Revolution™ Maxima

GE HealthCare

"This is neither an offer nor an agreement to supply the technologies. 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."

Disclaimers

Notice 1 – Trademarks: ASiR-V, Revolution, Revolution Maxima and SnapShot are all trademarks of General Electric Company

Notice 2 – ASiR and ASiR-V: In clinical practice, the use of ASiR and ASiR-V 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-V and FBP. The LCD measured in 0.625 mm slices and tested for both head and body modes using the MITA CT IQ Phantom (CCT183, The Phantom Laboratory), using model observer method.

Notice 3 – Dose factors: DLP to effective dose conversation factors used in the presentation come from AAPM Report No. 96

Notice 4 – Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

1 Kaasalainen, T., Palmu, K., Reijonen, V., & Kortesniemi, M. (2014). Effect of patient centering on patient dose and image noise in chest CT. American journal of roentgenology, 203(1), 123-130.

2 Toth T, Ge Z, Daly MP. The influence of patient centering on CT dose and image noise. Med Phys 2007; 34:3093–3101.

Disclaimers

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. DLIR's image sharpness rated as same as or improved over ASiR-V*.

* As demonstrated in clinical evaluations on Revolution CT consisting of 40 cases and 6 physicians, where each case was reconstructed with both DLIR and ASiR-V
and evaluated by 3 physicians. In 100% of the reads, DLIR's image sharpness was rated the same as or better than ASiR-V's. This rating was based on each individual reader’s preference. DLIR's noise texture rated as improved over ASiR-V*.

* As demonstrated in clinical evaluations on Revolution CT, consisting of 40 cases and 6 physicians, where each case was reconstructed with both DLIR and ASiR-V and evaluated by 3 physicians. In 92% of the reads, DLIR's noise texture was rated better than ASiR-V's. This rating was based on each individual reader’s preference.

4 Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

Disclaimers

5 Image quality as defined by low contrast detectability. In clinical practice, the use of ASiR-V 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 Artifact were assessed using reference factory protocols comparing ASiR-V and FBP. The LCD measured in 0.625 mm slices and tested for both head and body modes using the MITA CT IQ Phantom (CCT183, The Phantom Laboratory), using model observer method.

6 Software available to customer is dependent on the software package purchased by customer. StrokeSENS™ is legally manufactured by Circle.

7 Neurovascular Imaging, Inc. StrokeSENS is not available for sale in all countries.

Overview

Overview

High-performance care every step of the way

We understand your challenge to keep up with increasing CT procedure demands while maintaining patient comfort and balancing staff resources. We evaluated and streamlined every aspect of the CT workflow to turn your processes into a single click. And clear CT images into ultra-clear ones that can be acquired with less dose.

Overview

High-performance care every step of the way

All packaged it into a high-performance, reliable scanner we call Revolution™ Maxima. With Revolution Maxima, you'll be ready for what's next.

AI for workflow

AI workflows help provide maximum CT scanning efficiency, accuracy, clarity and consistency.

AI for imaging

Deep learning image reconstruction boosts image quality and contrast detectability while keeping the same dose.

Smart Subscription

Smart Subscription keeps your CT platform updated, ensures consistent exams and offers flexible imaging packages.

Workflow

Workflow

Always in position

Revolution Maxima's AI-based Auto Positioning automates patient positioning to help ensure each scan is as comfortable as possible for your patient and optimized to provide you with the exact dose and imaging consistency you need.

Workflow

Always in position

Here’s how it works. Our Xtream camera uses real-time depth-sensing technology to generate a 3D model of your patient’s body. Then, using our deep learning algorithm, Revolution Maxima pinpoints the center of the scan range and automatically aligns it with the isocenter of the bore.

Workflow

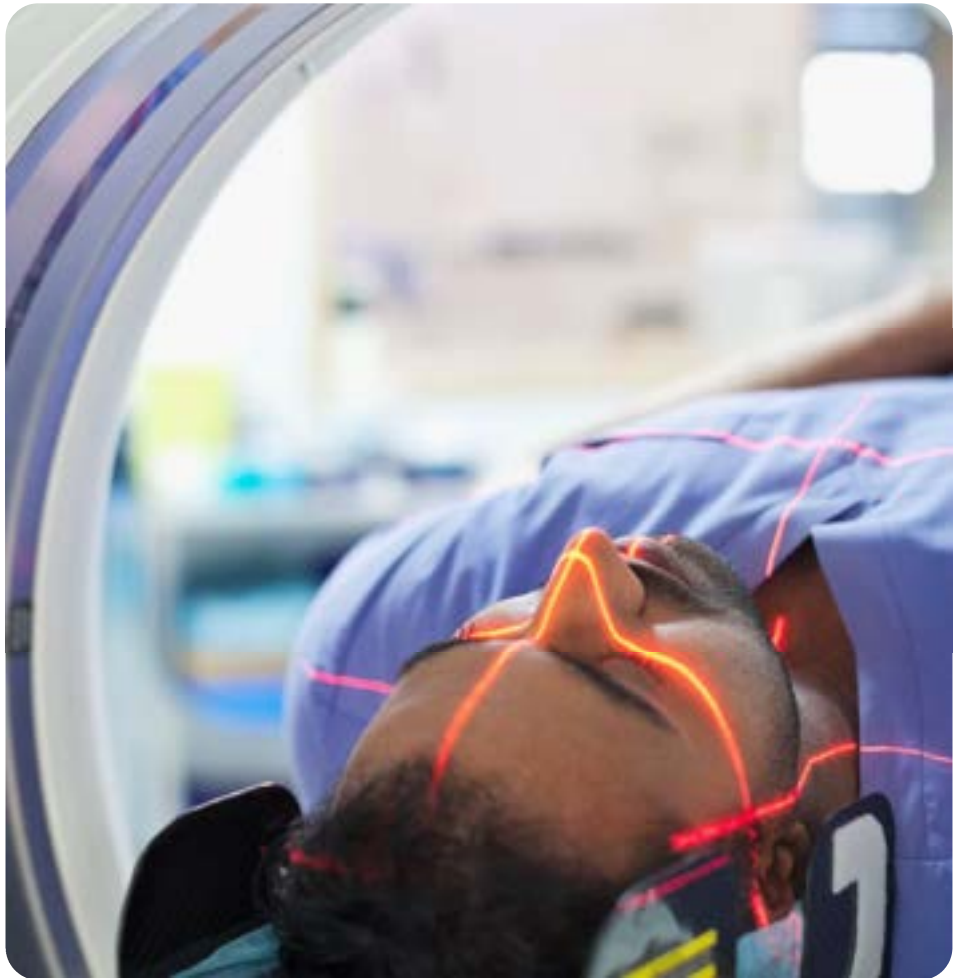
Always in position

With one click, Auto Positioning uses all of this information to automatically center your patient for a completely hands-free positioning experience.

Up to
100%
of CT patients are prone to mispositioning

Resulting in a
38%
Increase in dose[1]

Up to
22%
Increase in image noise[2]



Workflow

Smart select

Revolution Maxima simplifies the entire patient setup process. Innovative auto centering technology is at the core of our improved scan experience, but it starts with related protocol recommendations.

Quickly get to the appropriate protocol by choosing from a simple list of related protocols.

Workflow

Auto center

By comparing the exam description against a database of scan protocols, the system displays a short list of protocols to choose from.

By calculating the 3D center of the scan range, the system knows exactly how to align the table in the bore.

Workflow

Click to position

What used to take valuable time searching for the right protocol and then manually positioning the patient in the bore, can now be done with a quick selection and the simple click of a button.

With the click of a button, automatically position your patient at the start location of the scan.

Workflow

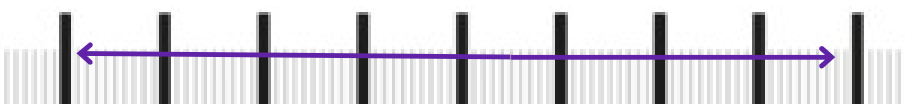
Mispositioning is a threat

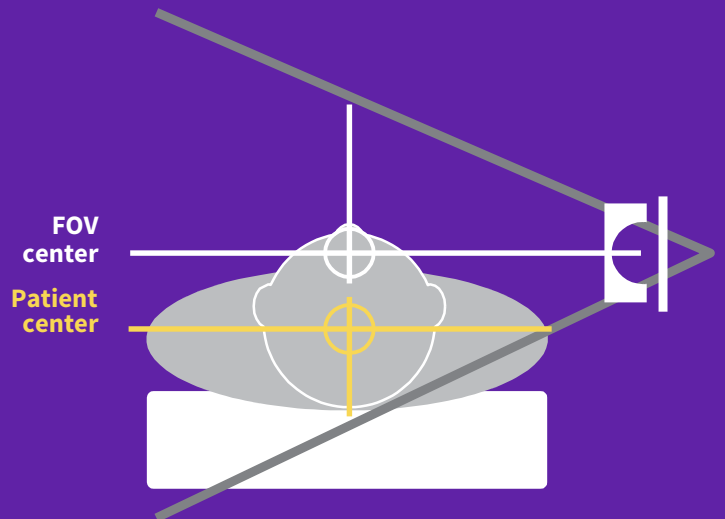
Miscentering causes magnification that leads to higher tube current and higher DLP[2]

Accurate localizer centering is required to achieve an appropriate balance of radiation exposure and image noise[1]

Did you know?

Errors from manual centering can range from -6.6 cm below to 3.4 cm above the isocenter.[3]





22%

After review of 549 scouts, 22% were miscentered by **more than 3 cm[3]**

Kataria, B., Sandborg, M., & Althén, J. N. (2016). Implications of patient centering on organ dose in computed tomography. Radiation protection dosimetry, 169(1-4), 130-135.
2. Harri, P. A., Moreno, C. C., Nelson, R. C., Fani, N., Small, W. C., Duong, A., ... & Applegate, K. E. (2014). Variability of MDCT dose due to technologist performance: impact of posteroanterior versus anteroposterior localizer image and table height with use of automated tube current modulation. American Journal of Roentgenology, 203(2), 377-386
3. Kataria, B., Sandborg, M., & Althén, J. N. (2016). Implications of patient centring on organ dose in computed tomography. Radiation protection dosimetry, 169(1-4), 130-135. .

Workflow

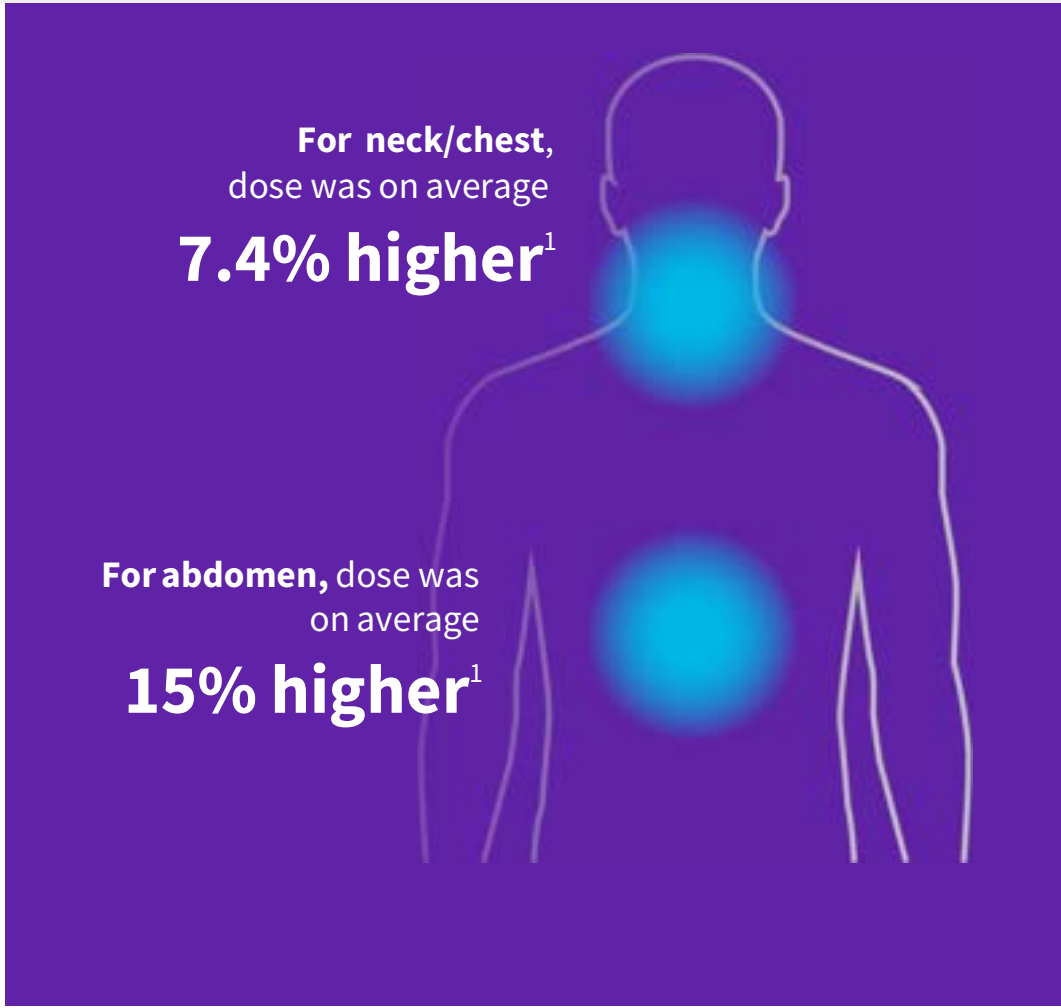
Unnecessary radiation exposure to patients

2.5+ cm

Centimeters from isocenter that create a noticeable change in patient dose

6+ cm

Centimeters below isocenter increases exposure by 38%[4]



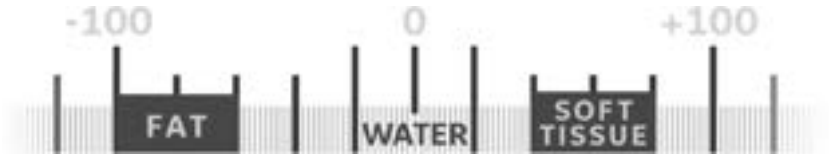
1. Kataria, B., Sandborg, M., & Althén, J. N. (2016). Implications of patient centering on organ dose in computed tomography. Radiation protection dosimetry, 169(1-4), 130-135.
4. Kaasalainen, T., Palmu, K., Reijonen, V., & Kortesniemi, M. (2014). Effect of patient centering on patient dose and image noise in chest CT. American journal of roentgenology, 203(1), 123-130.

Workflow

Impact on image quality

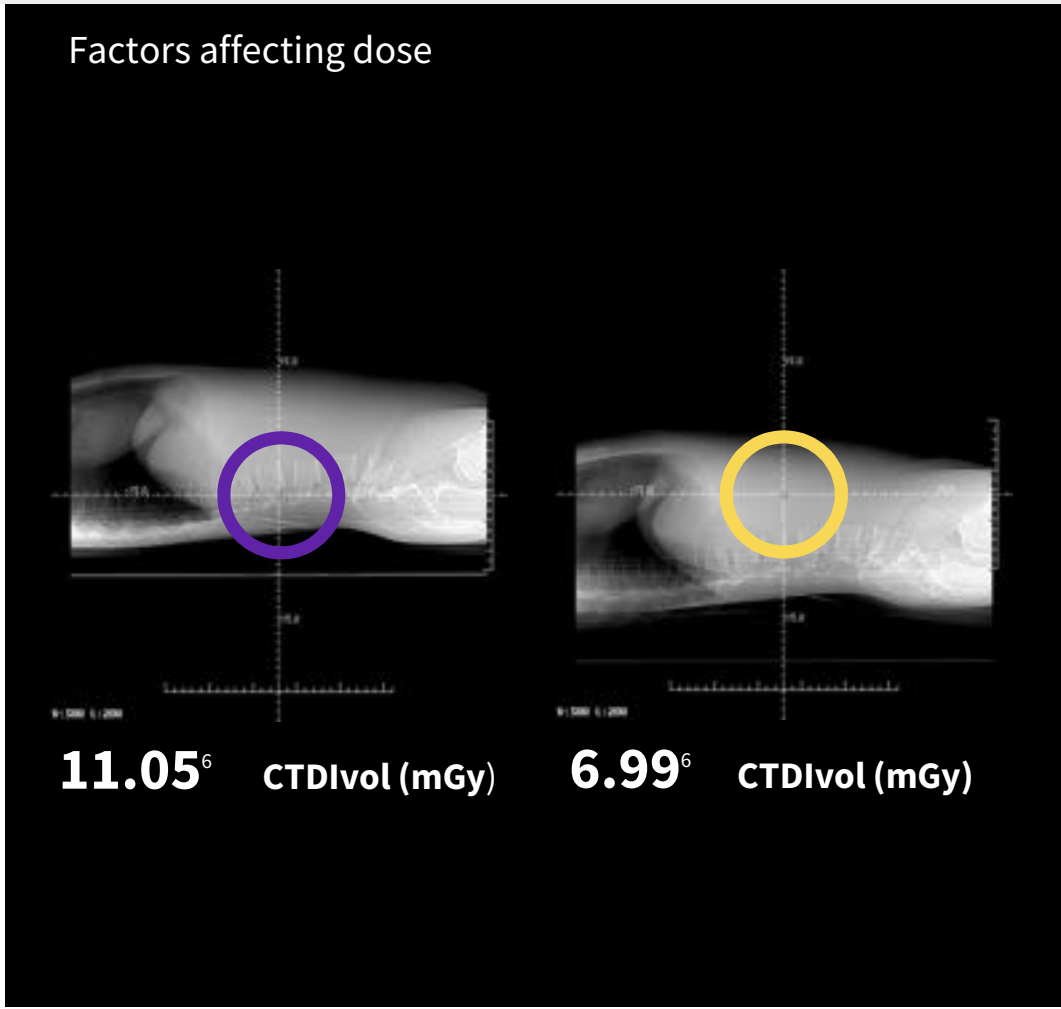
22 HU

density difference when isocenter is off by 10 cm[5]



Based on a 3 cm miscentered image, noise can increase by 6%

If the miscentering increases to 6 cm, a 22% increase in noise can be recognized[3,4]



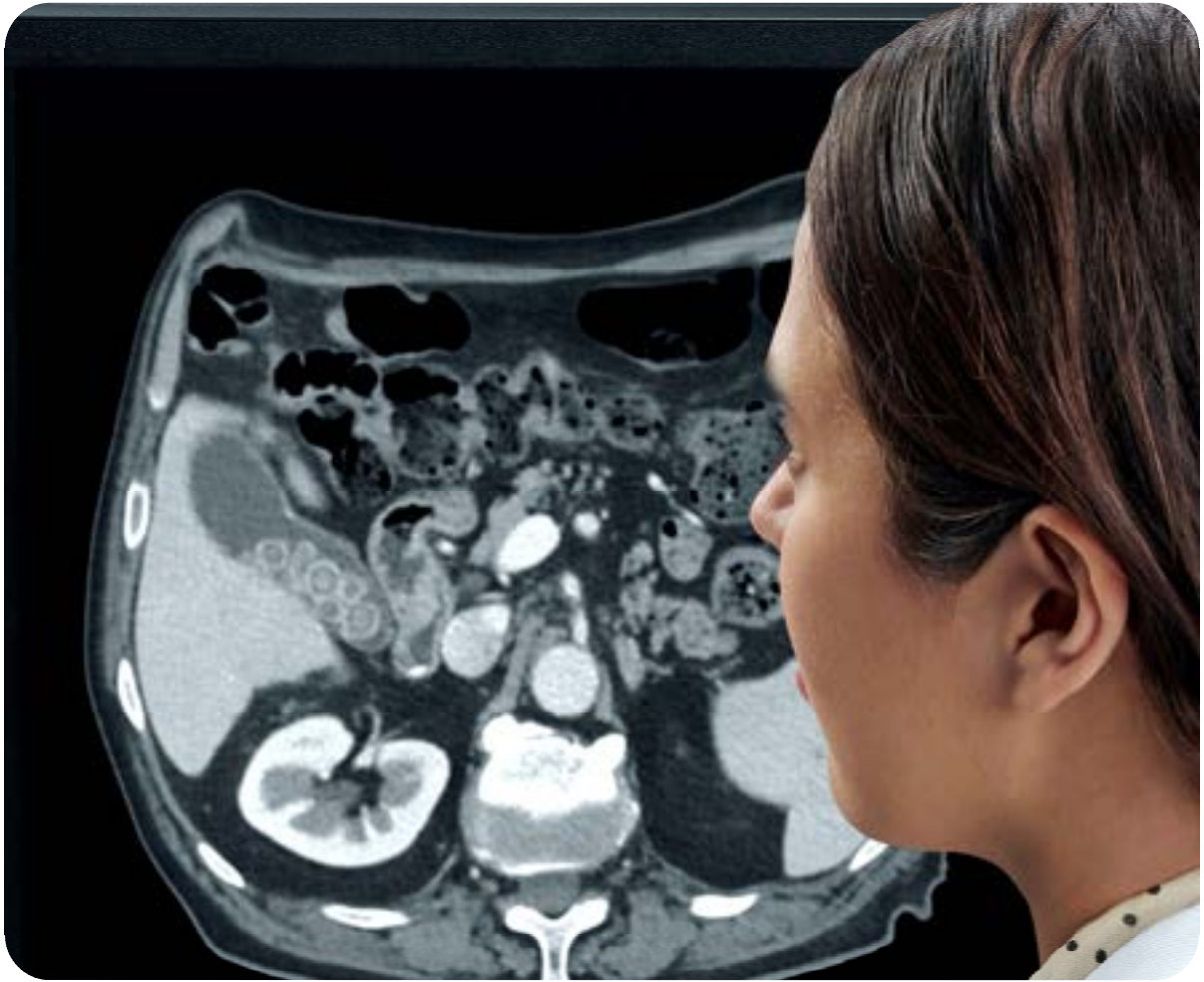
3. Kataria, B., Sandborg, M., & Althén, J. N. (2016). Implications of patient centring on organ dose in computed tomography. Radiation protection dosimetry, 169(1-4), 130-135.
4. Kaasalainen, T., Palmu, K., Reijonen, V., & Kortesniemi, M. (2014). Effect of patient centering on patient dose and image noise in chest CT. American journal of roentgenology, 203(1), 123-130.
5.Szczykutowicz, T. P., DuPlissis, A., & Pickhardt, P. J. (2017). Variation in CT number and image noise uniformity according to patient positioning in MDCT. American Journal of Roentgenology, 208(5), 1064-1072
6.Internal GE Measurements, original data on file.

Imaging

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.[3]



TrueFidelity™ DL

Deep learning for a deeper understanding

Filtered Back Projection (FBP)

ASiR-V 40%

TrueFidelity DL-M

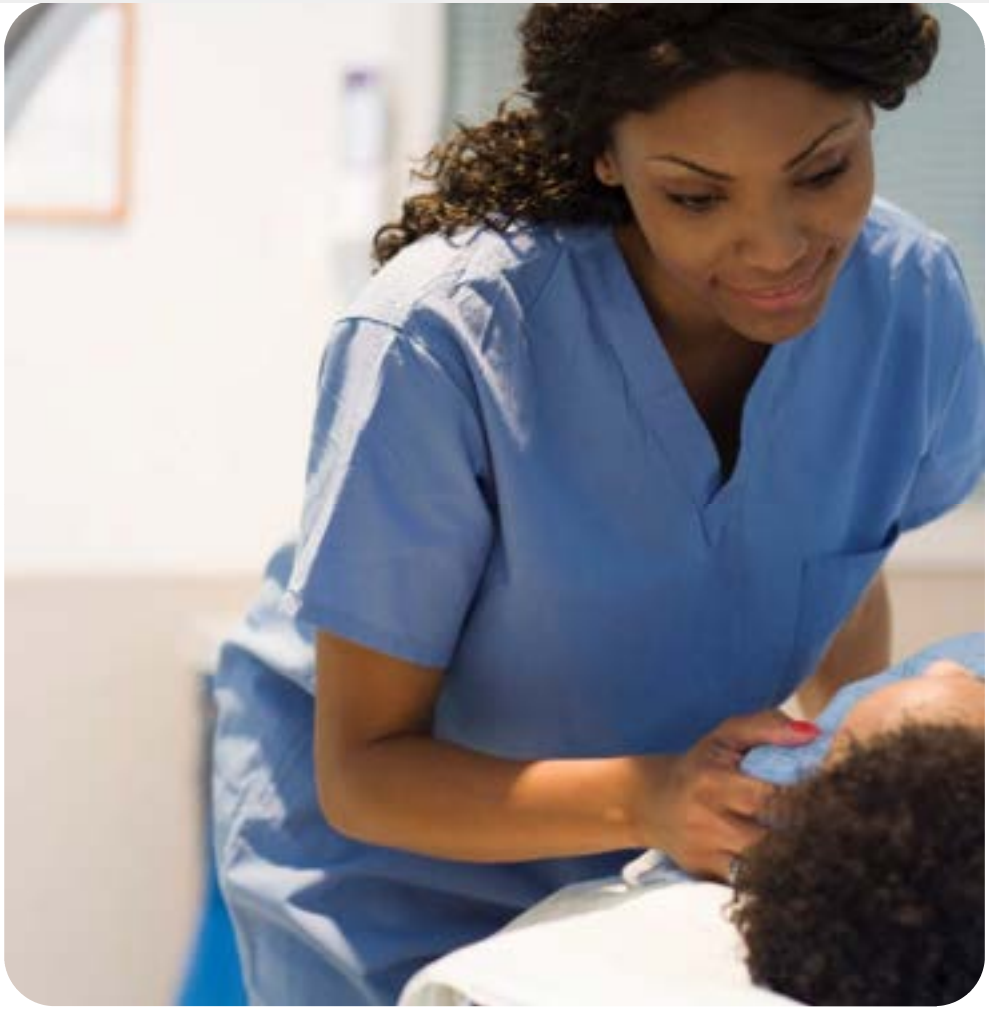
GE HealthCare

Imaging

It all comes together with clarity

Revolution Maxima is designed to provide you high-speed, full coverage imaging. It's built on our Clarity imaging chain featuring a 40 mm detector and provides 0.28 mm^4 spatial resolution.

This means you can quickly conduct routine scans and have the capability to amazing image quality across a diverse range of clinical needs.



Imaging

It all comes together with clarity

When paired ASiR-V you can expect to see an 82% reduction in dose[5] compared to filtered back projection reconstruction. Together, these core technologies provide you with everything you need to get to the right diagnosis, the first time, at the lowest dose possible.

40 mm
imaging detector

0.28 mm[4]
spatial resolution

Up to
82%[5]
lower dose with ASiR-V

Imaging

High speed at full coverage for routine imaging

40 mm

Detector coverage

Neuro in 2 seconds

Chest in 3 seconds

Chest Abdomen Pelvis in 5 seconds

Full body trauma in 10 seconds

Up to 175 mm/s scan speed with 40 mm collimation with submillimeter slice thickness and 1.531:1 helical pitch, across a 50 cm FOV

Imaging

Full coverage high resolution imaging

0.28 mm[4]
Spatial Resolution

Clarity detector design inherited from Revolution CT for up to 0.28 mm[4] spatial resolution across the full scan length and full 50 cm FOV

Clarity data acquisition system integrated detector module to reduce electronic noise

4. Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

Imaging

ASiR-V for low dose routine imaging

Up to

↓ 82%*

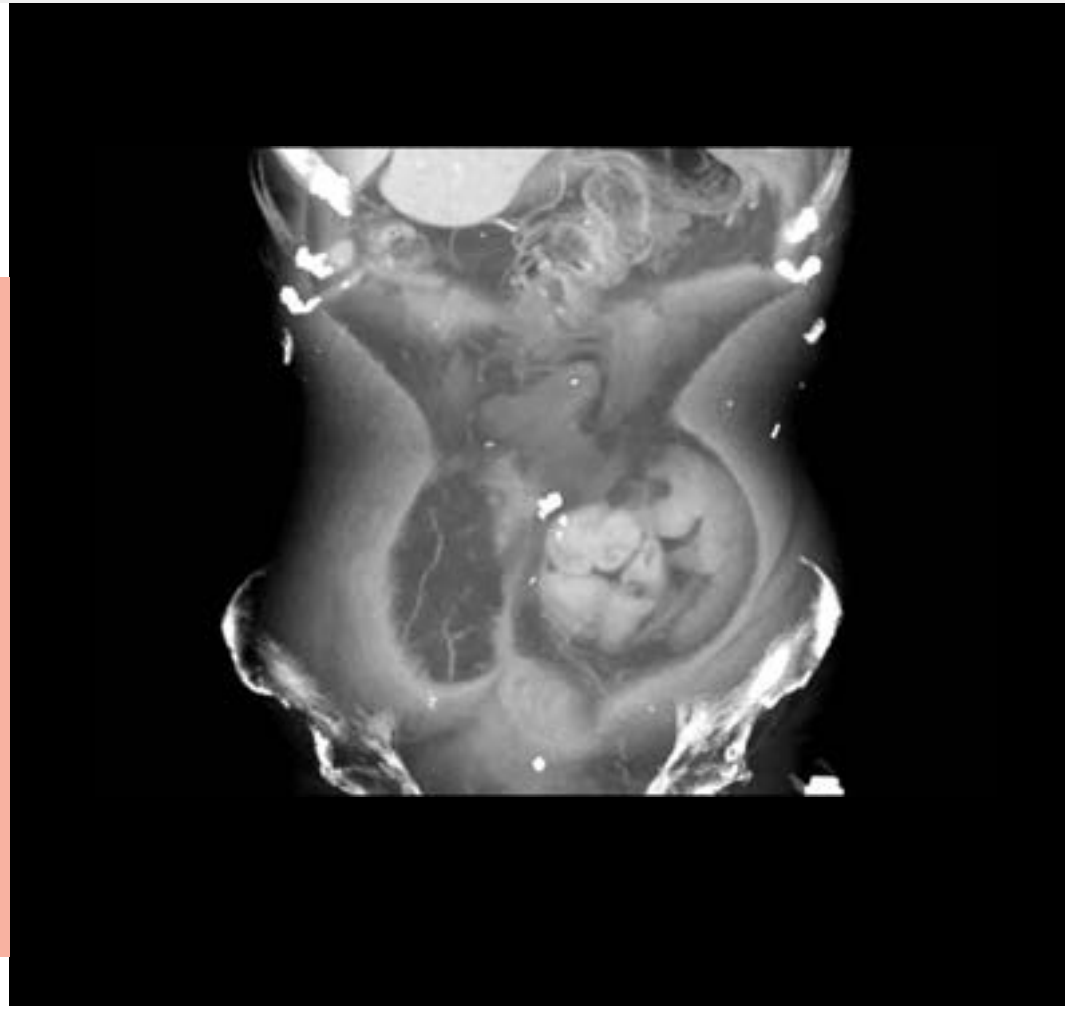
Reduction in dose compared to FBP at the same image quality[1]

ASiR-V[2] is a proven iterative reconstruction technology designed to be used for all applications allowing you to use lower dose and improve image quality, routinely

Improve LCD up to 135%* at the same dose

Reduce image noise up to 91%* at the same dose

Improve spatial resolution up to 2x at the same image noise



1 Image quality as defined by low contrast detectability.
2 Option
*In clinical practice, the use of ASiR-V 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 Artifact were assessed using reference factory protocols comparing ASiR-V and FBP. The LCD was measured using 0.625 mm slices and tested for both head and body modes using the MITA CT IQ Phantom (CCT183, The Phantom Laboratory), using a model observer method.

GE HealthCare

Imaging

Improve low contrast detectability up to 135%* at the same dose

Filtered back projection
Noise standard deviation = 43.8

ASiR
Noise standard deviation = 33.0

ASiR-V
Noise standard deviation = 14.1

1Image quality as defined by low contrast detectability.

*In clinical practice, the use of ASiR-V 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 Artifact were assessed using reference factory protocols comparing ASiR-V and FBP. The LCD was measured using 0.625 mm slices and tested for both head and body modes using the MITA CT IQ Phantom (CCT183, The Phantom Laboratory), using a model observer method.

Imaging

ASiR

68,000,000

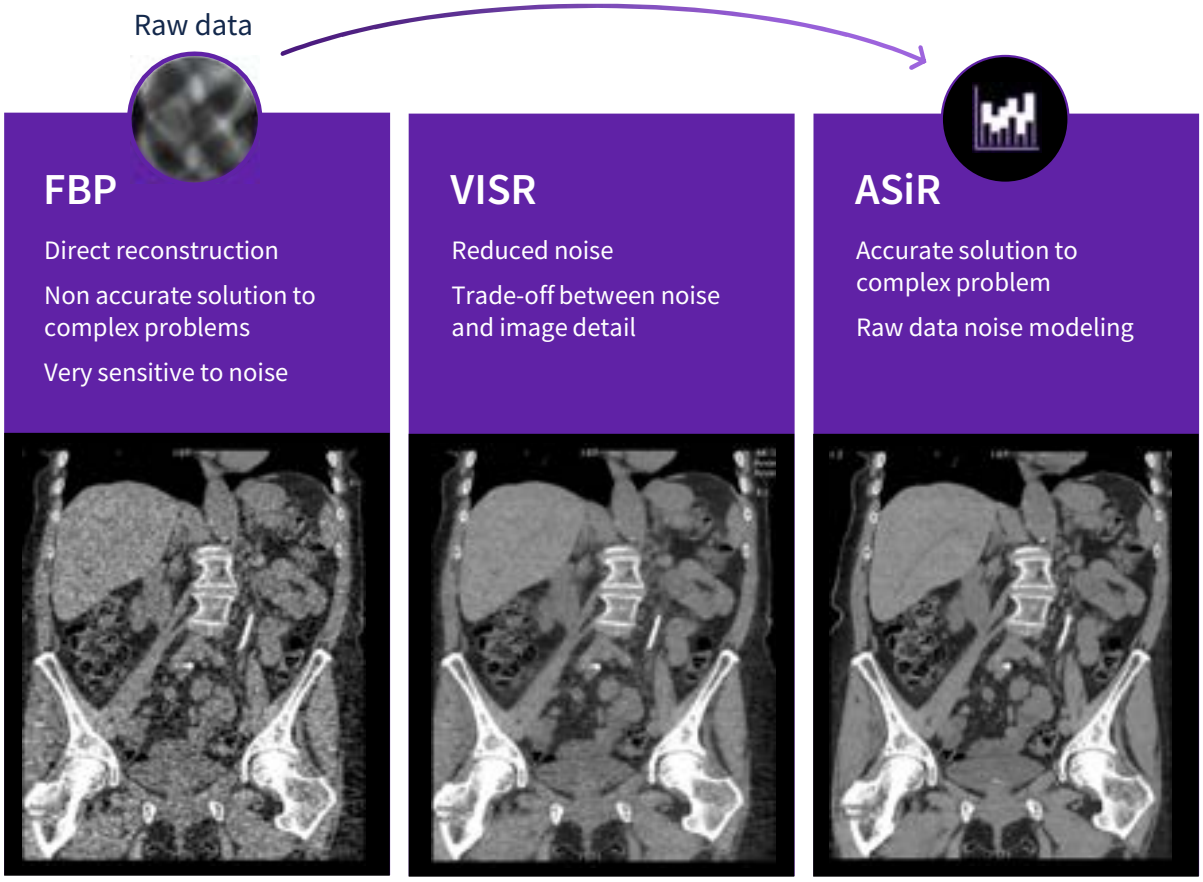
Exams using ASiR performed to date

5,600

GE HealthCare CT systems running with ASiR worldwide

150

Papers and talks since RSNA 2009



Imaging

Imaging that goes beyond

To provide enhanced clinical flexibility, Revolution Maxima also features a suite of intelligent applications to help you assess challenging clinical cases such as cardiac, stroke, oncology, and even patients with metal artifacts.

Smart MAR

Single acquisition metal artifact reduction.

Smart Cardiac

Set up complex cardiac procedures quickly, reliably and repeatedly.

Smart Stroke

Perform stroke assessment scans with perfusion shuttle technology and assess patient status quickly and accurately.

Imaging

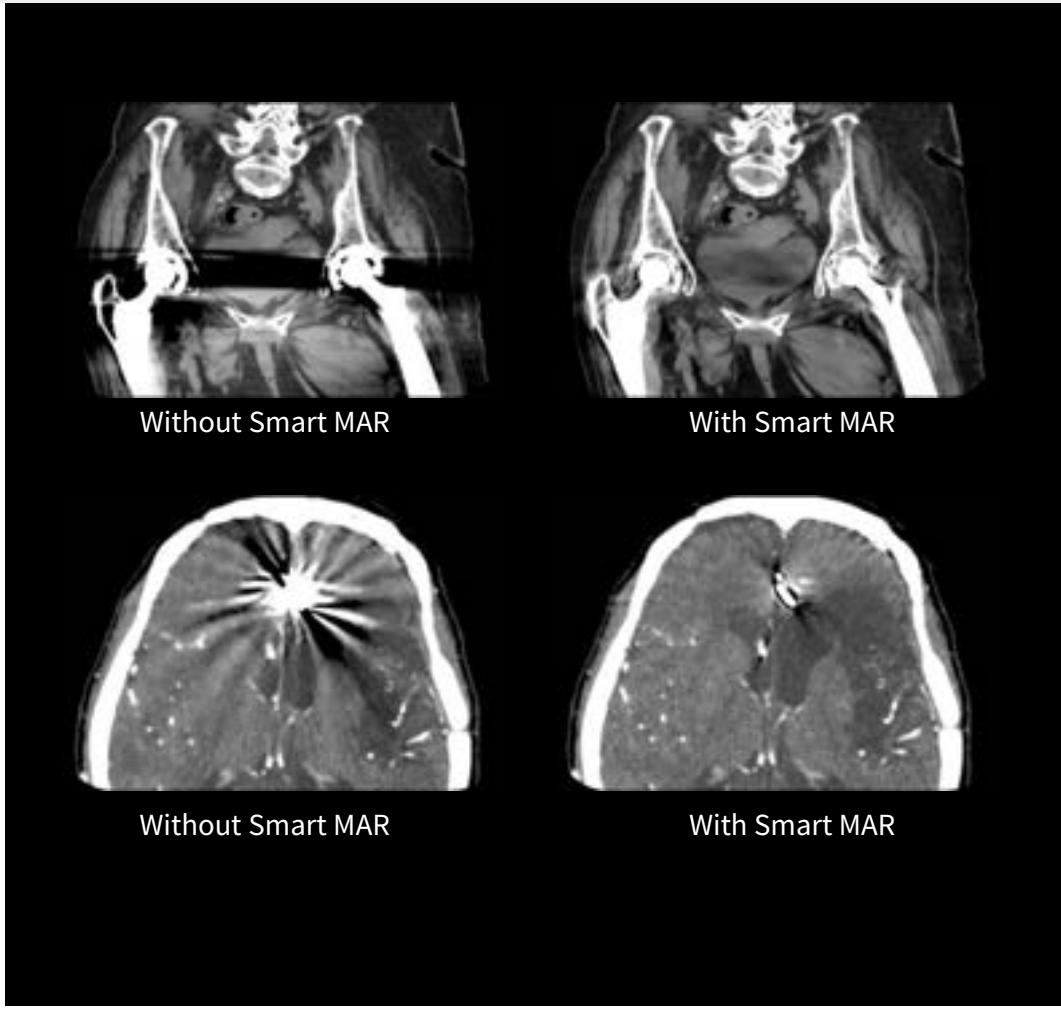
Smart MAR for artifact-less imaging

Single Acquisition

Designed to help reduce photon starvation, beam hardening and streak artifacts caused by metal in the body, for example:

- Hip implants
- Clips
- Screws
- Dental fillings

An innovative approach in the projection domain.
One acquisition — no additional interaction required



Imaging

Smart MAR: three-stage projection-based processing

Stage One

Corrupted samples in the projection that correspond to metallic objects are identified

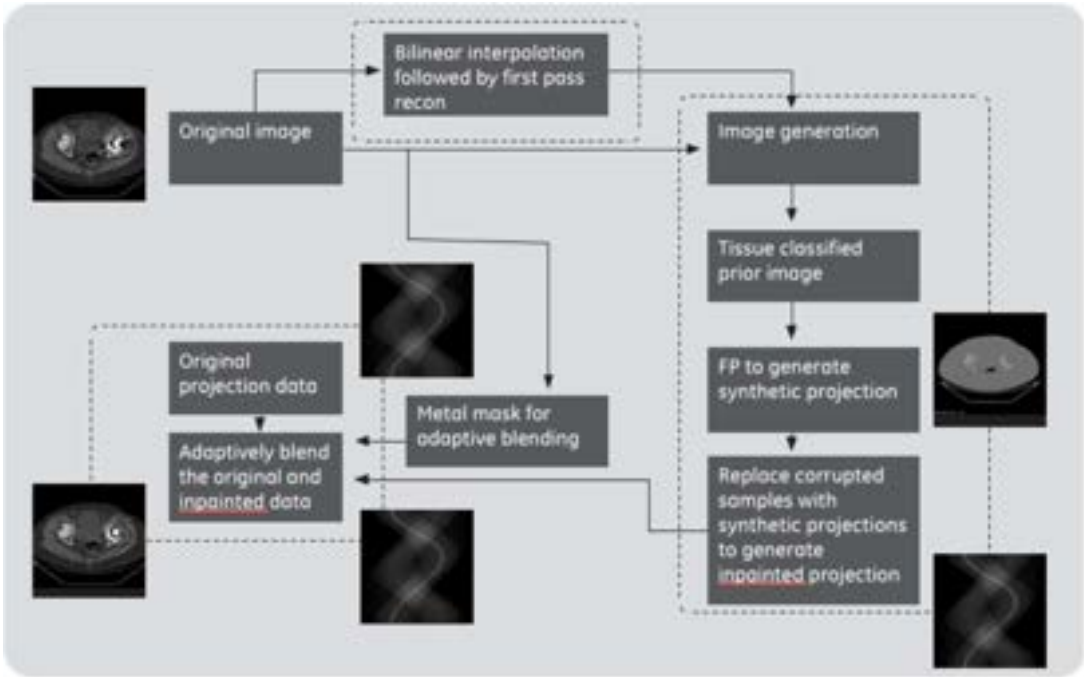
Stage Two

Inpainted data is generated by replacing the metal corrupted projections with the corrected data. The corrected data is generated using the forward projection of the classified image

Stage Three

The final corrected projection is generated using a combination of the original projection data and the in-painted projection, revealing anatomic details hidden beneath the artifacts

Figure: Smart MAR image processing framework



Imaging

CT Advanced Applications

Helping you elevate CT imaging with applications that improve diagnostic confidence and productivity

Assisted reading

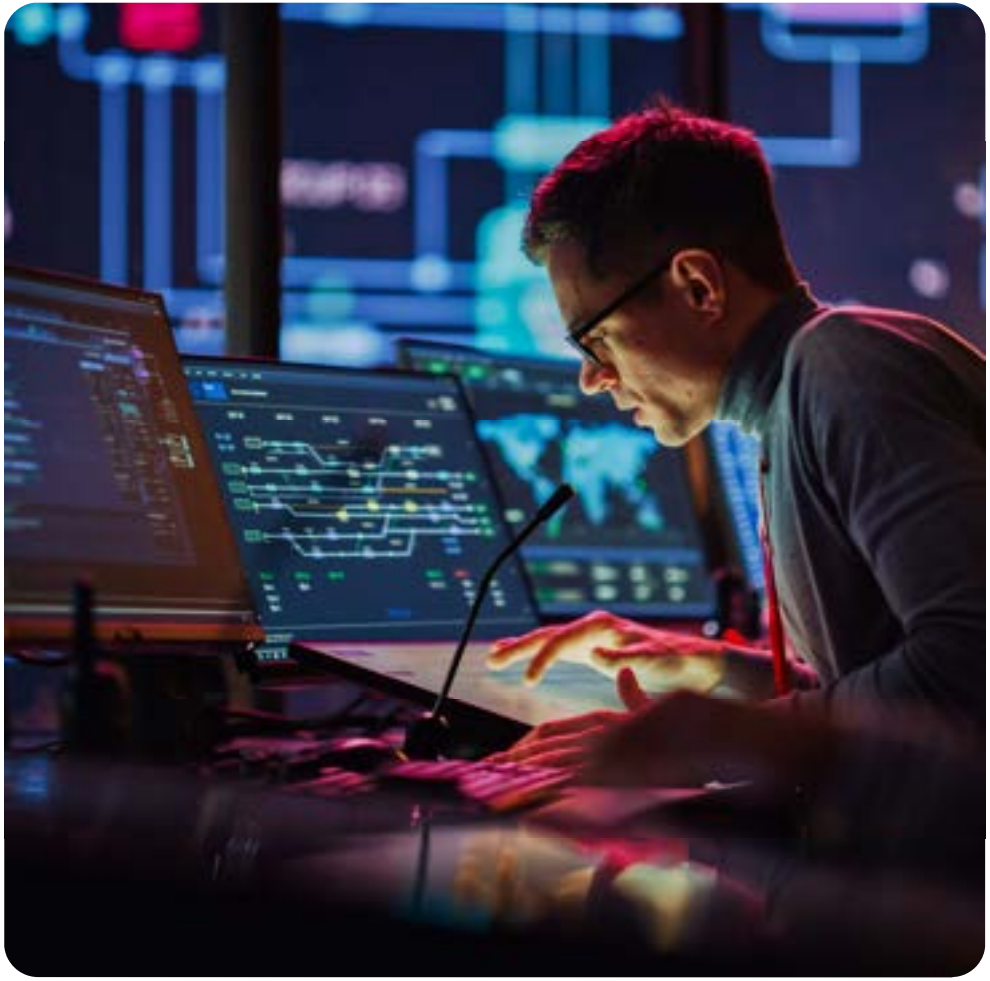
Applications leveraging AI algorithms to aid physician in the detection and analysis of lesions

Assisted reading

Applications leveraging AI algorithms to speed up post-processing and reduce manual interactions

Workflow solution

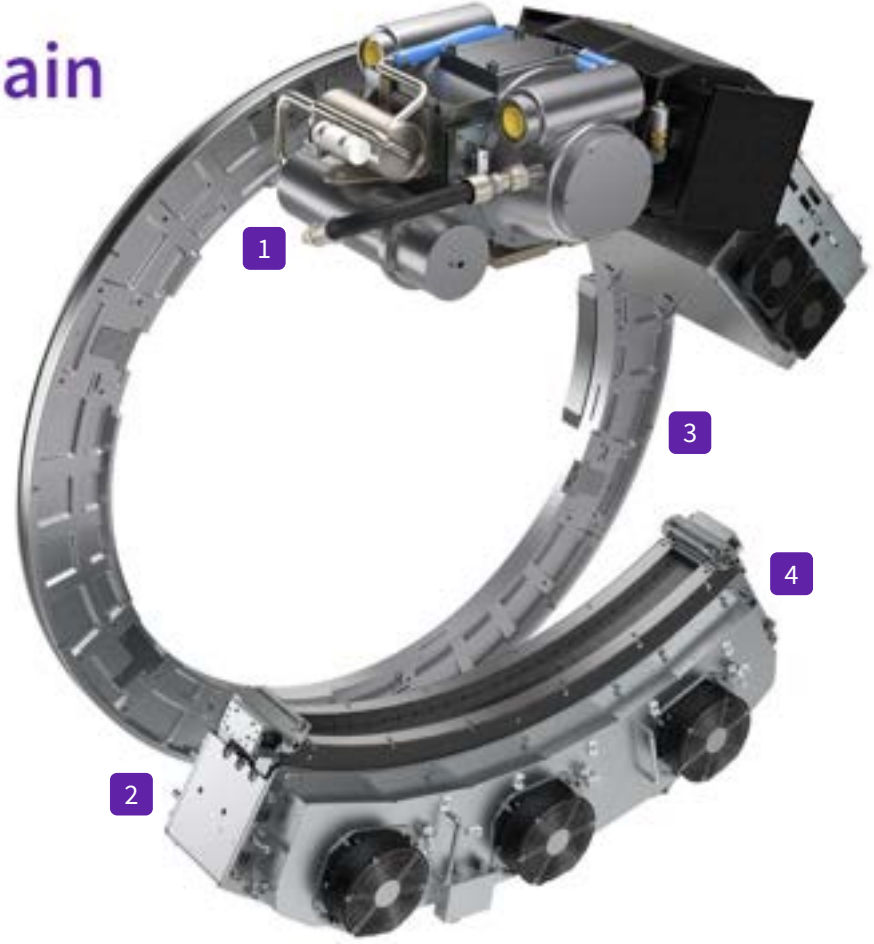
For a consistent and efficient image review



Technology

Technology

Clarity Imaging Chain



1 Improved precision with dual focal spot and liquid metal bearing technology

2 0.28 mm[4] spatial resolution with 18.3 lp/cm

Designed for less electronic noise for better low signal performance

3 0.35 s rotation speed with intelligent motion correction

4 40 mm detector coverage

4. Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

Technology

Clarity Detector

Inherited directly from the breakthrough technology introduced on the Revolution CT, this new detector enables high-resolution imaging (0.28 mm)[4] to see small details.

4. Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

Technology

Powered by Performix 40 Plus

7.0 MHU

Tube capacity

Liquid metal bearing Performix 40 Plus Tube for high capacity imaging

Technology

Performix 40 Plus

Designed for reliability and performance

Improved precision due to stable dual focal spot

Higher throughput with “instant-on” technology

Faster acquisitions without having to wait thanks to high cooling rate (1,070 kHU/min)

Faster workflow for all applications with 0.35 s routine rotation speed

Reduced audible noise for quieter scanning

Technology

Powered by Clarity Imaging Chain

55/72 kW

Generator power

Scalable offerings for varying clinical needs

Robust mA performance from
480 mA – 600 mA for clinical utilization

Technology

Scalable speed for varying clinical needs

Up to

0.35 sec*

Rotation speed

Rotation speeds starting up to 0.35 seconds providing scalable, robust and high-speed capabilities for varying clinical needs

Technology

Fast and reliable for every patient

Variable rotation speeds enable

Increased adaptability for different acquisition requirements

Enhanced temporal resolution for cardiac imaging coupled with intelligent motion correction

Faster workflow for all applications with 0.35 s rotation speed*

Reduced audible noise for quieter scanning

*Option, 0,5 s standard

Technology

Digital Tilt

Tilted Images

Without mechanical tilt

+/- 30° Tilted Images without mechanical movement of the gantry

Compatible with ODM to protect dose sensitive organs such as eyes or thyroid

Compatible with Smart MAR to avoid dental filling metal implant artefacts

Technology

Digital Tilt

Tilted images without physical gantry tilt

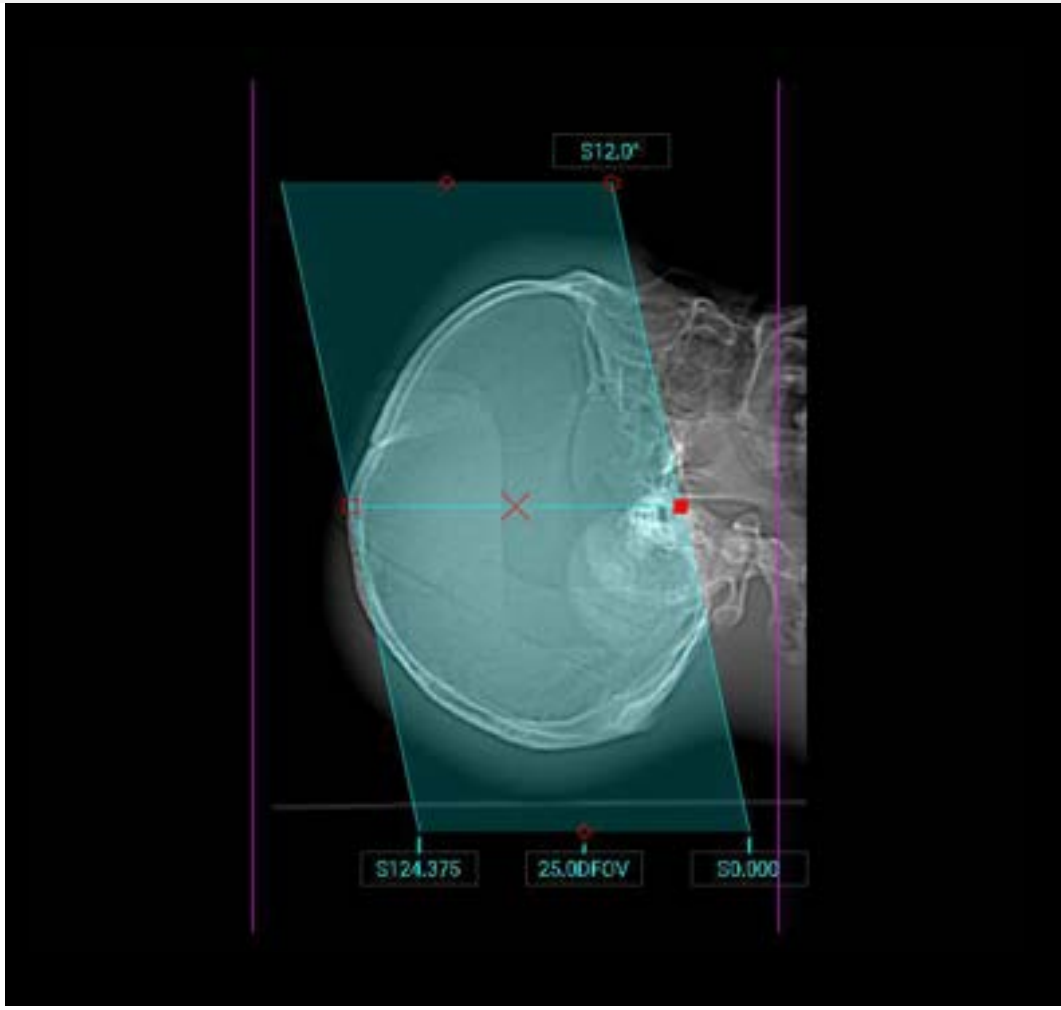
Digital tilt allows the user to acquire
tilted images without gantry tilt

Tilt image reconstruct with the 0-degree images

-30 degrees to +30 degrees

Same setting on Localizer and/or View/Edit screen

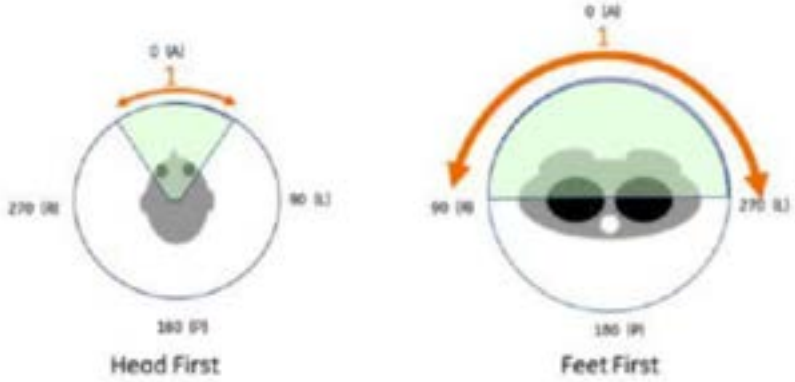
Minimum digital tilt is 0.5 degree



Technology

Organ Dose Modulation

Organ Dose Modulation (ODM) provides a mode to reduce x-ray tube current (mA) in anterior direction of the patient where the most radiation sensitive organs are located while maintaining overall diagnostic image quality by modulating x-ray tube current (mA) according to the x-ray tube angle.



SFOV	mA reduction rate (front side)	mA reduction range (tube angle)
Head, small head, pediatric head	Up to 30%	90
Large body, medium body, small body, pediatric body	Up to 40%	180

4. Calculated based on MTF 4% value in X/Y. 4% MTF is measured under 120kv, 200mA, 1.0 sec gantry rotation and Edge Plus kernel.

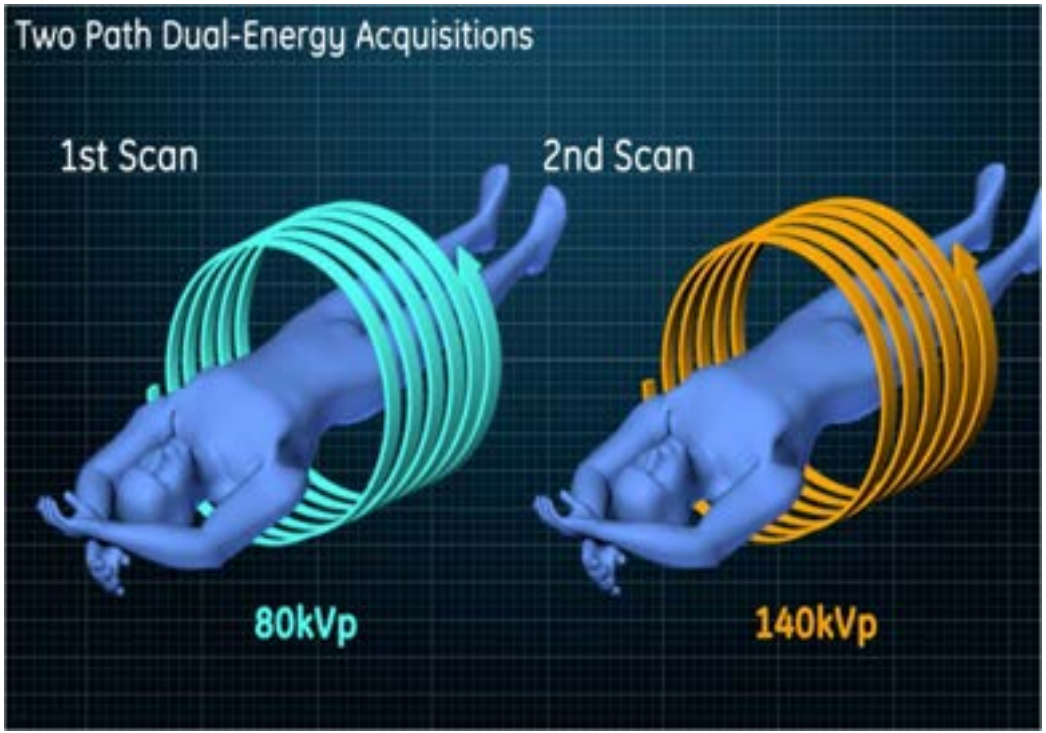
Technology

Dual energy acquisition – for simple characterization

Revolution Maxima dual-energy solution

Short scan time
A second acquisition can be performed in the opposite direction

Quick post-processing via AW
Register images and one-click ROI ratio to assist simple analysis



Technology

Dual energy acquisition – how it works

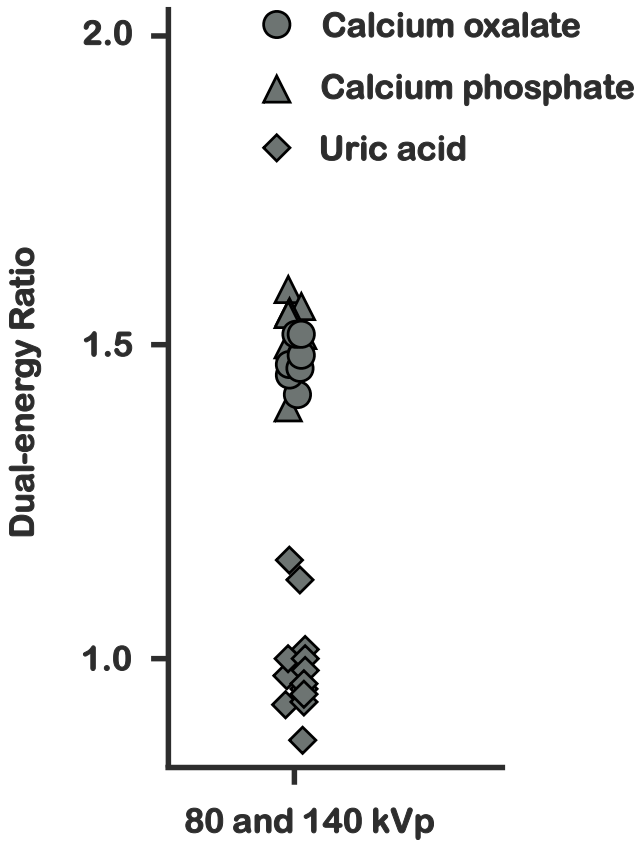
ROI ratio study summary

Based on ROI ratio of dual energy registered images

Dual energy ratio = HU @ 80 kV / HU @ 140 kV

ROI ratio > 1.25 ~ calcium

ROI ratio < 1.25 ~ uric acid



Technology

McAfee Antivirus

McAfee® Endpoint Security for Linux Threat Prevention detects threats and potentially unwanted software, then protects Linux systems from threats based on settings. Threat Prevention checks for viruses, trojans, unwanted programs, and other threats by scanning items. The software scans files and folders on local, network-mounted volumes, and mounted removable media.

Technology

Prospective exam split

How it works

With the selection of multiple procedures from the modality work list, the user can prospectively define the procedures and network send for acquisitions as they are being scanned. Each procedure is parsed into an exam labeled with the selected procedure ID.

Clinical use

Allow the user to specify how to split the exam prior to each scan. One scan for Chest, Abdomen, and Pelvis while prospectively split into 2 or 3 exams. In emergency scanning, prospectively split exams for brain, facial bones, cervical spine, chest, abdomen pelvis, lumbar spine and/or extremities prior to sending to workstation.

Smart Subscription

Smart Subscription

A CT that keeps getting better

Smart Subscription, a subscription service that provides access to the latest capabilities for your CT.[6]

Keep pace
Smart Subscription is the industry's first subscription-based service for CT that helps you keep your computing platform and software up to date and keep pace with clinical and workflow innovations.

Consistency
It enables you to provide consistent exams by having the same capabilities across all your systems at all your sites.

Flexibility
Smart Subscription includes a broad range of application packages across many different imaging services, giving you the flexibility to pick the right plan for you.

Smart Subscription

A CT that keeps getting better

Base package

Recon & IQ
Continuity Premium

TrueFidelity DL

ASiR-V

Smart MAR

\+

Additional packages

General Imaging
Spine Auto Views

Head Auto Views

Bone VCAR

VesselIQ Xpress with AutoBone Xpress

Cardiology
SnapShot Freeze 2

CardIQ Xpress 2.0 Reveal

SmartScore 4.0

Neurology
FastStroke with StrokeSENS[7]

Send by email

CT Perfusion 4D Neuro

Dynamic Shuttle

Smart Subscription Unlimited

Service

Service

Your CT works for you

When it comes to the operational and financial success of your imaging department, there is a lot your CT can do for you. With remote diagnostics, predictive analytics, cloud based solutions and subscription-based services, you can take comfort in knowing your CT is operating at peak efficiency.

Service

Your CT works for you

For example, Tube Watch uses a combination of artificial intelligence, machine learning and software analytics called Digital Twin technology to create a customized, digital model of your tube, system and usage profile.

Using that digital model, Tube Watch can predict when your tube is going to need to be replaced. This is just one of many ways we ensure Revolution Maxima is always working for you.

Advanced Visualization

Elevate your CT imaging with our collection of advanced visualization applications that assist reading, automate post-processing and streamline imaging review.

Tube Watch

Predict when your tube will fail three days in advance, so you can schedule a service call before it disrupts your schedule.

Imaging Protocol Manager

Standardize your protocols across all of your CT systems with this cloud-based protocol management solution that allows you to access and update your protocols through a single application.

Imaging Insights

Collect and analyze system data to pinpoint operational inefficiencies, which we can use to help you target opportunities to streamline your operations.

OnWatch

Proactively screen key system metrics for anomalies and preemptively alert a remote engineer to either make a repair online or schedule a service call before it turns into a bigger problem.

Service

Reduce disruptions. Enhance care.

35%
Remote fix[1]
(24x7, <20min)

79%
First call resolution[1]

26 years
Remote engineering experience[1]

Expert service delivery

Customized flexible offerings	Up to **99%** uptime guarantee 2-hour on-site response
Expertise Dedicated and highly trained local experts	**8000+** service engineers **1,200** professionals addressing clinical and technical education
Quality Large OEM parts network—Expedited delivery, strategic local stocking options, OEM quality	**6000+** service parts shipped per day
Uptime Remote diagnostics—24/7 (InSite, iLinq)[1.]	**35%** Remote repair Up to **70%** ↓ on-site repair time
Predict Asset Performance Management Predict (OnWatch, Tube Watch)	**32%** ↓ unplanned downtime[2] Up to **75%** ↓ tube related downtime[3]

1 GE HealthCare internal data. Results cannot be guaranteed; results may not be typical of all customers
2 White Paper Determining the Benefits of Proactive Digital Service for Computed Tomography Scanners
3 Based on timely receipt of the tube-health notice, parts/labor availability, access to equipment. May not be typical of every customer's experience

GE HealthCare

Service

Solutions beyond system maintenance

Asset Operational Efficiency

Optimize operational performance with digital tools

iCenter & MyGEHealthcare App

Visible data. Optimized Assets.

iCenter: Asset management application to manage service contracts and inventory, asset maintenance, optimize asset utilization, and support compliance needs. MyGEHealthCare app is the hassle-free way to manage your GE HealthCare services and support in one place.

Create service requests & track through to completion

Calendar view of past and future service events by equipment

Get real time push notifications

OnWatch

More Productive. Less Waiting.

OnWatch remotely monitors various CT system parameters and signals potential errors for early diagnosis & troubleshooting to initiate timely corrective action.

~32% reduction in unplanned downtime[1]

30% faster time to repair[1]

>10% fewer unscheduled system disruptions[1]

Tube Watch

Reduce Disruptions. Enhance Care.

Using digital twin technology, Tube Watch is a predictive solution that remotely monitors & predicts an impending tube failure, before any disruption occurs through proactive part delivery & service scheduling.

Up to a 75% estimated reduction in unplanned downtime[2]

>40 lost scans on average with every tube failure[3]

1 GE HealthCare internal data. Results cannot be guaranteed; results may not be typical of all customers
2 White Paper Determining the Benefits of Proactive Digital Service for Computed Tomography Scanners
3 Based on timely receipt of the tube-health notice, parts/labor availability, access to equipment. May not be typical of every customer's experience.

Service

Solutions beyond system maintenance

Asset Clinical Efficiency

Optimize clinical performance with digital tools.

Imaging Insights

Improve visibility. Actionable insights. Better outcomes.

Informatics platform for Imaging Department managers providing actionable insights to help increase exam throughput, reduce backlog, and optimize protocols and technologist performance.

$320k increase in revenue/year reported by customer[1]

Up to a 37% increase in exams per week[1]

Up to a 4-week reduction in patient wait times[1]

DoseWatch

Improved focus on patient care.

Suite of apps providing data, analytics, and clinical insights to better manage dose.

54% decrease in exams exceeding dose thresholds[2]

Up to 20% decrease in average dose for frequent protocols[3]

Imaging Protocol Manager

Optimized protocols every time, everywhere.

Cloud-based protocol-management solution that provides access, insight, and governance for imaging device protocols.

Up to $54,000 of additional exam revenue per device, per year by preventing downtime from protocol inefficiencies[4]

1: Estimate based on Radiomed customer testimonial, https://www.youtube.com/watch?v=QGOsiBbRaUE. GE HealthCare cannot guarantee the same outcome for all customers.
2: Tracking for single-injection procedures only and single DICOM studies. References: JB46270USa.
3: Results of DoseWatch implementation at a Level 1 trauma center in Chicago, IL, with over 250 sites of care, performing over 1.8MM imaging procedures every year and over 500 devices utilizing ionizing radiation. JB40975US.S.
4: Asst. Dir., Imaging Services, not-for-profit medical group serving more than 12 million members based on 250 days of operation and $1,500 revenue per exam. JB60508XX(1) Results may not be typical for all customers.

GE HealthCare

Service

Solutions beyond system maintenance

Life cycle management, Education, Cybersecurity

Continuity

Technology obsolescence. We can help.

Ongoing software and hardware upgrades as part of your service contract.

Up to 30%- 50% potential investment savings[1].

Refresh

Maintain your clinical competitive edge.

Maintain your imaging edge and optimize your cash flow via system and application upgrades in parallel with your service contract.

$0 upfront cost for upgrade.

Education and training

Elevate your clinical capabilities.

Ongoing software and hardware upgrades as part of your service contract.

Up to 30%- 50% potential investment savings[1].

Skeye

Protecting devices that enable patient care.

A holistic vendor-agnostic solution for networked medical devices to help protect healthcare systems from the increasing risk of cyber events.

Real time, proactive network and device monitoring by Security Operations Center.

Leverage the power of artificial intelligence to analyze risk factor.

Protect assets with remediation recommendations .

1.Assumes two software/one hardware upgrades. No guarantee that any such upgrades are available during term. Prices used for this calculation consist of example prices for certain upgrades and do not represent what the pricing for all such potential upgrades would be.

Service

Greater CT care with everything you need

Revolution Maxima provides you with our latest innovative CT solutions to ensure the most efficient patient care possible.

By optimizing the scan experience from referral to report with our latest AI technologies and scalable subscription software services, you'll have everything you need for greater CT care.

Revolution Maxima Select
You need everything, you'll get more!

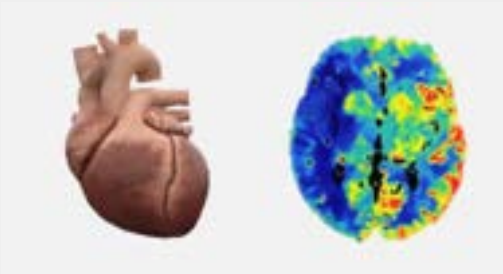
Better, Larger, More

Increase IQ, coverage and number of slices

Image Quality	• 0.28 mm spatial resolution • 1024 recon matrix • ASiR or ASiR-V • Smart MAR
Coverage	• 20 mm with 0.625 mm thickness • 40 mm with 1.25 mm thickness
# Slices	• 64 with 20- and 40-mm coverage

Easily Advanced

For all advanced applications, easier



- High quality Calcium Score and Cardiac CTA in 40 mm coverage (1.25) or 20 mm coverage (0.625)
- Whole brain CT perfusion with 8 cm coverage
- Fast and detailed whole-body CTA with 40 mm coverage and high pitch (1.25mm)
- Streamlined workflow with gantry tablet and advanced apps on OC (no need for additional workstation)

Upgradable

From Maxima Select to Elite in a heartbeat

Upgrade to:	• AI-based Auto Positioning • 40 mm coverage/128 slices @0.625 mm • Cardiac Low dose and SnapShot Freeze • Full power, latest IR, faster rotation • TrueFidelity DL • Remote Control Suite and AP

High speed at full coverage for routine imaging

20 mm @ 0.625 mm
40 mm @ 1.25 mm

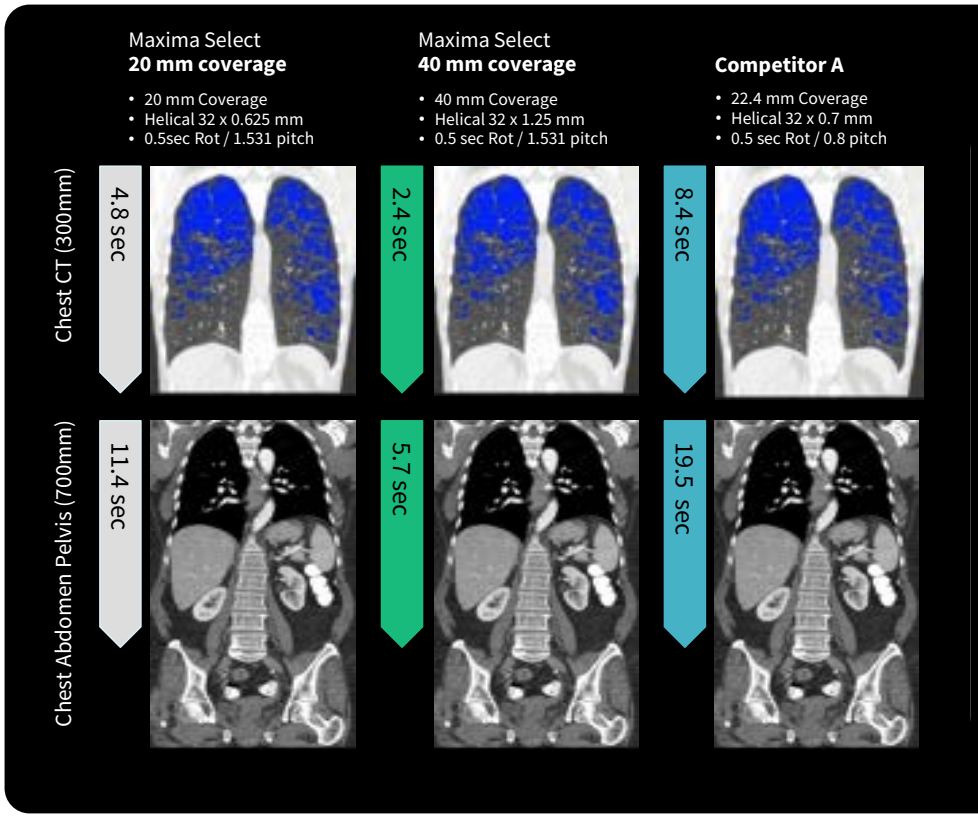
Detector coverage

- Neuro in 2 sec
- Chest in 3 sec
- Chest Abdomen Pelvis in 5 sec
- Full body trauma in 10 sec

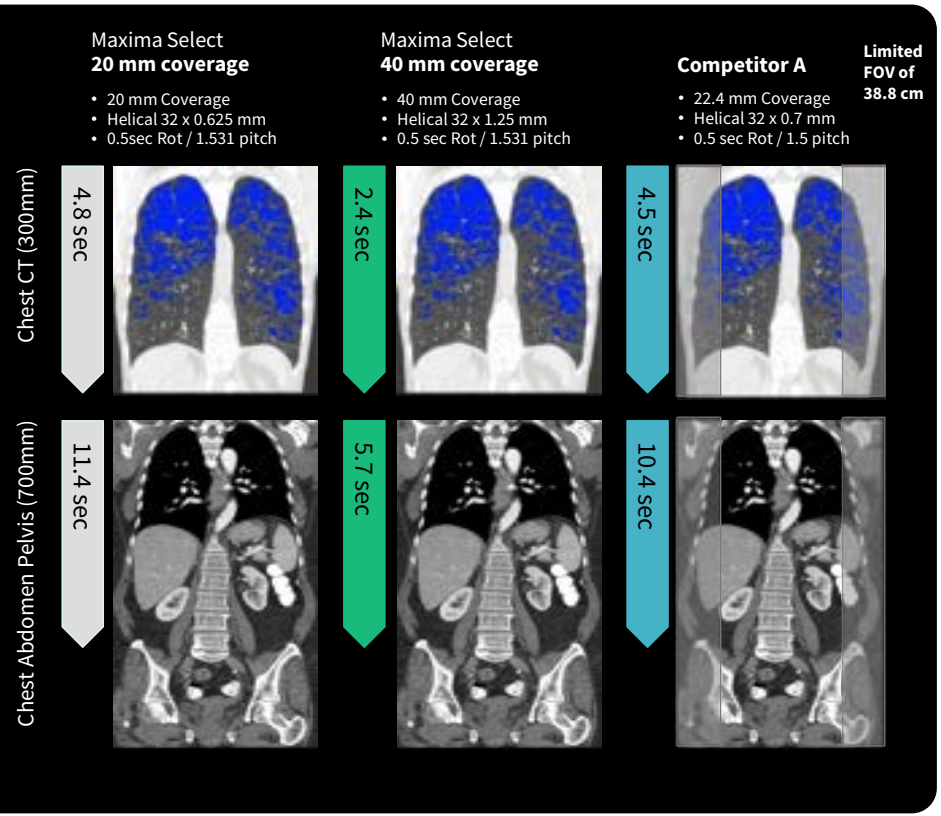
Up to 175 mm/s scan speed with 40 mm collimation with submillimeter slice thickness and 1.531:1 helical pitch, across a 50 cm FOV

No FOV limitations with high pitch and scan speed

Routine Imaging at 50 cm Full Scan Field of View



Routine Imaging at High Helical Pitch



Easy to upgrade

Elite Upgrade

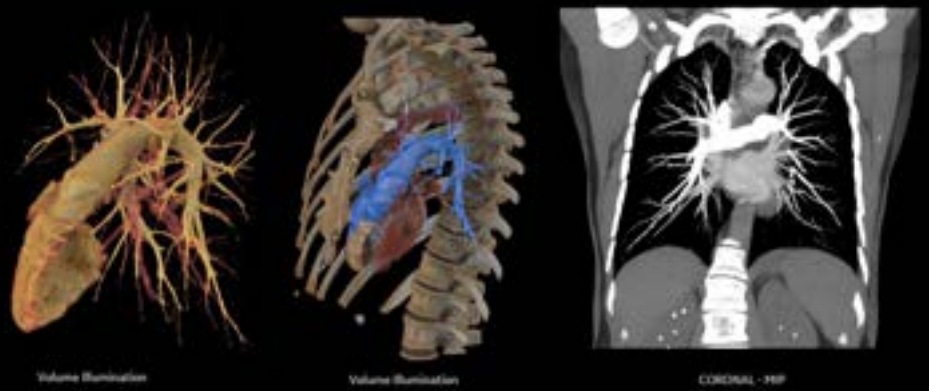
Get the most from your system with:

- 0.625 mm X 64 channels
- Overlapped reconstruction
- 0.35 seconds rotation speed

That allow:

- Faster anatomical coverage
- increased resolution
- Improved performance in all clinical areas and advanced applications

Pulmonary Embolism Protocol

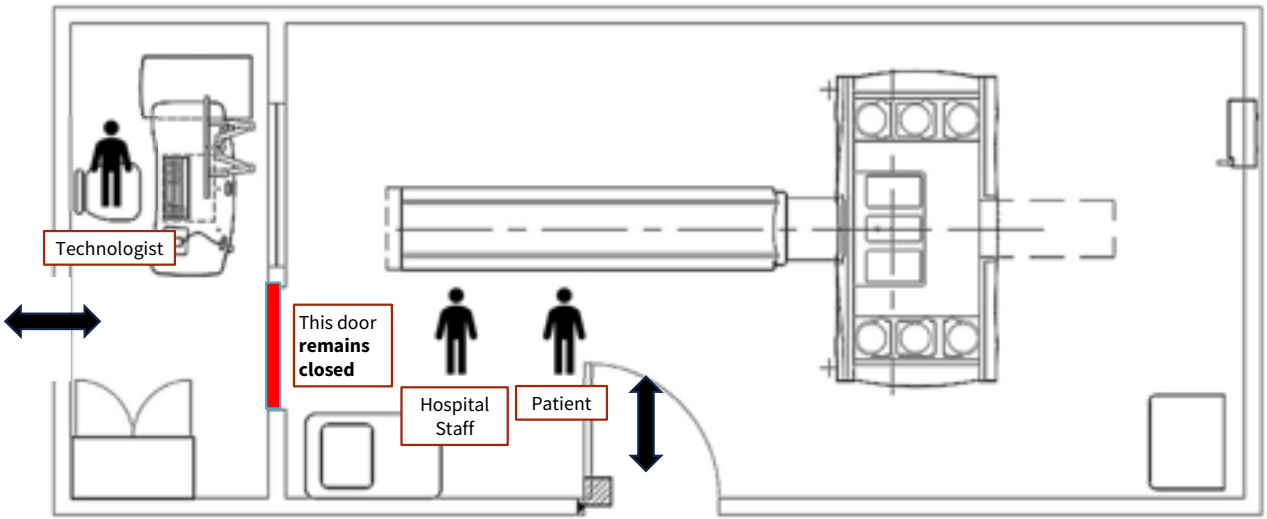


Scan type	Helical	kV	120
Rotation time, s	0.35	mA	Mod. mA
Pitch	1.375	Algorithm	STND
Slice, mm	0.625	CTDIvol, mGy	8.19
Reconstruction	AR50	DLP, mGy-cm	329

Elevating Radiology Remote Control Suite

Minimize potential contamination risk between gantry & console rooms

- Ability to remotely start and end exam from the console room without going into the gantry room
- Minimize the risk of contamination by avoiding unnecessary trips to the gantry room
- Functionalities built into the console room in order to execute a CT scan



Remote Control Suite

A control panel that is located near to the CT console so the operator can perform the following tasks without going into the CT room.

- Move the table in/out
- Move the table up/down
- Turn on/off the gantry alignment lights
- Set an internal or external landmark
- Move the table to home position
- Load/Unload

For better medical risk control, the Remote-Control Suite includes 3 Video Monitoring System[1] that allows the user to view the patient from three views

3 Video Monitoring System[1] is not connected to the CT and is not a medical device.

1 It can be sold as separate option

Remote Control Suite

The Remote Control is designed to remotely position patients from the scan control room, allowing the technologist to remain isolated from the patient.

Hardware Remote Control Panel to support:

- Load, Unload,
- Landmark Internal/External,
- Laser Alignment Lights,
- Table Motion (in, out, up, down) at both speeds
- Tilt (if applicable)

3 Video Monitoring System* to real time monitor the patient:

- 3-cameras setup to view the patient from front, rear and side angles
- High-definition performance to clearly view gantry laser lines
- Desktop monitor with a simple interface to easily switch views and a privacy button to black the screen.

GE HealthCare

* It can be sold as separate option

Remote Control Suite

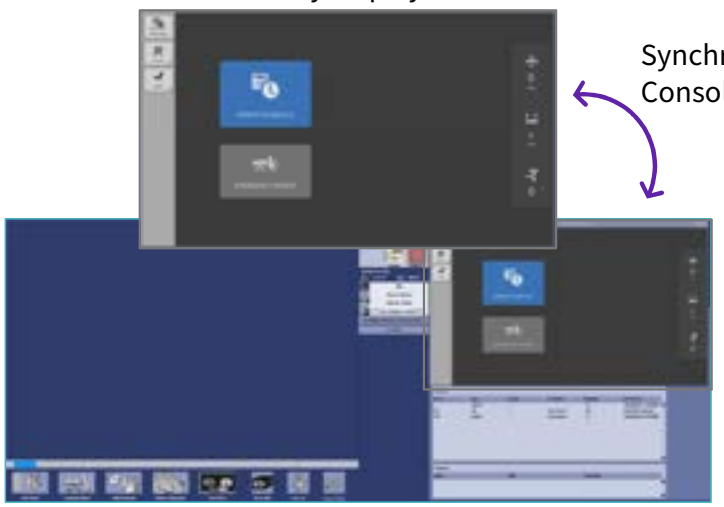
Supporting AutoPositioning on Revolution Maxima Select

Remote Patient AutoPositioning solution* synchronizes the Gantry display UI to console monitor so that the user can operate in the synchronized UI by clicking mouse at console side.

The following workflow is the same as current patient auto-positioning.

Gantry display UI

Synchronized to Console



Synchronized Gantry display UI on Console

Remote Control Panel(RCP)

3 Video Monitoring System

* Only available on product with AutoPositioning integrated


NEC

Quotes from usability session on Remote Control Suite users

"this would be extremely useful with COVID patients"

"I love it. It was easy for me to use"

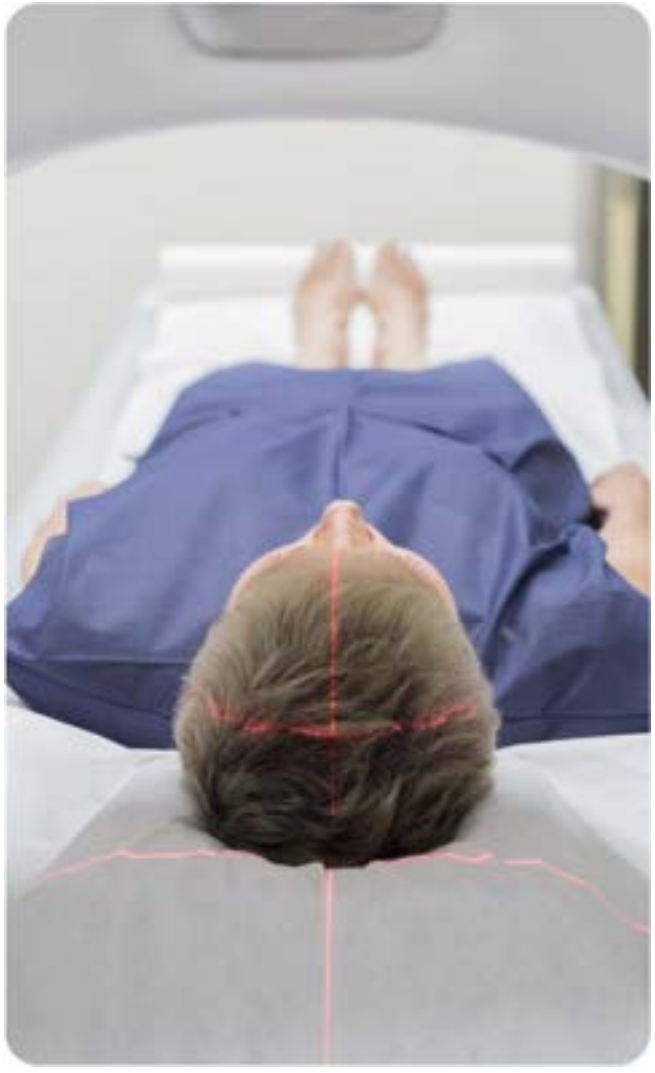
"cameras are very nice, have camera currently but this one has better angles, really like close up of top left"

"really like this better than Siemens Go Family"

"camera would be really nice in ER setting, would be really great to check IV lines, and really great in hospital setting, great safety features"

"telling patients, you can view them through a camera is reassuring to them-we can see them the entire time"

"if I were a hospital, I would choose this over Canon/Siemens"



Revolution Maxima clinical image gallery

Neuro

Chest

Body

Cardiac

Vascular

MSK

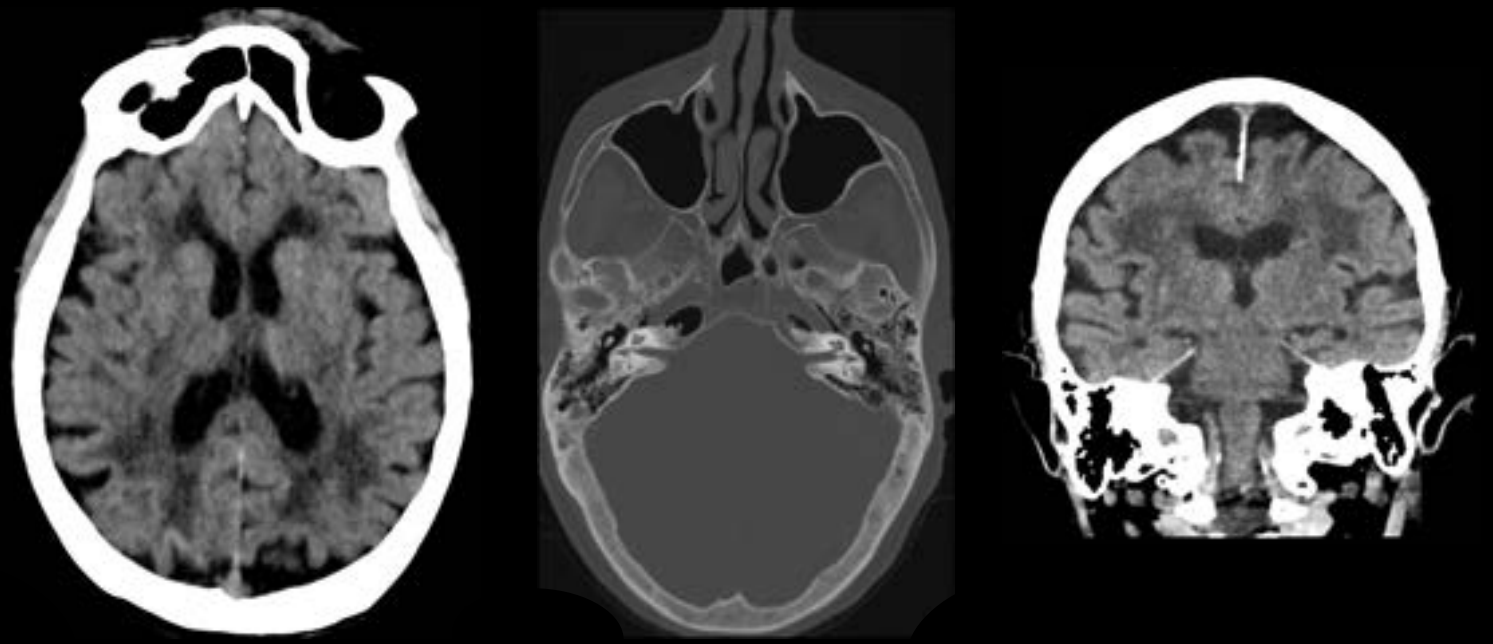
TrueFidelity DL Imaging

GE HealthCare

Neuro

Brain without contrast

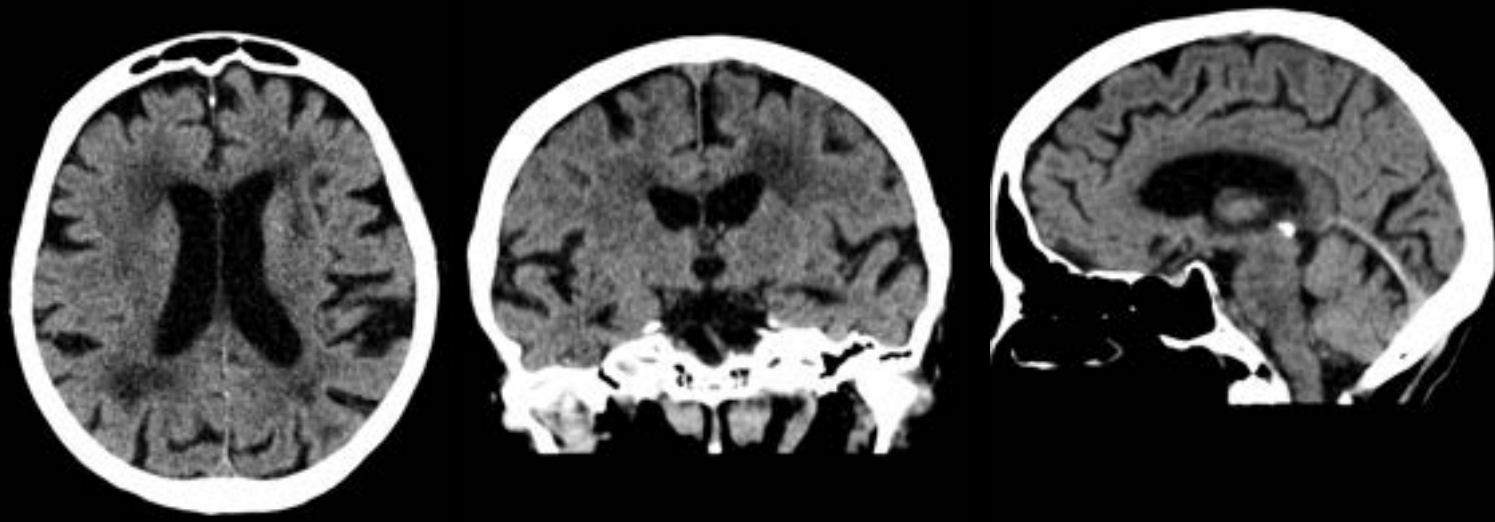
Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	Soft, EC1, AR80
kV	120
mA	Auto
Noise index	6.8
Contrast	
ml	
mgI/ml	
Algorithm	
BMI	
CTDIvol, mGy	37.8
DLP, mGy-cm	689
mSv (*0.0021)	1.45



Images courtesy of The Doctors Of Solime Company, Nancy - France

Head Ischemic Lesions

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	AR50
kV	120
mA	Auto
Noise index	6.8
Contrast	
ml	
mgI/ml	
Algorithm	Stnd
BMI	
CTDIvol, mGy	33.5
DLP, mGy-cm	530
mSv (*0.0021)	1.1



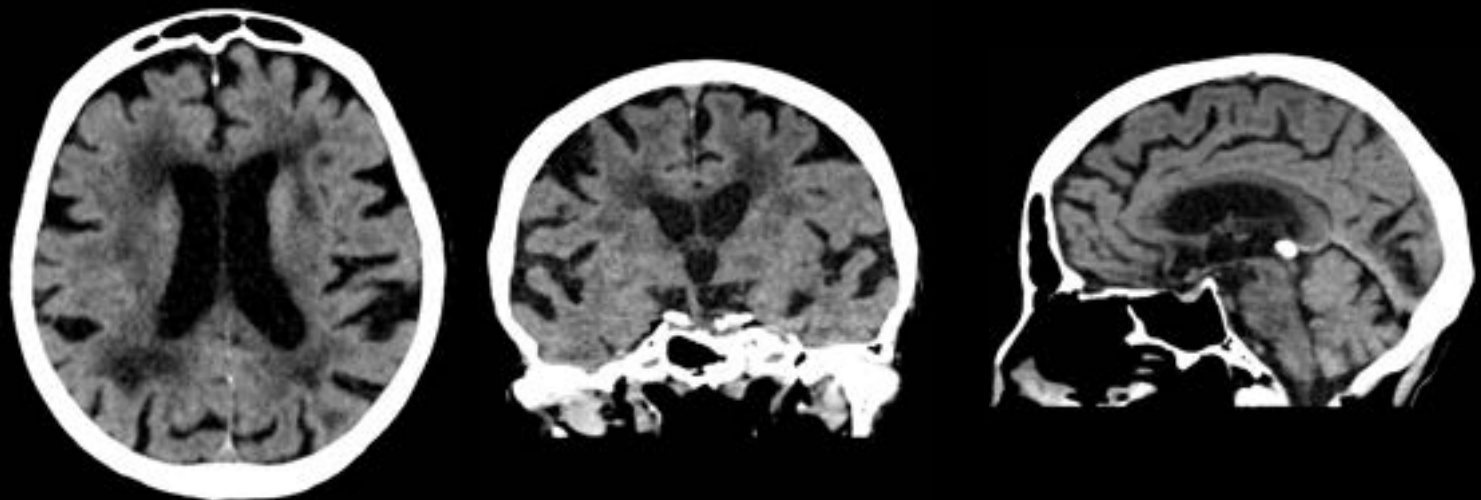
History: Senil dementia

Findings: Atrophy and ischemic lesions

Images courtesy of The Doctors Of Solime Company, Nancy - France

Head Ischemic Lesions

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	AR50
kV	120
mA	Auto
Noise index	6.8
Contrast	
ml	
mgI/ml	
Algorithm	Stnd
BMI	
CTDIvol, mGy	33.5
DLP, mGy-cm	530
mSv (*0.0021)	1.1



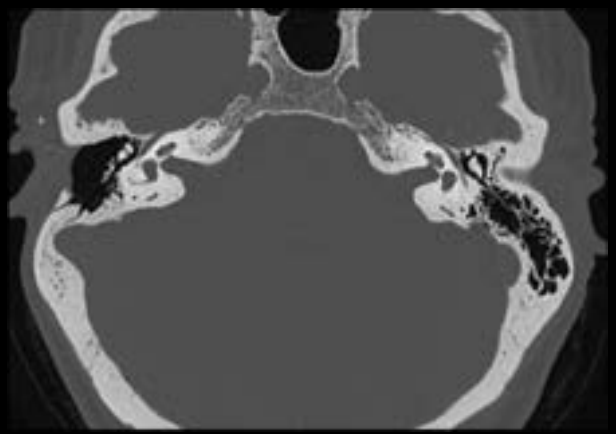
History: Senil dementia

Findings: Atrophy and ischemic lesions

Images courtesy of The Doctors Of Solime Company, Nancy - France

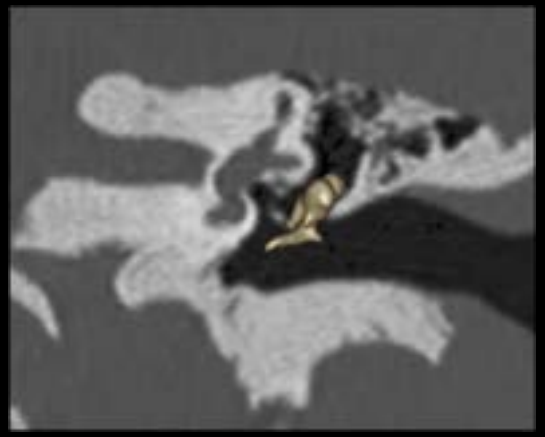
Inner ear

Scan type	Helical
Rotation time, s	1
Pitch	0.531
Slice, mm	0.625
Reconstruction	AR10
kV	140
mA	170
Noise index	
Contrast	
ml	
mgI/ml	
Algorithm	Ultra
BMI	
CTDIvol, mGy	80
DLP, mGy-cm	462
mSv (*)	



Matrix 1024

Matrix 1024



3D Malleus Incus

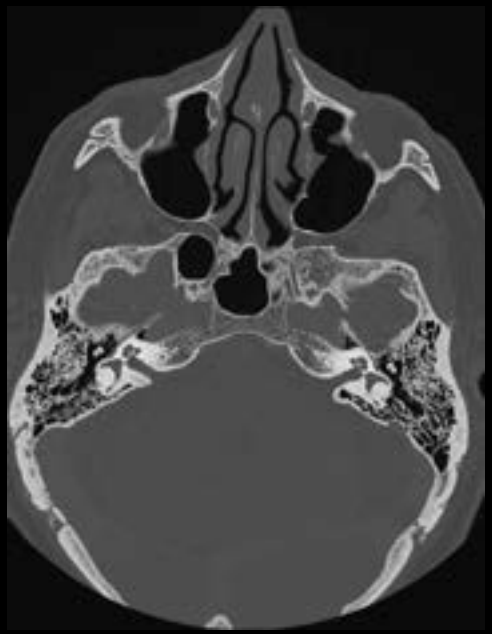
<u>History:</u> Matoidectomy after cholesteatoma

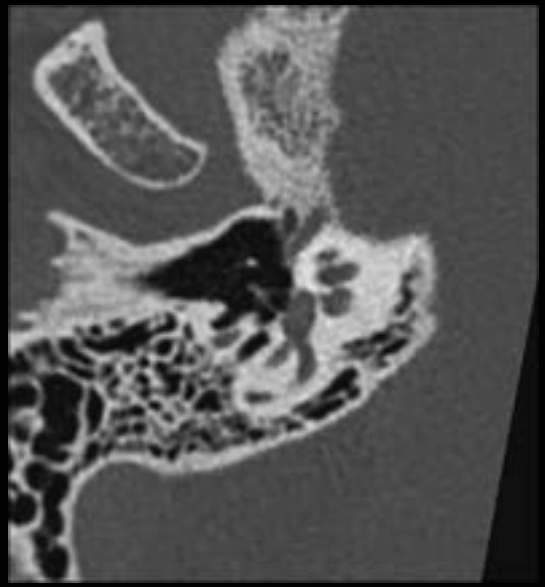
<u>Findings:</u> Follow up

Images courtesy of The Doctors Of Solime Company, Nancy - France

Inner ear

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	AR10
kV	120
mA	175
Noise index	
Contrast	
ml	
mgI/ml	
Algorithm	Ultra
BMI	
CTDIvol, mGy	59
DLP, mGy-cm	336
mSv (*)	
History:	Giddiness
Findings:	Normal





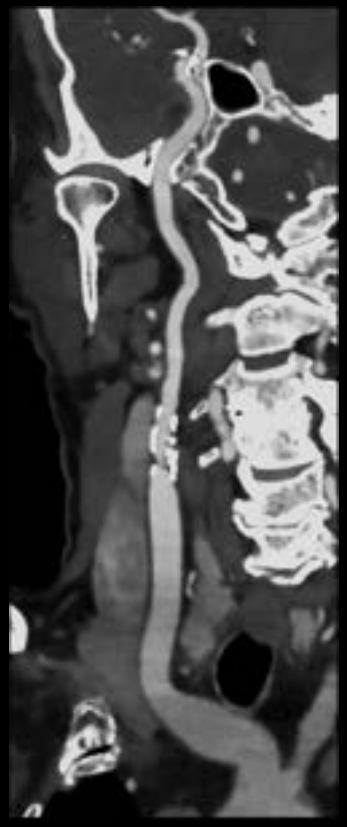
Images courtesy of The Doctors Of Solime Company, Nancy - France

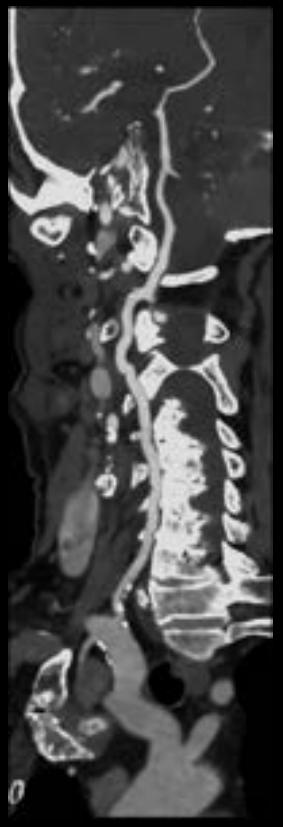
Carotids calcified plaques

Scan type	Helical
Rotation time, s	0.4
Pitch	0.984
Slice, mm	0.625
Reconstruction	AR100
kV	120
mA	Auto
Noise index	15
Contrast	
ml	50 at 3.5ml/s
mgI/ml	350
Algorithm	Detail
BMI	
CTDIvol, mGy	9.22
DLP, mGy-cm	319
mSv (*)	

History:

Findings: Calcified plaques, right carotid stenosis



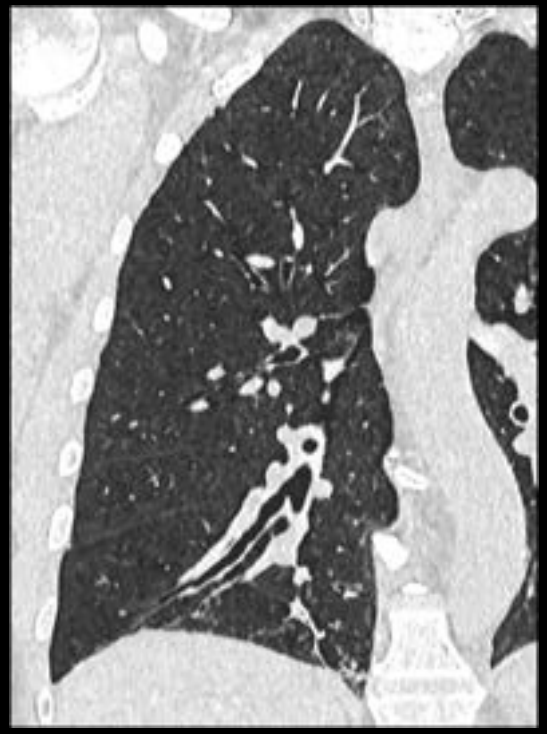


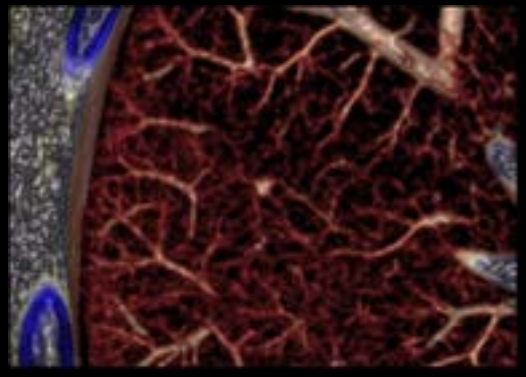
Images courtesy of The Doctors Of Solime Company, Nancy - France

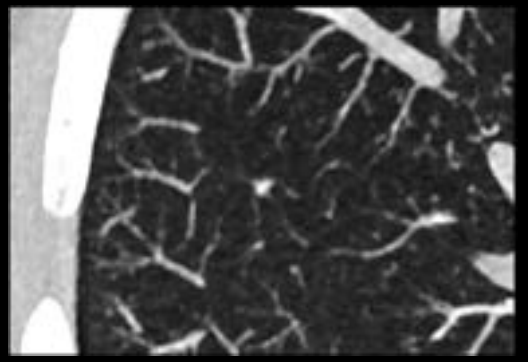
Chest

High resolution chest imaging

Scan type	Helical
Rotation time, s	0.4
Pitch	0.984
Slice, mm	0.625
Reconstruction	AR100
kV	100
mA	Auto
Noise index	55
Contrast	
ml	
mgI/ml	
Algorithm	Lung
BMI	
CTDIvol, mGy	3.14
DLP, mGy-cm	124
mSv (*)	







History:

Findings: Distal Bronchiectasies

Images courtesy of The Doctors Of Solime Company, Nancy - France

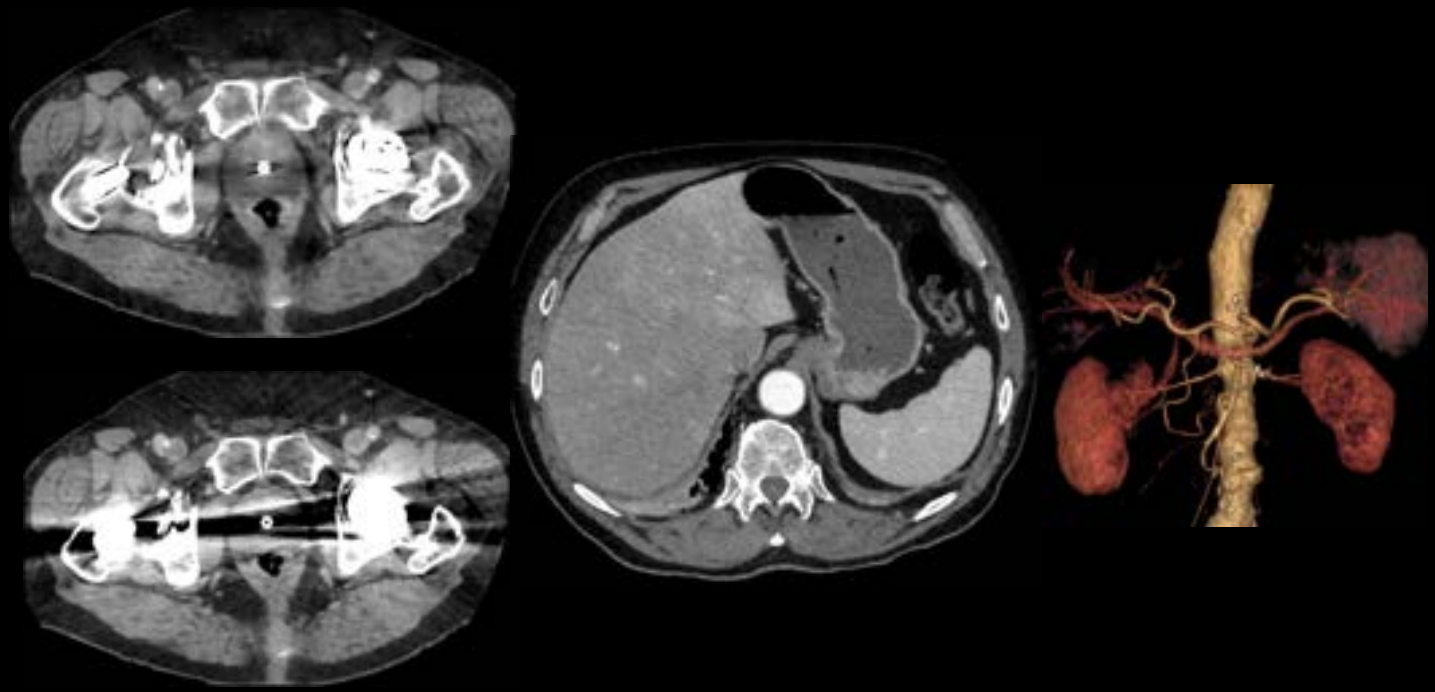
Body

Abdomen Pelvis imaging with Smart MAR

Scan type	Helical
Rotation time, s	0.5
Pitch	0.984
Slice, mm	1.25
Reconstruction	AR80
kV	120
mA	80-450
Noise index	55
Contrast	
ml	90 at 3.5ml/s
mgI/ml	350
Algorithm	Standard
BMI	
CTDIvol, mGy	12
DLP, mGy-cm	580
mSv (*)	

History: K prostate with double hip prothesis

Findings:



With Smart MAR

Images courtesy of The Doctors Of Solime Company, Nancy - France

Chest abdomen pelvis imaging

Scan type	Helical
Rotation time, s	0.7
Pitch	1.375
Slice, mm	1.25
Reconstruction	AR70
kV	120
mA	Auto
Noise index	34
Contrast	90 ml/s
ml	+50ml saline solution
mgI/ml	350
Algorithm	Standard
BMI	25
CTDIvol, mGy	6.6
DLP, mGy-cm	457
mSv (*)	

History: Prostate follow up

Findings:

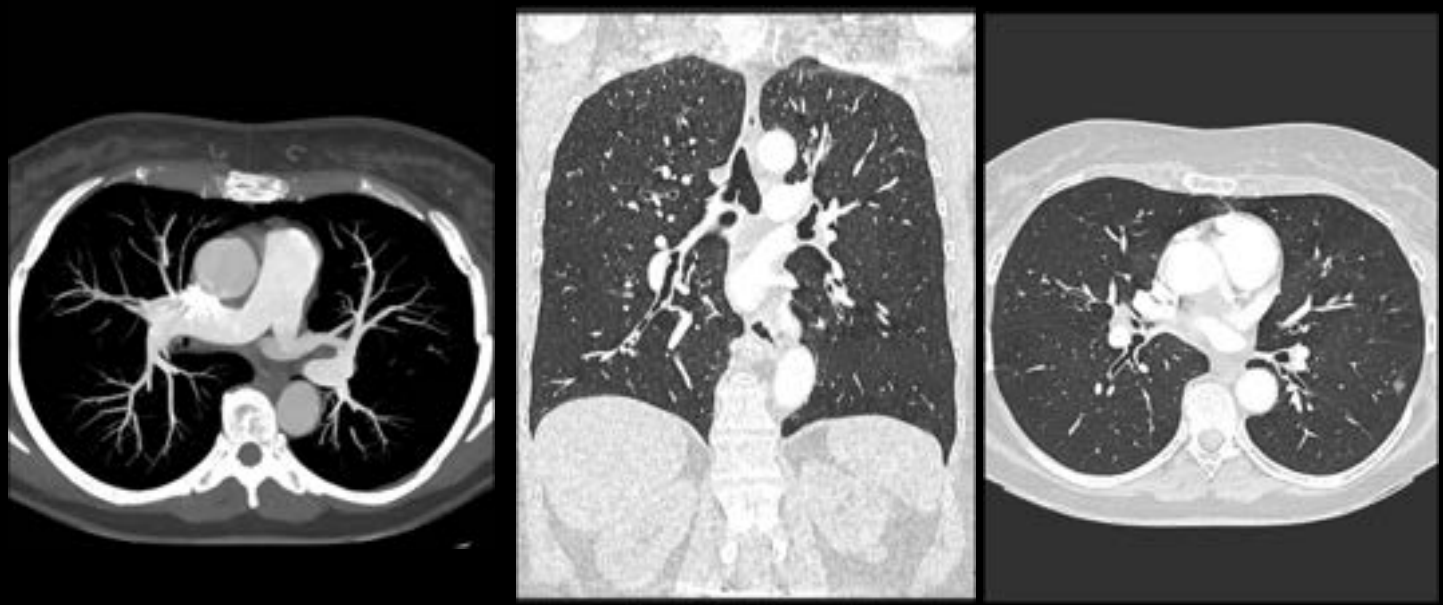
Images courtesy of The Doctors Of Solime Company, Nancy - France

Pulmonary Angiography

Scan type	Helical
Rotation time, s	0.7
Pitch	1.375
Slice, mm	1.25
Reconstruction	AR70
kV	120
mA	Auto
Noise index	34
Contrast	90 ml/s
ml	+50ml saline solution
mgI/ml	350
Algorithm	Standard
BMI	25
CTDIvol, mGy	6.6
DLP, mGy-cm	457
mSv (*)	

History: Prostate follow up

Findings:

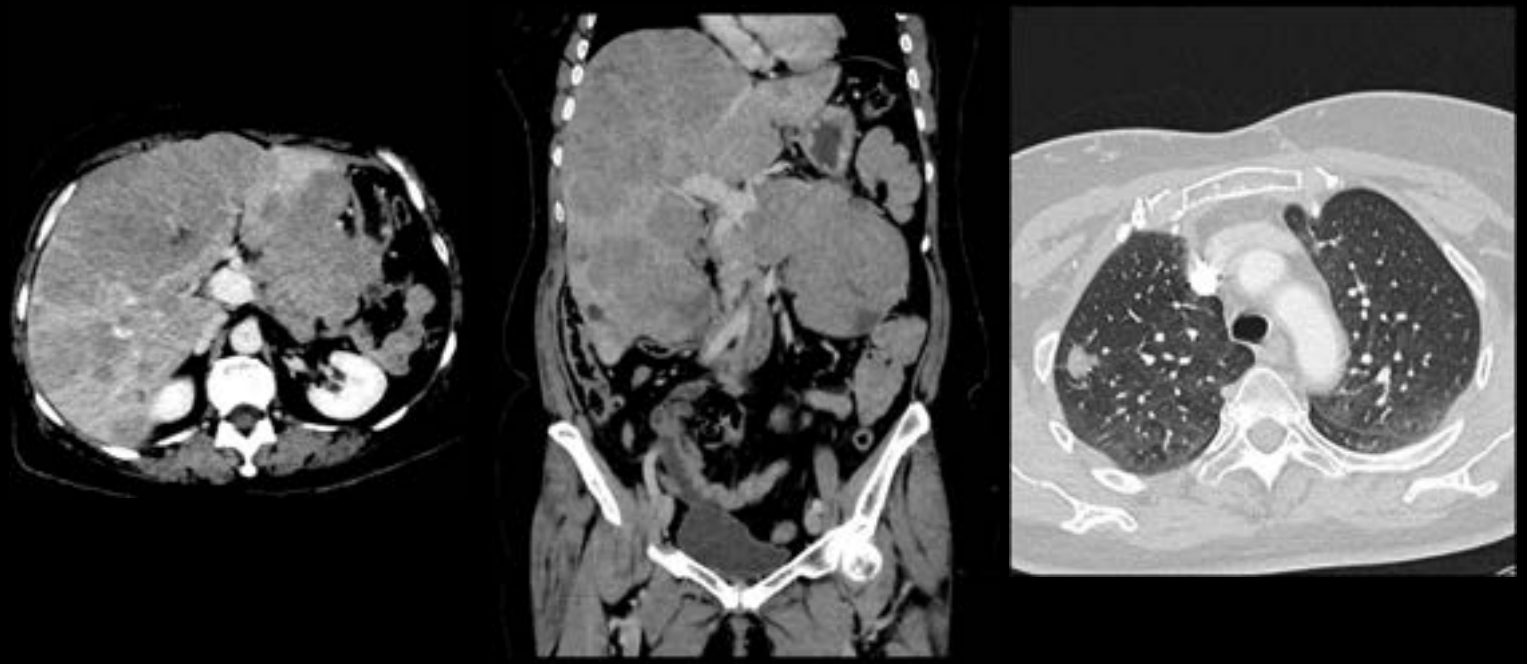


Lung nodule

Images courtesy of The Doctors Of Solime Company, Nancy - France

Liver Pancreas and mets

Scan type	Helical
Rotation time, s	0.5
Pitch	0.984
Slice, mm	1.25
Reconstruction	AR100
kV	120
mA	Auto
Noise index	32
Contrast	
ml	80 at 3ml/s
mgI/ml	350
Algorithm	Standard
BMI	
CTDIvol, mGy	9
DLP, mGy-cm	432
mSv (*)	



History: Pancreas K and liver metastasis

Findings:

Images courtesy of The Doctors Of Solime Company, Nancy - France

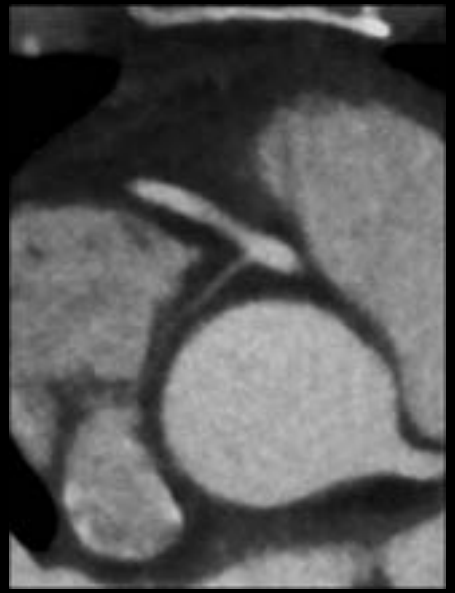
Cardiac

High resolution CCTA

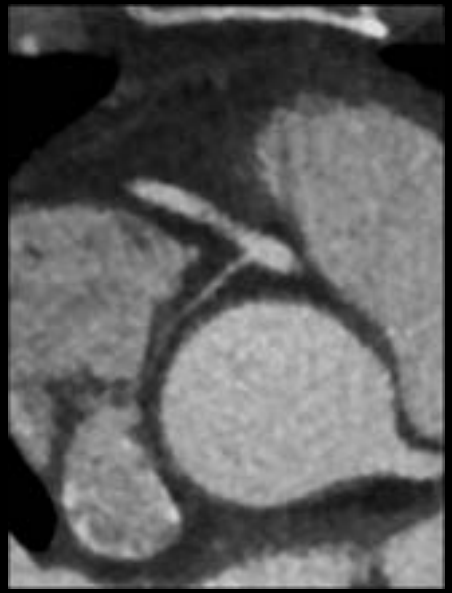
Scan type	Snapshot Pulse
Rotation time, s	0.35
Pitch	
Slice, mm	0.625
Reconstruction	AR100
kV	100
mA	335
Noise index	37
Contrast	
ml	50 at 4ml/s
mgI/ml	350
Algorithm	Detail
BMI	
CTDIvol, mGy	8
DLP, mGy-cm	143
mSv (*)	

<u>History:</u> Normal anatomy

<u>Findings:</u>



Infundibular artery 512



Infundibular artery 1024

Images courtesy of The Doctors Of Solime Company, Nancy - France

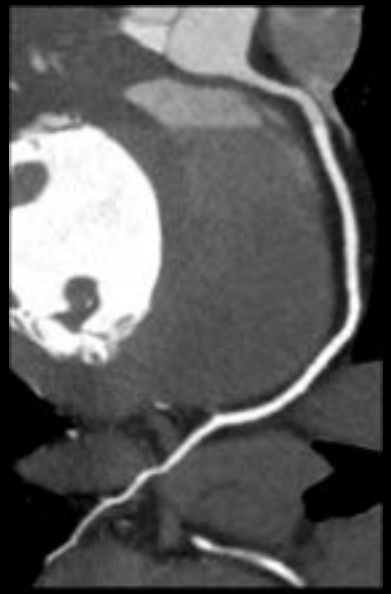
High resolution CCTA

Scan type	Cardiac Pulse
Rotation time, s	0.35
Pitch	
Slice, mm	0.625
Reconstruction	AR100
kV	100
mA	80 – 450
Noise index	23
Contrast	
ml	50 at 4ml/s
mgI/ml	350
Algorithm	Detail
BMI	23
CTDIvol, mGy	11.92
DLP, mGy-cm	157
mSv (*0.015)	2.3

<u>History:</u> Young woman with atypical chest pain.

<u>Findings:</u> Normal exam.

LAD



RCA

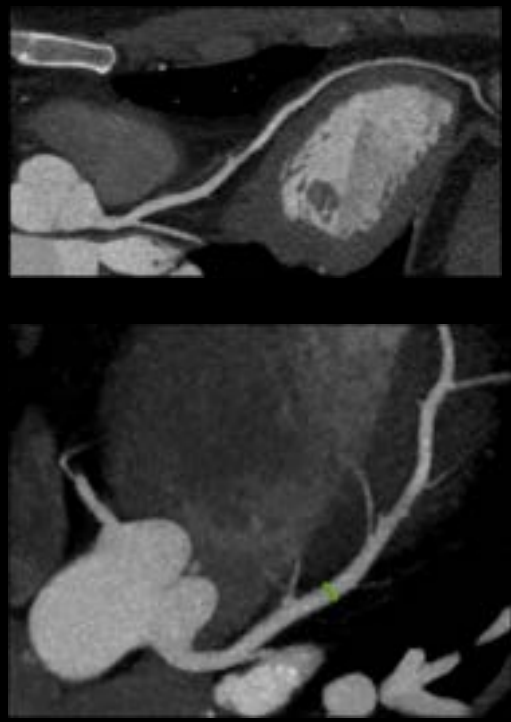
Images courtesy of The Doctors Of Solime Company, Nancy - France

High resolution CCTA

Scan type	Cardiac Pulse
Rotation time, s	0.35
Pitch	
Slice, mm	0.625
Reconstruction	AR100
kV	100
mA	460
Noise index	23
Contrast	
ml	50 at 4ml/s
mgI/ml	350
Algorithm	Detail
BMI	23
CTDIvol, mGy	11.92
DLP, mGy-cm	157
mSv (*0.015)	2.3

<u>History:</u> Young man with atypical chest pain.

<u>Findings:</u> Normal exam.



LAD

Images courtesy of The Doctors Of Solime Company, Nancy - France

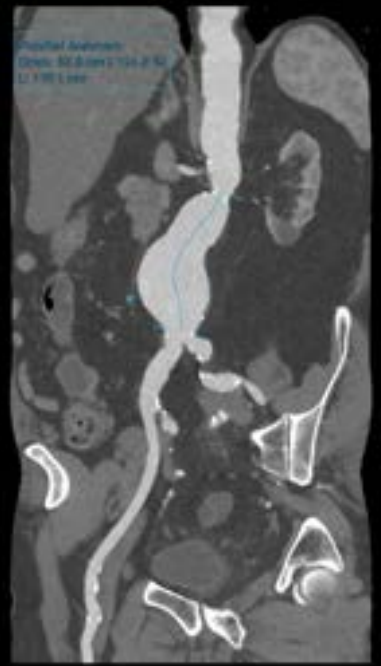
Vascular

Abdominal aorta anevrysm

Scan type	Helical
Rotation time, s	0.6
Pitch	1.375
Slice, mm	0.625
Reconstruction	AR100
kV	120
mA	Auto
Noise index	37
Contrast	
ml	50 at 4ml/s
mgI/ml	350
Algorithm	Standard
BMI	37
CTDIvol, mGy	16
DLP, mGy-cm	840
mSv ()	

<u>History:</u> Aorta anevrysm follow up.

<u>Findings:</u> Anevrysm max diameter more than 50mm. Left renal artery stenosis.



Images courtesy of The Doctors Of Solime Company, Nancy - France

Run off angiography

Scan type	Helical
Rotation time, s	0.6
Pitch	0.516
Slice, mm	0.625
Reconstruction	E1, AR100
kV	100
mA	80 - 450
Noise index	23
Contrast	
ml	110 at 4ml/s +50ml saline solution
mgI/ml	350
Algorithm	Standard
BMI	25
CTDIvol, mGy	6.3
DLP, mGy-cm	754

<u>History:</u> Hardness of walking. Bypass follow up.

<u>Findings:</u> Bypass ok, left femoral occluded

Bypass

Auto delete calcifications

Bypass

Ilio femoral calcified

Images courtesy of The Doctors Of Solime Company, Nancy - France

Helical gated aorta

Scan type	Helical
Rotation time, s	0.6
Pitch	1.375
Slice, mm	0.625
Reconstruction	AR100
kV	100
mA	80 – 450
Noise index	23
Contrast	
ml	110 at 4ml/s +50ml saline solution
mgI/ml	350
Algorithm	Standard
BMI	25
CTDIvol, mGy	6.3
DLP, mGy-cm	754

<u>History:</u> Hardness of walking. Bypass follow up.

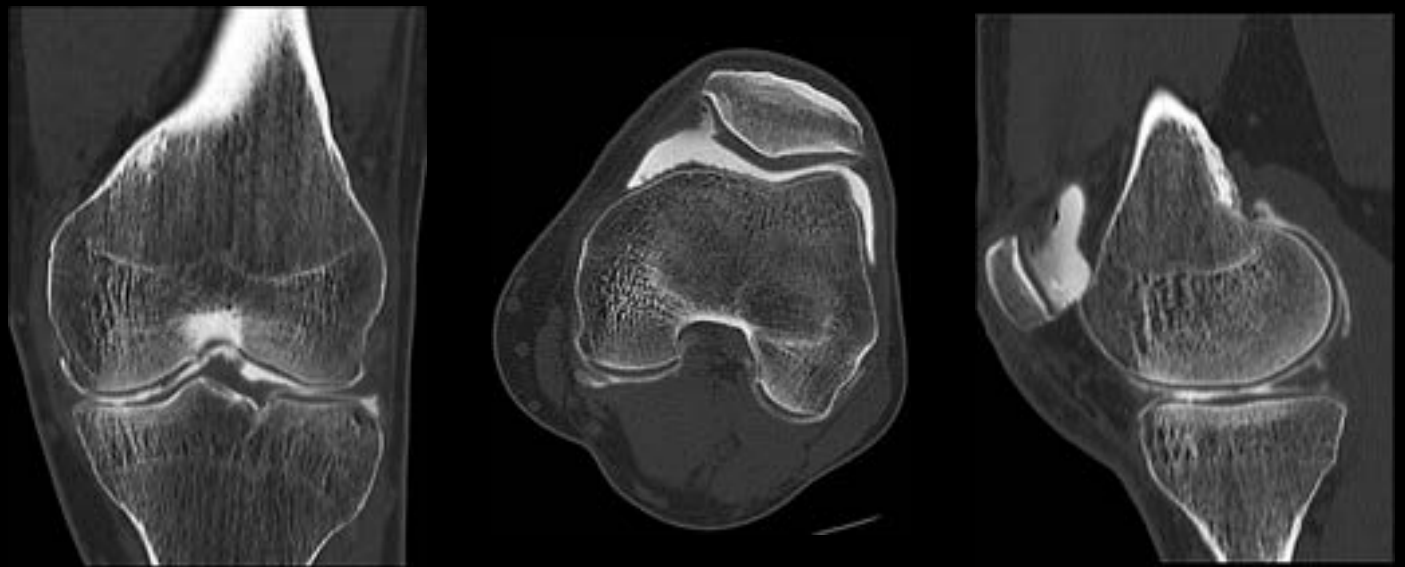
<u>Findings:</u> Bypass ok, left femoral occluded

Images courtesy of The Doctors Of Solime Company, Nancy - France

MSK

Knee arthro

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	IQE + AR10
kV	120
mA	150
Noise index	
Contrast	
ml	
mgI/ml	
Algorithm	Bone+
BMI	
CTDIvol, mGy	21
DLP, mGy-cm	354
mSv ()	



History: Arthritis

Findings: Cartilage ulcerations

Images courtesy of The Doctors Of Solime Company, Nancy - France

Wrist radius fracture

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	IQE + AR30
kV	100
mA	100
Noise index	23
Contrast	
ml	
mgI/ml	
Algorithm	Ultra
BMI	
CTDIvol, mGy	7.8
DLP, mGy-cm	115
mSv ()	

History:

Findings:

Images courtesy of The Doctors Of Solime Company, Nancy - France

Shoulder Arthro

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	AR20
kV	120
mA	Auto
Noise index	20
Contrast	
ml	
mgI/ml	
Algorithm	Bone+
BMI	
CTDIvol, mGy	20
DLP, mGy-cm	249
mSv ()	

History:

Findings:

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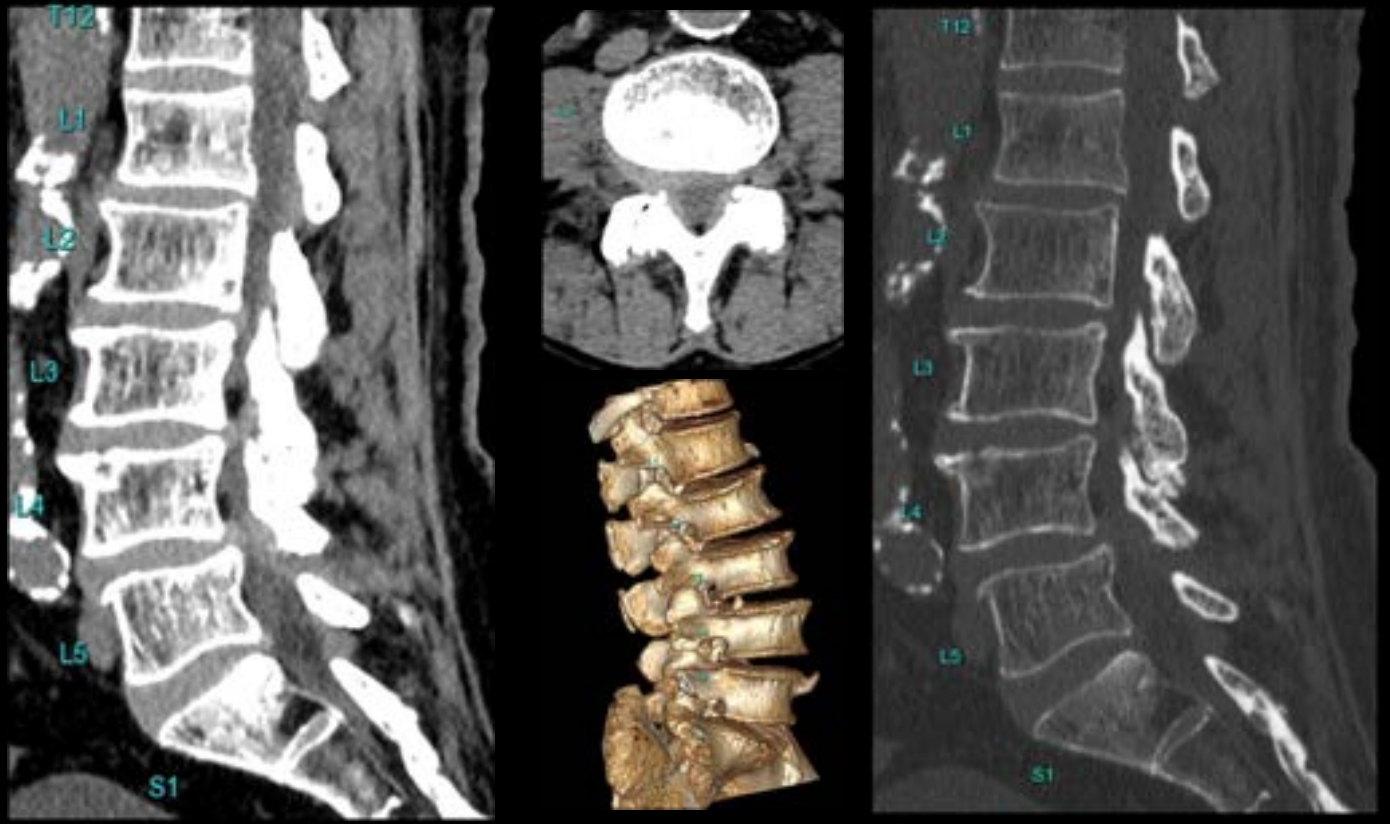
Lumbar spine assessment

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	AR60
kV	120
mA	Auto
Noise index	21
Contrast	
ml	
mgI/ml	
Algorithm	Standard
BMI	32
CTDIvol, mGy	24.8
DLP, mGy-cm	590
mSv ()	

<u>History:</u> Right sciatic

<u>Findings:</u> Herniated disc



Images courtesy of The Doctors Of Solime Company, Nancy - France

Cervical Spine Trauma

Scan type	Helical
Rotation time, s	0.7
Pitch	0.531
Slice, mm	0.625
Reconstruction	AR20 Bone AR40 Detail
kV	120
mA	Auto
Noise index	37
Contrast	
ml	
mgI/ml	
Algorithm	
BMI	32
CTDIvol, mGy	20
DLP, mGy-cm	500
mSv ()	
History:	M 58 Y , traffic accident.
Findings:	No fracture Osteoarthritis

Automatic Curved View

Automatic curved view

Images courtesy of The Doctors Of Solime Company, Nancy - France

Hip prothesis MAR 2.0

Scan type	Helical
Rotation time, s	0.7
Pitch	0.531
Slice, mm	0.625
Reconstruction	
kV	120
mA	Auto
Noise index	25
Contrast	
ml	
mgI/ml	
Algorithm	Stnd – Bone+
BMI	
CTDIvol, mGy	16
DLP, mGy-cm	480
mSv ()	

<u>History:</u> Hip prothesis on femoral fracture.

<u>Findings:</u> Follow up.

Smart MAR

Images courtesy of The Doctors Of Solime Company, Nancy - France

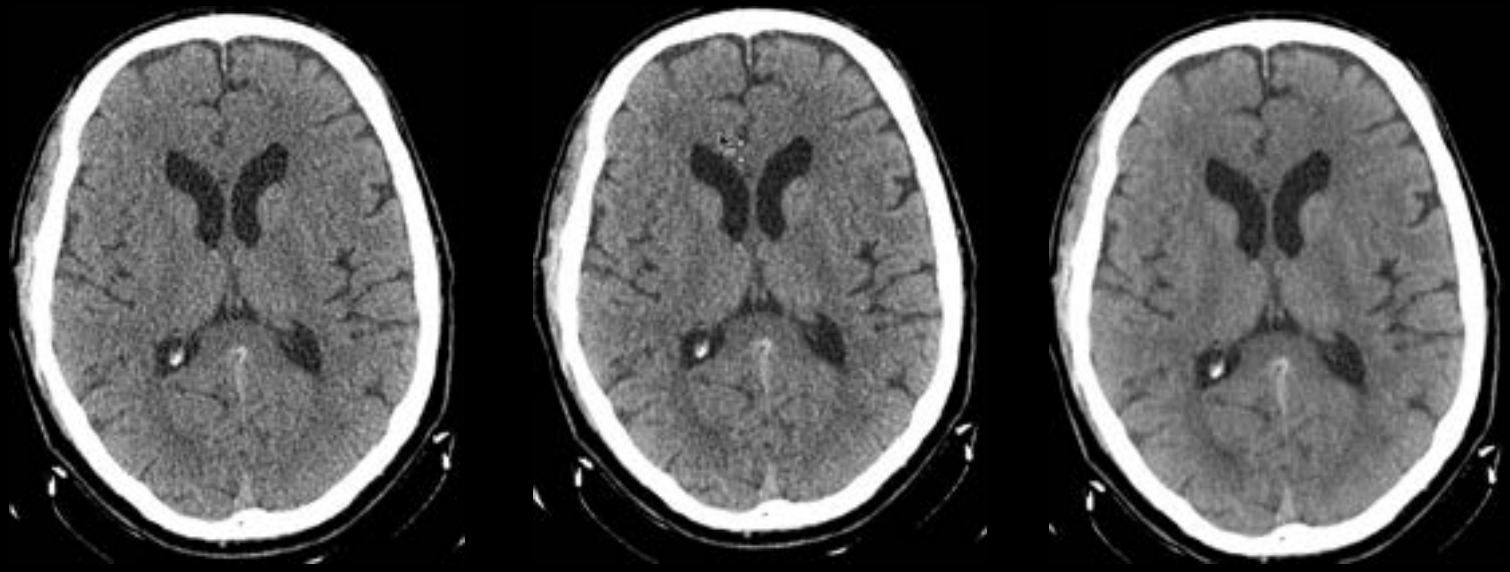
TrueFidelity DL

Neuro

Brain

Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	2.5
Reconstruction	Standard & Digital tilt
kV	120
mA	mod
Noise index	6.4
DLP, mGy-cm	988
CTDI	44

History: Recovered right hemiparesis follow up



FBP | ASiR–V 40% | **TrueFidelity DL - M**

Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard & Digital tilt
kV	120
mA	mod
Noise index	6.4
DLP, mGy-cm	980
CTDI	44

History: Metastatic melanoma follow up

Volume illumination
TrueFidelity DL- M

TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	2.5
Reconstruction	Standard & Digital tilt
kV	120
mA	mod
Noise index	6.4
DLP, mGy-cm	980
CTDI	44

History: Metastatic melanoma follow up

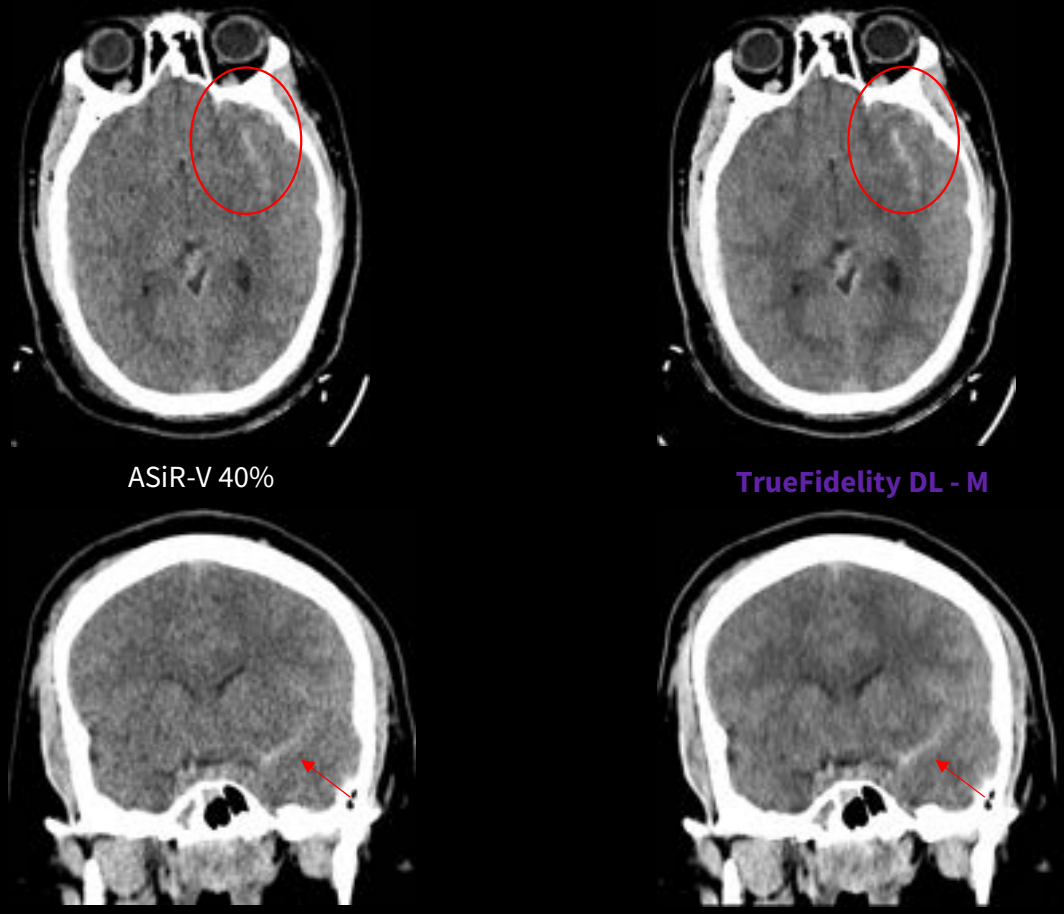
FBP | ASiR–V 40% | **TrueFidelity DL - M**

Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7

History: Head trauma
Findings: Hemorrhage



ASiR-V 40%

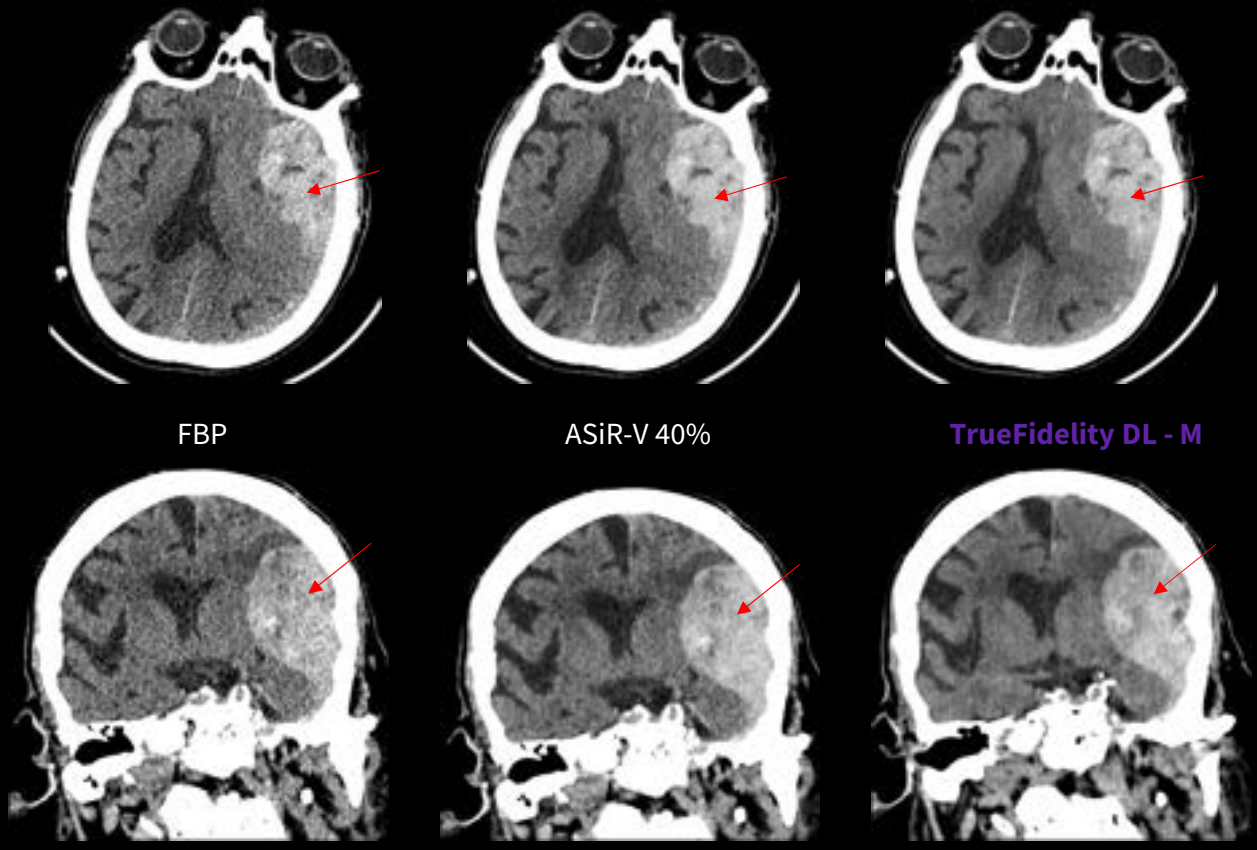
TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	6.4
DLP, mGy-cm	644
CTDI	35

History: Trauma
Findings: Hemorrhage

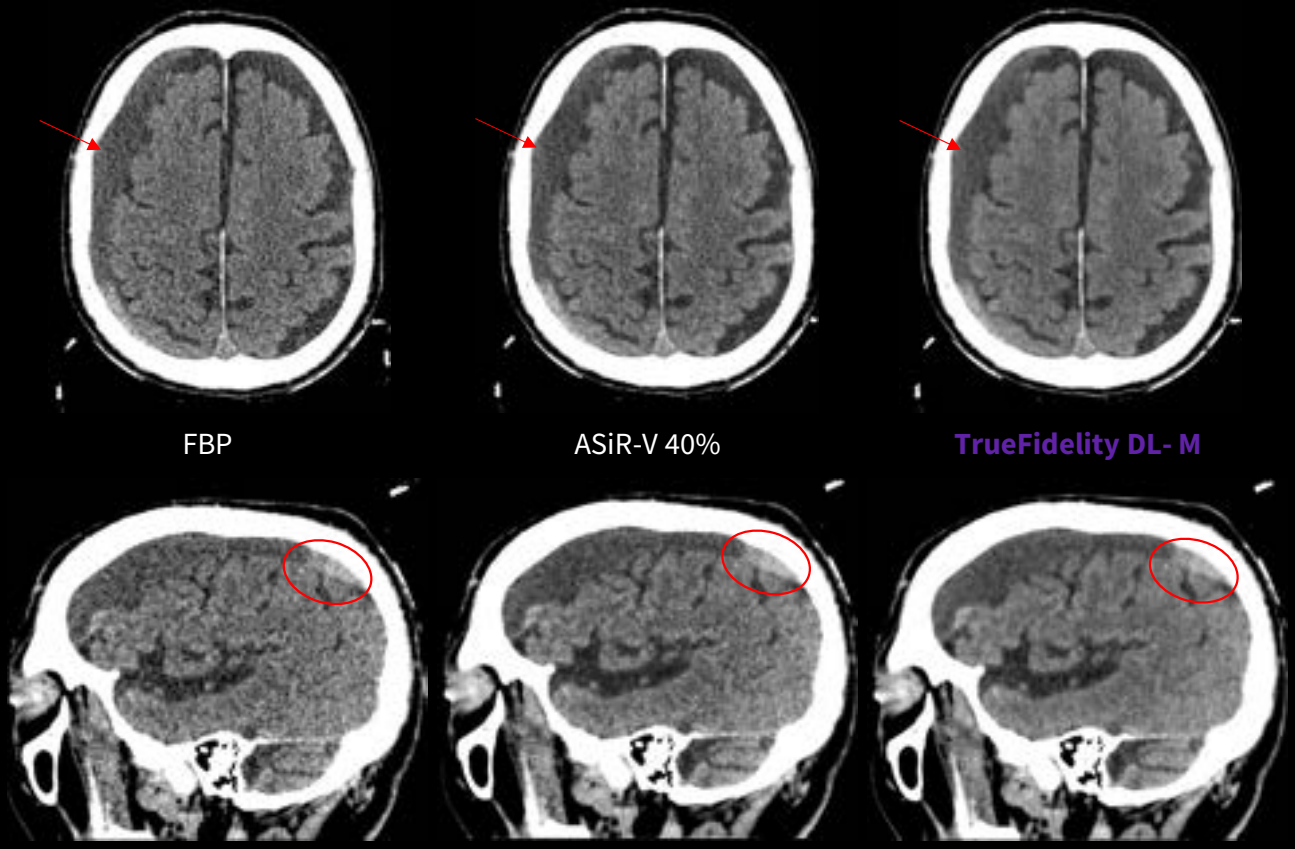


Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7
DLP, mGy-cm	646
CTDI	38

History: Subdural hematoma
Findings: Subdural re-bleeding

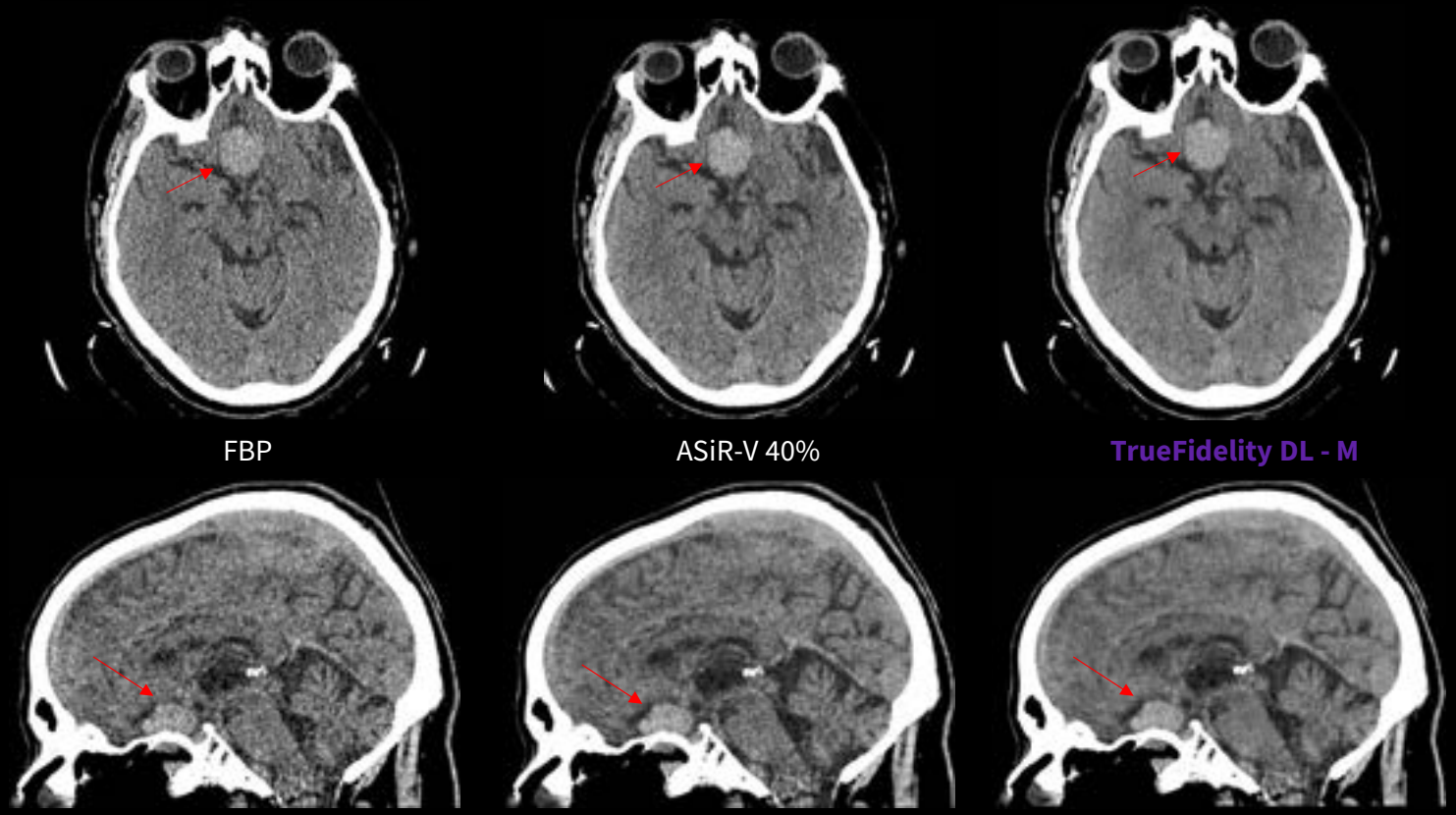


Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7
DLP, mGy-cm	608
CTDI	36

Findings: Cerebral tumor

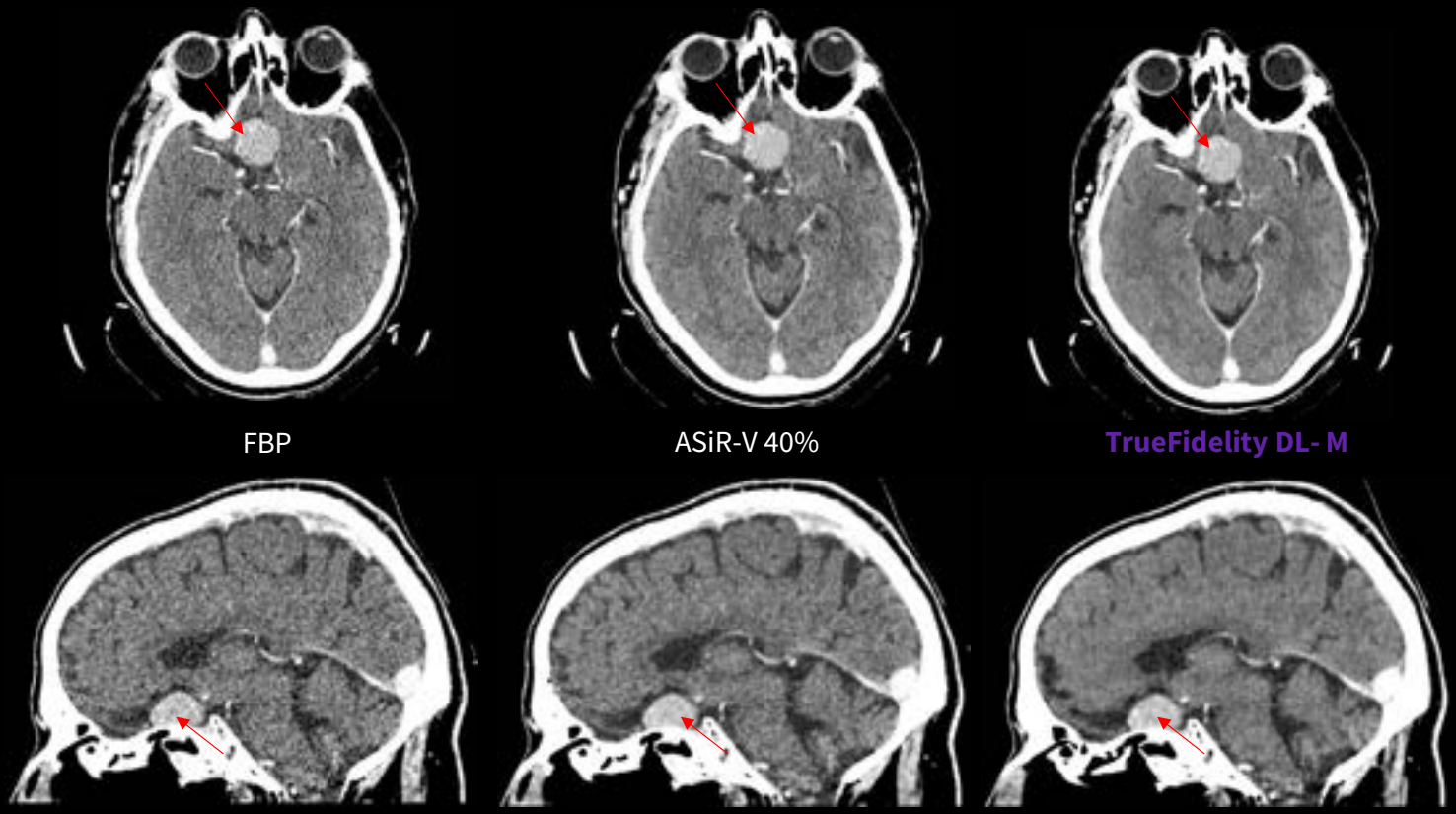


Images Courtesy of Hospital da Costa Burela - Spain

Brain

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7
DLP, mGy-cm	609
CTDI	36.9

Findings: Cerebral tumor



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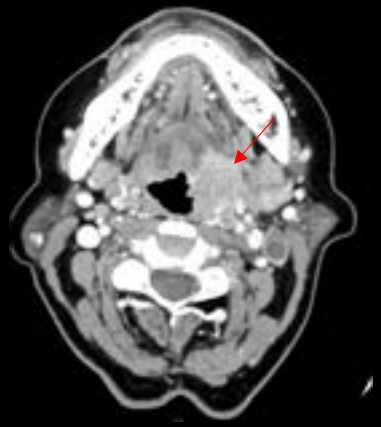
Neck

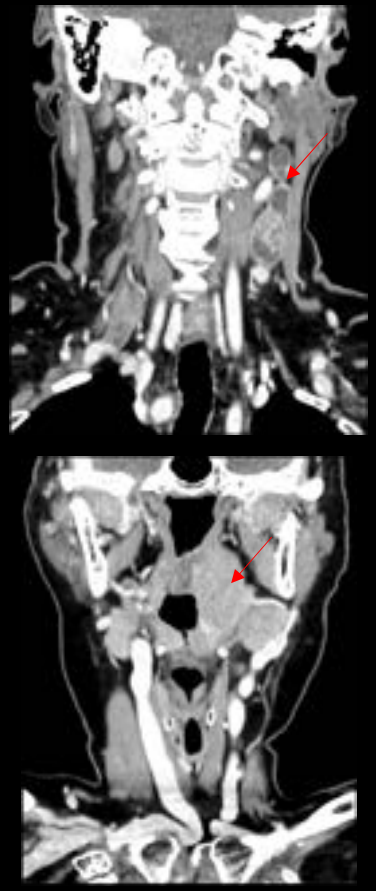
Scan type	Helical
Rotation time, s	0.8
Pitch	0.969
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	22
DLP, mGy-cm	216
CTDI	9

History: Left tonsil carcinoma rule out

TrueFidelity DL - M



Coronal - **TrueFidelity DL- M**



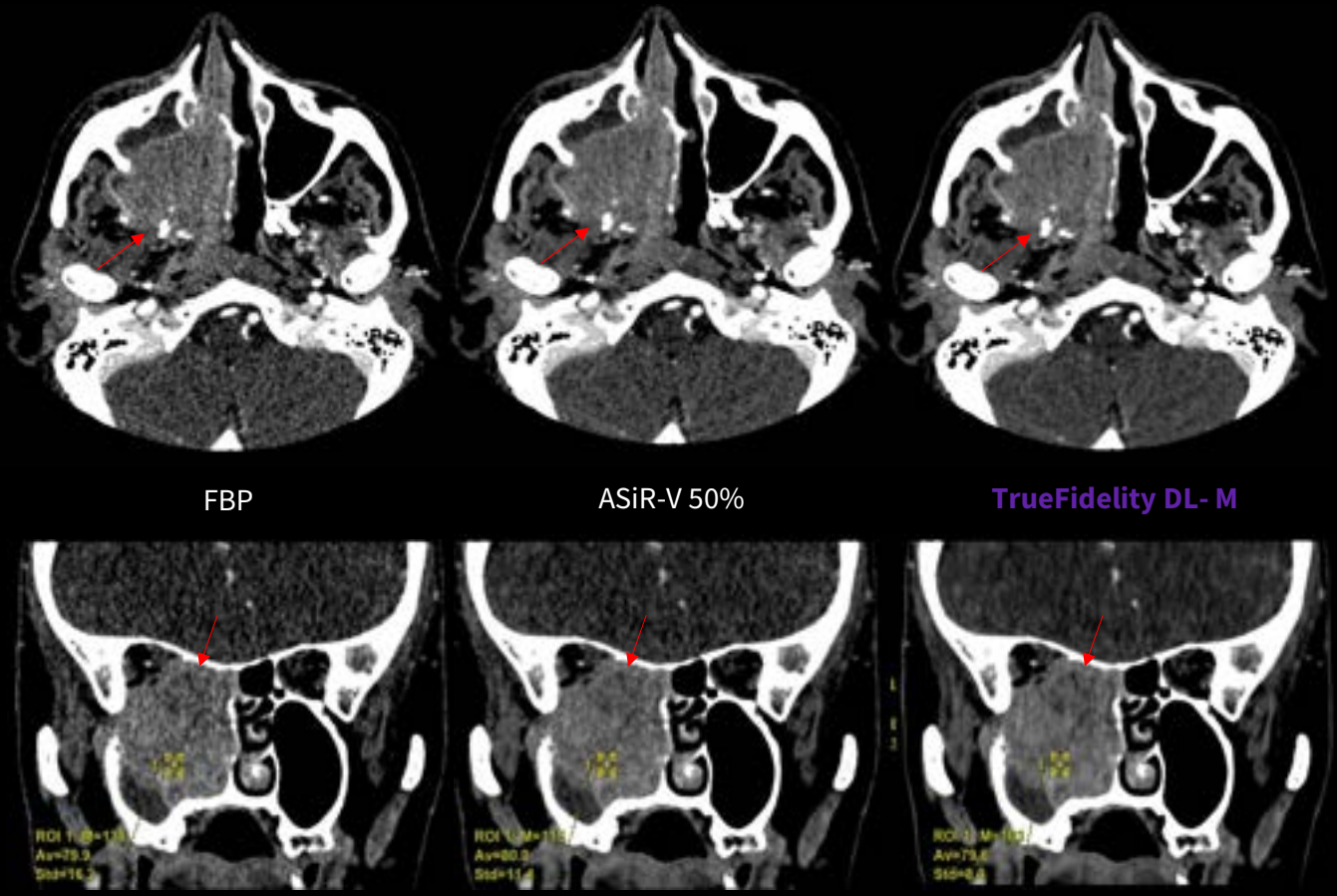
Volume illumination
TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

Facial

Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard
kV	100
mA	mod
Noise index	12
DLP, mGy-cm	131
CTDI	10.3

History: Right hemicranial headache, diplopia in horizontal view
Findings: Facial mass



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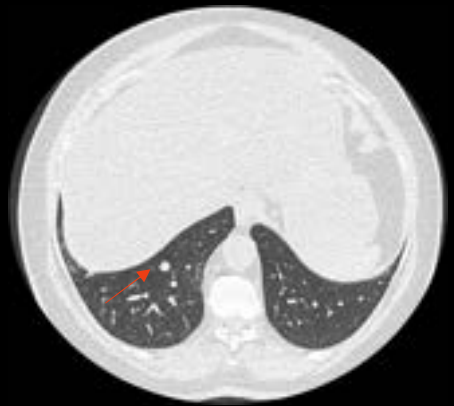
Body

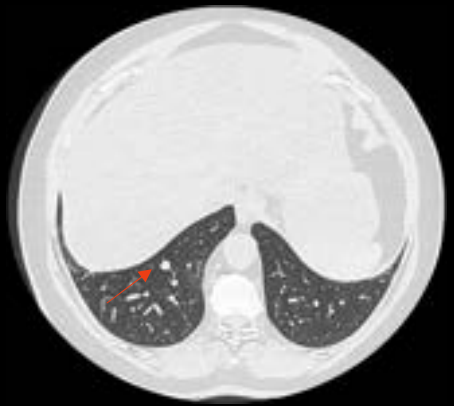
Low dose chest

Scan type	Helical
Rotation time, s	0.4
Pitch	0.984
Slice, mm	0.625
Reconstruction	Lung & Standard LU
kV	120
mA	60
Noise index	N/A
DLP, mGy-cm	76.3
CTDI	2.12
mSv (*0.017)	1.2

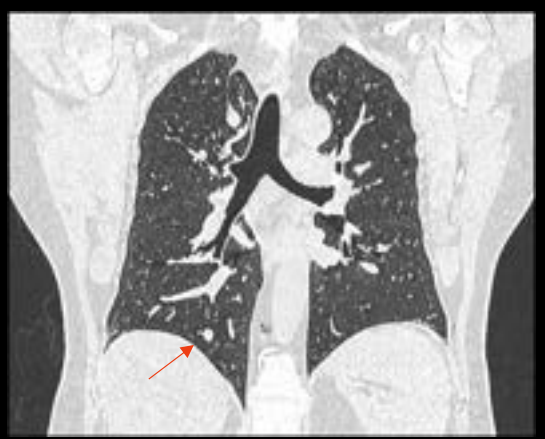
History: Lung screening
Findings: Lung Node



ASiR-V 40%



TrueFidelity DL - M



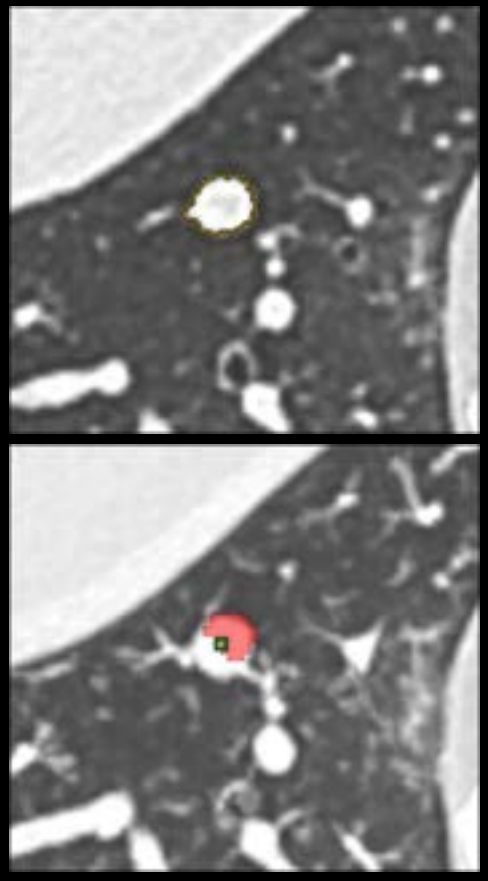
Images Courtesy of Hospital da Costa Burela - Spain

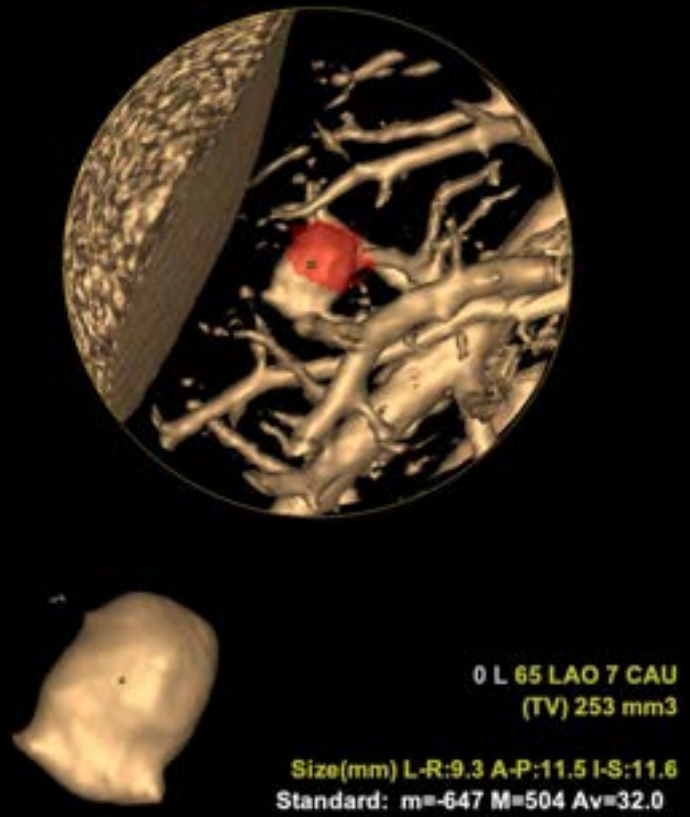
Low dose chest

Scan type	Helical
Rotation time, s	0.4
Pitch	0.984
Slice, mm	0.625
Reconstruction	Lung & Standard LU
kV	120
mA	60
Noise index	N/A
DLP, mGy-cm	76.37
CTDI	2.12
mSv (*0.017)	1.2

History: Lung screening
Findings: Lung Node

Lung Node Analysis with Lung VCAR





Images Courtesy of Hospital da Costa Burela - Spain

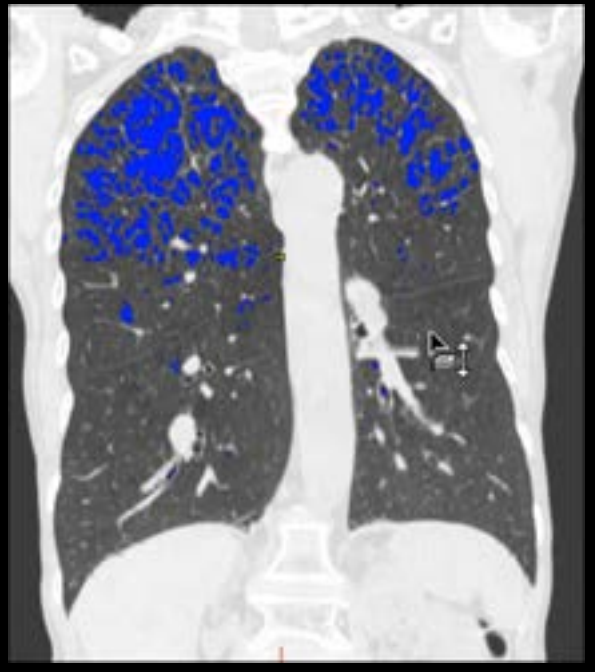
Lung Emphysema

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard LU
kV	120
mA	80
Noise index	N/A

Findings: Emphysema

Axial -**TrueFidelity DL- M**

Coronal - **TrueFidelity DL- M**



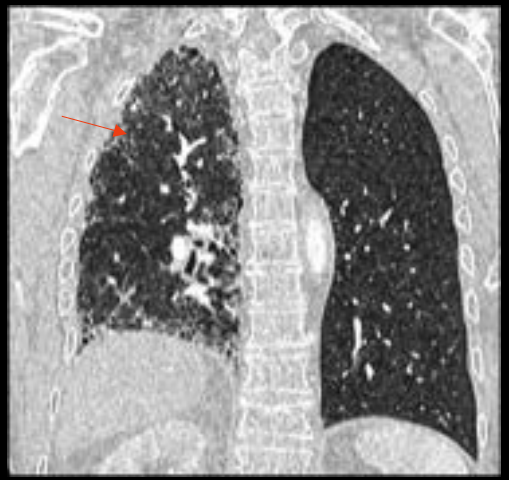
Range Name	Range values	Right Lung	Left Lung	Total Lung Volume
		Right Lung	Left Lung	Combined Lungs
-950 HU	[-1024 / -950[	7.4812 %	3.0067 %	5.4502 % / 0.2467 L
>= -950 HU	[-950 / 3071[	92.5188 %	96.9933 %	94.5498 % / 4.2794 L
	Total	2.4716 L	2.0545 L	4.5261 L

Images Courtesy of Hospital da Costa Burela - Spain

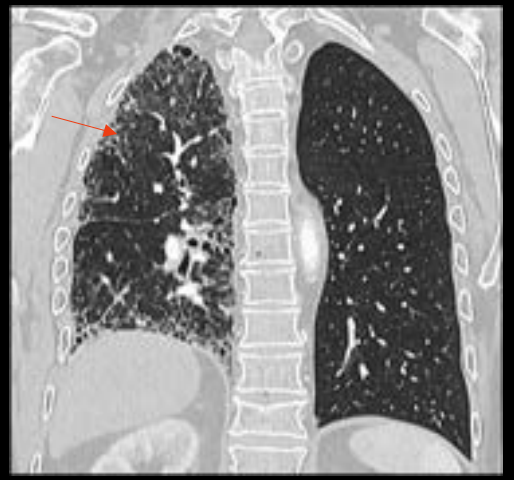
Lung Fibrosis

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	0.625
Reconstruction	Lung - Standard LU
kV	100
mA	Mod
Noise index	42
DLP, mGy-cm	113.22
CTDI	3.57

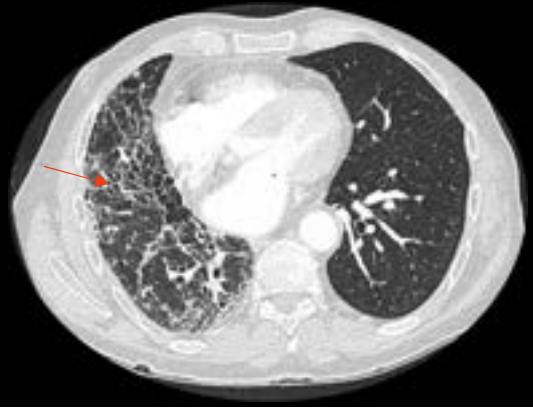
History: Unilateral lung, 1st year follow up

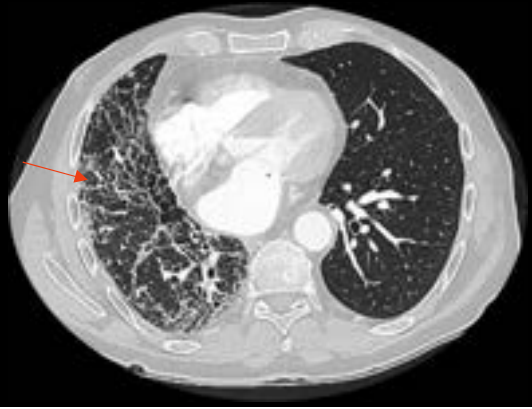


ASiR–V 40%



TrueFidelity DL - M





Images Courtesy of Hospital da Costa Burela - Spain

Low Dose Chest

Scan type	Helical
Rotation time, s	0.35
Pitch	0.984
Slice, mm	1.25
Reconstruction	Lung - Standard LU
kV	120
mA	40
Noise index	N/A
DLP, mGy-cm	42.8
CTDI	1.2
Eff dose, mSv	0.72

History: Lung Screening
Findings: Normal

ASiR–V 40%

TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

CAP

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	0.625
Reconstruction	Standard
kV	100
mA	Mod
Noise index	42
DLP, mGy-cm	268
CTDI	4.1

History: Cavitating pneumonia, rule out hidden neoplasia

Venous

FBP

ASiR–V 40%

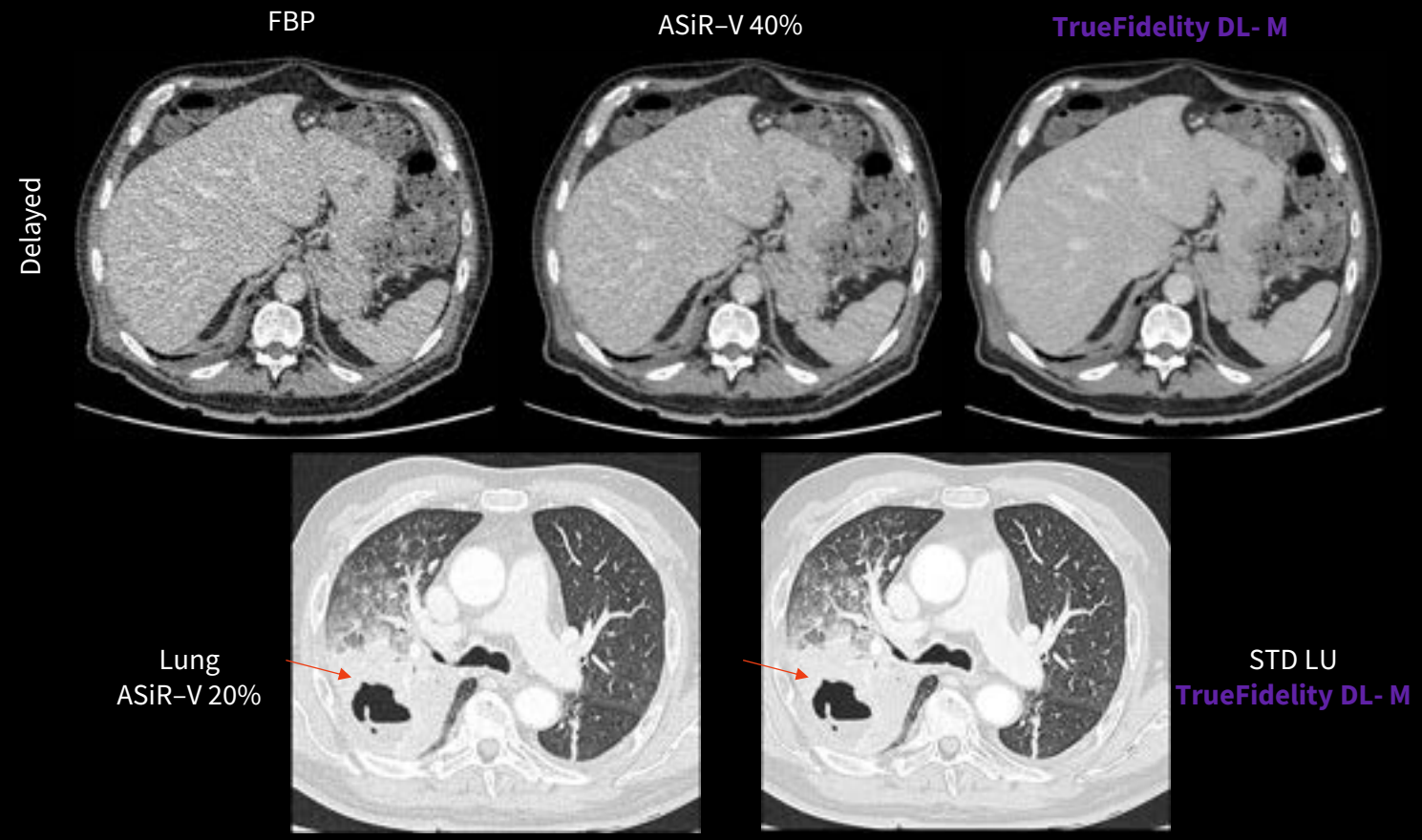
TrueFidelity DL- M

Images Courtesy of Hospital da Costa Burela - Spain

CAP

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	0.625
Reconstruction	Standard
kV	100
mA	Mod
Noise index	42
DLP, mGy-cm	196
CTDI	4

History: Cavitating pneumonia, rule out hidden neoplasia



Images Courtesy of Hospital da Costa Burela - Spain

CAP - Lung Tumor follow up

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	50 - 400
Noise index	21
DLP, mGy-cm	1100
CTDI	15

History: Lung T Follow up

FBP

ASiR–V 40%

TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

Chest - Pleural disease follow up, high BMI

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	120
mA	80 - 240
Noise index	21
DLP, mGy-cm	419
CTDI	12

History: Lung T Follow up

FBP

ASiR–V 40%

TrueFidelity DL- M

Images Courtesy of Hospital da Costa Burela - Spain

Abdomen & Pelvis renal stone, 33 BMI

Scan type	Helical 40mm
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	120
mA	50 – 400
Noise index	21
DLP, mGy-cm	962
CTDI	20

History: Abdominal pain
Findings: Renal stone

FBP

ASiR–V 40%

TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

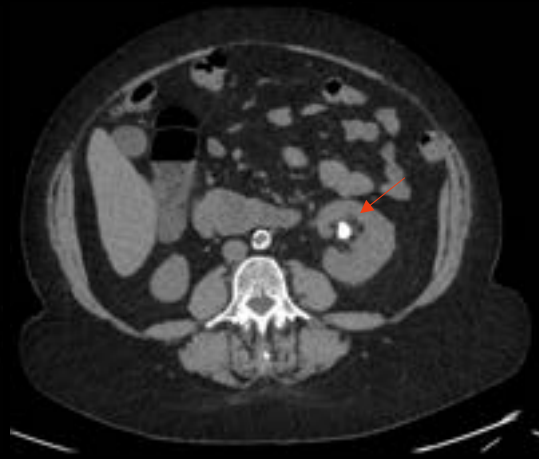
Abdomen & Pelvis renal stone, 33 BMI

Scan type	Helical 40mm
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	120
mA	50 – 400
Noise index	21
DLP, mGy-cm	962
CTDI	20

History: Abdominal pain
Findings: Renal stone

FBP

ASiR–V 40%



TrueFidelity DL- M

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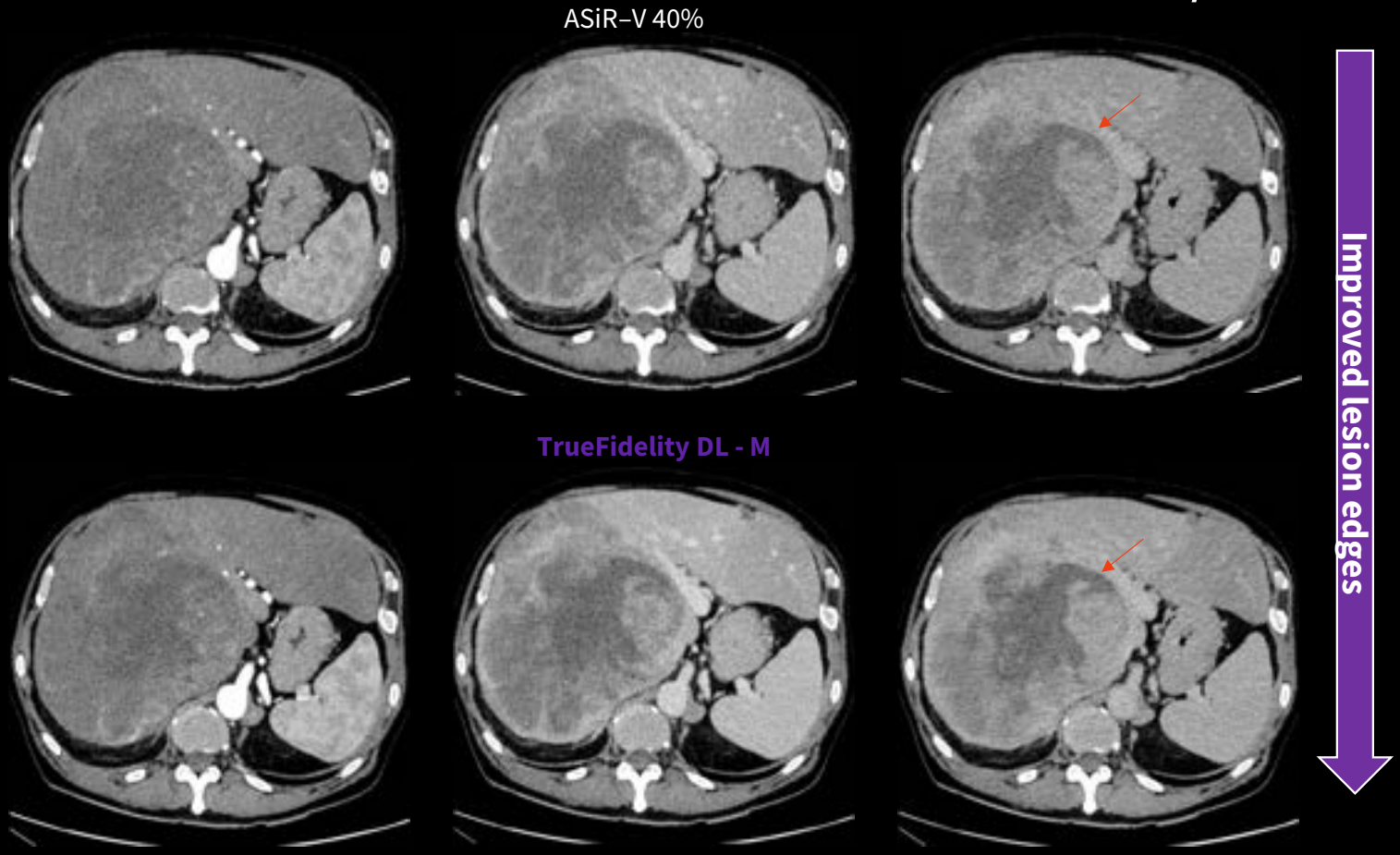
Multiphase Liver HCC

Scan type	Helical 40mm
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	230x3 – 463
CTDI	7.30x3 – 6.7

History: Constitutional syndrome
Findings: HCC

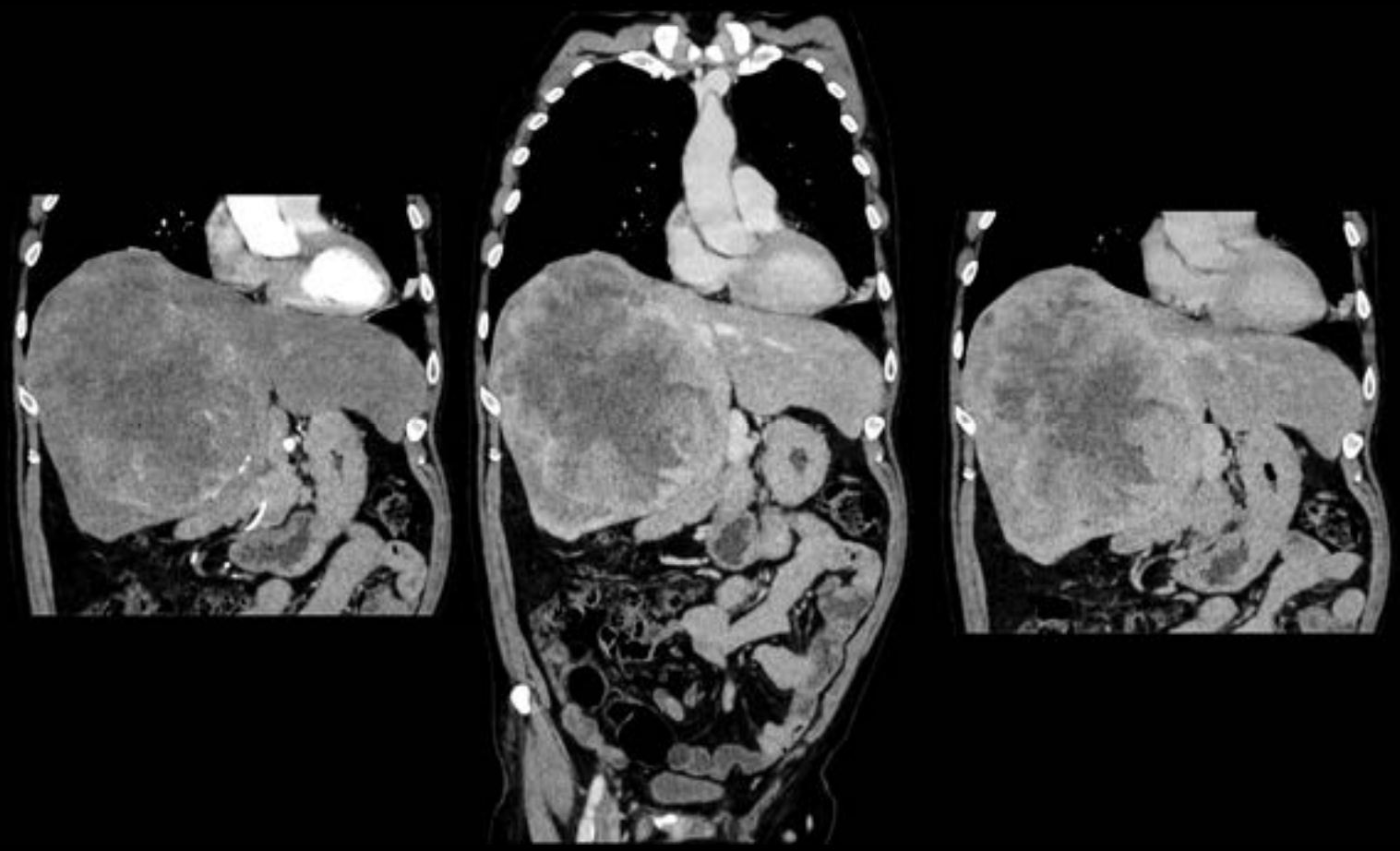


Images Courtesy of Hospital da Costa Burela - Spain

Multiphase Liver HCC

Scan type	Helical 40mm
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	230x3 – 463
CTDI	7.30x3 – 6.7

History: Constitutional syndrome
Findings: HCC



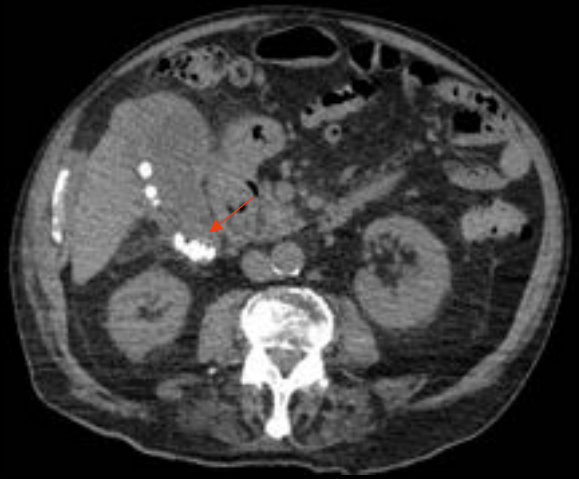
Images Courtesy of Hospital da Costa Burela - Spain

Abdomen & Pelvis - Gallstones

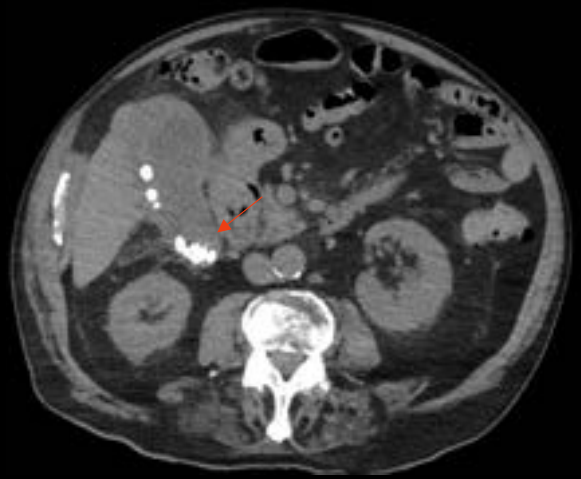
Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	231
CTDI	10

History: Abdominal Pain
Findings: Cholecystitis, gallstones

FBP



TrueFidelity DL - M



Volume Illumination
TrueFidelity DL - M

Images Courtesy of Hospital da Costa Burela - Spain

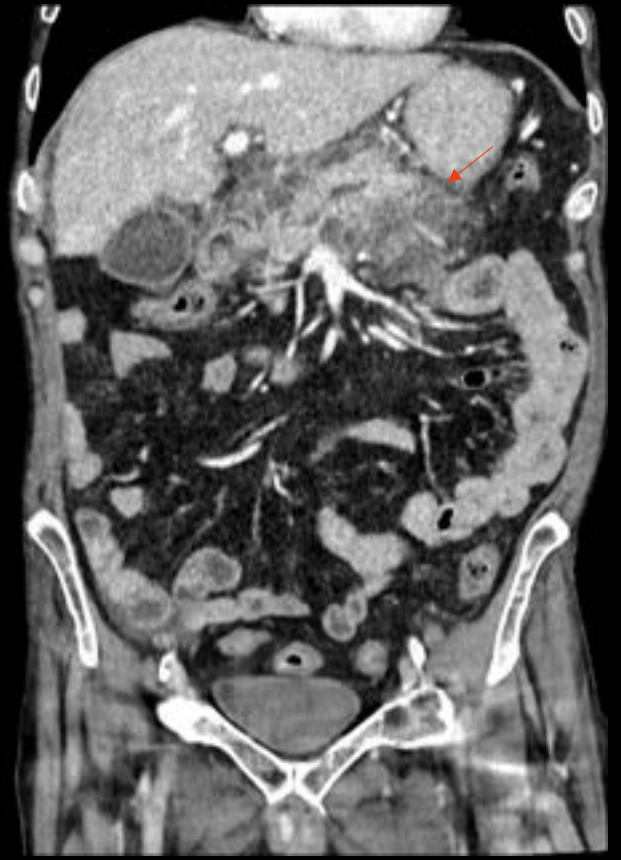
Abdomen & Pelvis - Pancreas

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	219 -207
CTDI	4.50 – 4.56

History: Chronic pancreatitis
Findings: Acute pancreatitis

ASiR - V with MAR

TrueFidelity DL– M with MAR



Images Courtesy of Hospital da Costa Burela - Spain

Abdomen & Pelvis - Pancreas

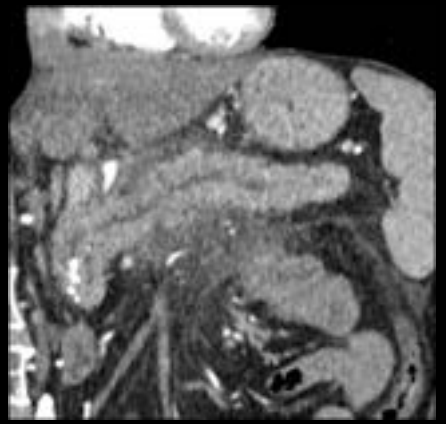
Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	219 -207
CTDI	4.50 – 4.56

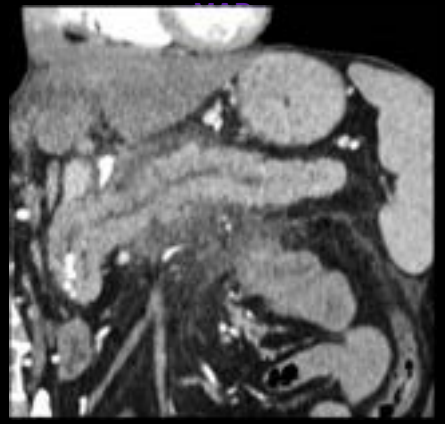
History: Chronic pancreatitis
Findings: Acute pancreatitis

Curved - ASiR - V with MAR

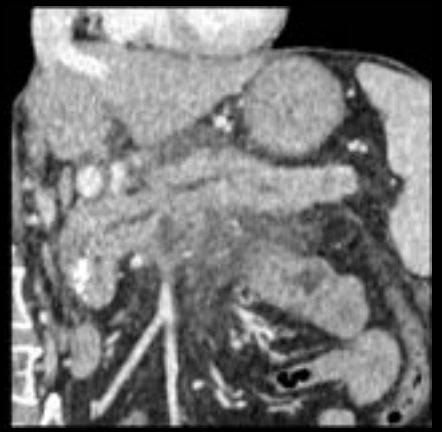
Curved – **TrueFidelity DL – M with**

Arterial





Venous



Images Courtesy of Hospital da Costa Burela - Spain

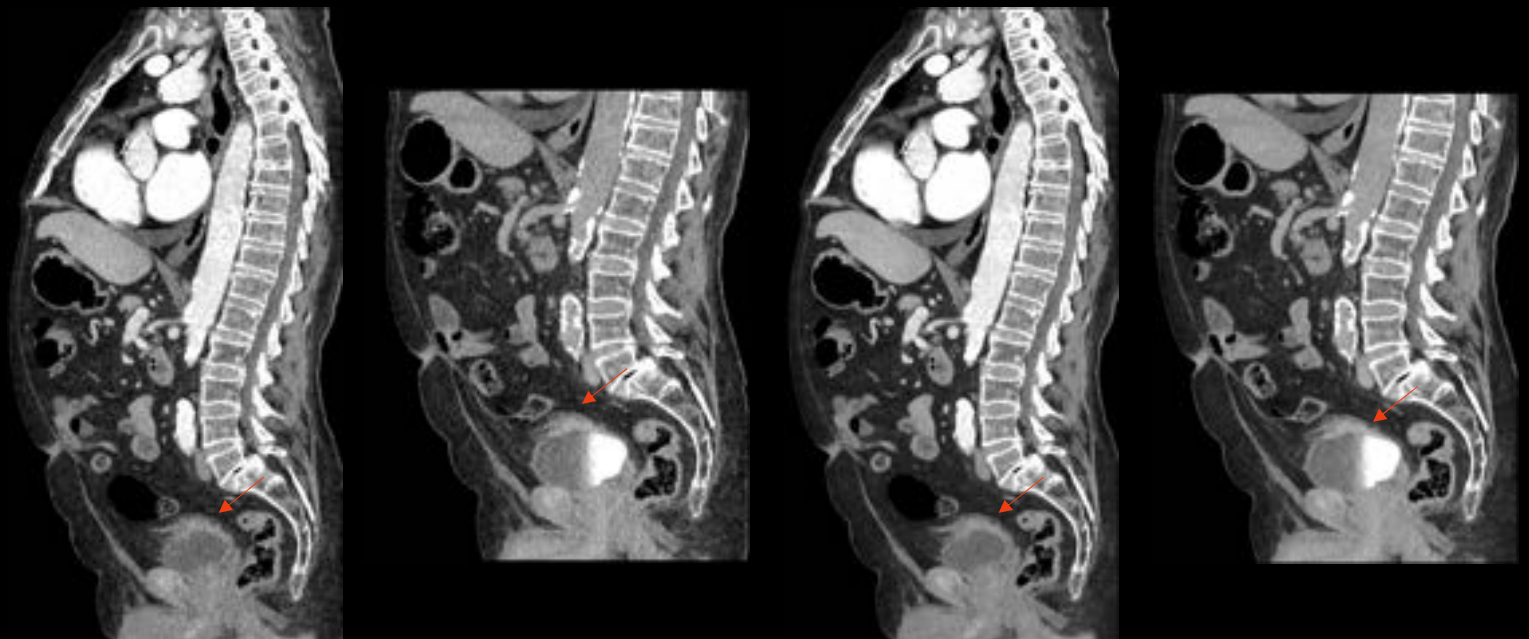
Abdomen & Pelvis - Uro

Scan type	Helical
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	mod
Noise index	42
DLP, mGy-cm	526 – 383
CTDI	10.5 – 10.2

History: Vesical carcinoma follow up

ASiR - V 40%
Venous

TrueFidelity DL– M
Urographic



Images Courtesy of Hospital da Costa Burela - Spain

CTA

PE

Scan type	Helical 40mm
Rotation time, s	0.4
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	160 – 400
Noise index	21
DLP, mGy-cm	269
CTDI	8

History: PE assessment
Findings: Normal

FBP

ASiR–V 40%

TrueFidelity DL- M

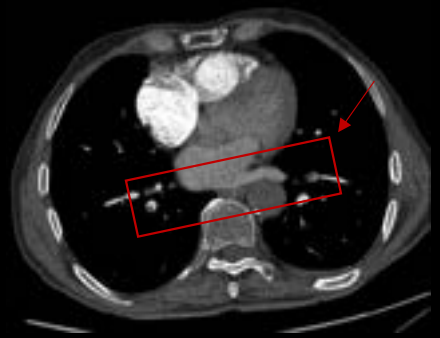
Images Courtesy of Hospital da Costa Burela - Spain

PE + 121 DLP

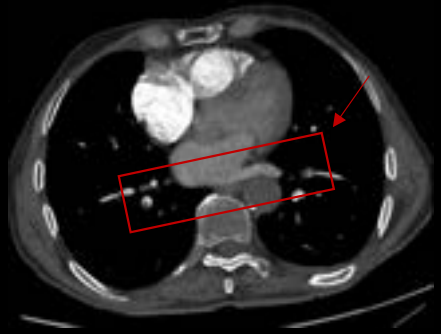
Scan type	Helical 40mm
Rotation time, s	0.4
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	50 – 350
Noise index	42
DLP, mGy-cm	121
CTDI	3.4

History: Oncologic patient, rule out PE
Findings: Bilateral PE +

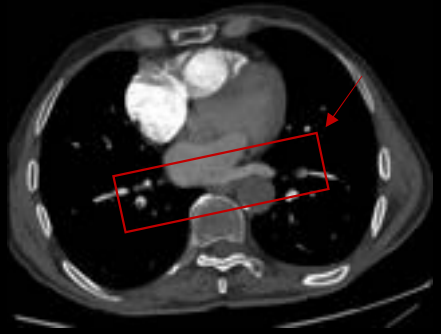
FBP



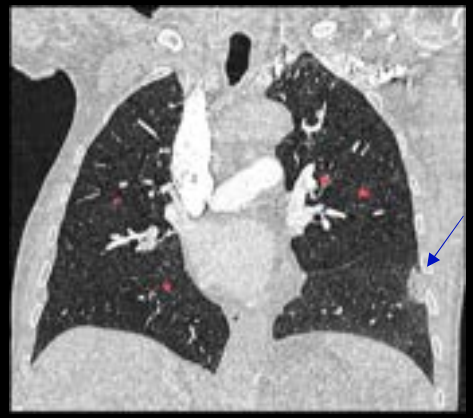
ASiR–V 40%



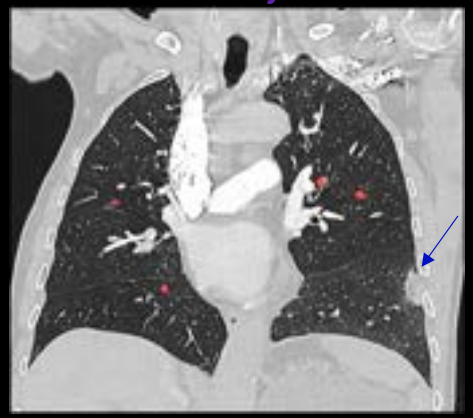
TrueFidelity DL - M



LUNG - ASiR–V 20%



Standard LU
TrueFidelity DL- M



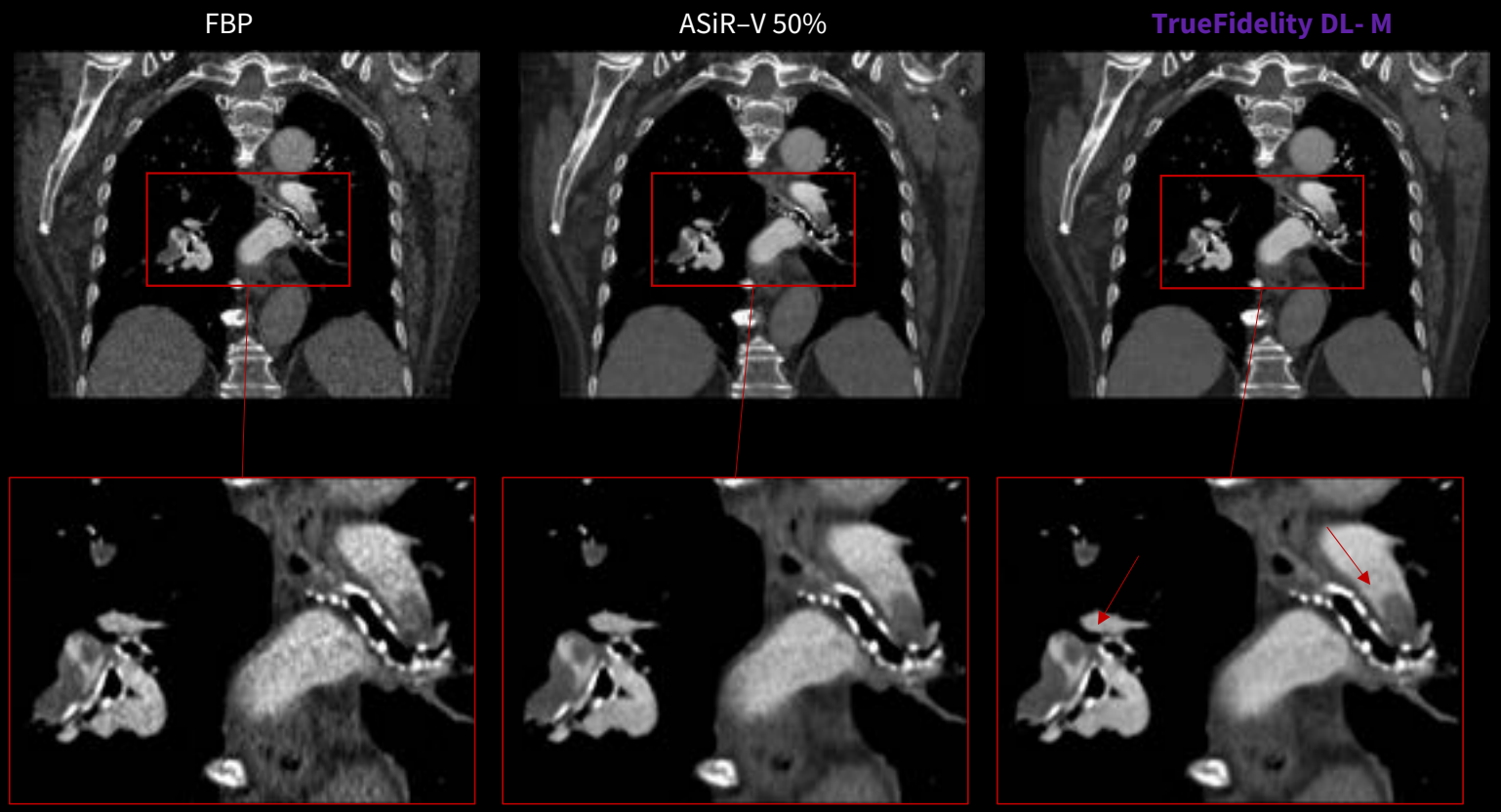
Images Courtesy of Hospital da Costa Burela - Spain

PE + 178DLP

Scan type	Helical 40mm
Rotation time, s	0.4
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	50 – 350
Noise index	42
DLP, mGy-cm	170
CTDI	5.8

History: Rest dyspnea, localized chest pain. Previous thrombophlebitis

Findings: Bilateral PE+

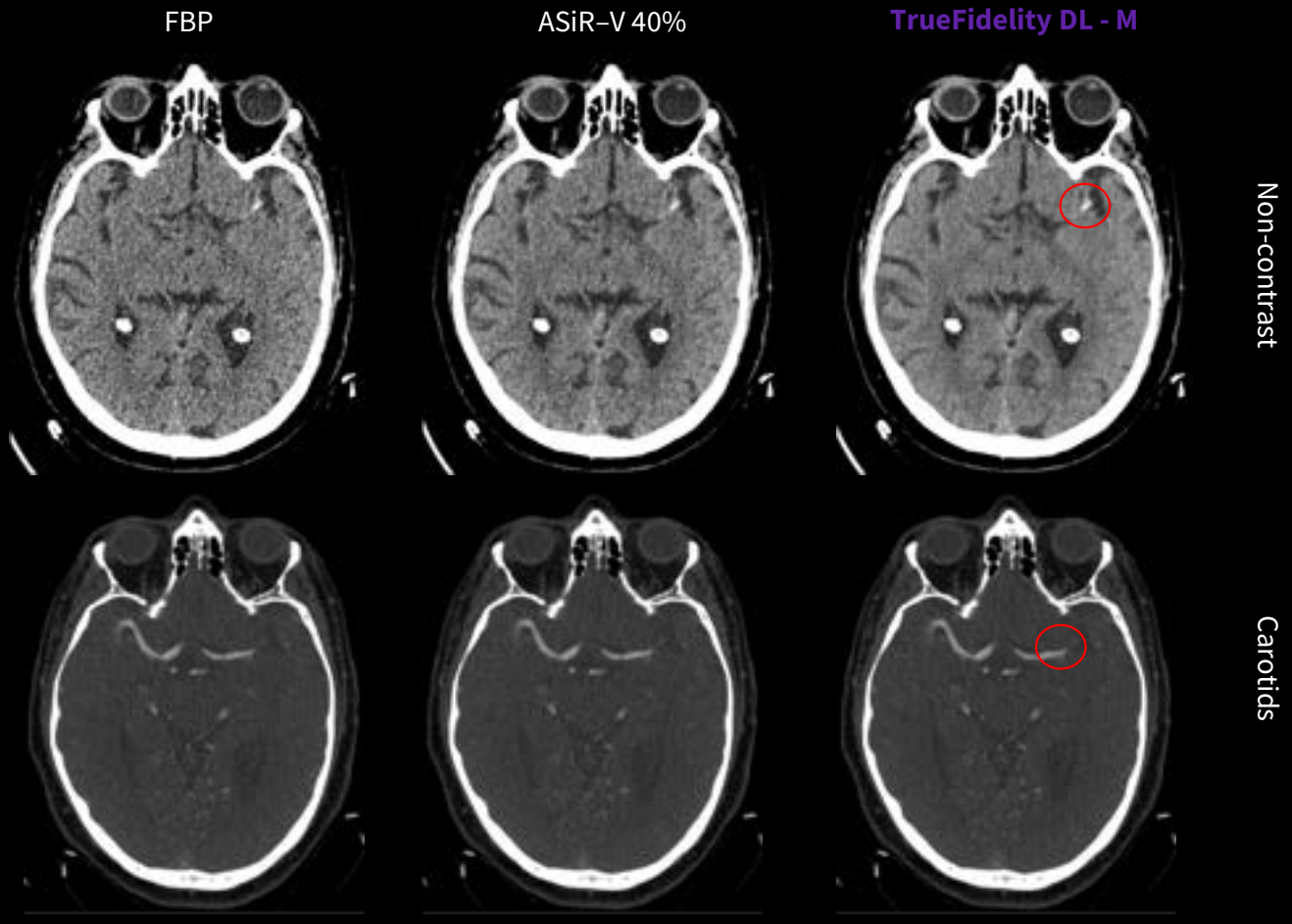


Images Courtesy of Hospital da Costa Burela - Spain

Head + Carotids

Scan type	Helical
Rotation time, s	0.8 – 0.4
Pitch	0.531 – 1.375
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7 - 25
DLP, mGy-cm	649
CTDI	36

History: Stroke
Findings: LMCA occlusion



Images Courtesy of Hospital da Costa Burela - Spain

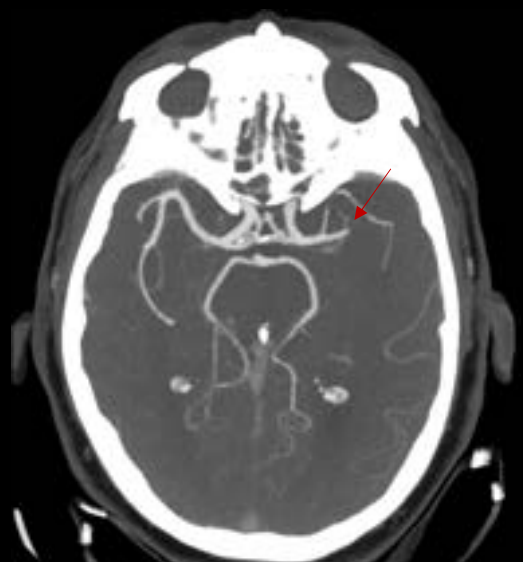
Head + Carotids

Scan type	Helical
Rotation time, s	0.8 – 0.4
Pitch	0.531 – 1.375
Slice, mm	0.625
Reconstruction	Standard
kV	120
mA	mod
Noise index	4.7 - 25
DLP, mGy-cm	255
CTDI	7.2

History: Stroke
Findings: LMCA occlusion

TrueFidelity DL– M

Carotids MIP



Volume illumination

Images Courtesy of Hospital da Costa Burela - Spain

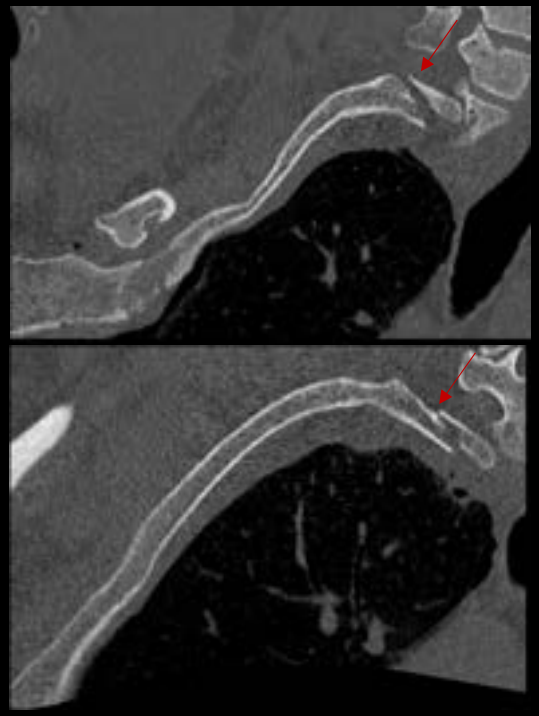
MSK

Cervical Spine Trauma

Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	1.25
Reconstruction	STD / Bone+/ STD LU
kV	120
mA	mod
Noise index	15.1
DLP, mGy-cm	560
CTDI	19

History: Trauma
Findings: 1st and 2nd right ribs fracture, pneumothorax

Curved - Bone+



Volume Illumination – **TrueFidelity DL - M**

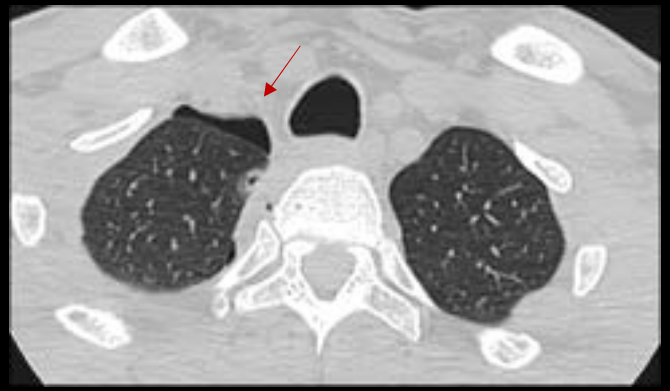
Images Courtesy of Hospital da Costa Burela - Spain

Cervical Spine Trauma

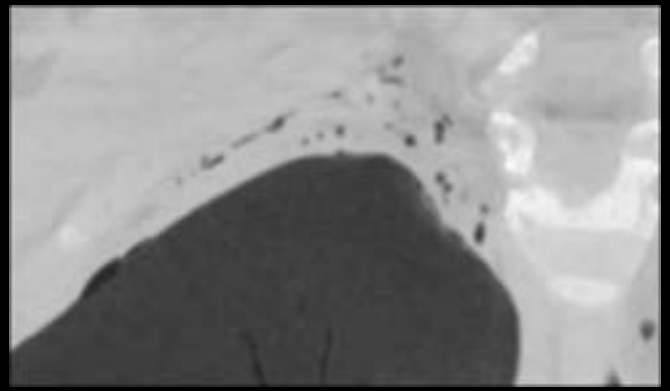
Scan type	Helical
Rotation time, s	0.6
Pitch	0.531
Slice, mm	1.25
Reconstruction kV	STD / Bone+/ STD LU 120
mA	mod
Noise index	15.1
DLP, mGy-cm	560
CTDI	19

History: Trauma
Findings: 1st and 2nd right ribs fracture, pneumothorax

1.25mm Standard LU **DL-M**



DL-M MinIP



1.25mm Standard **DL-M**

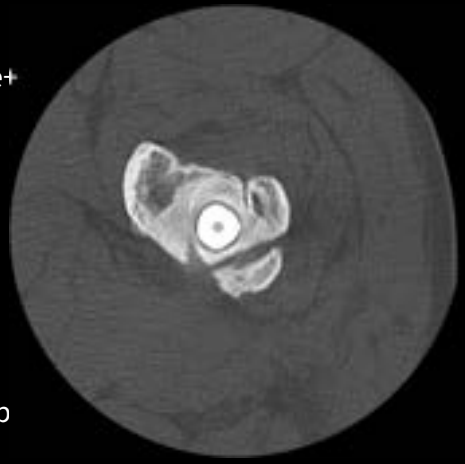
Images Courtesy of Hospital da Costa Burela - Spain

Femoral Pseudoarthrosis

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	Standard – Bone+
kV	120
mA	mod
Noise index	26.5
DLP, mGy-cm	980
CTDI	19

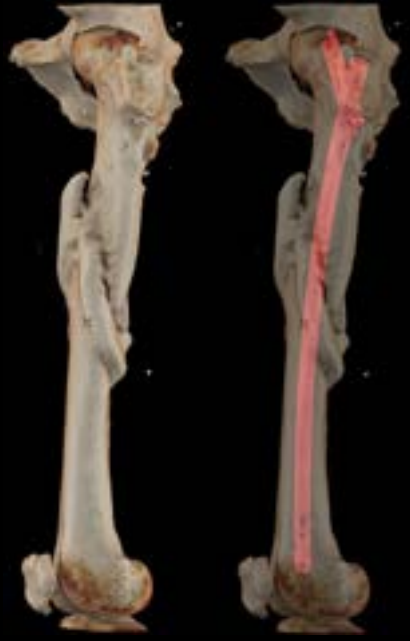
History: Pseudoarthrosis follow up

0.625mm Bone+ with MAR



0.625mm STD with MAR
TrueFidelity DL- M

Volume Illumination
TrueFidelity DL - M



Images Courtesy of Hospital da Costa Burela - Spain

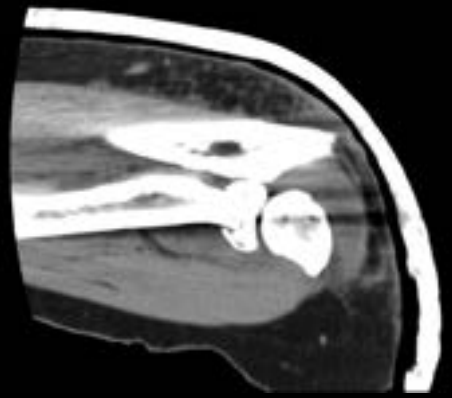
Elbow

Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard – Bone+
kV	120
mA	60
Noise index	26.5
DLP, mGy-cm	111
CTDI	8.59

History: Radius head fracture follow up

0.625mm Bone+

0.625mm Standard
TrueFidelity DL - M



Volume Illumination
TrueFidelity DL- M

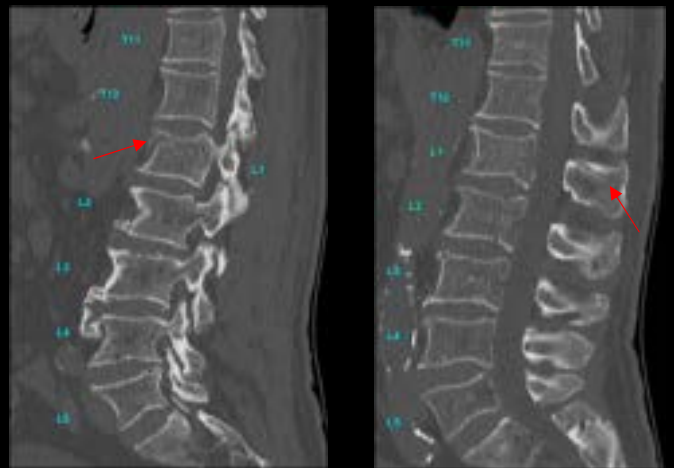
Images Courtesy of Hospital da Costa Burela - Spain

Spine

Scan type	Helical
Rotation time, s	0.8
Pitch	0.969
Slice, mm	0.625
Reconstruction	Standard – Bone+
kV	120
mA	mod
Noise index	25.7
DLP, mGy-cm	591
CTDI	19

History: Trauma
Findings: L1 + longitudinal spinous fracture.

0.625mm Bone+



0.625mm Bone+

0.625mm Standard

Volume Illumination
TrueFidelity DL- M

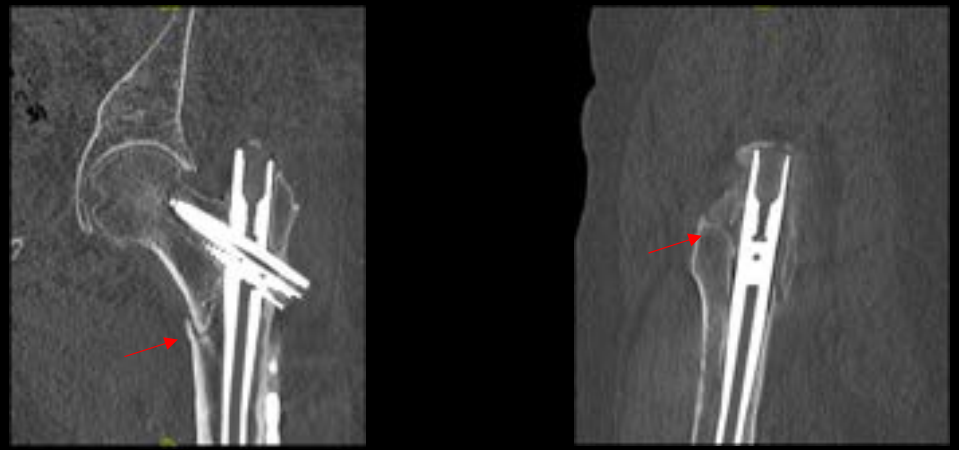
Images Courtesy of Hospital da Costa Burela - Spain

Hip

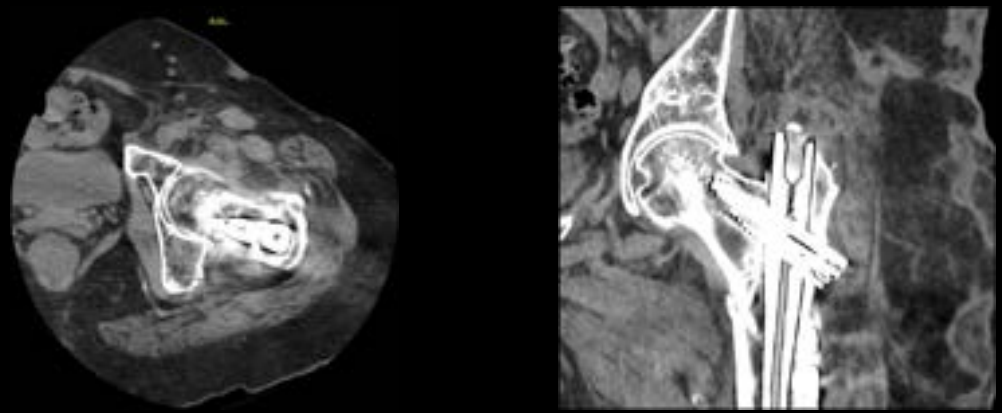
Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	1.25
Reconstruction	Standard – Bone+
kV	120
mA	mod
Noise index	25.7
DLP, mGy-cm	292
CTDI	15

History: Hip fracture follow up

0.625mm Bone+ with MAR



0.625mm STD **TrueFidelity DL- M** with MAR



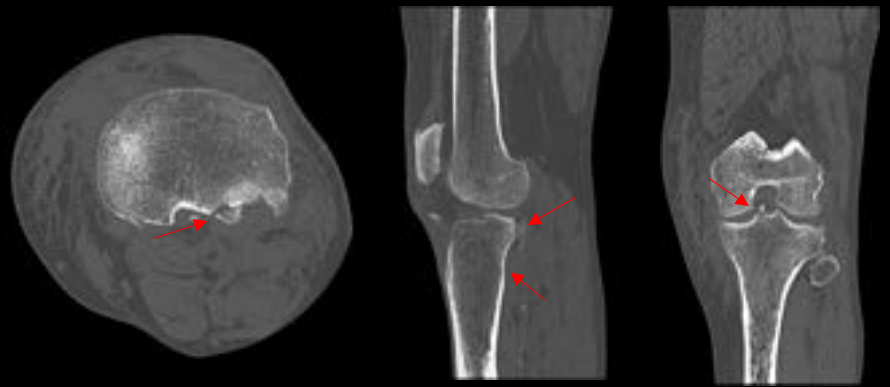
Images Courtesy of Hospital da Costa Burela - Spain

Knee

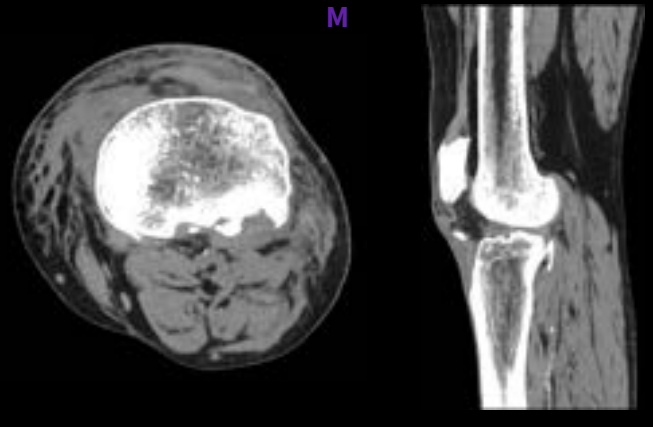
Scan type	Helical
Rotation time, s	0.8
Pitch	0.531
Slice, mm	0.625
Reconstruction	Standard – Bone+
kV	120
mA	80
Noise index	
DLP, mGy-cm	356.13
CTDI	11.23

History: Trauma
Findings: Tibial spine and plateau fractures

0.625mm Bone+



0.625mm Standard **TrueFidelity DL-M**



Volume Illumination
TrueFidelity DL– M

Images Courtesy of Hospital da Costa Burela - Spain

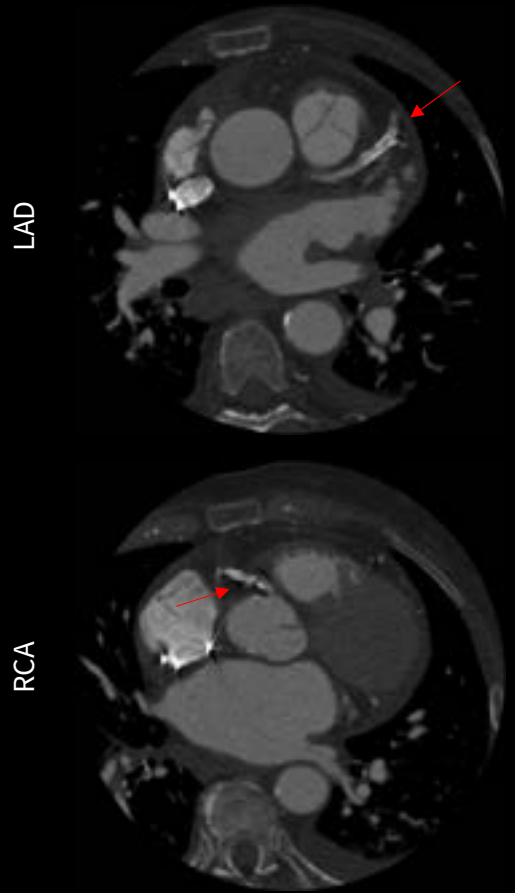
Cardiac

Coronary and aortic valve assessment on a TAVI patient

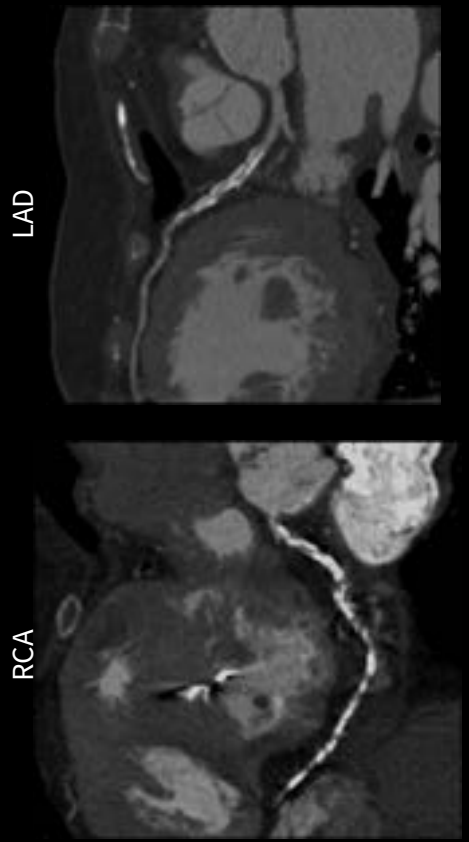
Scan type	Helical
Rotation time, s	0.35 –0.35
Pitch	0.22 – 0.984
BPM	59
Slice, mm	0.625 - 0.625
Reconstruction	Standard
kV	100 - 100
mA	225 - mod
Noise index	N/A - 32
DLP, mGy-cm	275 - 329
CTDI	18 – 4.67

History: CCTA and TAVI assessment
Findings: RCA and LAD plaques

TrueFidelity DL- M



Curved - TrueFidelity DL- M



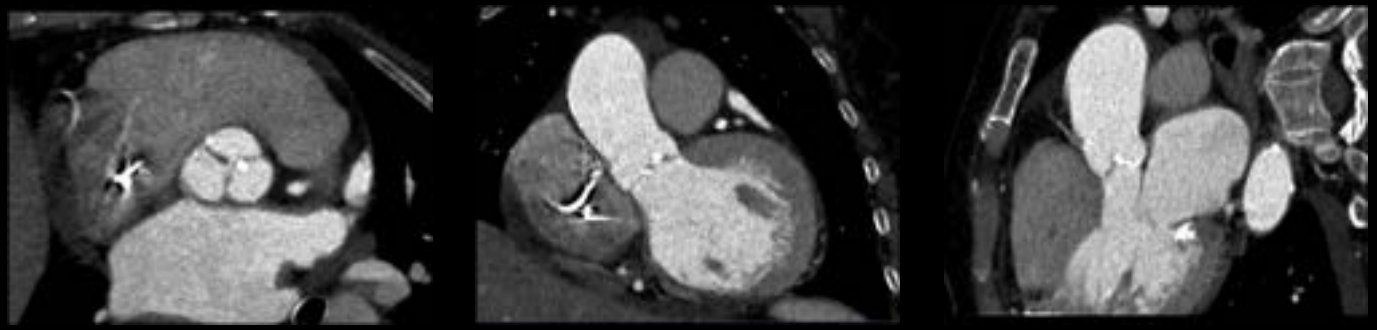
Images Courtesy of Hospital da Costa Burela - Spain

Coronary and aortic valve assessment on a TAVI patient 2/3

Scan type	Helical
Rotation time, s	0.35 –0.35
Pitch	0.22 – 0.984
BPM	59
Slice, mm	0.625 - 0.625
Reconstruction	Standard
kV	100 - 100
mA	225 - mod
Noise index	N/A - 32
DLP, mGy-cm	275 - 329
CTDI	18 – 4.67

History: CCTA and TAVI assessment
Findings: RCA and LAD plaques

ASiR–V 50%



TrueFidelity DL- M

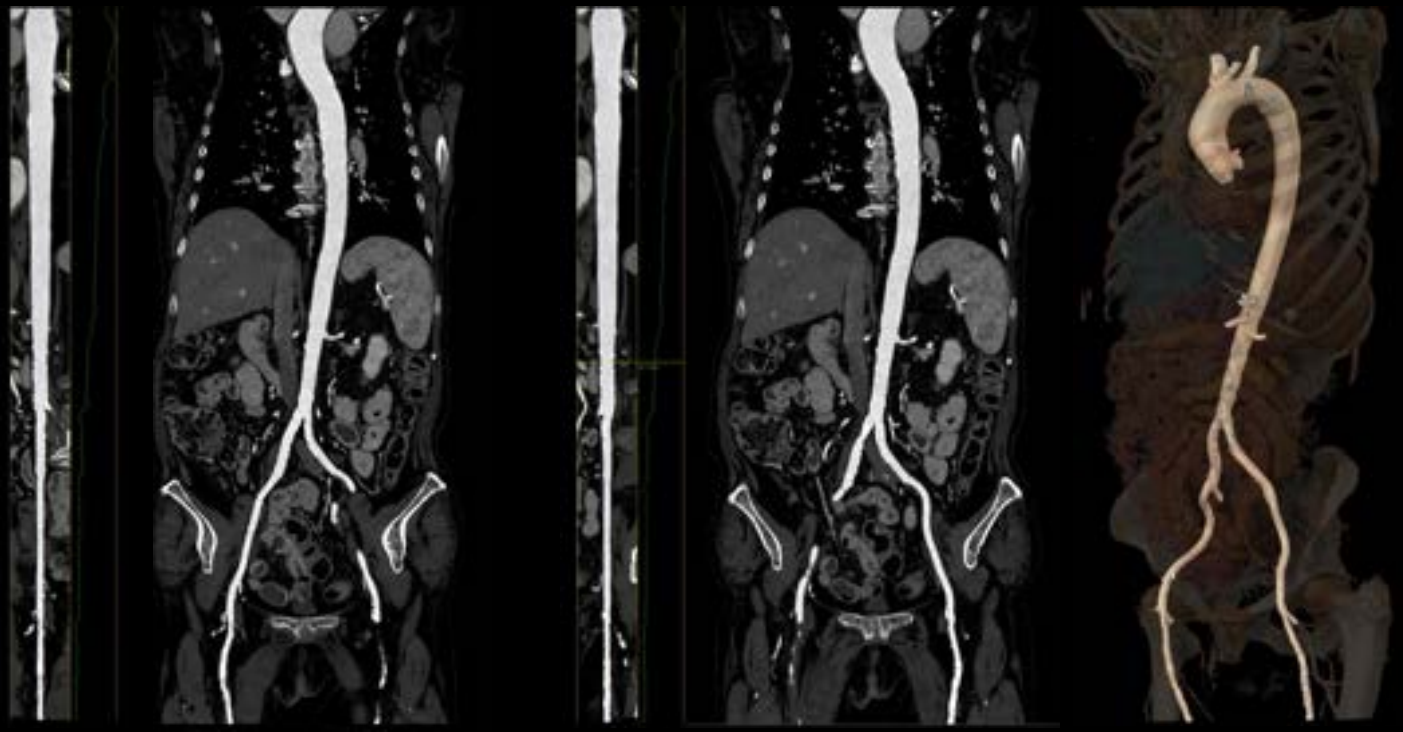
Images Courtesy of Hospital da Costa Burela - Spain

Coronary and aortic valve assessment on a TAVI patient 3/3

Scan type	Helical
Rotation time, s	0.35 –0.35
Pitch	0.22 – 0.984
BPM	59
Slice, mm	0.625 - 0.625
Reconstruction	Standard
kV	100 - 100
mA	225 - mod
Noise index	N/A - 32
DLP, mGy-cm	275 - 329
CTDI	18 – 4.67

History: CCTA and TAVI assessment
Findings: RCA and LAD plaques

TrueFidelity DL– M and Volume Illumination



Images Courtesy of Hospital da Costa Burela - Spain

Pediatrics

Abdomen & Pelvis 16-yr old

Scan type	Helical 40mm
Rotation time, s	0.6
Pitch	0.984
Slice, mm	1.25
Reconstruction	Standard
kV	100
mA	50 – 250
Noise index	45
DLP, mGy-cm	161
CTDI	3.57

History: Appendicitis assessment

FBP | ASiR–V 40% | **TrueFidelity DL- M**

Images Courtesy of Hospital da Costa Burela - Spain

GE HealthCare

JB31709XX