

Revolution Ascend Platform

A new revolution in CT efficiency



GE HealthCare

It's time to get ahead in CT. Way ahead.

As the demand for CT procedures continues to increase, this means you need to image a larger number of patients in a shorter amount of time. You also need CT technology that can keep up. Not just for the routine patients you have today, but also for the challenging patients you'll have tomorrow. The need for efficiency to stay ahead has never been greater.

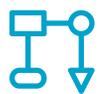
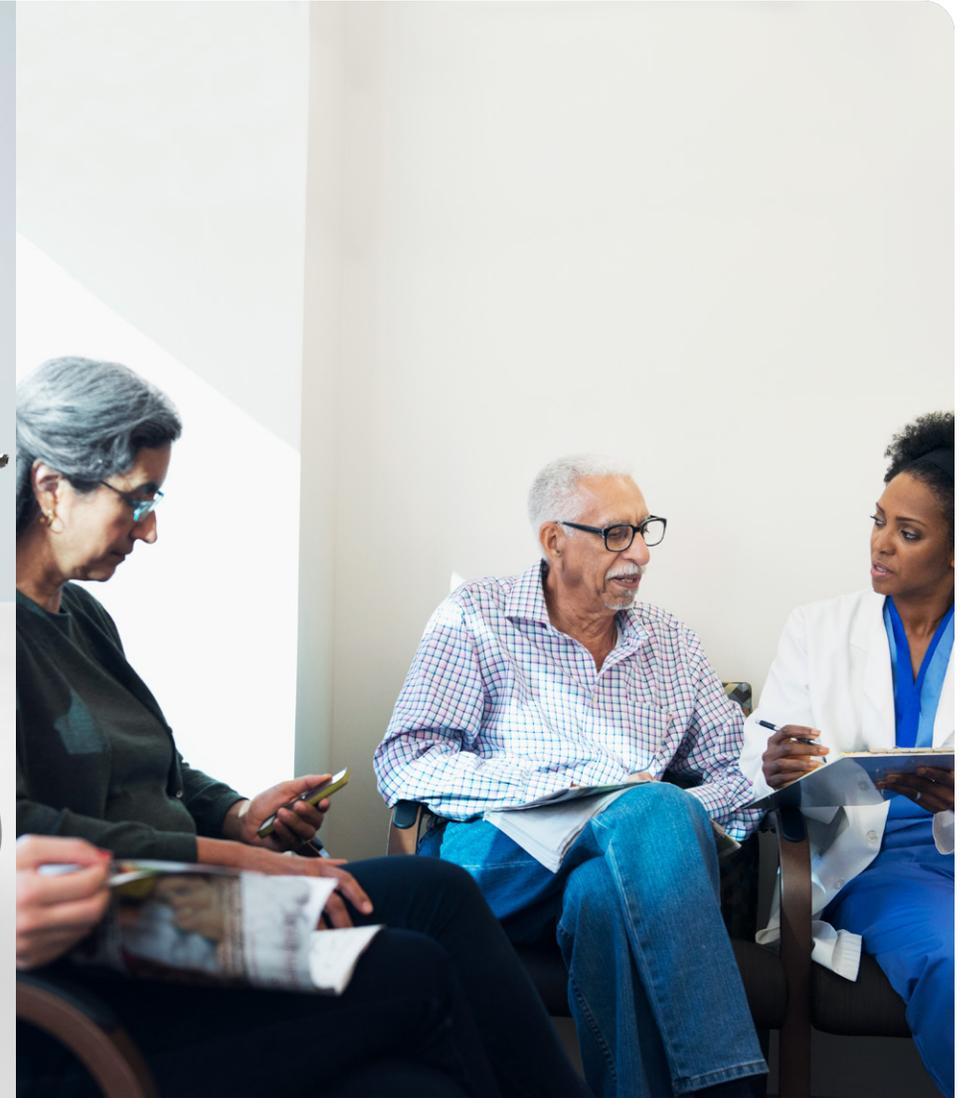
“Our challenges are the same as everyone else’s. With lower reimbursement, we need three patients now for every one patient we had 10 years ago. The need for high volumes drives the need for efficiency.¹”

Academic Hospital, UK



91%

of hospitals are looking to improve capabilities that reduce patient radiation dose



89%

of hospitals said improving their CT department workflow is a top priority



82%

of hospitals feel challenged by the increase in CT procedures in the last two years

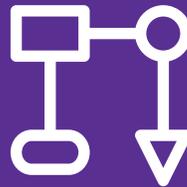
A new revolution in CT efficiency is here

Introducing the new Revolution™ Ascend Platform, our latest CT offering that is designed for efficiency to match your imaging demands. Whether you require a highly efficient system with 20 mm of coverage for routine scanning or a more advanced system with 40 mm of coverage that improves low contrast detectability, you can choose exactly what you need. Since the Revolution Ascend Platform is scalable, you can invest in the CT you need today and take comfort in knowing that it's ready for tomorrow.



Deep learning-enabled

Deep learning image reconstruction helps improve image quality and contrast detectability while maintaining the same dose.



Workflow-optimized

Effortless Workflow helps provide maximum CT scanning efficiency, accuracy, clarity and consistency.



Designed for scalability

A scalable design brings a reliable platform to everyone without compromising scan quality or patient experience.



“This new technology allows significant gains in image quality and significantly reduces patient dose. And as a result, this scanner enables a more reliable diagnosis.¹”

Alban Genu, M.D., Chief of Radiology, Center Hospitalier

Revolution Ascend Platform at a glance

Select	20 mm coverage	32/64 slices	Upgradeable to Plus
Plus	40 mm coverage	64/128 slices	Upgradeable to Elite
Elite	40 mm coverage	128 slices	Comes standard with deep learning technologies

Designed to enhance what matters

True Enhance DL²

For challenging oncology cases or pulmonary embolism evaluation, True Enhance DL is designed to enable better detectability and diagnosis when increased contrast resolution is needed.

True Enhance DL uses a dedicated Deep Neural Network (DNN) to generate deep learning-based monochromatic-like images from single-energy X-ray.

This technology is engineered to provide you with incredible image quality without a radiation penalty and a simple workflow.

Arterial Phase



Portal Phase



Venous Phase



120 kVp



WW 400

WL 40

True Enhance DL 50 keV

² True Enhance DL is 510(k) pending in the U.S. FDA. Not available for sale in the United States.

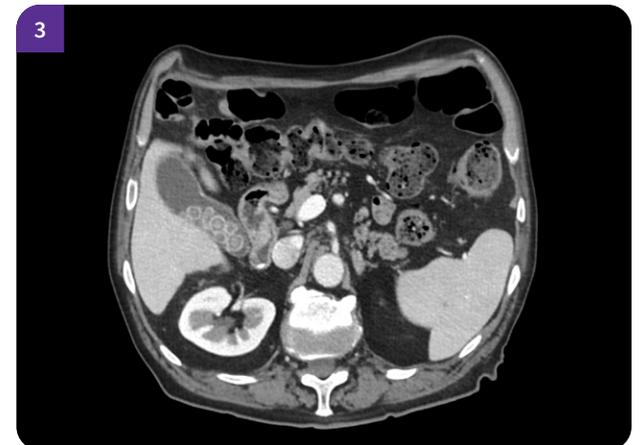
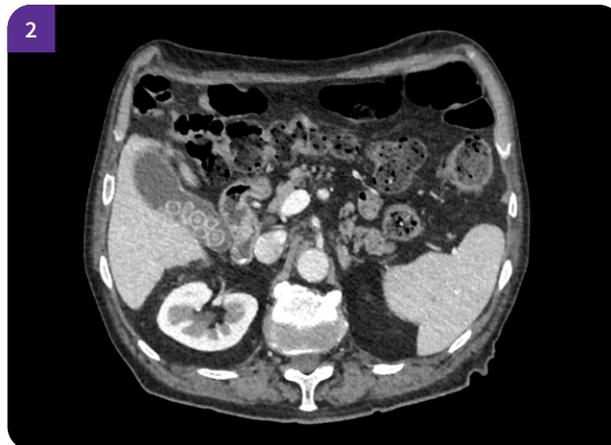


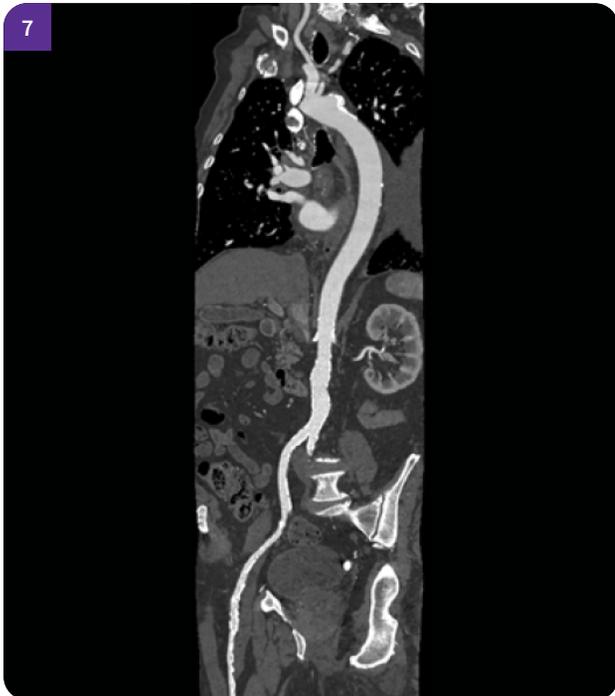
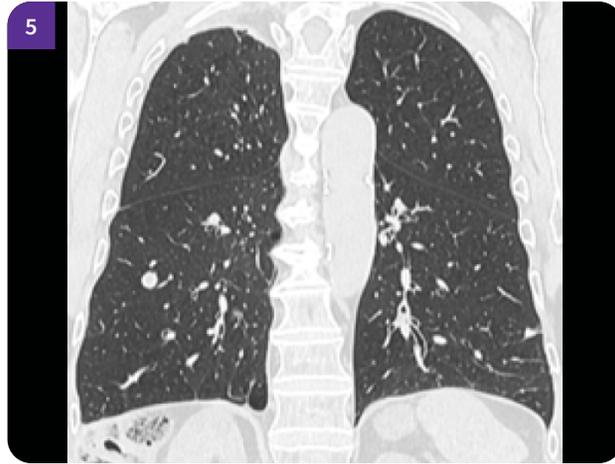
Deep learning for a deeper understanding

TrueFidelity™ DL

TrueFidelity DL is our state-of-the-art image reconstruction technology that uses a 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.³

1. Filtered Back Projection (FBP)
2. ASiR-V 60%
3. TrueFidelity DL





“We have seen the improvement in iterative reconstruction, but deep learning reconstruction takes it to a new level in terms of bringing the radiation dose down, while also improving image quality.¹”

Ricardo Cury, M.D., Chairman of Radiology, Baptist Health



- 4. Curved view of the carotid artery
- 5. Lung parenchyma coronal view
- 6. Sagittal abdominal reformat
- 7. Curved view of aorta
- 8. 3D Volume Illumination of the heart
- 9. 3D Volume Illumination of the abdomen

Simplified scanning from start to finish



Effortless Workflow

Available on all Revolution Ascend Platform configurations, Effortless Workflow intelligently automates your CT workflow from pre-scan protocoling to post-scan processing. It uses AI-based features to help transform the entire CT experience and provides maximum efficiency, accuracy, clarity and consistency.

This enables technologists to automatically and accurately personalize scans for each patient with significantly less effort. The end result is a beautiful CT image acquired in less time.

Pre-scan

Patient setup is a breeze with AI-based protocol suggestions based on each site's individual behavior along with automatic patient positioning. This helps reduce errors and ensures the best possible scanning position for the patient.



Intelligent Protocoling



Auto Positioning

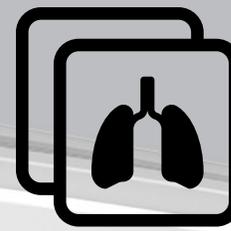


56%

reduction in positioning time⁴

“You have this piece of equipment with all this technology in it. Yet it pretty much runs itself.”

Gladys Farias, Manager Imaging Services, Baptist Health



Scan

Automatic scan ranges along with auto-adjustment of the scan settings can help balance dose and image quality in addition to reducing scan time.

-  Clarity UI
-  Smart Plan
-  Auto Prescription
-  Effortless Recon DL
 - TrueFidelity DL
 - True Enhance DL
-  Home Positioning & Remote Control Suite

 **66%**
reduction in total exam clicks⁵

Post-scan

Post-processing tasks are streamlined through Prospective Multiple Reconstruction, automated reformatted view generation, along with a suite of intelligent and AI-based applications. All designed to automate your image post-processing and facilitate results sharing.

-  Automated post-processing tools
 -  Direct MPR
 -  Spine Auto Views⁷
 -  Head Auto Views⁸
 -  FastStroke with StrokeSENS⁹
 -  Snapshot Freeze 2

 **21%**
reduction in total exam time⁶

You'll be ready for what's next



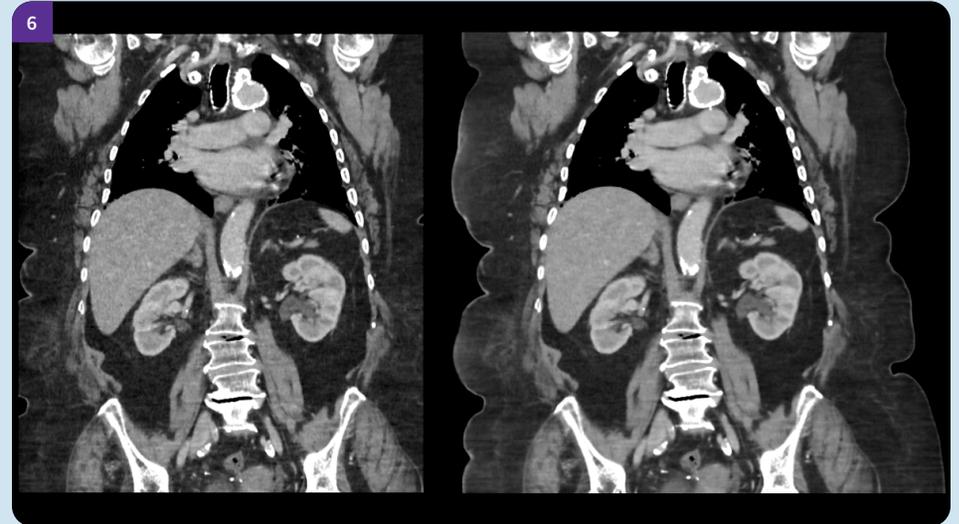
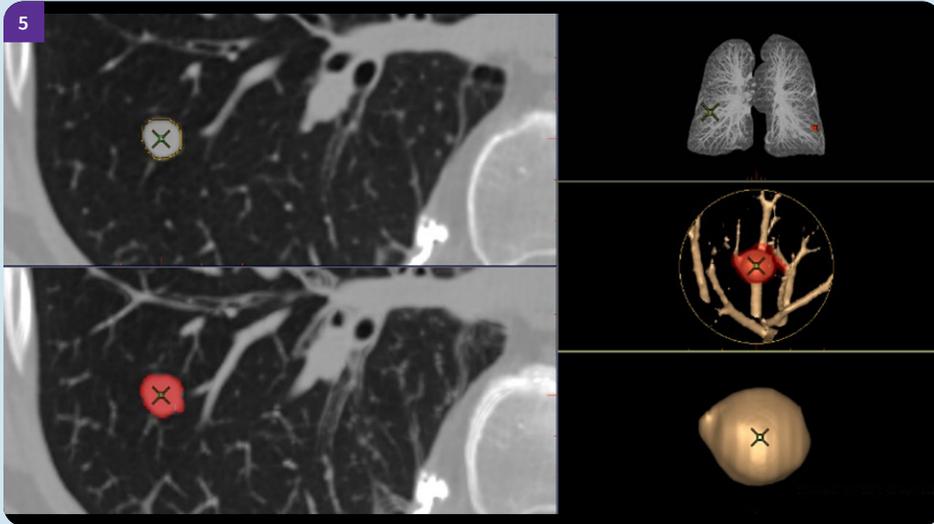
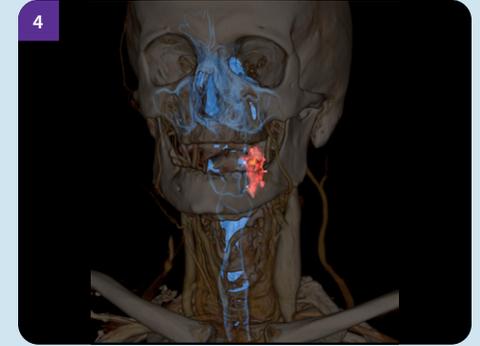
The Revolution Ascend Platform's scalable and upgradeable design lets you invest in the clinical capabilities you need today, while enabling your CT to grow with you in the future. The Revolution Ascend Select can be upgraded to Plus or Elite. And Plus can be upgraded to Elite. All of the configurations are paired with Effortless Workflow and Smart Subscription for the most efficient CT experience.

Smart Subscription is our industry's first subscription-based service for CT. This helps you keep your computing platform, clinical software applications and workflow innovations up to date across your entire fleet. As new applications are developed, they are automatically deployed to your Revolution Ascend Platform system. So you can take comfort in knowing your investment will always be ready for what's next.

	Revolution Ascend Select	Revolution Ascend Plus	Revolution Ascend Elite
	High performance for routine and basic coronary analysis	Best-in-class with a faster workflow from referral to report	State-of-the-art detectability and diagnosis
Scalability	Upgrades to Plus	Upgrades to Elite	Includes all deep learning technologies
Detector coverage	20 mm with 32 slices (64 slices optional)	40 mm with 64 slices (128 slices optional)	40 mm with 128 slices
Generator power	55 kW or 72 kW	55 kW or 72 kW	72 kW
TrueFidelity DL	Optional	Optional	•
True Enhance DL	-	-	•

Insightful images

Oncology

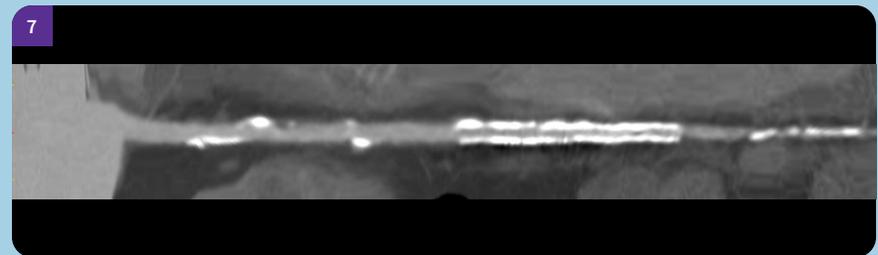
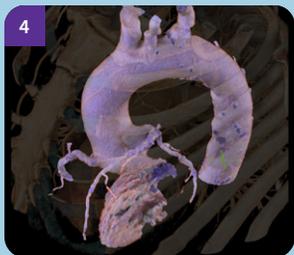
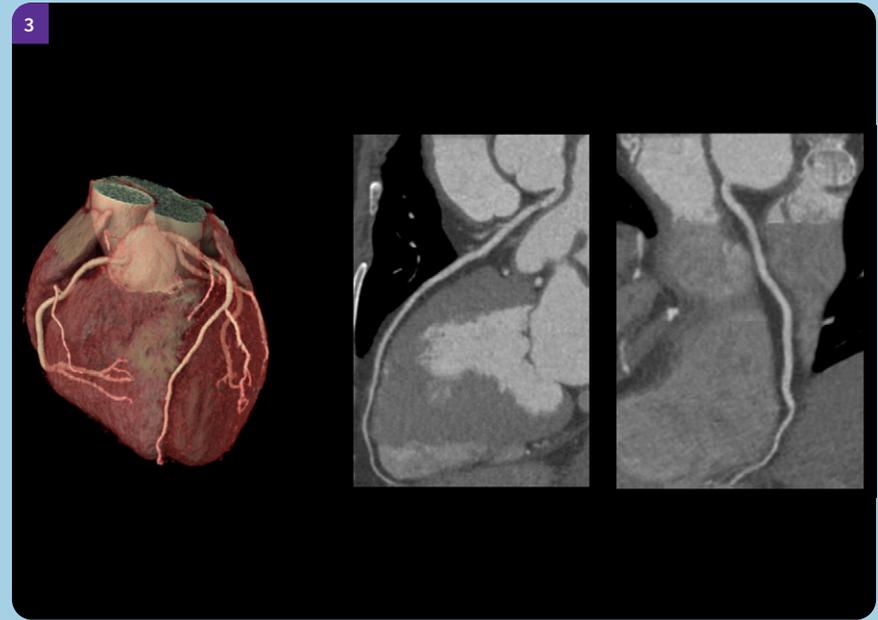


1. Liver tumor, TrueFidelity DL
2. HCC 100 kV volume illumination
3. Post-op biopsy lung

4. Tongue cancer, 1024 matrix
5. Lung nodules, TrueFidelity DL
6. With and without maxFOV

For challenging patients

Cardiovascular

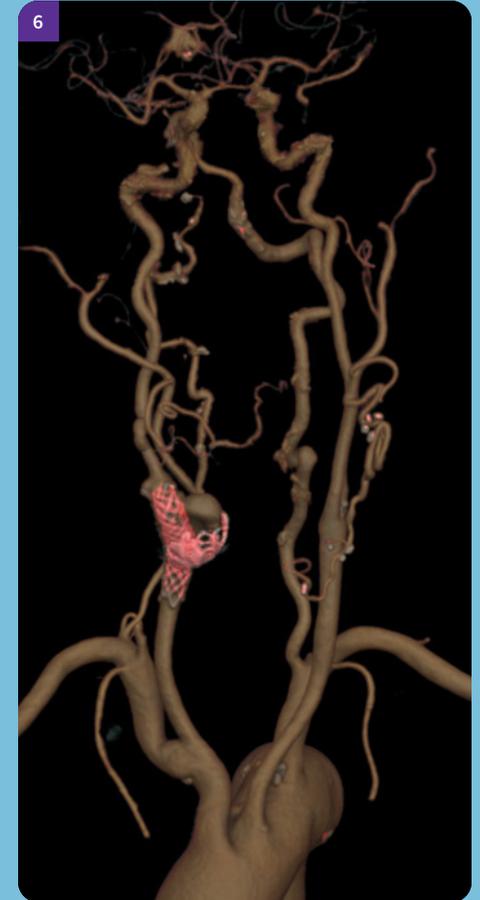
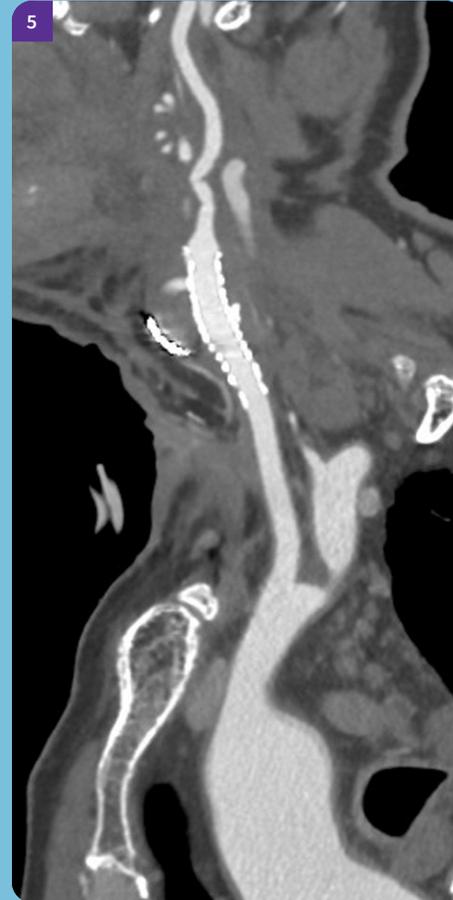
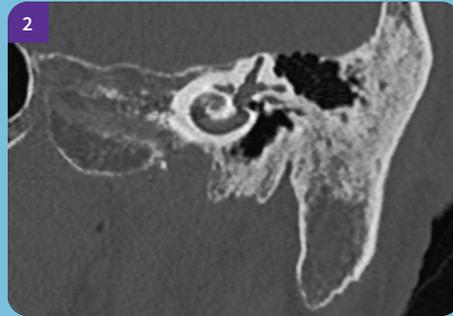
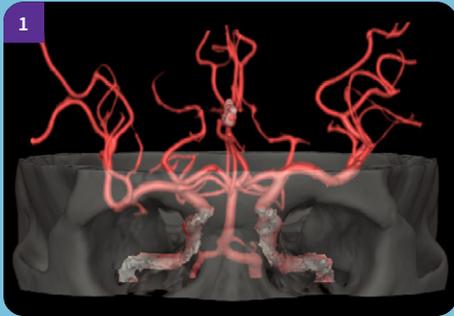


1. Low dose TAVI acquisition using 80 kVp
2. Aortic dissection with TrueFidelity DL
3. CCTA

4. Thoracic aorta
5. CTA carotids
6. CCTA with mixed plaque, AW plaque analysis
7. CCTA intrastent lumen view

Quick and clear

Neuro



- 1. Circle of Willis for clipping using MAR
- 2. High-resolution inner ear
- 3. Non-contrast brain
- 4. Cervical spine using MAR

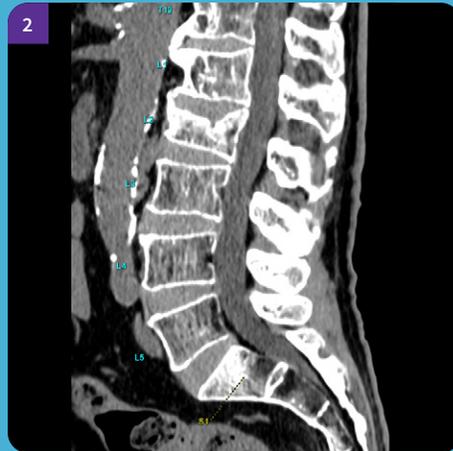
- 5. CTA Carotids with stent applying MAR
- 6. Volume illumination of carotids with stent

For every patient

General imaging



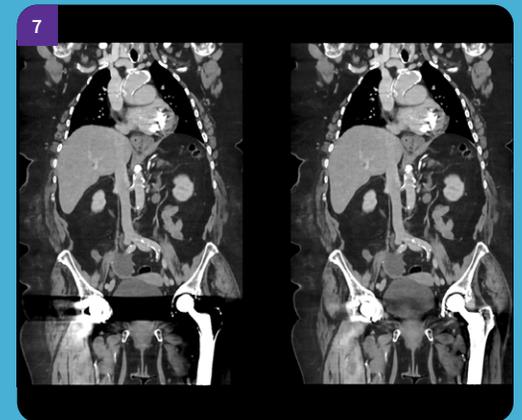
1. CTA run-off



2. Lumbar spine
3. High-resolution lung
4. Morbid obese patient, BMI 52



5. Pulmonary embolism
6. High-resolution ankle
7. With and without MAR



7. With and without MAR



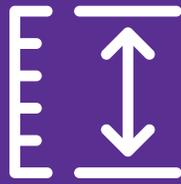
There's great CT care ahead

The Revolution Ascend Platform is ready for your CT department's clinical needs and efficiency demands. By offering advanced clinical capabilities, exceptionally efficient workflow as well as the latest in scalable imaging technology, you will have a CT that can keep you ahead of today's patients and tomorrow's challenges.



**AI-based
Auto Positioning**

Up to
40 mm
coverage



75 cm
gantry



**True Enhance
DL**

**Scalable
design**



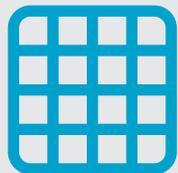
Revolution Ascend Platform

A new revolution in CT efficiency



Up to
.35 sec
rotation speed

**Interventional
CT-ready**

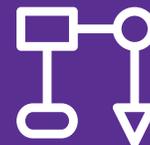


.28 mm
spatial
resolution



up to
82%
reduction
in required
dose

**Effortless
Workflow**



**TrueFidelity
imaging**



About GE HealthCare

GE HealthCare is the \$18 billion healthcare business (NYSE: GEHC).

As a leading global medical technology and digital solutions innovator, GE HealthCare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

Follow us on Facebook, LinkedIn, Twitter, and Insights for the latest news, or visit our website www.gehealthcare.com for more information.

¹ Not a consultant for GE HealthCare. The statements by GE HealthCare's customers described here are based on their own opinions and on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist, i.e. hospital size, case mix, etc., there can be no guarantee that other customers will achieve the same results.

² True Enhance DL is 510(k) pending in the U.S. FDA. Not available for sale in the United States.

³ 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.

⁴ The data was based on comparison between GE HealthCare's legacy products (16 ch and 64 ch scanner) and Revolution Ascend in the three institutions using a pilot product and selected routine head and body. The data set of this comparison was 838 exams for legacy products and 1387 exams for Revolution Ascend. The time saving value may not be effective for all institutions depending on the clinical practice. Defined the scan setting time is from "Open new patient" to "Confirm setting for Scout"

⁵ The required clicks are defined as clicks required to execute a scan from selecting a new patient till start scan. All associated clicks for and in clinical practice, number of the required clicks may vary depending on the circumstances, including but not limited to, the clinical task, exam type, clinical practice, and image reconstruction technique.

⁶ The data was based on comparison between GE HealthCare's legacy products (16 ch and 64 ch scanner) and Revolution Ascend in the three institutions using a pilot product and selected routine head and body. The data set of this comparison was 838 exams for legacy products and 1387 exams for Revolution Ascend. The time saving value may not be effective for all institutions depending on the clinical practice. Definition of entire exam time is from "Open new patient" to "Last primary recon completed" for Revolution Ascend and "Close exam" for legacy products.

⁷ Not CE-marked. Cannot be placed on the market or put into service until it has been made to comply with the Medical Device Regulation requirements for CE marking or otherwise obtained all required regulatory authorizations.

⁸ This is neither an offer nor an agreement to supply Head Auto Views. Not CE-marked. Cannot be placed on the market or put into service until it has been made to comply with the Medical Device Regulation requirements for CE marking or otherwise obtained all required regulatory authorizations.

⁹ StrokeSENS™ is legally manufactured by Circle Neurovascular Imaging, Inc. StrokeSENS is not available for sale in all countries.



GE HealthCare