



Introducing Revolution™ Aspire



GE HealthCare

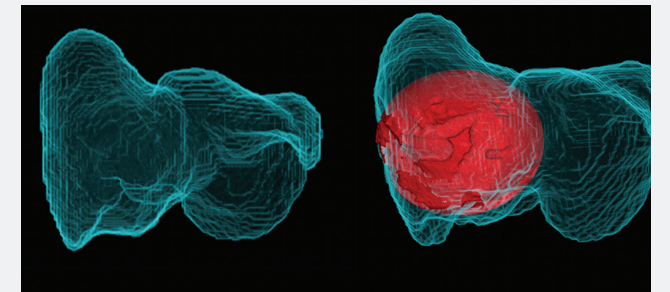
Aspire for more. Build a winning business.



Accommodate a larger variety of patients



Scan with exceptional image quality at low dose



Power your practice with continuous scanning and higher uptime



Increase patient throughput with faster scans



Reduce operating costs with low siting space and power input



Empower more lives everyday, 24/7



More Success with Revolution™ Aspire



Up to 50% Increased Patient Throughput¹ enabled by 0.8 second gantry rotation



Higher Uptime with a 42 kW generator peak power (70 kW equivalent with ASiR)



Larger Variety of Patient Scans with the 70 cm gantry bore size, Fixed and Up & Down table features



Enhanced Cyber Security Scan with a multi-layer approach to patient data privacy



Uninterrupted, Continuous Scanning with the 3.5 MHU X-Ray Tube (5.8 MHU equivalent with ASiR)



Up to 30% Enhanced Image Quality with Atlas Clarity Detector



Improved Patient Comfort with 20% lower breath-hold time and reduced scan time

At GE HealthCare, we always look beyond the horizon of care.

Revolution Aspire is a comprehensive CT solution that enables you to provide superior care to a greater number of patients at a lower cost. Thus, empowering you to continue growing your CT practice profitably in a highly competitive market.

It is designed with an easy-to-upgrade hardware in mind, ensuring your practice continued viability of cutting-edge technology for years to come.

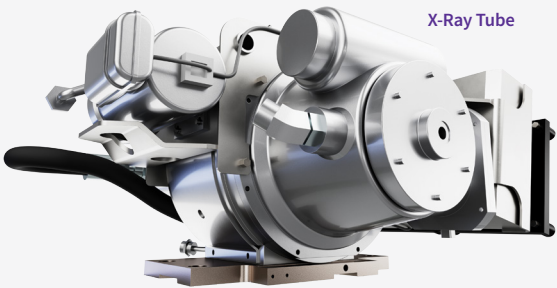
When you aspire to build a winning CT business, the Revolution Aspire CT is exactly what you need.

More stability with the

Powerful & robust X-Ray tube and generator



** Use of ASiR can allow for scanning at lower mA and less anode heat, thereby reducing tube cooling limitations / Use of ASiR allows scanning at a lower mA and less tube heat output, resulting in the ability for longer duration helical scans similar to the capability of a 5.8 MHU tube and 70 kW generator



Revolution Aspire powers your practice to the next level with higher throughput and uptime².

Designed to enable health-care providers transform more lives, it now helps you to serve more patients, every hour, every day, with greater speed and consistency.

More Power and Speed

- With up to 50% increased throughput¹, Revolution Aspire is equipped with a 3.5 MHU tube (5.8 MHU)**, 42 kW generator (70 kW)** and 0.8 second gantry rotation.

Improved Patient Comfort

- A 20% lower breath-hold time and reduced scan time enables improved patient comfort.

Maintains Stability

- The X-Ray tube contains a well-tested, high-heat transfer technology to manage throughput and high-voltage stability for consistent techniques.

Manages Over-heating

- Efficient anode heat transfer and casing design reduces interpatient delays for demanding helical scans.

Streamlines Workflow

- ScanWatch streamlines patient scan workflow to reduce the patient waiting time. It displays the tube usage percentage on the host UI so that the operator is aware of the current tube usage status before setting up a new exam.

¹Compared to the previous generation CT scanner

Up to
50%*

Increased Patient Throughput

Down to
20%*

Lower Breath-hold Time Due to Faster Scan

More competency with the

Next-Generation Clarity Imaging Chain



See more with the state-of- the-art Clarity Imaging Chain and enhance your diagnostic capabilities.

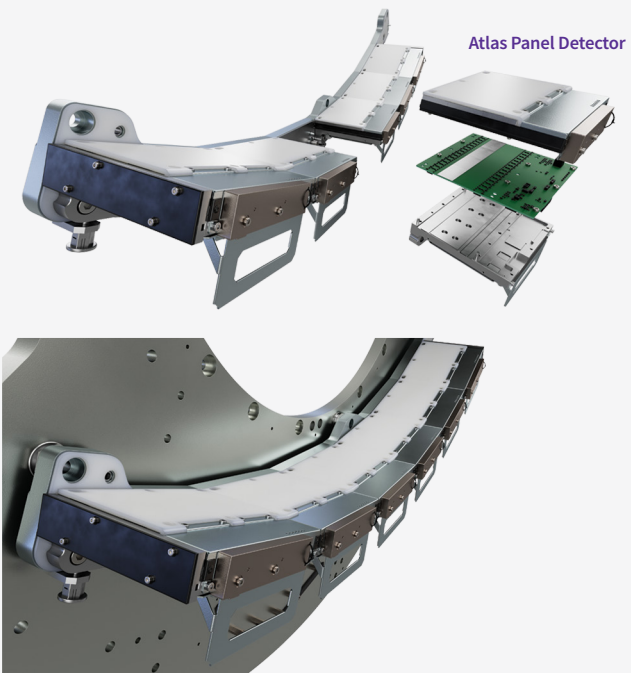
The Clarity Imaging Chain delivers superior imaging to meet your diagnostic needs in a variety of clinical settings.

Innovative Imaging Chain

- The Clarity Imaging Chain consists of the Atlas Panel Detector, X-Ray Tube, Compact High Voltage Generator and optional ASiR reconstruction. It delivers high resolution imaging to meet various customer needs in real clinical situations. Clarity Imaging Chain delivers high spatial resolution, low noise or less artifact.

Power Efficient Design

- The innovative detector technology helps to provide long term protection of your investment while enabling clinical capability and economic returns today. Its segmented panel designs built with an advanced packaging and miniaturization technology lowers power consumption and improves thermal performance.



Up to

30%*

Enhanced Image Quality

Down to

20%*

Lower noise for better image quality

More adaptability with the Bigger gantry bore & optimized table design



With a personalized approach to care, Revolution Aspire is designed to adapt to a diverse range of patients.

The compact gantry design customizes each patient scan based on age, size, weight and need.

Patient Table Features

- Single table, cantilever design with wide height range.
- Convenient controls on the gantry for cradle movement and patient positioning.
- Optimized table dimensions designed to accommodate a large variety of patients.
- Latch free control is provided and readily accessible on the table for emergency release.
- Vertical movement of the table enables optimal patient position and convenient loading/ unloading.
- Foot pedals on both sides of table for elevation. Cradle in-out position is controlled from OC for prescribed scans.



Fixed Table



Up & Down Table

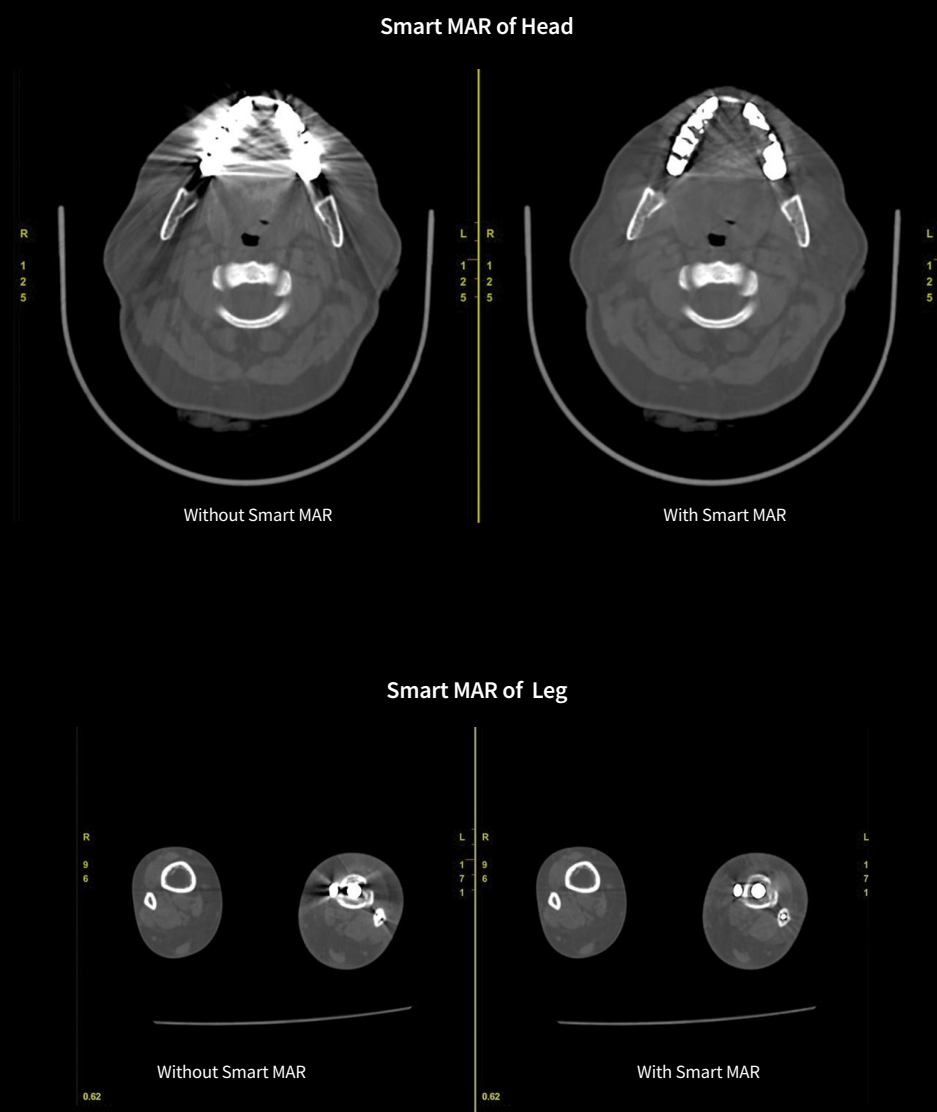


Gantry

With its large bore of 70 cm and a patient load capacity of up to 180 kg (396 lb), the Revolution Aspire increases your ability to image a wide variety of in-patients with ease - from emergency and trauma to pediatric and from the elderly to larger sized patients.

More informed diagnosis with

Higher imaging intelligence using Smart MAR*



Patients are looking to you for help. You can rely on Revolution Aspire to enable you to improve your diagnostic reputation.

The potential to capture new opportunities by offering referring physicians and patients higher levels of clinical results.

Smart Metal Artifact Reduction

Accurate dose calculation is essential to precision radiation treatment planning and this accuracy depends upon anatomic and tissue electron density information.

The presence of metal in the volume scanned by an x-ray CT scanner causes metal induced image artifacts that influence CT numbers and thereby introduce errors in the radiation dose distribution calculated.

Metal artifact obscures the anatomic detail making it difficult to accurately delineate the tumor.

Smart MAR is designed to reveal anatomic details obscured by metal artifacts, helping clinicians utilize CT scans, diagnose disease and contour targets and critical organs with greater confidence.

Benefits of Smart MAR

This innovative, projection-based method helps to reduce photon starvation, beam hardening, and streak artifacts caused by metal in the body, such as hip implants, spine screws and dental fillings.

Exceptional Image Quality

- Smart MAR uses a three-stage, projection-based process to deliver consistent, enhanced image quality.

Streamlined Workflow

- Unlike some other approaches, the Smart MAR solution requires only one scan, making the process of obtaining a corrected image fast and efficient.

Dose Conscious

- It requires just a single scan to create an exceptionally clear image, helping you to deliver dose-conscious care.

Increased Patient Comfort

- The efficient, single-scan process helps reduce patient time inside the scanner.

Versatility

- Smart MAR is designed to enhance clarity across a range of cases with metal including scans with hip implants, dental fillings, screws or other metal in the body.

More ease with the

Super-efficient & streamlined UI workflow



A Smart CT for a smart business. Smart features of Revolution Aspire help you streamline your workflow even more.

Take advantage of the ease in patient set-up, prescription, and scanning due to simplified, automated scan prescriptions, personalized to the patient, and extremely user-friendly reference protocols.

IQ Enhance

IQ Enhance (IQE) reduces helical artifacts which are important for image quality of thin-slice helical scans. The Revolution Aspire CT series scanner with this feature can accelerate its helical pitch up to 70% when acquiring the same helical artifact level compared with the same scanner having IQ Enhance disabled.

SmartPlan

SmartPlan makes intelligent anatomy recognition possible and helps users to set localizer more efficiently for head, chest, abdomen and pelvis.

Up to

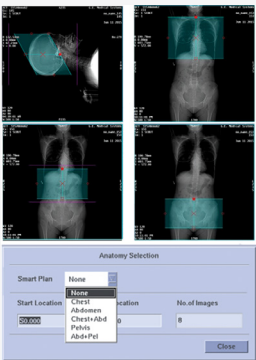
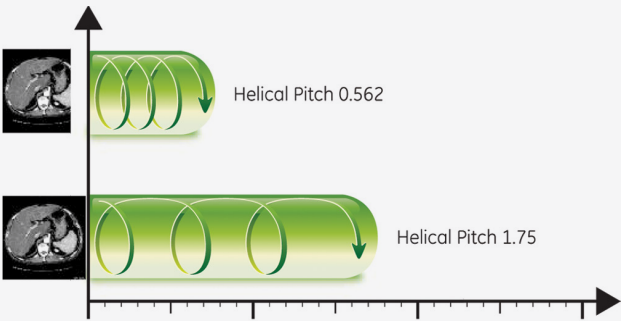
33%

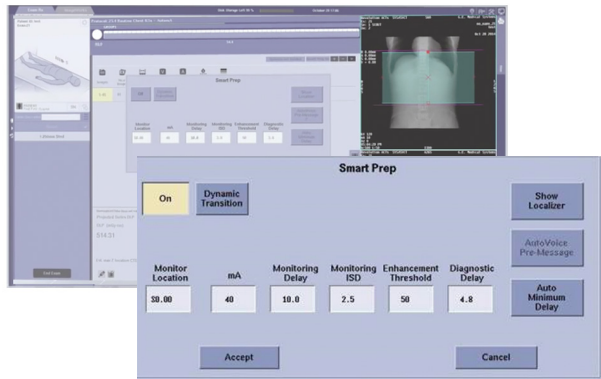
Increase in single helical scan length²

Up to

85%

Faster daily prep





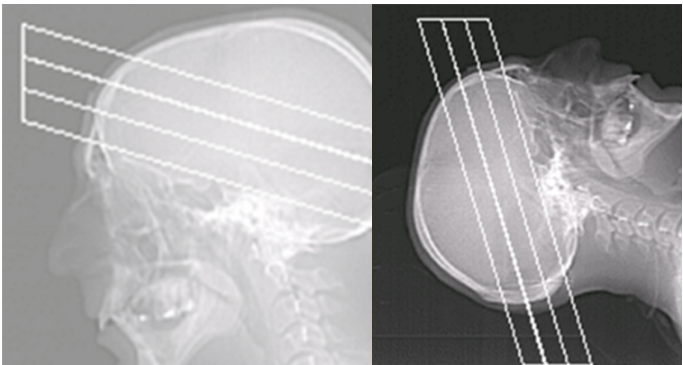
SmartPrep

SmartPrep allows intermittent monitoring of IV contrast enhancement in an area of interest. The contrast flow is monitored by low-dose scans until the contrast enhancement reaches the preferred point and then the auto trigger function initiates the scan prescription automatically.



Emergency Patient Mode

Revolution Aspire has a dedicated user interface (UI) for emergency cases to start the examination quickly. The patient name and patient ID are assigned automatically and once a protocol is selected, scan setup interface displays.



Digital Tilt

Volume helical digital tilt is an innovation in image reconstruction technology that allows clinicians to reconstruct tilted views of up to +/- 30 degrees without the need for physically tilting the scanner.

Digital tilt exams are efficient since operators can setup the entire workflow from their console without the need for multiple trips between console and gantry controller. With a volume helical acquisition, clinicians have the additional advantage of leveraging powerful post processing and visualization tools for creating volume rendering, multi- planar reformatting (MPR), and curved MPR views as needed.



User Interface

The operator console of Revolution Aspire utilizes a computer workstation with the following user interface features designed for a modern look and feel:

- One 24” wide screen LCD monitor. Wide screen display with a new user interface allows efficient control of scan workflow and imaging workflow. Monitor provides a 1920 x 1080 high resolution, flicker-free display.
- New compact scan control box design to fit efficiently on your desktop with intercom speaker, microphone and volume controls.
- Three button mouse.

Exam Split

Exam Split provides customers with the capability to “split” a series of patient images into separate groups. These smaller image groups can be networked to desired reading stations for multiple “read” and multiple billings on selected patient exams.

120 Seconds Continuous Scan

Revolution Aspire supports continuous 120 seconds scan for Helical and Cine modes.

More safety with

Advanced Smart Dose Technologies



Revolution Aspire makes an impactful difference in raising the value of patient care by providing superior image quality at a lower dose.

Smart Dose Technologies are intelligently designed to aid healthcare providers in acquiring high-quality images using lower radiation doses, contributing to more accurate diagnoses and lower exposures for patients.

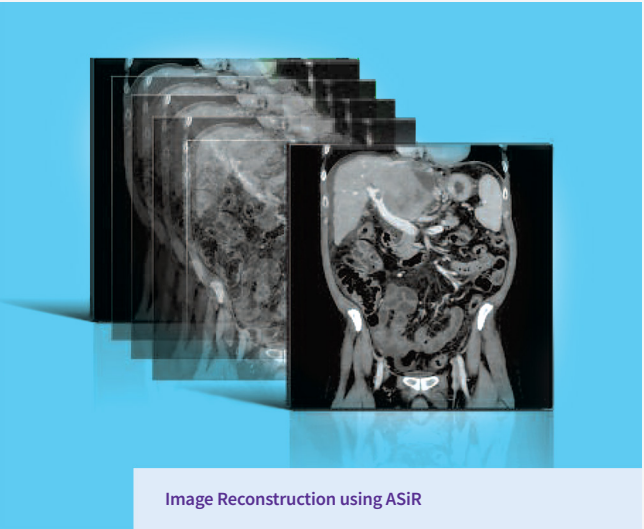
Smart Dose Technologies

Smart Dose Technologies are integral to Revolution Aspire in providing dose-conscious care to patients.

With ASiR* - Adaptive Statistical Iterative Reconstruction dose reduction technology - dose can be lowered by up to 40% at comparable image quality, enhancing patient care³.

Smart Dose gives access to an array of dose reduction technologies for pediatric to the elderly and high BMI patients. Some of these technologies are:

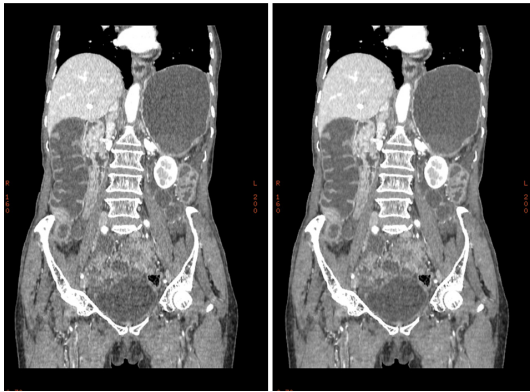
- ASiR
- Organ Dose Modulation (ODM)
- Dose Check



Down to

40%

Lower dose enables enhanced patient care³

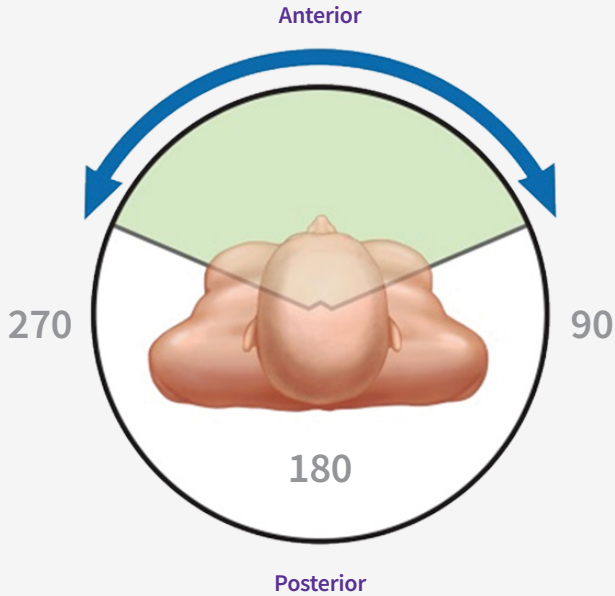


In clinical practice, the use of ASiR may reduce CT patient dose depending on the clinical task, patient size, anatomical location and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task. Low contrast detectability (LCD), image noise, spatial resolution and artifacts were assessed using reference factory protocols comparing ASiR and FBP.

In clinical practice, the actual level of LCD and resolution improvement may vary.

ASiR Features & Benefits

- ASiR is an advanced iterative reconstruction technique that provides breakthrough image quality in multi-slice CT exams at significantly less dose. It allows healthcare providers to lower dose by up to 40% to their patients as compared to standard image reconstruction without reducing imaging quality.
- ASiR uses sophisticated statistical modeling to remove noise in images while preserving anatomical detail. It improves low-contrast detectability and can have equivalent IQ to an acquisition with 1.67 times the mA.
- Operators can manage longer coverage scans easier.
- ASiR allows achieving the same image quality at a lower mA with less tube heat output, which enables the tube for longer duration under helical scan.



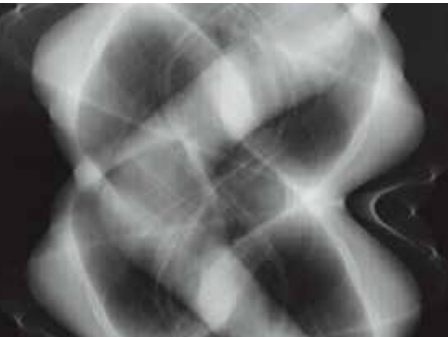
Organ Dose Modulation (ODM)

ODM provides reduction of radiation dose via X-ray tube current modulation for superficial organs and tissues, such as breasts while maintaining diagnostic quality without decreasing productivity (as the result of not using externally applied shields).

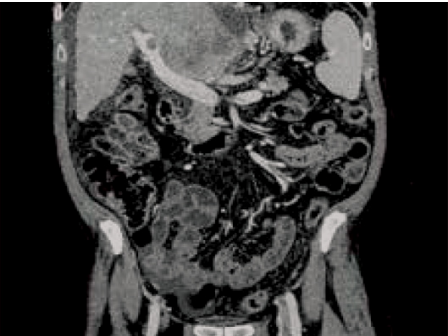
ODM not only reduces the dose to the sensitive organ by up to 40% but also optimizes the overall dose while maintaining the noise index (NI) value selected by the user.

Dose Check

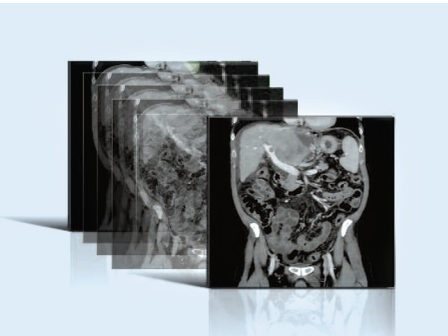
Dose Check provides users with tools to help them manage CT dose in clinical practice. Receiving notifications and alerts if your predetermined dose levels will be exceeded enables you to correct and confirm the right settings before scanning to avoid unnecessary radiation dose to your patient.



Raw Data



Conventional CT Reconstruction



Final Image Reconstruction using ASiR

More visualization with Essential software for advanced clinical applications



Do more with what you have.

When we created Revolution Aspire, we thought as much about helping you get the most out of it as we did about the technologies that went into it.

Volume Viewer

Harness the power of Volume Viewer to make 3D visualization routine. Get more information about the spatial relationships of different structures using multi-object volume rendering, multi-planar reformat, and MIP/min-MIP.

Navigation and Fly-Through

Use Virtual Endoscopy to visualize intra-luminal structures such as airways, sinuses, or vascular structures. A virtual “fly-through” mode lets you view images dynamically.

Vascular Imaging and Processing

Allows enhanced analysis of vascular features by automatically determining vessel centerline and tracking multiple vessels. You can also view oblique cross sections of vascular images, and rotate curved views to more clearly visualize vascular lesions.

CT Colonography

Provides quick, accurate, non-invasive colon exams. Prone and supine view can be displayed and synchronized together. You can even conduct a 3D fly-through that resembles an optical colonoscopy. Bookmarking tools mark polyp location, and distance and ROI tools quantify size and homogeneity.

Multi-organ CT perfusion 4D

Multi-organs is an image analysis software package that allows the evaluation of dynamic CT data. This follows an injection of a compact bolus of contrast material and generates information regarding changes in image intensity over time.

DentaScan

DentaScan creates a comprehensive set of cross-referenced composite axial, panorex, and oblique planar reformations of the mandible and/or maxilla. It gives you the information you need to plan dental implants or orthodontic surgery.

More protection with

Robust cyber security & privacy controls

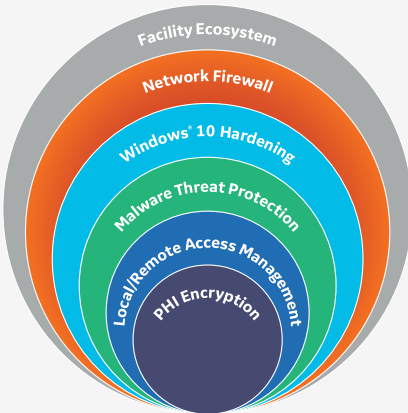


Manage productive daily workflows with more access control and firewall protection.

Protect your practice and patient data from cyber threats and unauthorized access.

Enhanced access control is enabled by Role-based Access Controls (RBAC) and stronger password policies.

- RBAC create role-based user accounts to provide users with exact privileges.
- It can protect data and critical components on the system by preventing unauthorized users.
- Passwords stored on the system are encrypted with algorithms that are FIPS 140-2 compliant.
- Inbuilt firewall protection shields applications from Denial of Service (DoS) attacks. Two levels of network firewall are provided: Operating System Firewall & Router Firewall.



* Windows is a registered trademark of Microsoft Corporation.

Audit Trails enables IT administrators to track, monitor and investigate cybersecurity events.

The Audit Trails tool can generate audit records of cybersecurity events including system state changes, user authentication, account management, patient data manipulation, network communications and service operations. It can also export audit records to a central server for long term data storage.

Data privacy is enabled with de-identification and encryption functions.

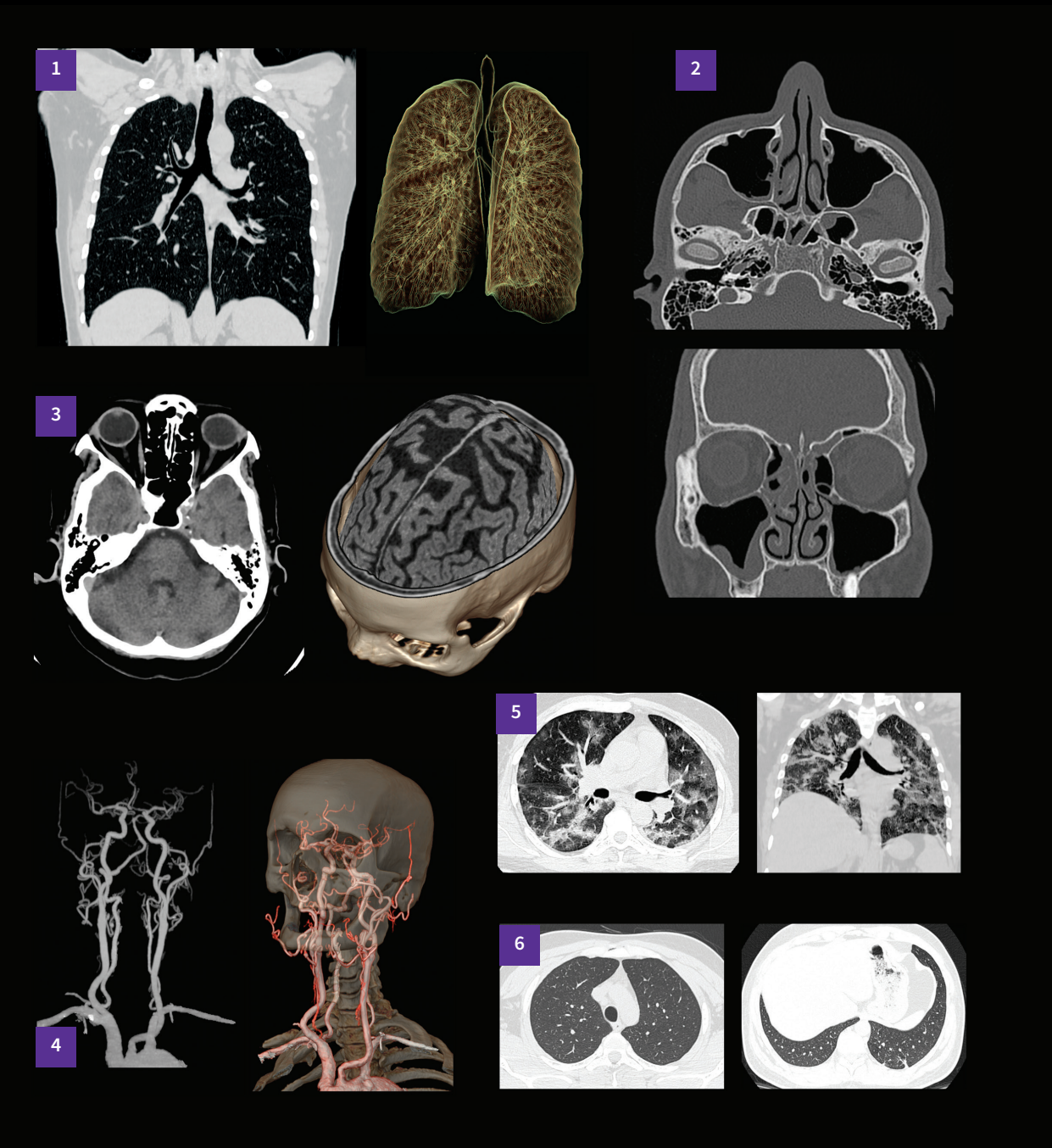
The Transport Layer Security (TLS) protocol is used to encrypt patient information when DICOM data is transferred from the CT scanner to DICOM destinations such as PACS, reading workstations, archive nodes and filmers. The Federal Information Processing Standards (FIPS) 140-2 compliant encryption algorithm is used to anonymize patient identification attributes when the data is collected for service purposes.

Image Transfer / Networking

Interface for transfer of medical images and information using the DICOM standard facilitates communication with devices from different manufacturers. Smart Transfer technology enables priority and parallel image transfer. Image transfer time using DICOM protocols is > 16fps on a 1000baseT network.

More efficiency with

Top-of-the-line CT imaging



01

Routine Chest (Whole chest helical)

02

Axial & Coronal reconstructions of Paranasal Sinus

03

Routine Brain (Axial Mode) with 3D Volume Rendering reconstruction of skull and brain parenchyma

04

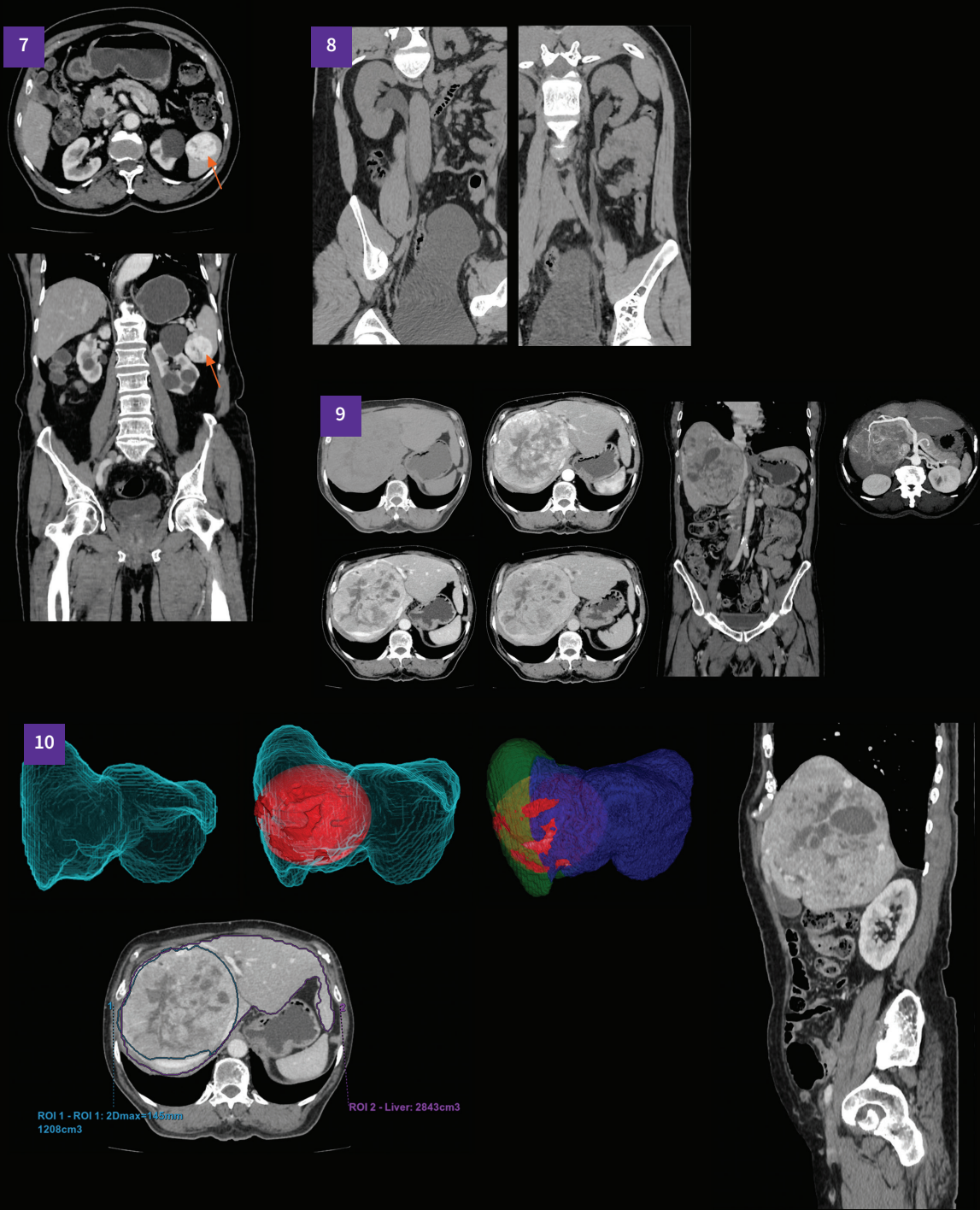
Head and Neck Angio - High pitch enabled by IQE

05

Covid-19 patient with poor breath- hold

06

HRCT Chest



07

Abdomen & Pelvis Multiple Renal Cyst

08

Curved Reformatted View of Left and Right Kidney Ureter Bladder

09

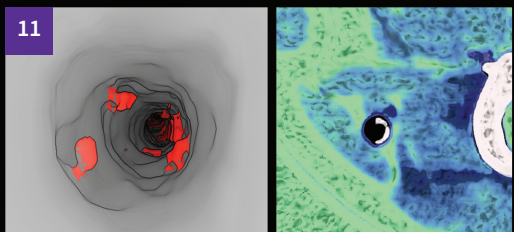
Multiphasic Liver Acquisition

10

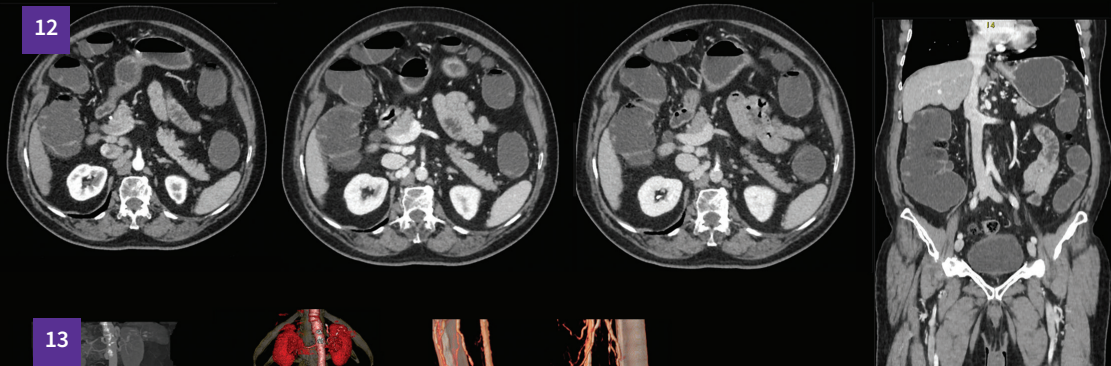
Multi-Phase Abdomen -HCC: fibrolamellar type

11

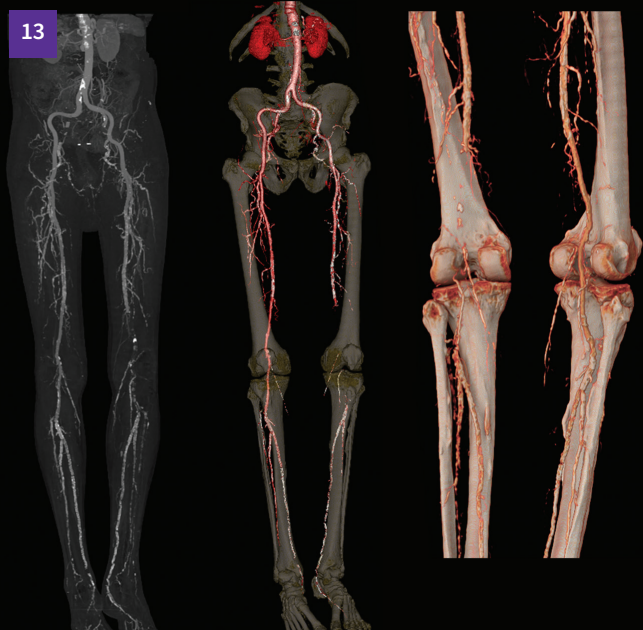
Intra-vessel virtual navigation with calcifications enhancement. Volume Rendering IVUS view



12



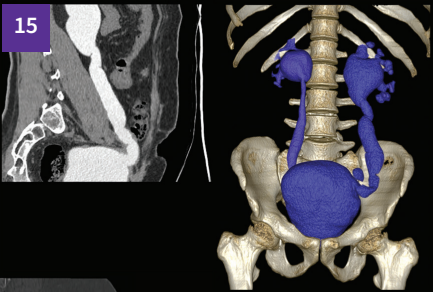
13



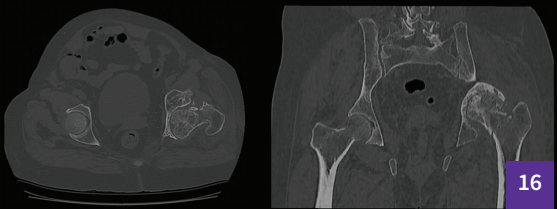
14



15



16



12

Multi-Phase Abdomen

13

Abdominal aorta and lower limbs CTA

14

Pelvis Volume illumination and Volume Rendering models

15

Post OP follow up Congenital Megaloureter Suspected leak - CTU

16

Axial and Coronal Hips reconstructions



Aspire for more and build a winning business.

GE HealthCare has gone to great lengths to create Revolution Aspire, a significant breakthrough in the Revolution family of Value CT scanners, to assist your practice in meeting its clinical and business objectives while improving and transforming the lives of your patients. As you rise, grow, evolve and move to the next level of care.

About GE HealthCare

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 clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing connected and compassionate care, while simplifying the patient's journey across the care pathway. Together, we're creating a world where healthcare has no limits.

Contact your GE HealthCare Sales Representative to learn more.

Write to us at: teamgehc@ge.com

[gehealthcare.com](https://www.gehealthcare.com)

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Revolution Aspire is not 510k cleared by the US FDA and is not yet CE marked. It is not available for sale in the United States or the EU and is also not commercially available in all markets



GE HealthCare