



GE HealthCare

# Revolution™ Maxima

## Upgrade



# There is so much more you can do with your Revolution Maxima

Clinical and operational practices are evolving fast, driving challenges like higher exam volumes, stricter dose requirements and added procedures — all while preserving patient care and staff satisfaction.

As your needs shift, so should your scanner. With Revolution Maxima, users can tackle emerging challenges and boost clinical and operational capabilities without buying new equipment.

**A new era of imaging is here.  
The Revolution Maxima is  
ready to lead the way.**





# A new console generation upgrade for your need for speed

Our next generation console is designed to enhance the performance and capabilities of your Revolution Maxima

## Improved reconstruction speed

### Up to 70 fps

of improved image reconstruction speeds

### 40% faster

compared to the previous console

## Image storage boosted

Simpler console data storage management

### Up to 3x more images

can be stored on the console

## Faster workflow

Faster workflow for every kind of examination providing shorter exams and better patient comfort

Thanks to faster image recon speeds, you spend less time waiting for the whole exam completion, even for more complex procedures

## Increased throughput

Faster image reconstruction speeds help to improve scan efficiency and may help increase daily exam workload



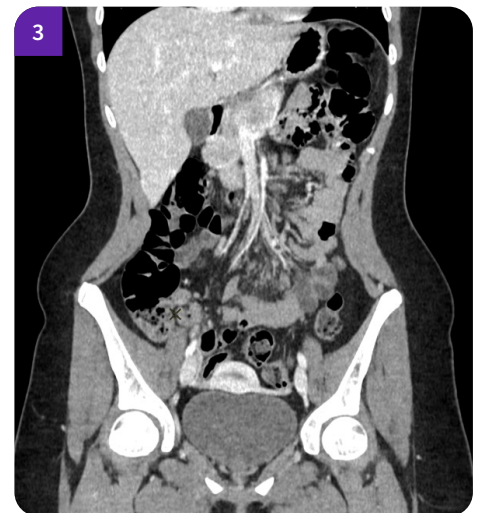
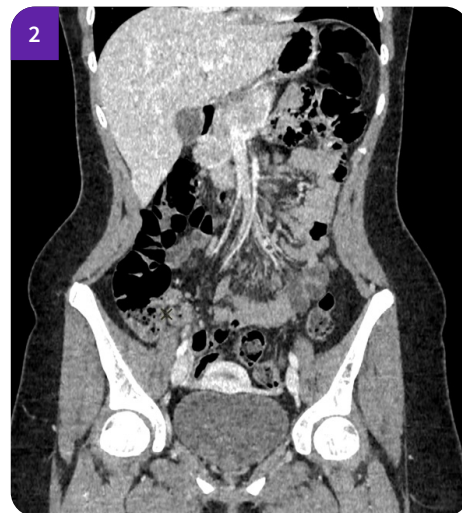
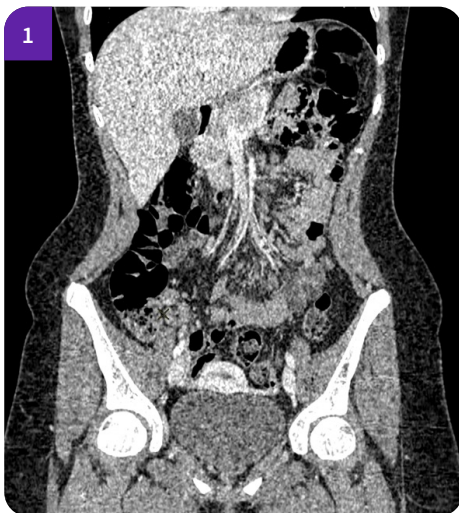
# Enter in the era of deep learning image reconstruction

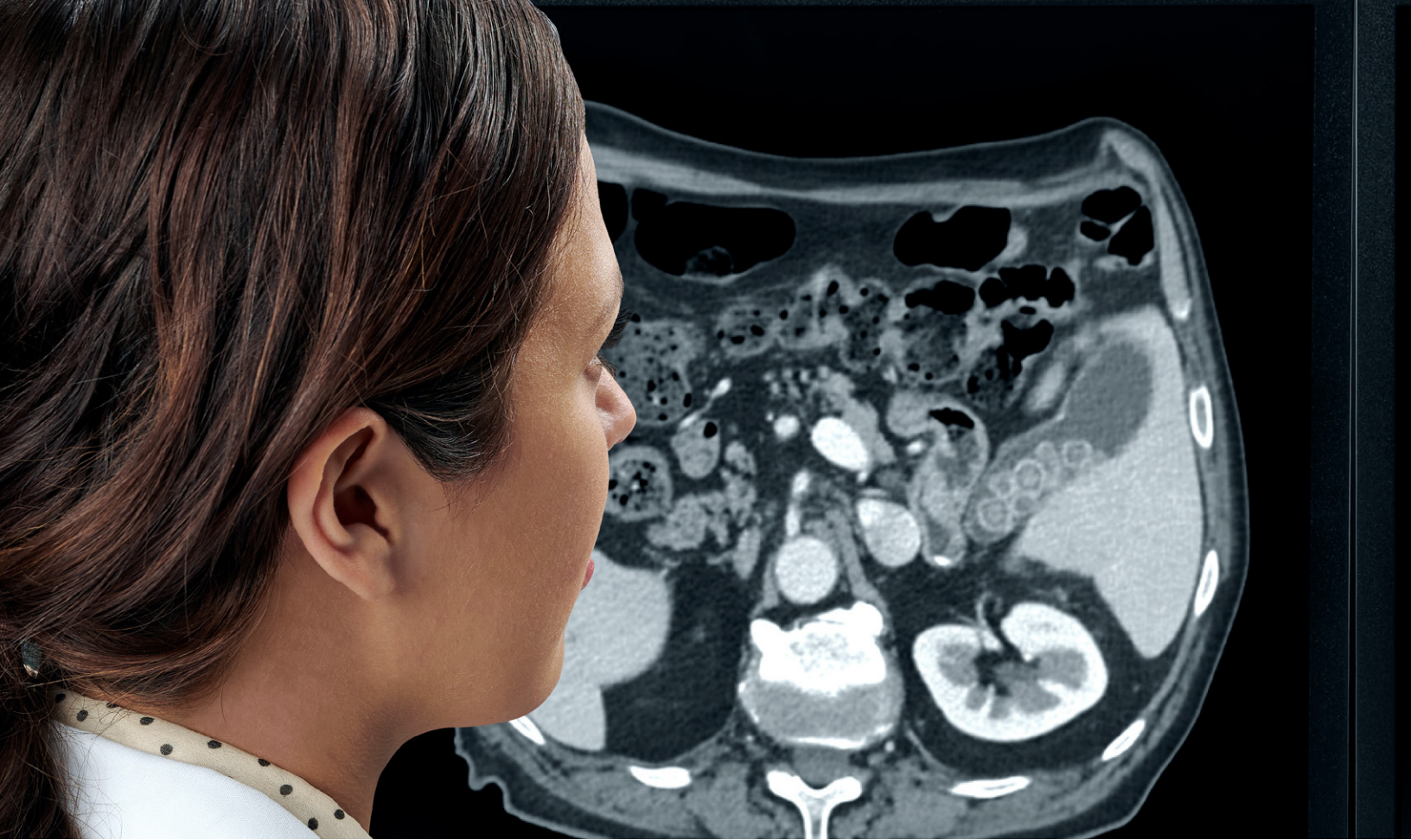
## TrueFidelity™ DL

### Deep learning for a deeper understanding

TrueFidelity DL is our state-of-the-art AI-based image reconstruction technology that uses a Deep Neural Network (DNN) to generate high-definition, low-noise CT images. It produces images with exceptional sharpness, low-contrast image quality performance and your preferred noise texture, at the same dose.<sup>1</sup>

1. Filtered Back Projection (FBP)
2. ASiR-V 40%
3. TrueFidelity DL-M





## How we designed and trained our deep learning image reconstruction<sup>2</sup>

### Deep neural network design



We designed our deep neural network based on our 40+ years of knowledge in CT reconstruction

Our neural network can learn CT image quality features from our carefully curated training data

### Ground truth training data selection



Two categories of training data were carefully selected

High dose FBP phantom images with ground truth

High fidelity FBP clinical images

### Supervised training



Trained to apply knowledge for every aspect of CT image quality

Low contrast detectability

Image noise and noise power spectrum (NPS)

High-contrast spatial resolution

CT number uniformity

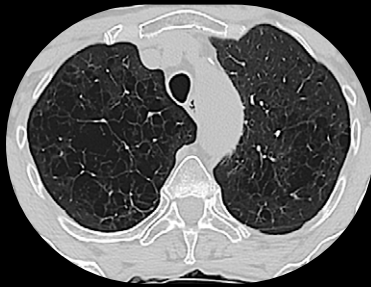
CT number accuracy

Artifacts suppression

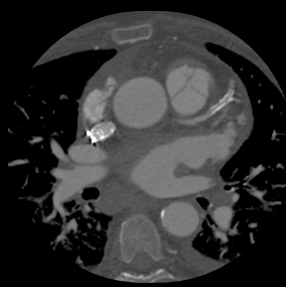
## TrueFidelity DL for your examinations



**Neuro**  
Improved gray/white matter differentiation



**Chest**  
Removed noise with superior CNR allowing for better detectability



**Cardiac**  
Less noise for improved image clarity

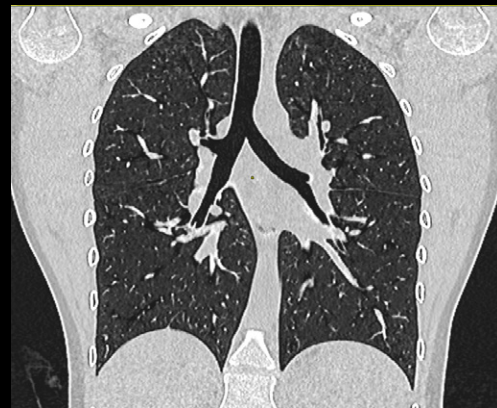


**Abdomen**  
Great depiction of details in low contrast imaging tasks

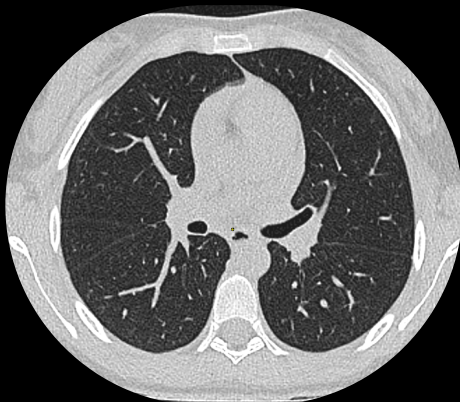
## Low dose chest



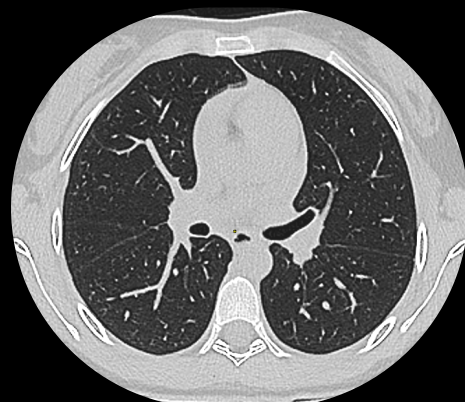
ASiR-V 40%



TrueFidelity DL



ASiR-V 40%



TrueFidelity DL

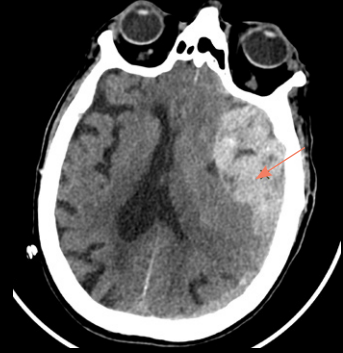
## Brain



FBP



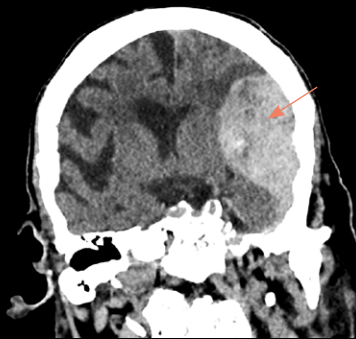
ASiR-V 40%



TrueFidelity DL



FBP



ASiR-V 40%



TrueFidelity DL

## Multiphase liver hepatocellular carcinoma

Arterial



Venous



Delayed



TrueFidelity DL



ASiR-V 40%



# Expand your clinical capabilities on your Revolution Maxima



## Cardiology

Unlock advanced cardiac acquisition capabilities, from calcium scoring to coronary angiography.

Increase temporal resolution by combining a 0.35 second rotation speed with SnapShot Freeze 2 for whole-heart motion artifact correction.

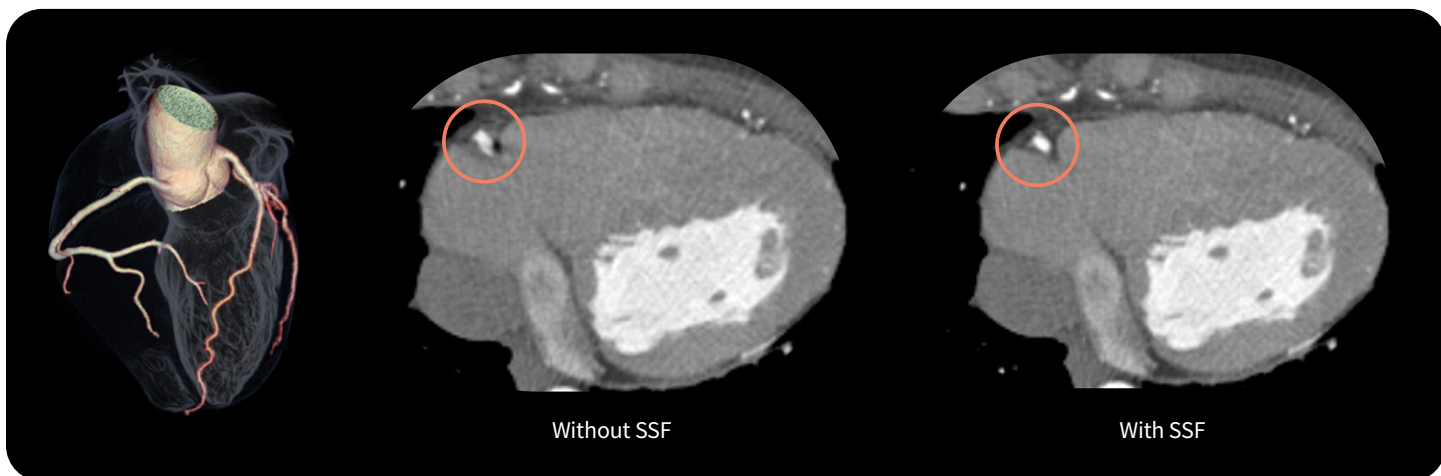
Optimize cardiac post-processing with the latest CardIQ Suite, featuring automatic calcium scoring and comprehensive coronary review.



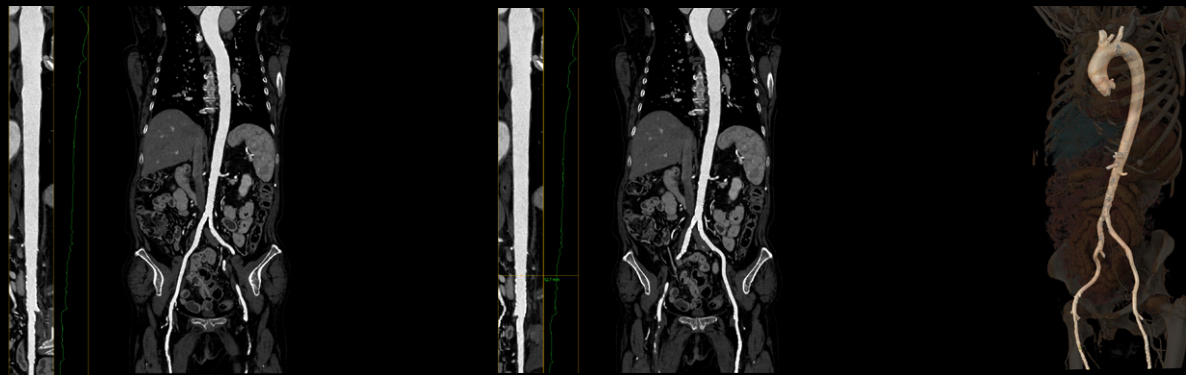
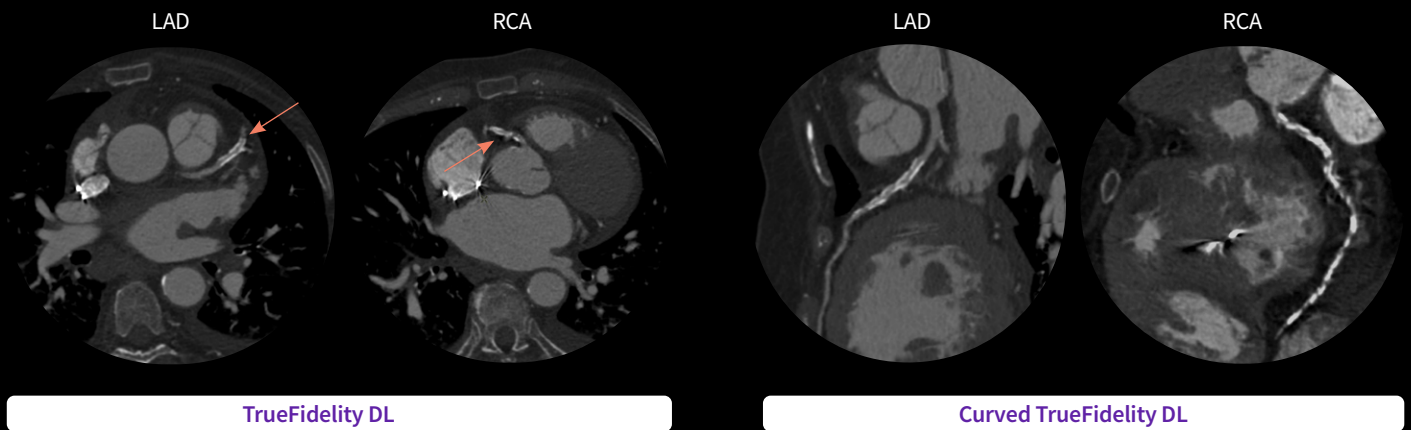
## Neurology and emergency

Reduce metal artifacts right when you need it with Smart MAR solutions.

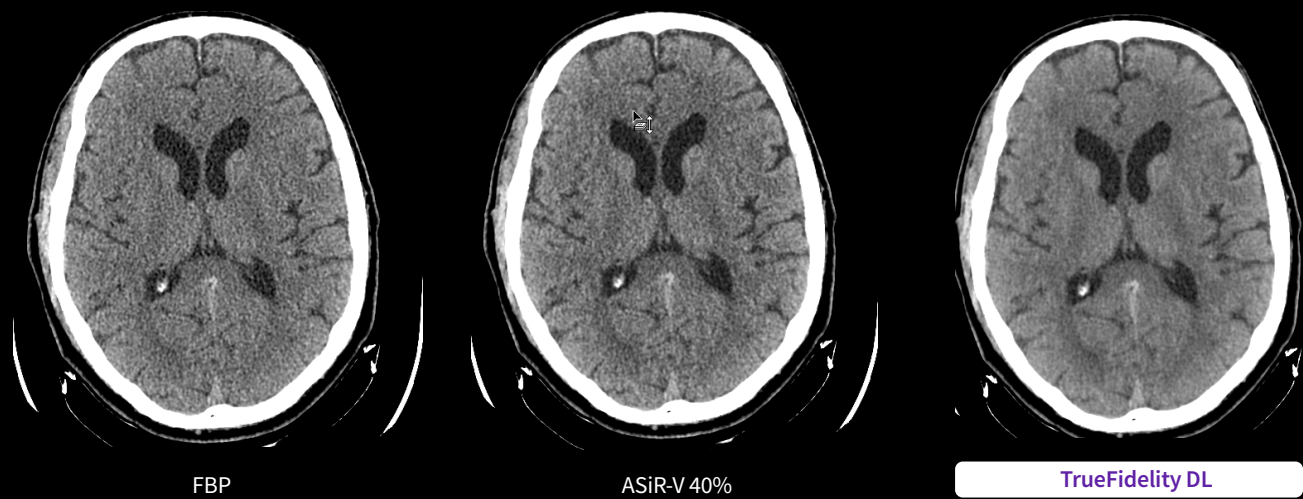
Achieve higher resolution with a 1024 matrix.



# Coronary and aortic valve assessment on a TAVI patient



# Brain





# Johnathan Moore

400-89-067 1941/7/4 78 Years M

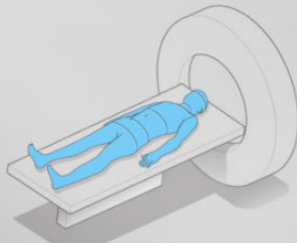
Chest Routine

Operator

Protocol: 3.4 Chest w/o IV Contrast

SCOUT	GROUP1	GROUP2
Start Loc.	S 60.0 mm	S 60.0 mm
End Loc.	I 300.0 mm	I 300.0 mm
kV	80	80
mA	10	10
Scout Plane	0	90

Head First  
Supine  
XY



Keep watching during auto motion for patient movement and collisions.



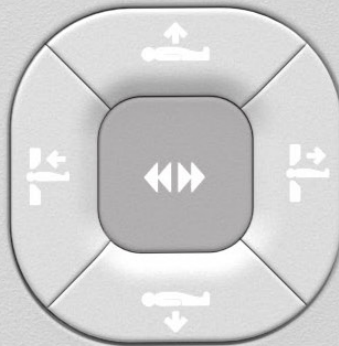
Touch this window to

# PAUSE



50.0  
mm

s1250.0  
mm



# Remain at the forefront of the innovation in CT


## CT Smart Subscription for a CT that keeps getting better

GE HealthCare's subscription-based service for CT helps you keep your computing platform and software up to date and keep pace with clinical and workflow innovations by providing the latest upgrades and updates to your CT capabilities<sup>3</sup>.

Keep pace with clinical and workflow innovations by providing the latest upgrades and updates to your CT capabilities as soon as they're available<sup>4</sup>.

Pick the plan that's right for you. Smart Subscription includes a broad range of application packages across many different imaging services, giving you the flexibility to choose how you want to expand your CT capabilities.






### CT



Revolution Maxima

+

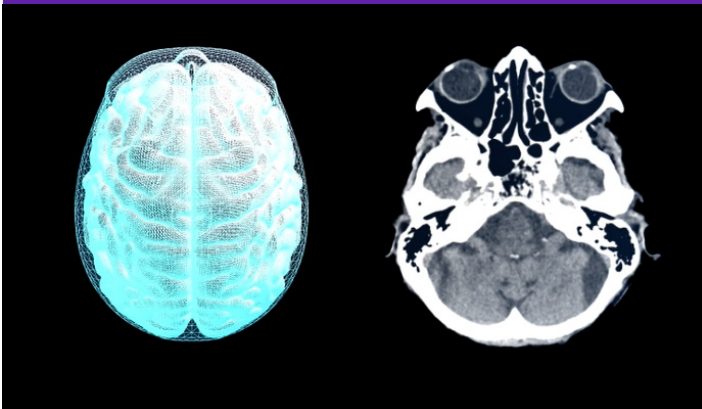
### Smart Subscription Unlimited

 <p><b>Continuity Premium</b></p>	 <p><b>Recon &amp; IQ</b> TrueFidelity DL ASiR-V Smart MAR</p>	 <p><b>Cardiology</b> SnapShot Freeze 2 CardIQ Xpress 2.0 Reveal SmartScore 4.0</p>	 <p><b>General Imaging</b> Spine Auto Views Head Auto Views Bone VCAR VessellQ Xpress with AutoBone Xpress</p>	 <p><b>Neurology</b> FasteStroke with StrokeSENS<sup>5</sup> Send by email Auto Batch CT Perfusion 4D Neuro Dynamic Shuttle</p>
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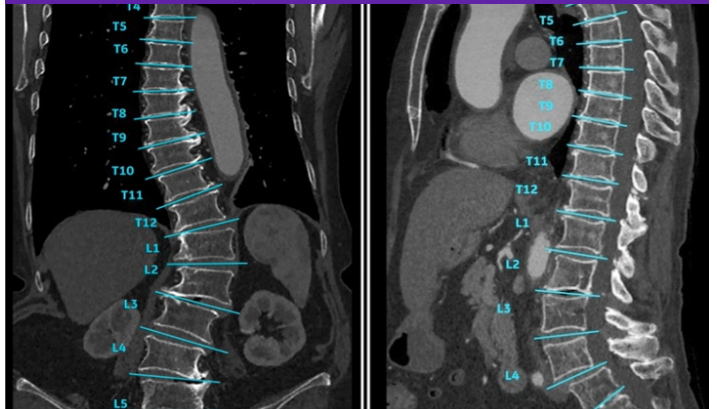
Designed to automate your image post-processing and facilitate results sharing with a fully automated workflow

### Head Auto Views<sup>6</sup>



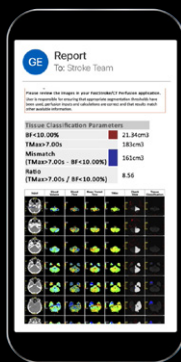
Automatically generate anatomically aligned head reformatted views

### Spine Auto Views<sup>6</sup>



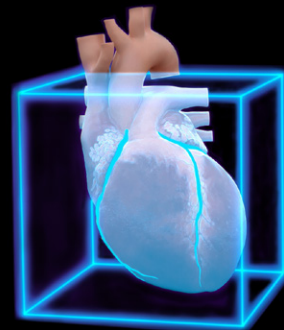
Automatically generate anatomically aligned and labeled spine reformatted views

### FastStroke with StrokeSENS<sup>5,6</sup>



Automatic processing of ischemic stroke cases and emailing results

### SnapShot Freeze 2<sup>6</sup>



Automated whole heart motion correction

## About GE HealthCare Technologies Inc.

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrated solutions, services, and data analytics to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing personalized, connected, and compassionate care, while simplifying the patient's journey across the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharmaceutical Diagnostics businesses help improve patient care from diagnosis, to therapy, to monitoring. We are a \$19.6 billion business with 51,000 colleagues working to create a world where healthcare has no limits.

Follow us on LinkedIn, X (formerly Twitter), and Insights for the latest news, or visit our website <https://www.gehealthcare.com/> for more information.

### References:

<sup>1</sup> Image quality comparisons were evaluated by phantom tests of MTF, SSP, axial NPS, standard deviation of image noise, CT Number accuracy, CNR, and artifact analysis. Additionally, LCD was demonstrated in phantom testing using a model observer with the head and body MITA CT IQ Phantoms (CT191, CT189 The Phantom Laboratory). DLIR-H and ASiR-V reconstructions were performed using the same raw data.

<sup>2</sup> From GE HealthCare TrueFidelity DL – Technical White Paper (JB68676XX)

<sup>3</sup> Software available to customer is dependent on the software package purchased by customer

<sup>4</sup> Commercial availability may vary from regions to regions

<sup>5</sup> StrokeSENS™ is legally manufactured by Circle Neurovascular Imaging, Inc. StrokeSENS is not available for sale in all countries.

<sup>6</sup> Note that some applications may not be available in all countries and package content and availability may vary depending on CT systems.



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