



# Discovery CT750 HD, Revolution HD and Revolution Frontier Upgrade

[gehealthcare.com](http://gehealthcare.com)



# Elite Upgrade

Faster, Better, More

## Faster scan workflow

- Improved image reconstruction speed with 62fps (up to 77% faster compared to previous host computer – Z800 and previous versions)
- Faster scan preparation with table and gantry movement speed increase (up to 50%) and scout speed increase (up to 75%)
- 0.35 secs rotation speed for faster acquisition with every clinical application

## Improved Image Quality

- 1024x1024 ultra-high-resolution reconstruction to enhance visual resolution
- Reduced artifact with Smart MAR – Helps reduce beam hardening and streak artifacts caused by metal in the body
- Improved image quality in neuro and bone exams with new reconstruction kernels

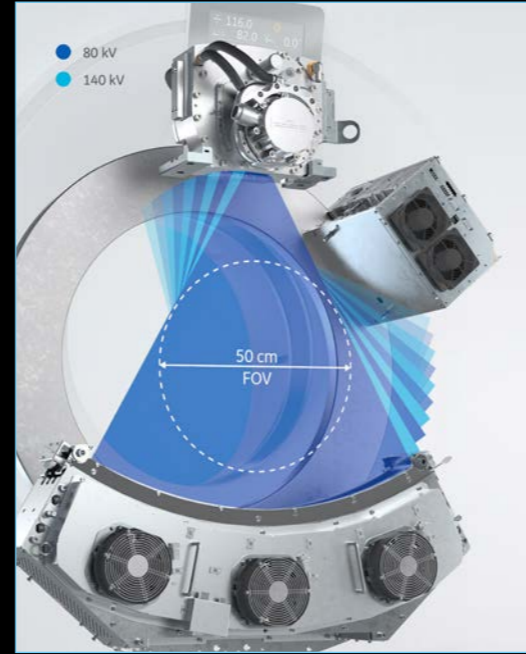
## Enhance your Spectral CT experience\*

- Enhance your GSI workflow with GSI Pro
- GSI recon speed enhancement from 2/3fps to 10fps with GSI Pro
- GSI Assist and GSI interrupt/resume capability to streamline spectral imaging workflow for routine exams

\*For current GSI users.



Z8g4



512

1024

# GSI Pro in Abdominal Emergency imaging

Revolution Frontier Gen 3

## Acquisition

- Scan Type GSI 40mm helical
- Rotation time, s 0.6
- Pitch 0.984
- Slice, mm 1.25
- Kernel Standard
- ASiR-V % 30/60
- CTDI vol, mGy 13
- DLP mGy x cm 657
- kV ~
- mA 375

## History

- Abdominal pain, emesis

## Scan Purpose

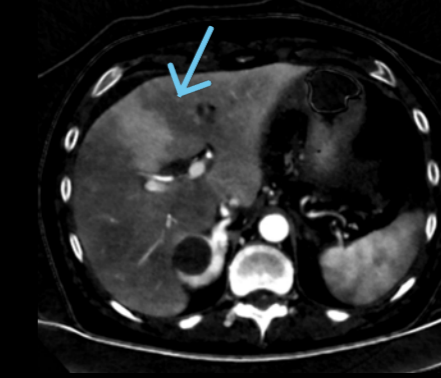
- Abdominal Emergency

## Findings

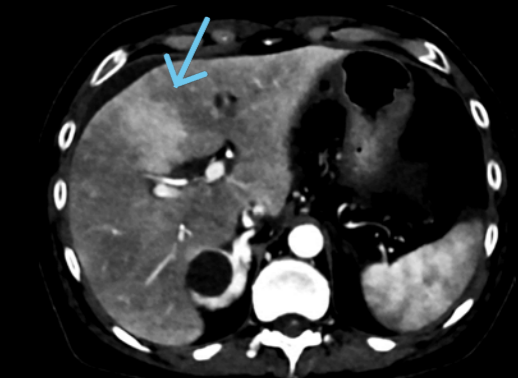
- Gall bladder perforation
- Hypoperfusion of the sigmoid loop wall
- Dolichocolon
- Liver hyperperfusion



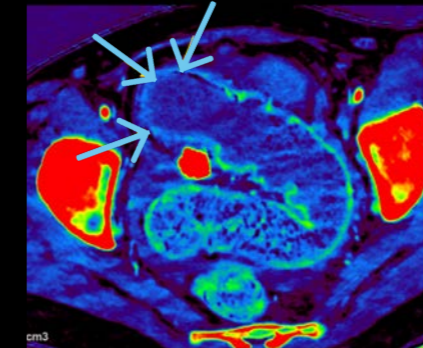
MD Iodine/Water



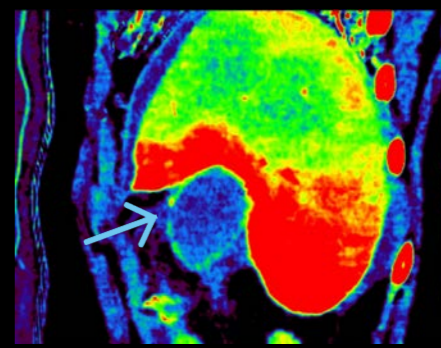
MD Iodine/Water



65 KeV



MD Iodine/Water



MD Iodine/Water



65 KeV

# Abdomen for diffuse pain on a 46 BMI patient with TrueFidelity

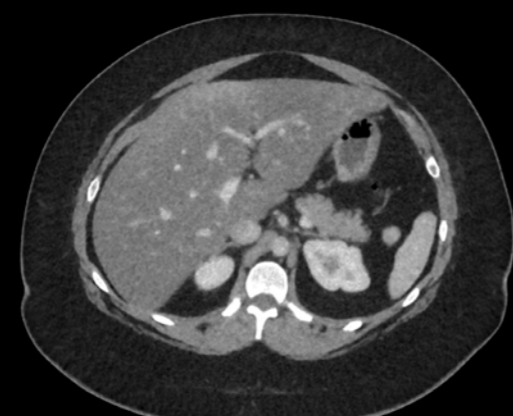
## Revolution Frontier Gen 3

### Acquisition

- Scan Type Helical
- Rotation time, s 0.35
- Pitch 0.516
- Slice, mm 0.625
- Reconstruction TF, AV50, FBP
- Algorithm Standard
- kV 120
- mA Mod
- Noise index 34
- Contrast
  - ml 108
  - mg/ml 350
- BMI 46
- CTDIvol, mGy 17,9
- DLP, mGy-cm 896
- mSv (\*K-factor) 12,6



FBP



ASiR-V 50



TrueFidelity

### History

- Abdominal pain

# Gen 3 upgrade

Ready for the future

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\*For current GSI users.

## Latest clinical innovations with Smart Subscription

- Discover Deep Learning Image Reconstruction with TrueFidelity images
- Access to a broad range of application packages and keep pace with innovations

## Smart Subscription offering

- Subscription-based service for CT that helps you keep your computing platform and software up to date.
- Keep pace with clinical and workflow innovations by providing the latest upgrades and updates to your CT capabilities<sup>2</sup> as soon as they're available.
- Pick the plan that's right for you. Smart Subscription includes a broad range of application packages across many different imaging services, giving you the flexibility to choose how you want to expand your CT capabilities.

### Base

CT Console & OS  
Non-obsolescence



Recon & IQ



- TrueFidelity
- ASiR-V
- Smart MAR

### Additional package

Cardiology



- SnapShot Freeze 2
- CardIQ Xpress 2.0 Reveal
- SmartScore 4.0

General



- Bone VCAR
- VessellIQ Xpress with Autobone Xpress

Neurology



- FastStroke with StrokeSENS<sup>1</sup>
- CT Perfusion 4D Neuro
- Dynamic Shuttle

Spectral



- GSI Pro
- GSI Viewer
- Thoracic VCAR with GSI Pulmonary Perfusion

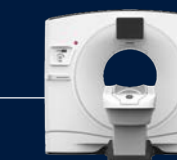
Workflow



- Imaging Protocol Manager



Smart Subscription Unlimited



Note that some applications may not be available in all countries.

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

2. Software available to customer is dependent on the software package purchased by customer

# Smart Subscription Packages

Automate your CT workflow from protocoling to image processing and deliver the latest innovations to improve image quality, reduce dose and minimize localized artifacts

## Recon and IQ



**Delivering the latest innovations to improve image quality, reduce dose, and minimize artifacts.**

Exceed your expectation of image quality with TrueFidelity, Deep Learning Image Reconstruction.

Improve IQ, reduce dose, with ASiR-V<sup>1</sup> and minimize metal artifacts with Smart MAR.

## Cardiology



**Automate Cardiac CT post processing and streamline your workflow.**

Improve Cardiac exams with automated whole heart motion correction thanks to SnapShot Freeze 2.

Get access to cardiac post-processing applications for coronary analysis and calcium scoring, with CardIQ Xpress 2.0 Reveal and SmartScore 4.0, directly from the operator console or from a remote client, to speed up your image review and diagnostic workflow.

## Neurology



**Simplify the Stroke CT workflow and the communication within the stroke team.**

Get access to stroke CT post-processing applications with FastStroke with StrokeSENS<sup>2</sup> directly from the operator console or from up to 4 remote clients, simultaneously to speed up your image review and diagnostic workflow within your stroke team.

## General



**Streamline the processing and reading of routine CT exams.**

Get access to CT vascular and spine imaging applications with VessellQ Xpress with AutoBone Xpress, and with Bone VCAR, directly from the operator console or from another remote client, to speed up your image review and diagnostic workflow.

## Spectral



**Enable spectral imaging studies and simplify the reading and analysis of spectral datasets.**

Enable spectral imaging exams with GSI Pro. Get access to Spectral post-processing applications with GSI Viewer, directly from the operator console or from another remote client, to speed up your image review and diagnostic workflow.

## Workflow



**Optimize the workflow and output of your CT scanner.**

Simplify protocol management across your GE devices with Imaging Protocol Manager.

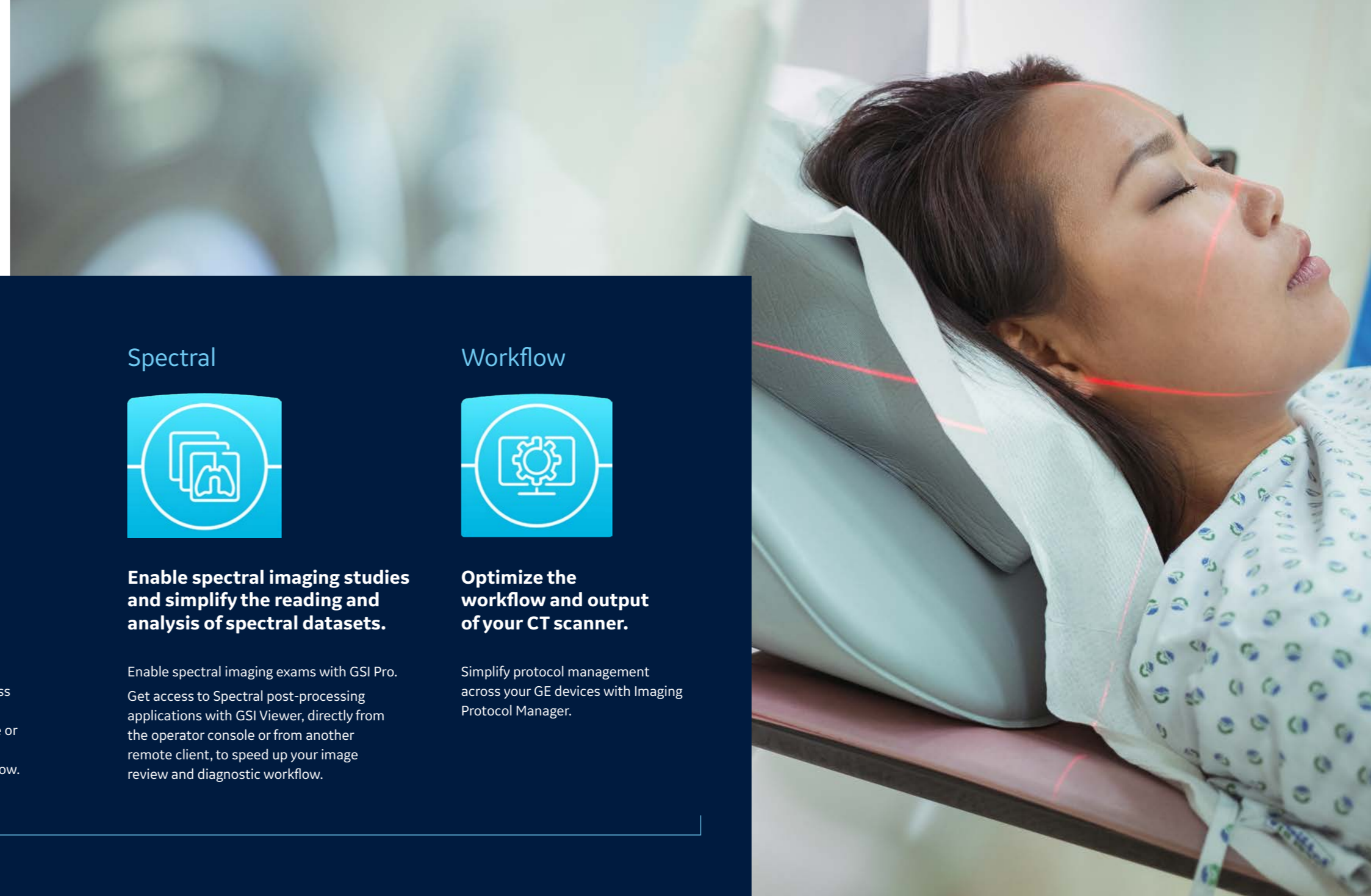


Including future updates & upgrades

Note that some applications may not be available in all countries

1. 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. Image quality as defined by low contrast detectability

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

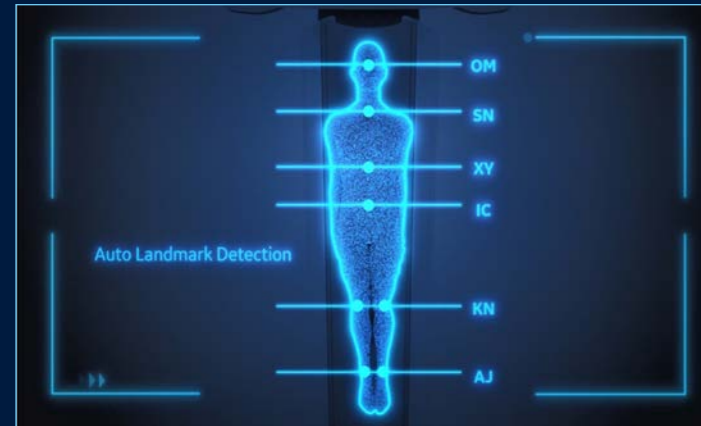


# Additional Capabilities<sup>1</sup>

Bring in Intelligence and Efficiency into workflow

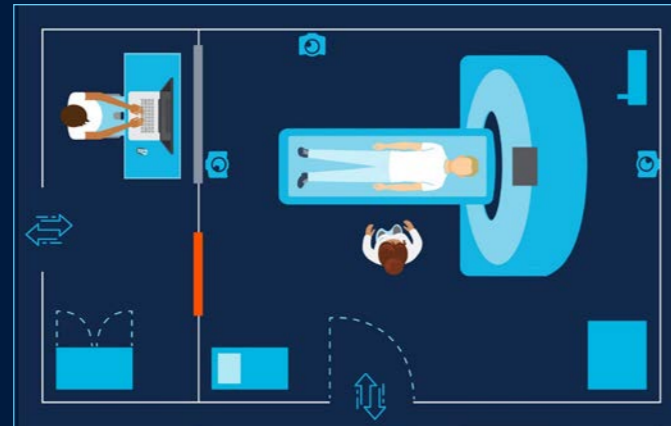
## Auto Positioning<sup>2</sup>

Automated workflow and personalized scanning.



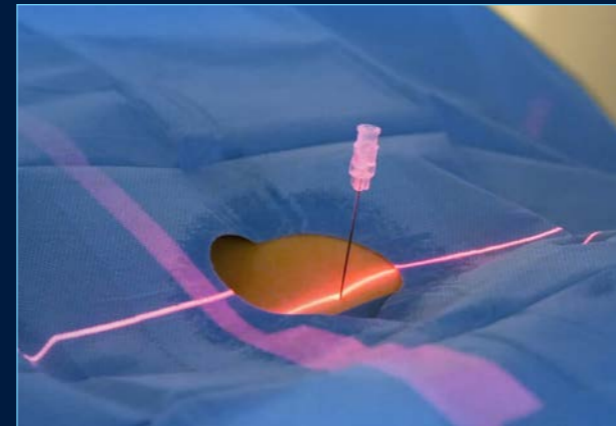
## Remote control suite<sup>2</sup>

Minimize potential contamination risk between gantry and console rooms.



## SmartView 3D

See well. Target precisely.  
Streamlining interventional CT.



# Gen 3

Customized benefits for every user or persona

## Radiologist



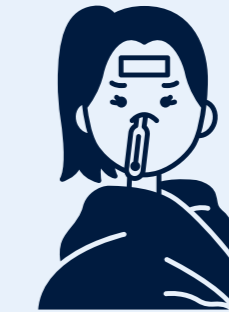
- Improved image quality with TrueFidelity images
- Enhanced visual resolution with 1024x1024 ultra-high-resolution reconstruction
- GSI Pro<sup>2</sup> improve lesion detection and characterization, streamline spectral imaging workflow for routine exams
- Always access to the latest applications with Smart Subscription
- Fast, precise interventional CT guidance with SmartView 3D<sup>1,2</sup>

## Technologist



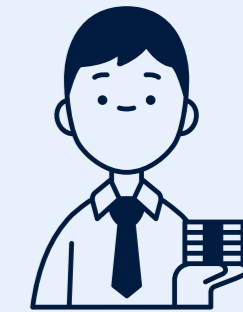
- Faster scan workflow reduce scan preparation time and improve recon speed
- Access to advanced applications with improved work efficiency and clinical capability
- Automatic workflow and personalized scanning. Improve efficiency and consistency through auto positioning and remote-control suite

## Patient



- Better patient comfort with faster scan and reduced time in the CT room
- Low dose imaging with ASiR-V<sup>3</sup>
- Access to advanced diagnostic capabilities that may improve diagnosis accuracy

## Administrator



- Investment protection through Smart Subscription and upgradability
- Manage patient throughput for CT department with workflow enhancement and scan consistency
- Wider range of CT diagnostic services

1. Optional; 2. Not available for HDe2 and HDe3 configurations; 3. 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. Image quality as defined by low contrast detectability.



Building a world that works

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From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

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