# Caring for you

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Neusoft Medical Systems



in Neusoft Medical





# Neusoft CT

"A RICH History of Innovation"

Current trends of an aging population together with diverse and complex diseases bring a higher demand for medical imaging equipment providers. Healthcare providers are facing increasing numbers of patients, limited budgets, ever-increasing costs while facing ever-increasing demand for complex procedures, such as coronary CTA.

Neusoft Medical Systems is an excellent value innovator of global healthcare service: through continuous focus on meaningful innovation of CT technology.

NeuViz 64 In was developed to be a patient-centric imaging CT, focused on minimizing patient X-Ray dose while maintaining excellent image quality, delivering high patient throughput at a lower cost, performing coronary imaging and a wide variety of easy to use post-processing and diagnostic operations.

In general, the NeuViz 64 In supplies new opportunities for whole body scanning, ever coronary CTA.

**2019** NeuViz Glory

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2017

NeuViz Prime

2015

0

NeuViz 128

2014

NeuViz 64 In

2012

NeuViz 64

**2009** NeuViz 16

2005

NeuViz Dual

2002

CT-C2800 / 3000 Dual

**2000** CT-C2800 / 3000

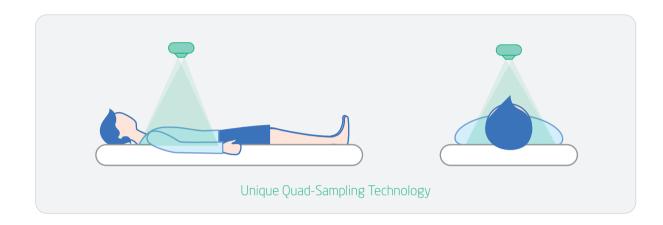
**1998** CT-C2000

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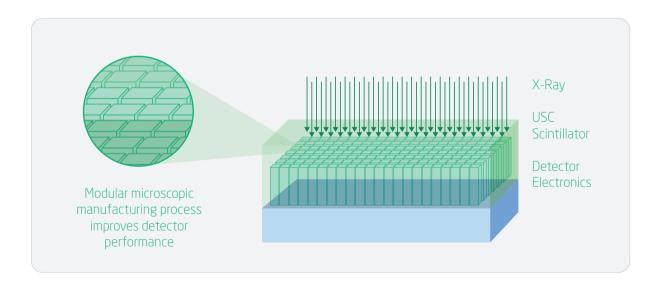


## **Quad-Sampling Technology**



4640 views per rotation provide high data sampling density. Simply put, this results in a market leading isotropic resolution of 0.32 mm and a pitch up to 1.7.

### **Dose Efficient Detector**



A patented manufacturing process reduces afterglow time (<2 us) and maximizes conversion rate (99.99%) This results in a perfect balance between low dose and high quality.

## **1024 Reconstruction Matrix**

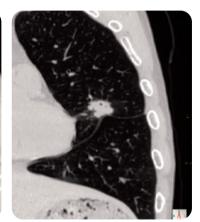
1024 matrix reconstruction technology provides the spatial resolution necessary for lung nodule and inner ear studies.

#### High Resolution Lung Images

Multiplanar reformation shows a solitary pulmonary nodule in the left upper lobe. This nodule presents with irregular margins, lobulated signs and hollowed pleuras. These are clinical indicators of carcinoma.

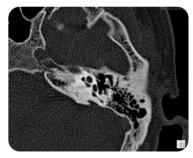






### High Resolution Inner Ear Images

Coronal and axial multiplanar reformation shows the small structures of the inner ear such as cochlea and semicircular canals.







## O-Dose Platform



240 degree exposure

Dose to the patient and physician reduced.



Organ-Safe

Reduces dose to radiosensitive organs, such as eyes, thyroid and breasts.



ClearView

Iterative Processing in projection & image spaces optimizes dose efficiency.



Auto kV

The kV automatically adjusts to the optimum level based upon the patients anatomy while insuring the best kV for a given exam type is used.



3D dose modulation

Tube current modulates based on the anatomy in the scan field for an anatomically optimized dose.



#### New detector design

Modular design delivers 99.99% x-ray conversion efficiency, lowering the dose necessary to deliver excellent image quality.



#### Pediatric Protocols

Not "scaled down" adult protocols.

Designed specifically for pediatric
anatomy.





#### ECG dose modulation

Reduces tube current during non-imaging phases of the cardiac cycle to minimize patient dose.

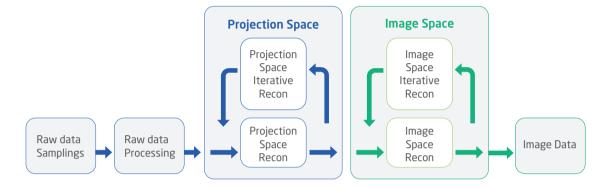


#### Dose check

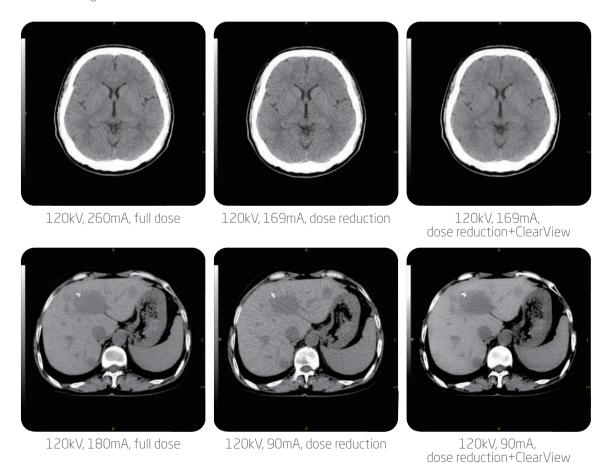
DoseCheck (NEMA XR-25) and SmartDose (NEMA XR-29) are fully implemented. Patient safety is insured.

## ClearView Iterative Reconstruction

By performing iterative processing operations in both projection and image space, noise and artifacts associated with low dose imaging can be removed, while diagnostic information is retained, yielding a study with high clinical value.



"Removes noise while preserving detail, providing low-dose image quality that is superior to that of full-dose images."







### Low Dose Cardiac Solutions

#### Prospective Scan

The NeuViz 64 In can support ECG-Triggered prospective cardiac imaging with cardiac acquisition at the end of diastole. Combined with reduced tube current and advanced iterative reconstruction algorithm ClearView, patient dose below 3mSv can be achieved.



#### Low Dose Retrospective Scan

In each cardiac cycle, acquisition is continuous, with simultaneous ECG-Tracking to obtain data. However, tube current would be largely reduced at systole and beginning of diastole to optimize patient dose.

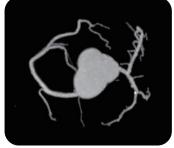


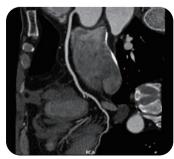
#### **Clinical Benefits**

The NeuViz 64 In provides for superior Coronary Artery visualization as demonstrated in the VR and MPR studies pictured below:

Male, 45 years old, 66bpm, 2.77mSv



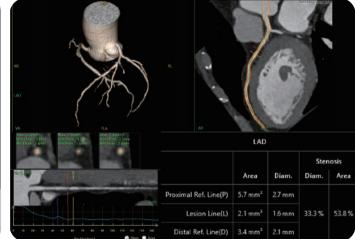




#### Post-processing Application Solutions

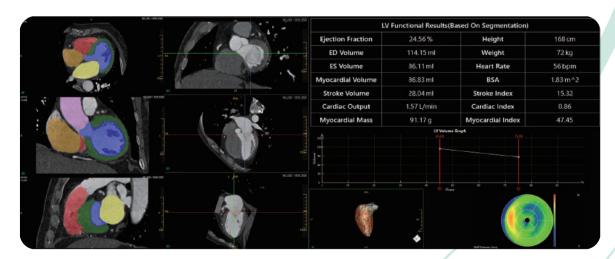
The NeuViz 64 In is designed to offer cardiac solutions which include Cardiac Calcium Scoring, Cardiac Function Analysis and even Coronary Analysis. It delivers one-stop, full-range diagnostic certainty to cardiac imaging.





Cardiac Calcium Scoring

Cardiac Coronary Analysis



Cardiac Function Analysis



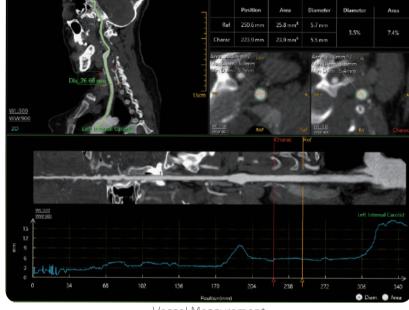
# Full Range of Clinical Applications

## Advanced Vessel Analysis

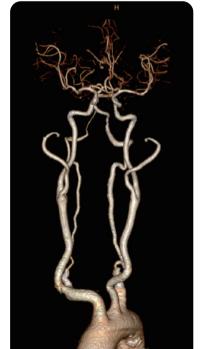




Pulmonary Artery CTA

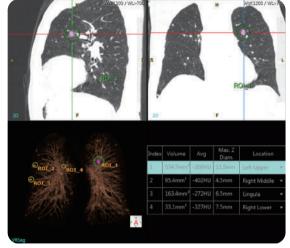


Vessel Measurement

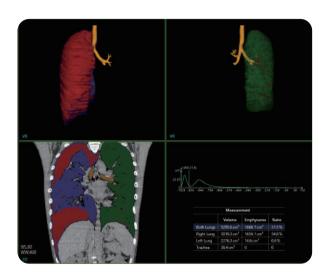




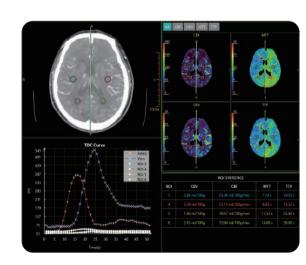
Lung Nodule Analysis



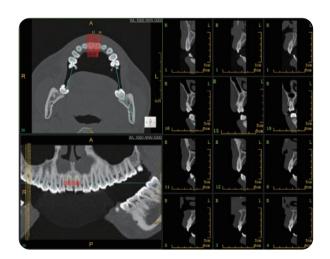
**Lung Density Analysis** 



**Brain Perfusion** 



**Dental Analysis** 



Head & Neck CTA

Abdominal Aorta CTA

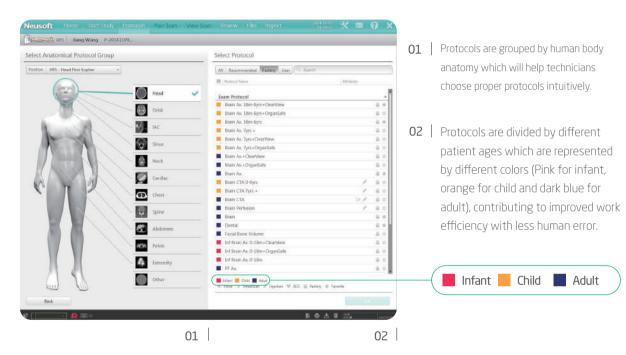
Run-off CTA

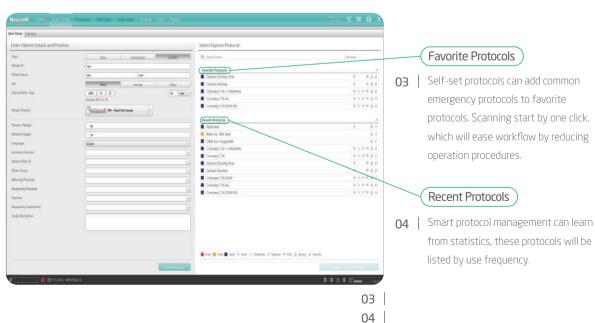


# Optimized, Intuitive Workflow

#### Intuitive Operation & Smart Protocol Selection

Intuitive workflow and user interface guide healthcare providers using a "guided tool bar", designed to facilitate daily workflow.





#### **Efficient Post-processing**

Post processing is designed to optimize time saving. Key strokes are minimized and process steps automated, streamlining workflow.

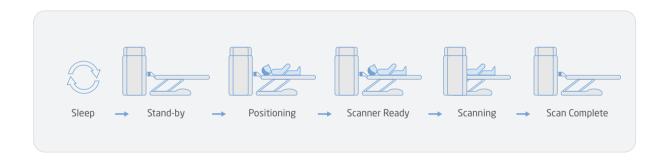


#### RSSF (Real-time System Status Feedback)

System status and ECG are clearly displayed.

Breath hold commands are also communicated to the patient.





#### **Emergency Examination without Waiting**

Patented RSSF allows emergency scanning without preheating, saving precious time and decreasing exposure. This guarantees the timeliness and safty of emergency scanning.

# Service and Logistics Support

#### Neusoft Global Service & Logistics Network



#### After-sales service and support

- Remote service capabilities bring Neusoft expertise to you IMMEDIATELY, no matter where you are!
- Identifying and correcting PROMPTLY and PROACTIVELY, minimizing downtime and patient inconvenience.
- Global logistics network enables fast response regarding parts and supplies.
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