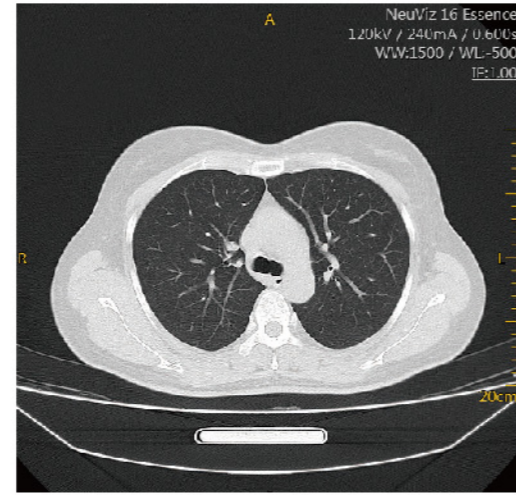
## Product Highlights

- Advanced technology once reserved for premium CT systems.
- Precise imaging for accurate diagnosis.
- Efficient Detector Design.
- Low dose applications package.
- Comprehensive clinical applications.
- Efficient design, optimized workflow.

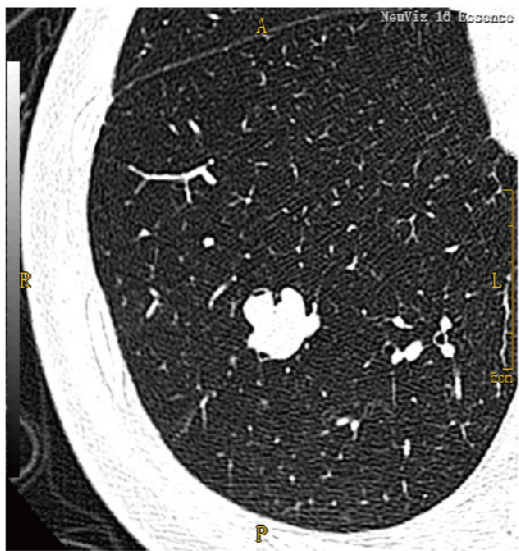
# Precision Imaging



High definition imaging with small focal spot



High definition imaging with small focal spot



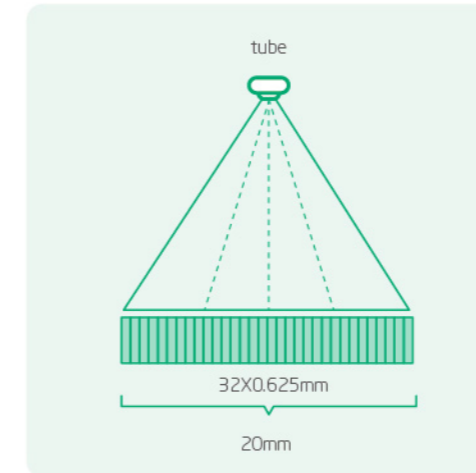
1024 x 1024 matrix, high resolution imaging



1024 x 1024 matrix, high resolution imaging

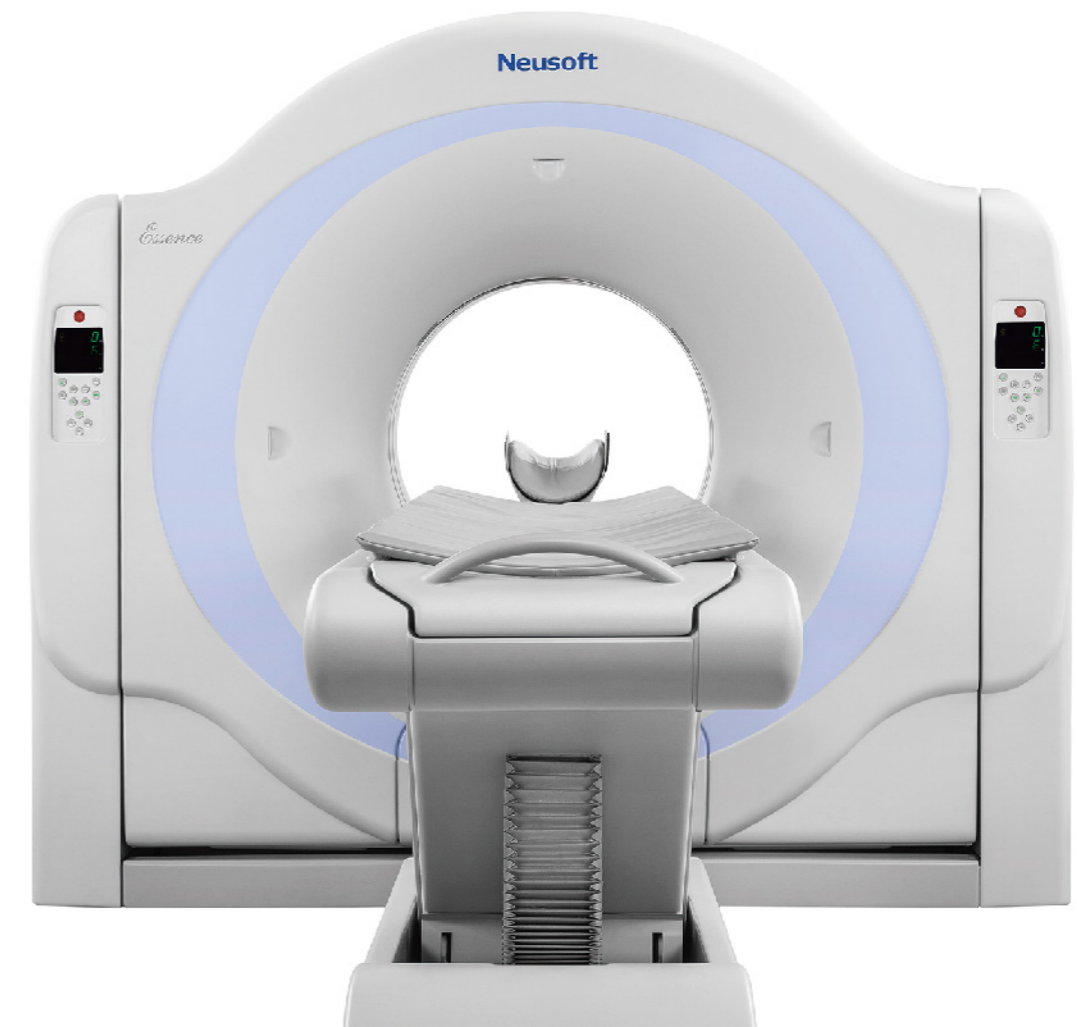
# Efficient Detector Design

Minimal detector afterglow allows 4640 projections to be collected per rotation. X-ray conversion efficiency is 99.99%.



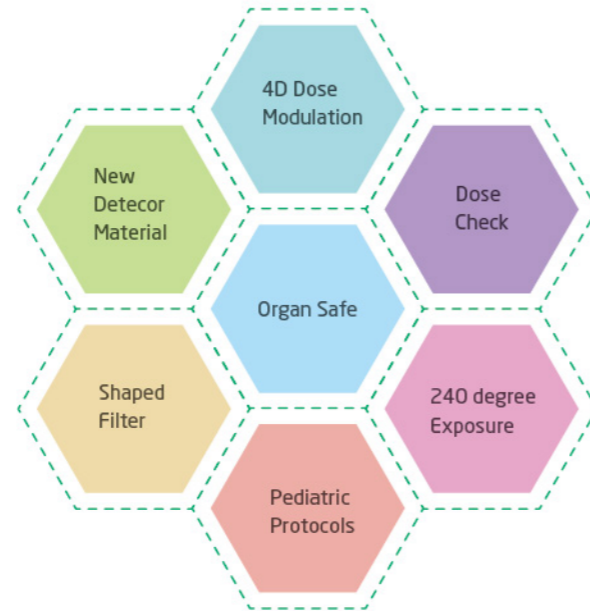
Large sub-millimeter detector coverage

- Increased detector coverage results in greater anatomical coverage per rotation, decreasing scan time and patient dose.
- Adaptive collimation adjusts to changing scan modes reducing patient dose.
- Minimizing exam time improves image quality by reducing motion and pulsatory artifacts.



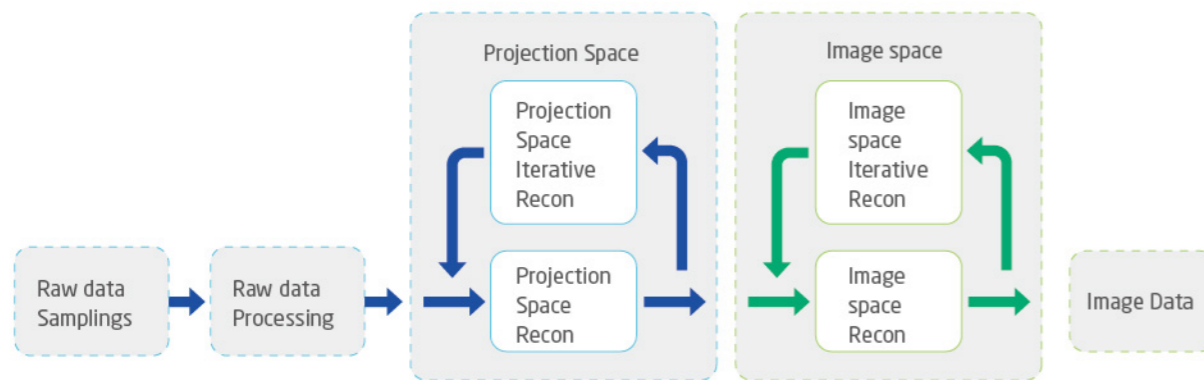
# Full-scale, Low Dose Solutions

The NeuViz 16 Essence is configured with a full compliment of dose reduction tools. Insuring the lowest patient dose levels are achieved without compromising image quality, as well as extending the tube lifetime.



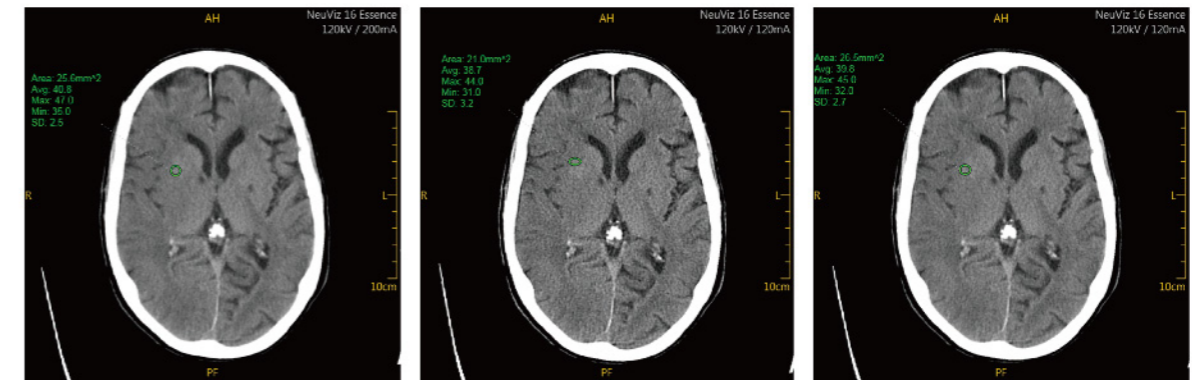
## ClearView - Advanced Iterative Reconstruction Algorithm

By performing iterative processing in both projection and image spaces, patient dose can be minimized without compromising diagnostic quality.



# ClearView Iterative Reconstruction, Low Dose Imaging with Diagnostic Certainty

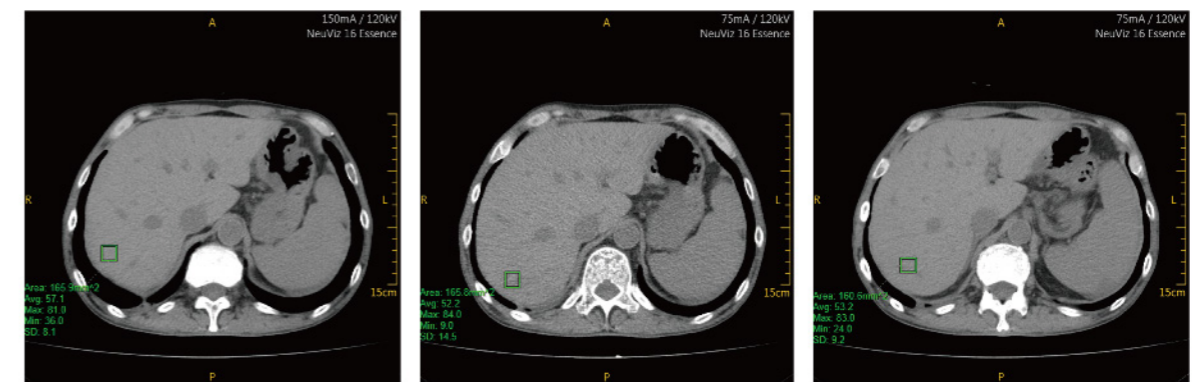
Head: dose decrease by 30%  
Abdomen: dose decrease by 50%



120kV 200mA FBP

120kV 120mA FBP

120kV 120mA ClearView

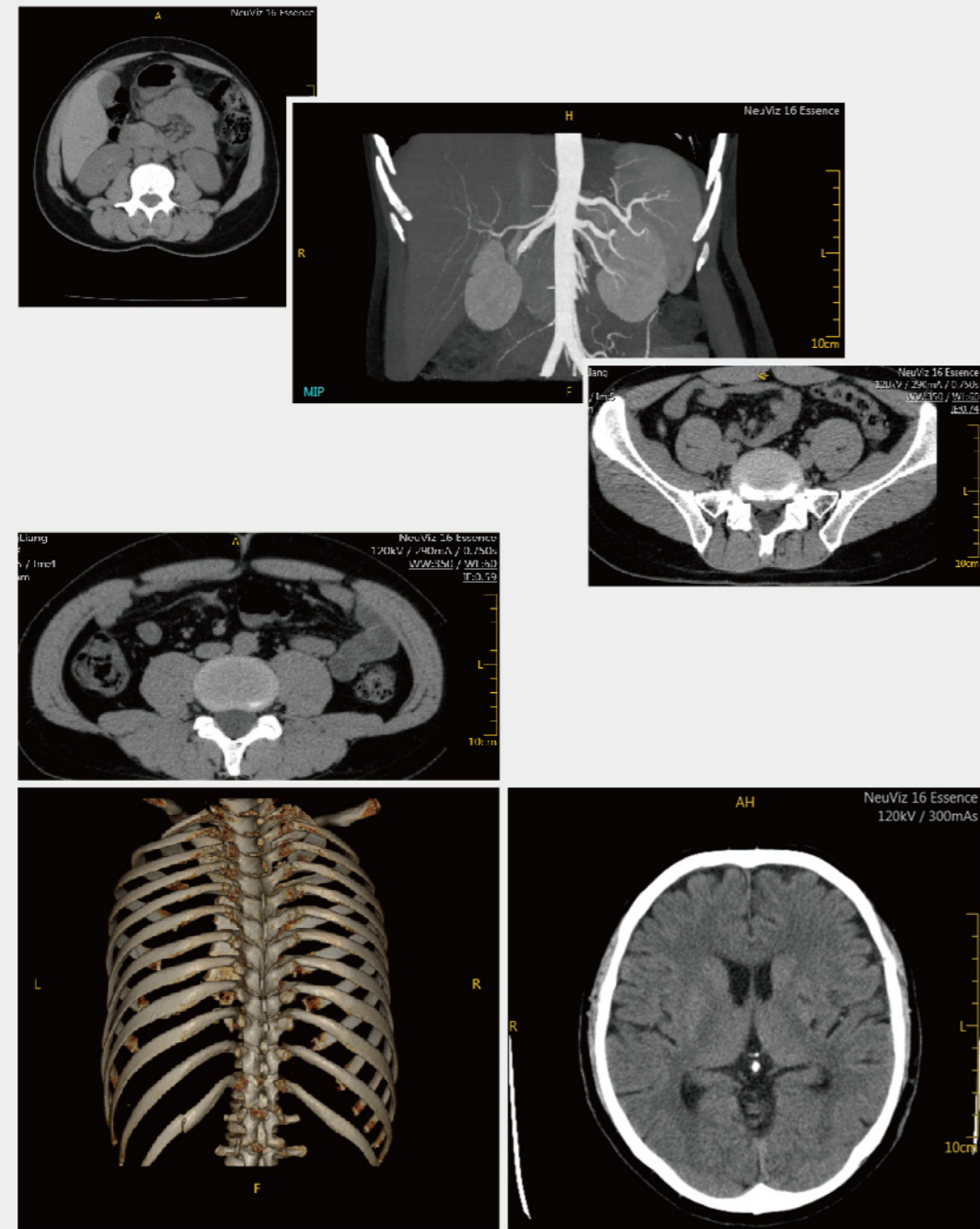


120kV 150mA FBP

120kV 75mA FBP

120kV 75mA ClearView

# High Definition Imaging

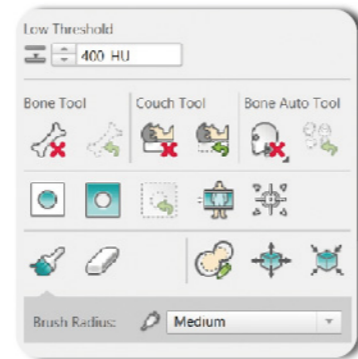
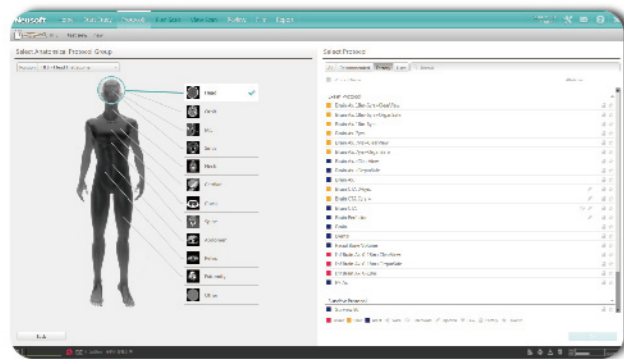


# High Definition Imaging - CTA



# Advanced Applications

NeuViz 16 Essence provides an intelligent user interface that improves workflow efficiency.



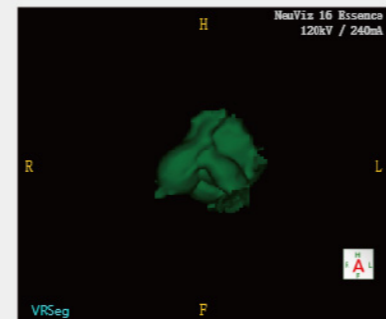
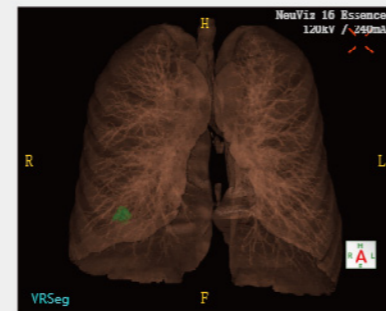
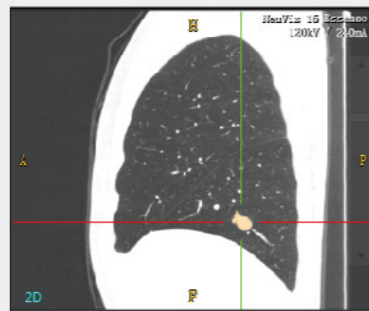
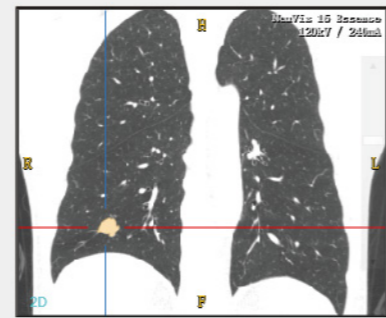
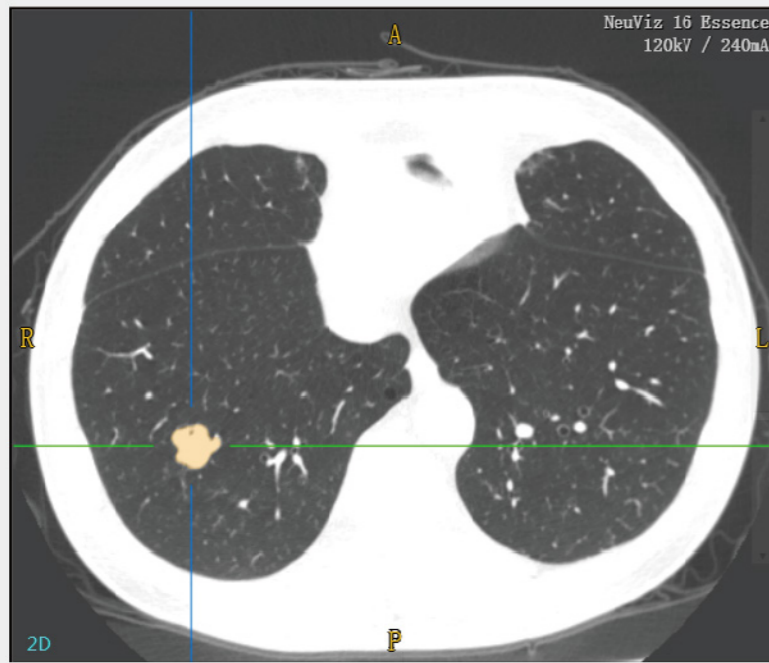
## Advanced Application List

- Vessel Analysis
- Brain Perfusion
- Lung Nodule Analysis
- Tumor Analysis
- Virtual Colonoscopy
- CT DSA
- Body Perfusion
- Lung Density Evaluation
- Fat Analysis



# Advanced Applications

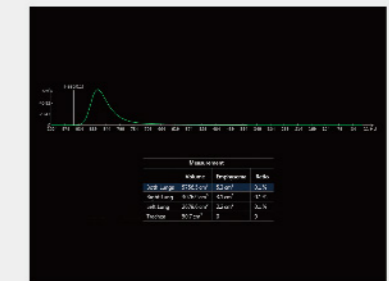
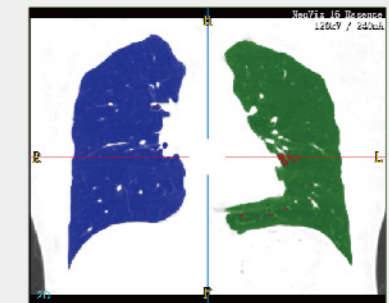
## Lung Nodule Analysis



- The Lung Nodule Analysis assists radiologist with the detection and quantification of pulmonary nodules and lesions.
- Single click segmentation with Nodule volume calculation.
- Follow up support: the growth of nodules can be tracked over time.

# Advanced Applications

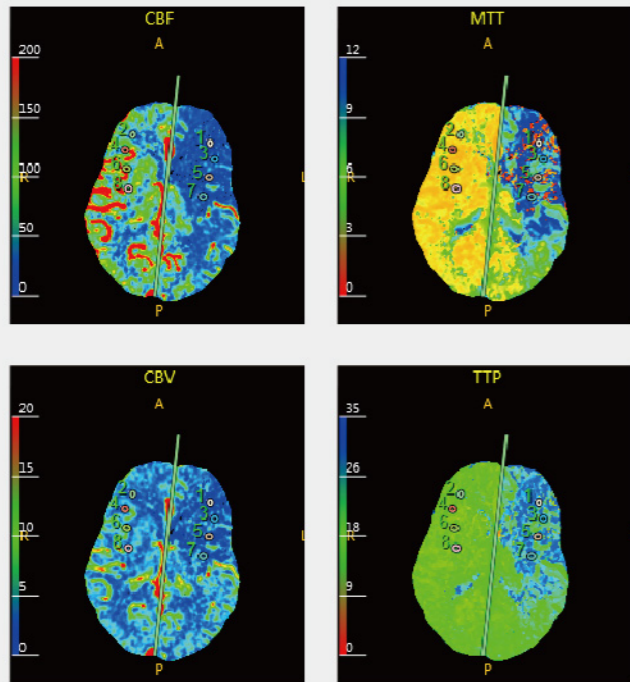
## Lung Density Evaluation



- Lung Density Evaluation is an automated application that provides quantitative (volumetric) lung emphysema measurements and a visual representation of the diffusion of emphysema.
- Auto Lung Segmentation, Emphysema Segmentation, Emphysema Volume Calculation, Lung Volume Histogram.

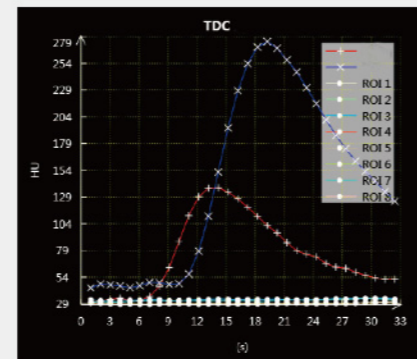
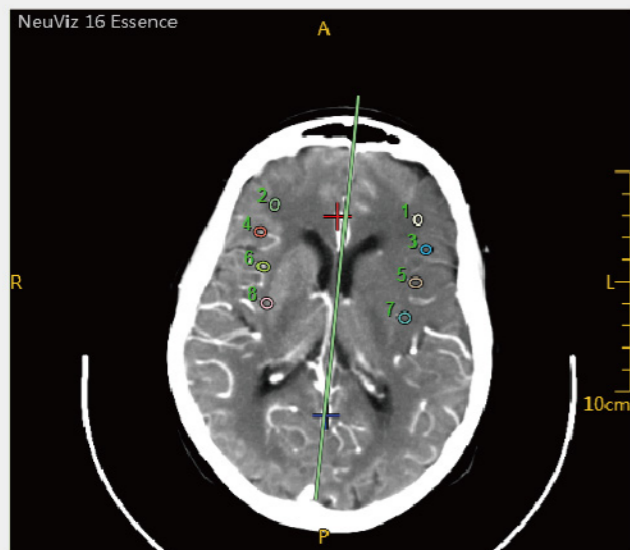
# Advanced Applications

## Brain Perfusion



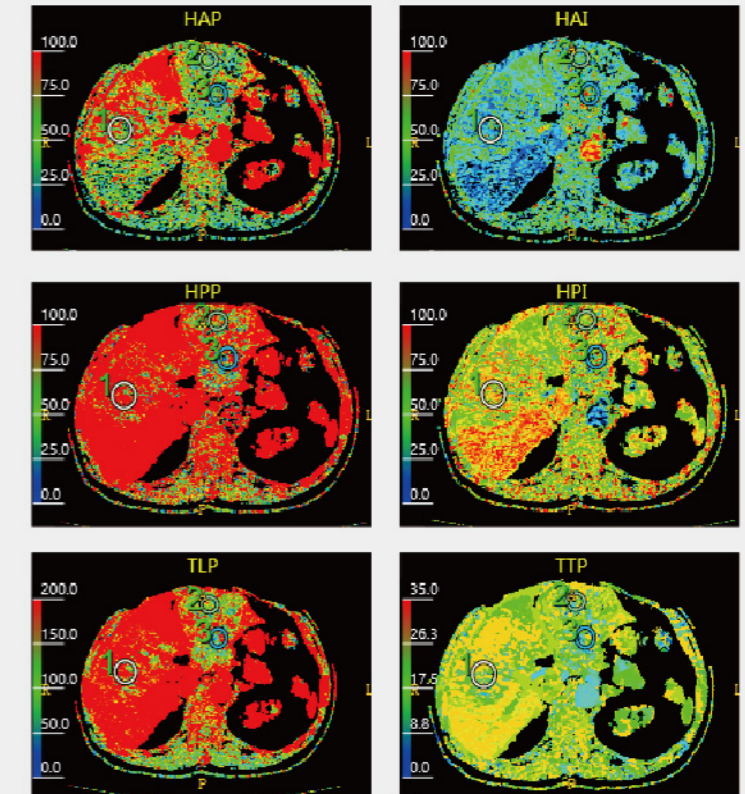
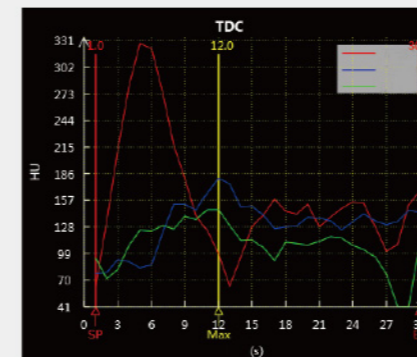
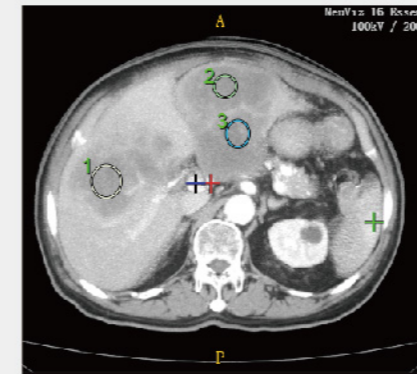
ROI	CBV	CBF	MTT	TTP
1	1.72 ml/100g	12.50 ml/100g/min	10.27 s	30.99 s
2	1.78 ml/100g	29.68 ml/100g/min	3.93 s	16.01 s
3	0.83 ml/100g	7.65 ml/100g/min	7.42 s	21.54 s
4	5.45 ml/100g	140.26 ml/100g/min	2.37 s	13.83 s
5	1.08 ml/100g	14.83 ml/100g/min	6.17 s	22.95 s
6	9.04 ml/100g	247.10 ml/100g/min	2.21 s	13.53 s
7	1.79 ml/100g	12.19 ml/100g/min	9.85 s	26.38 s

Using dynamic CT for quantitative assessment of cerebral ischemia in acute stroke. CBF, CBV, MTT, TTP measurements provided.



# Advanced Applications

## Body Perfusion



Body Perfusion is an advanced application for quantitative analysis of renal, hepatic and pancreatic blood flow. It has following features: HAP, HPP, TLP, HAI, HPI, TTP measurements provided, ROI and TDC display. Send result to Film & Report.

ROI	ROI					
	HAP	HPP	TLP	HAI	HPI	TTP
1	67.47 ml/min/100ml	223.82 ml/min/100ml	291.30 ml/100g/min	27.25 %	71.80 %	22.17 s
2	39.85 ml/min/100ml	73.99 ml/min/100ml	113.83 ml/100g/min	36.05 %	63.80 %	18.45 s
3	45.46 ml/min/100ml	86.94 ml/min/100ml	132.39 ml/100g/min	40.38 %	57.53 %	18.15 s

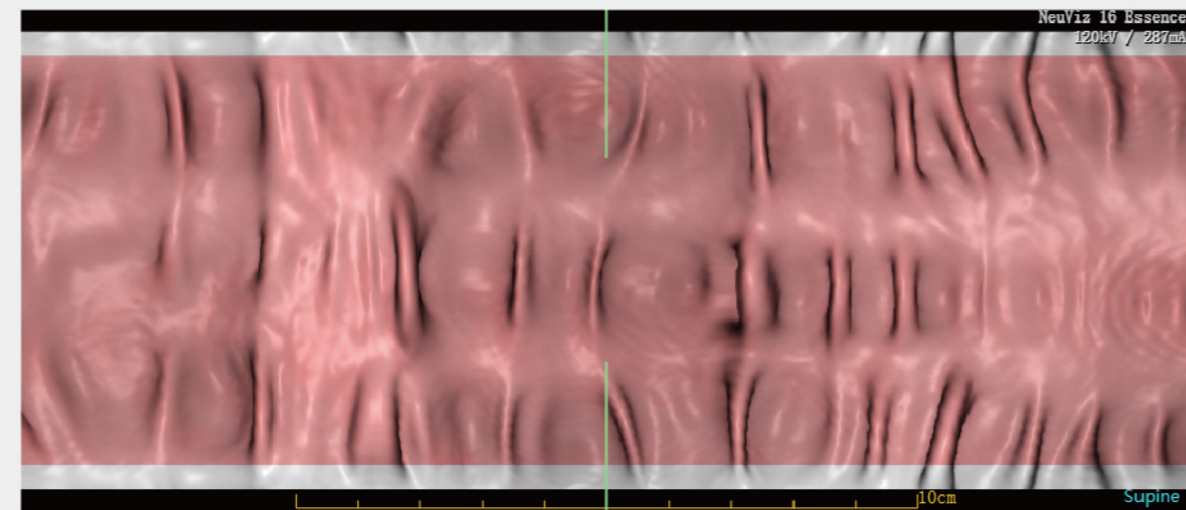
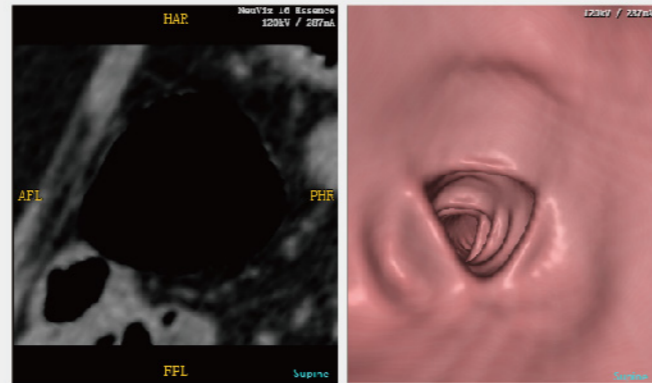


# Advanced Applications

## Virtual Colonoscopy

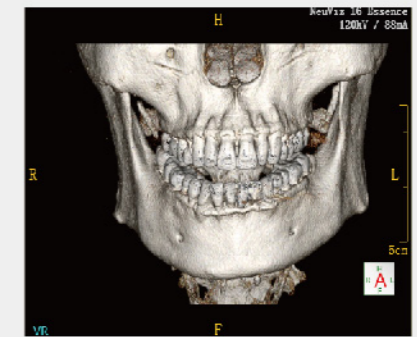
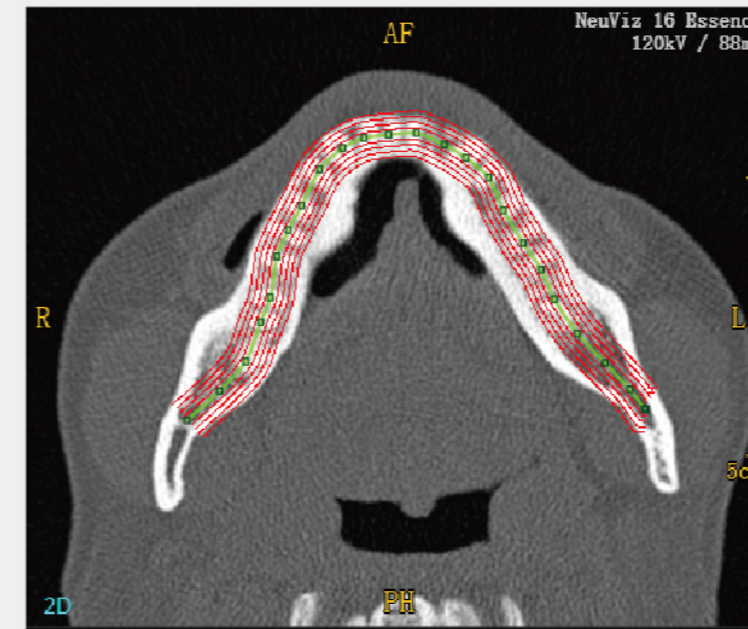


Automatic Colon Segmentation, Unfold View, Polyp Detection, Compare with Supine and Prone



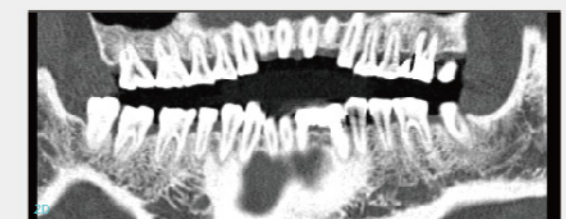
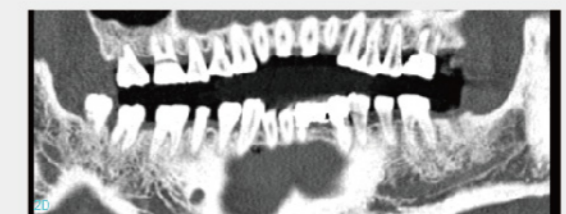
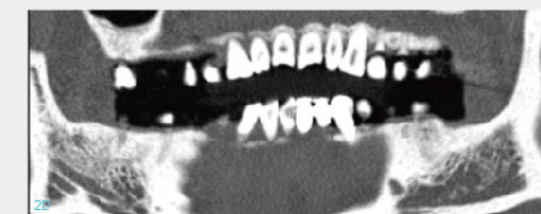
# Advanced Applications

## CT Dental Analysis



Dental Analysis is designed for assisting oral surgeons in planning implantation of prostheses. Featuring:

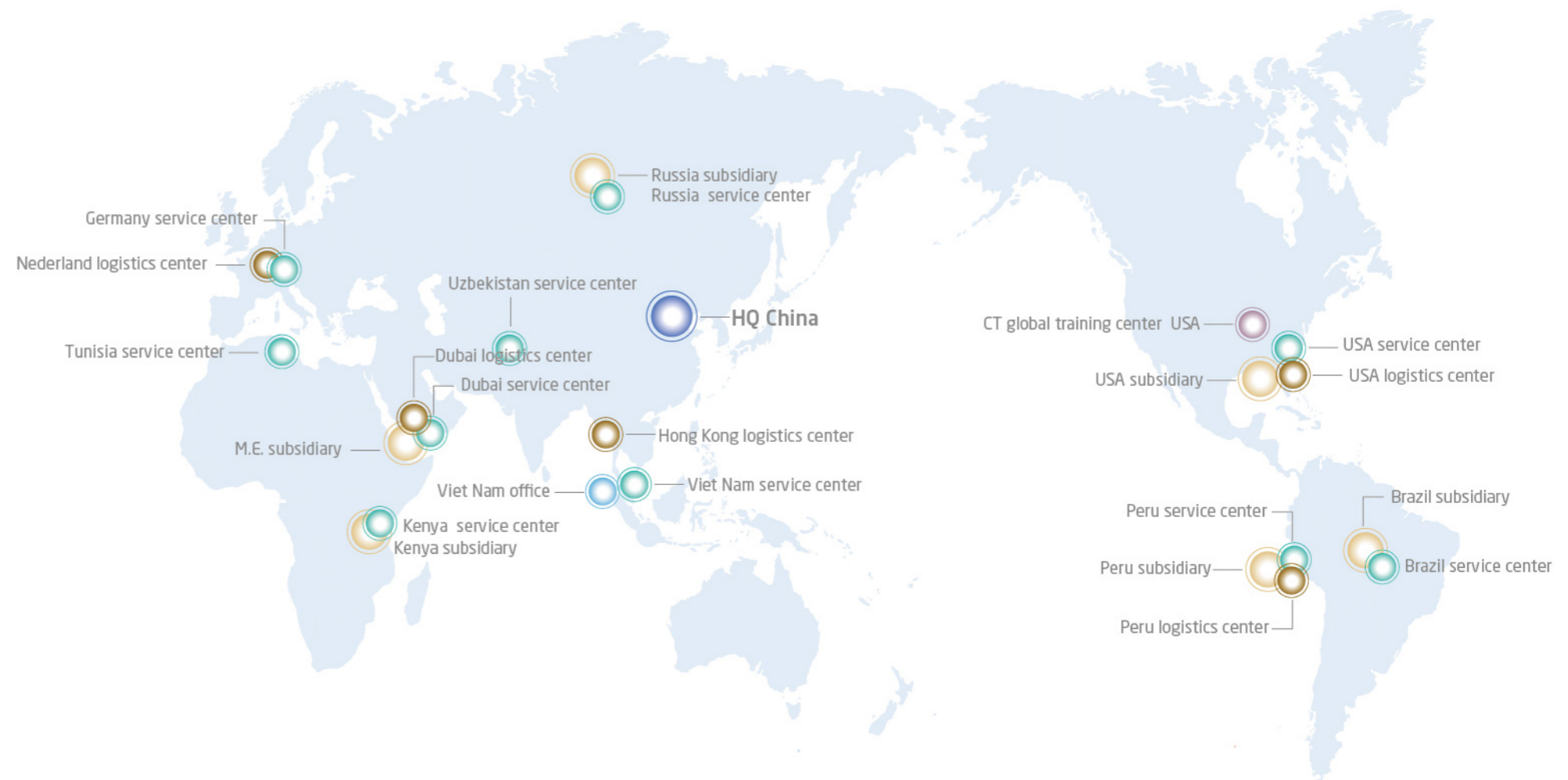
- display panoramic views.
- display cross-sectional planes.
- filming the panoramic and cross-sectional images in true size.



# Service and Logistics Support



## Neusoft Global Service & Logistics Network



### Support service, after the sale!

- Remote diagnostic capabilities bringing Neusoft expertise to you IMMEDIATELY, no matter where you are!
- Identifying and correcting prompt PROACTIVELY, minimizing downtime and patient inconvenience.
- Global logistics network, prompt response regarding parts and supplies.

\* Neusoft Medical Systems reserves the right to make change in design and specification of this product at any time without prior notice or obligation and will not be liable for any consequences resulting from the use of this publication. Technical characteristics, descriptions and drawing as provided in this publication are for guide purpose only and do not represent any commitment on behalf of Neusoft Medical Systems.