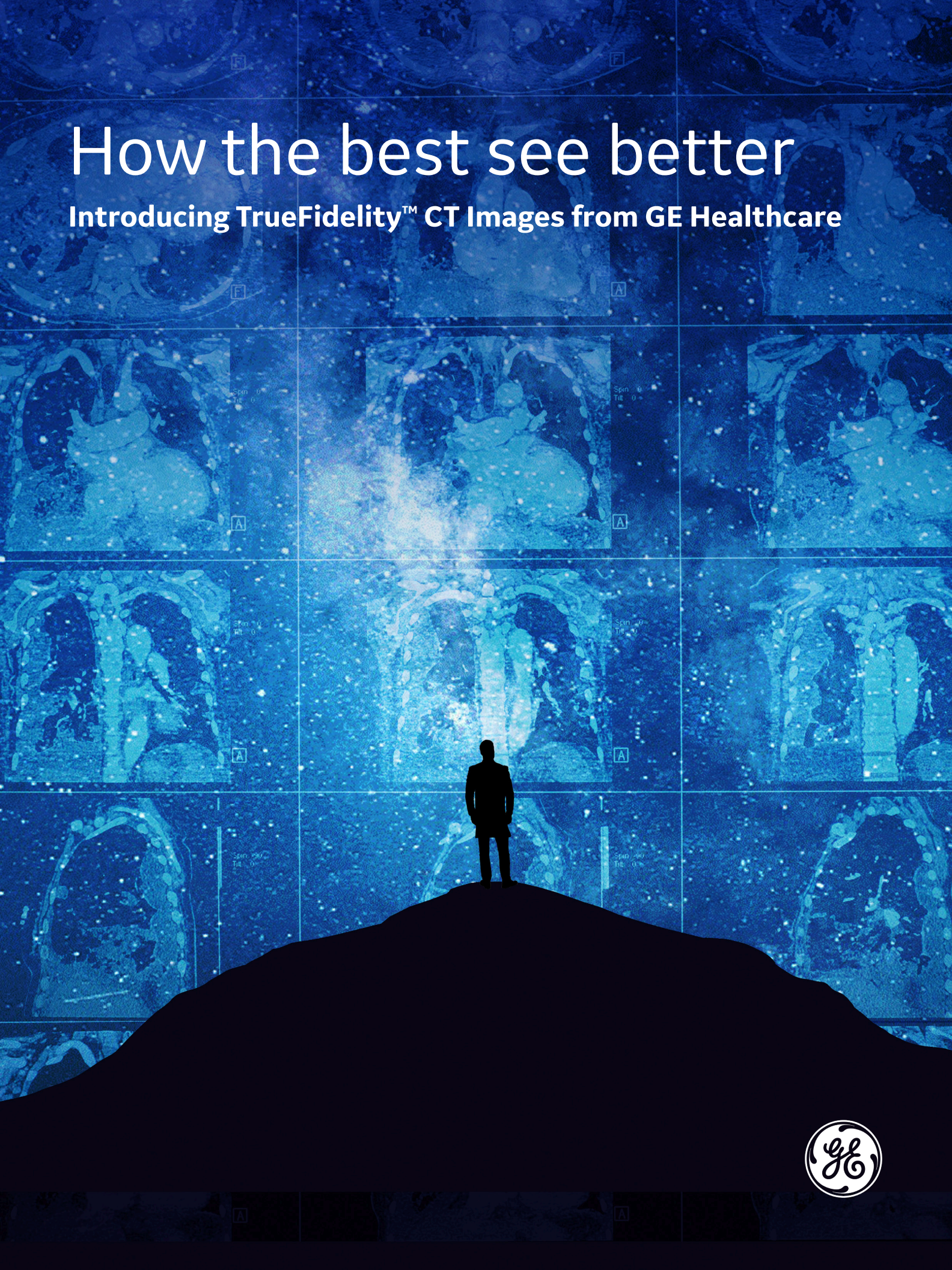
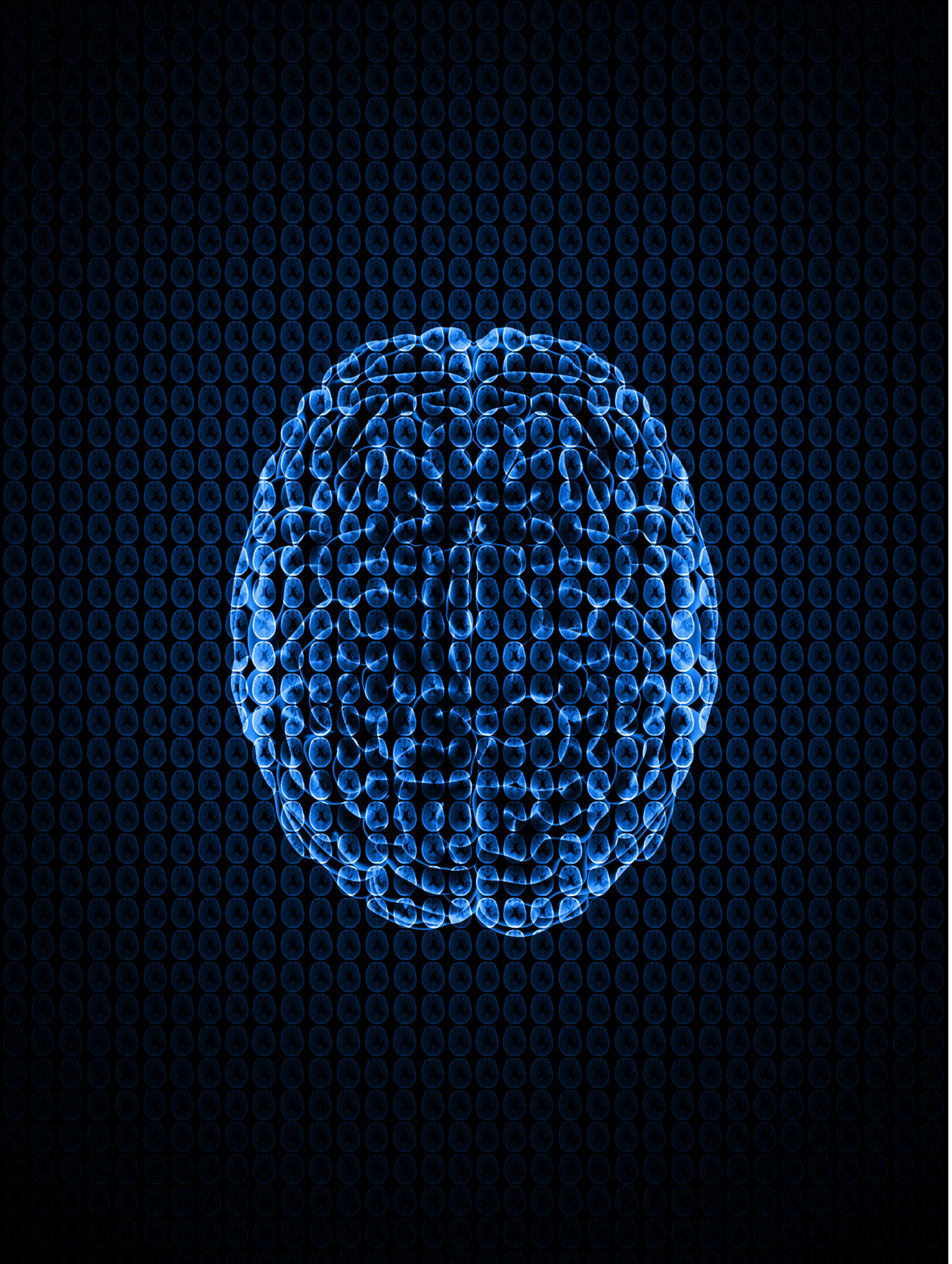

How the best see better
Introducing TrueFidelity™ CT Images from GE Healthcare

Vision that pushes radiology further.

Artificial Intelligence. Machine Learning. Deep Learning. Radiology is undergoing a transformation.

Deep Learning Image Reconstruction (DLIR) promises unparalleled benefits for patients, along with the radiologists and technologists dedicated to their care. And after nearly half a century at the forefront of computed tomography, GE Healthcare is uniquely positioned to ensure this latest advance keeps its promise.

GE Healthcare pioneered and consistently pushed the science of image reconstruction further. TrueFidelity CT Images are more than a radical, 3rd-generation improvement. They elevate the vision of what you and Deep Learning Image Reconstruction can achieve—together.

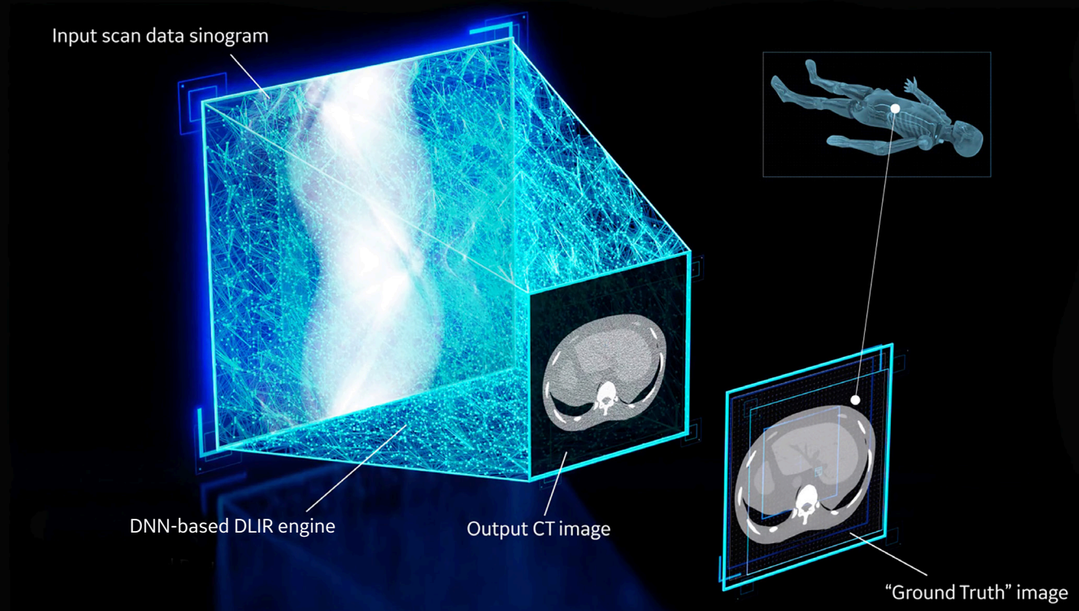


Where Deep Learning does its learning matters.

A Deep Learning Image Reconstruction application is only as good as the training it receives.

GE Healthcare's proprietary DLIR training reflects our unmatched understanding of what successful DLIR requires. And what radiologists want. The foundation of that training is GE's library of millions of low noise, filtered back projection images.

These ground truth images cover every anatomy and are the gold standard for image quality. The artificial intelligence that powers our Deep Learning Image Reconstruction gets its education here. An education that allows you and TrueFidelity CT Images to achieve never-before-possible clarity at low dose.



In supervised training, GE’s Deep Neural Network (DNN)-based DLIR engine compares the output to millions of ground truth images.

Confidence. Not compromise.

Compared with even the most sophisticated Model-Based Iterative Reconstruction, TrueFidelity CT Images are scanning taken to another level.

Contrast visualization is maintained; noise and artifacts are minimized; edges are maintained—just enough—so there’s remarkable clarity and none of the compromise that comes with unfamiliar noise texture.*

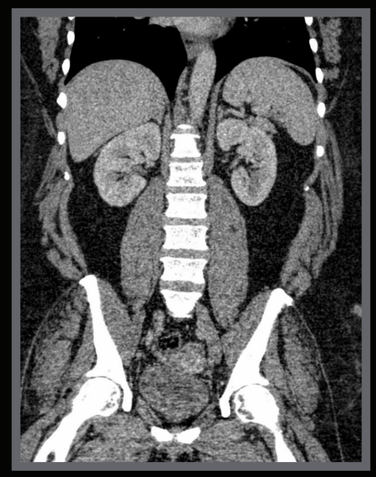
The result is an easy, information-rich interpretation experience. An experience that gives diagnosticians the confidence they require, even as it potentially improves scan read times and fights radiologist fatigue.

*DLIR neural networks give an image appearance (as shown on NPS plots) similar to traditional high-dose, low-noise FBP images. Demonstrated in phantom testing comparing images reconstructed from the same raw data, with DLIR-H and ASiR-V 100%, using the standard kernel.

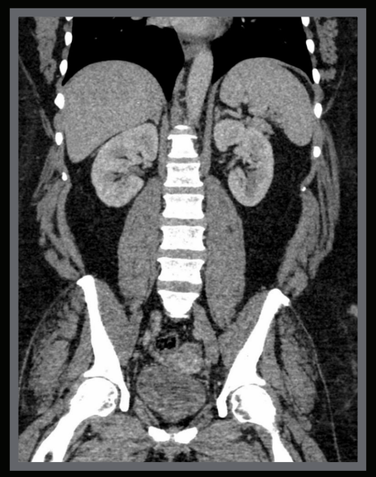
Clearly meeting the challenge of obesity.

Worldwide, global obesity has more than tripled since 1975.

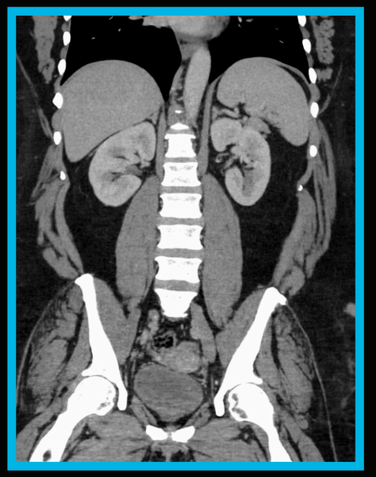
This epidemic poses particular difficulties for radiologists, technicians, and, ultimately, patients. In fact, at many facilities, at least 1 patient a day has multiple weight-related artifacts affecting image quality. The scan below is an example of GE's improved TrueFidelity CT Image for a patient with a BMI of 62.



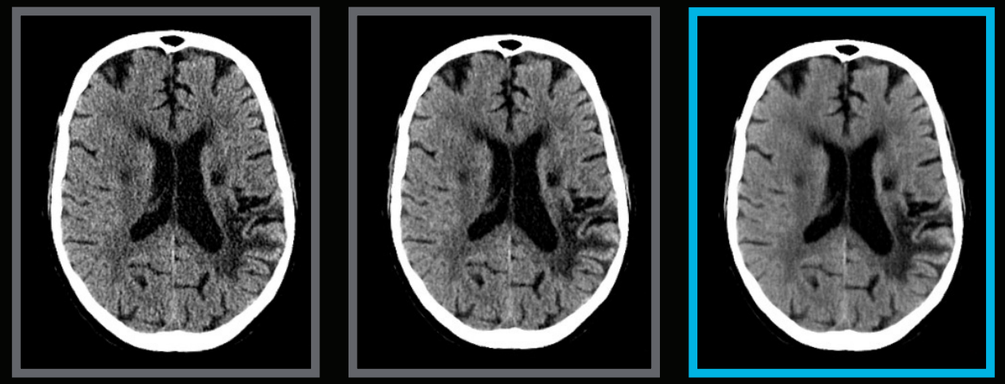
0.625 mm FBP



0.625 mm ASiR-V 50%



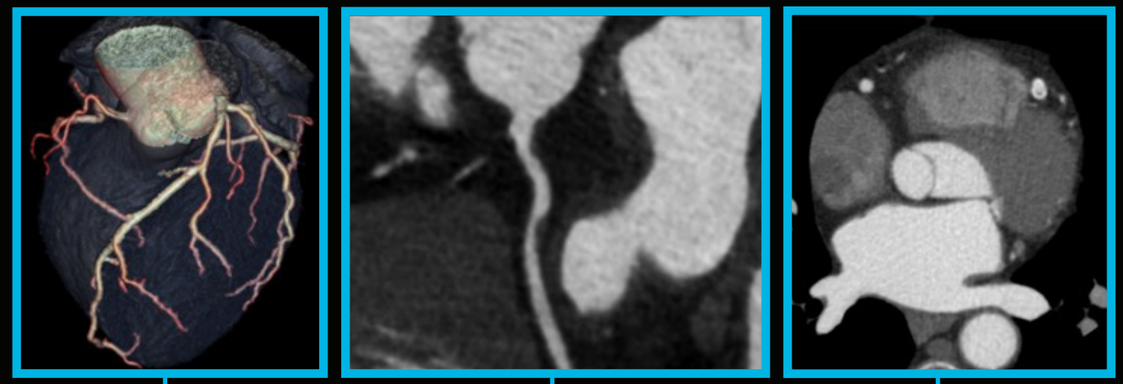
0.625 mm TrueFidelity



0.625 mm FBP

0.625 mm ASiR-V 50%

0.625 mm TrueFidelity



TrueFidelity

“This is what a head CT image should look like and never did, even in the high-dose era. Less noise, fewer artifacts, and a pleasure to interpret.”

—***Lawrence N. Tanenbaum,*** *MD, FACR*
RadNet

“The reduced noise and improved image quality in the epicardial fat allows for improved depiction of the outer wall of the coronary arteries, making it easier to detect positive remodeling of high-risk plaque than with prior reconstruction methods.”

—**James Earls**, *MD, FSCCT*
George Washington University Hospital

Deep Learning meets an even deeper commitment.

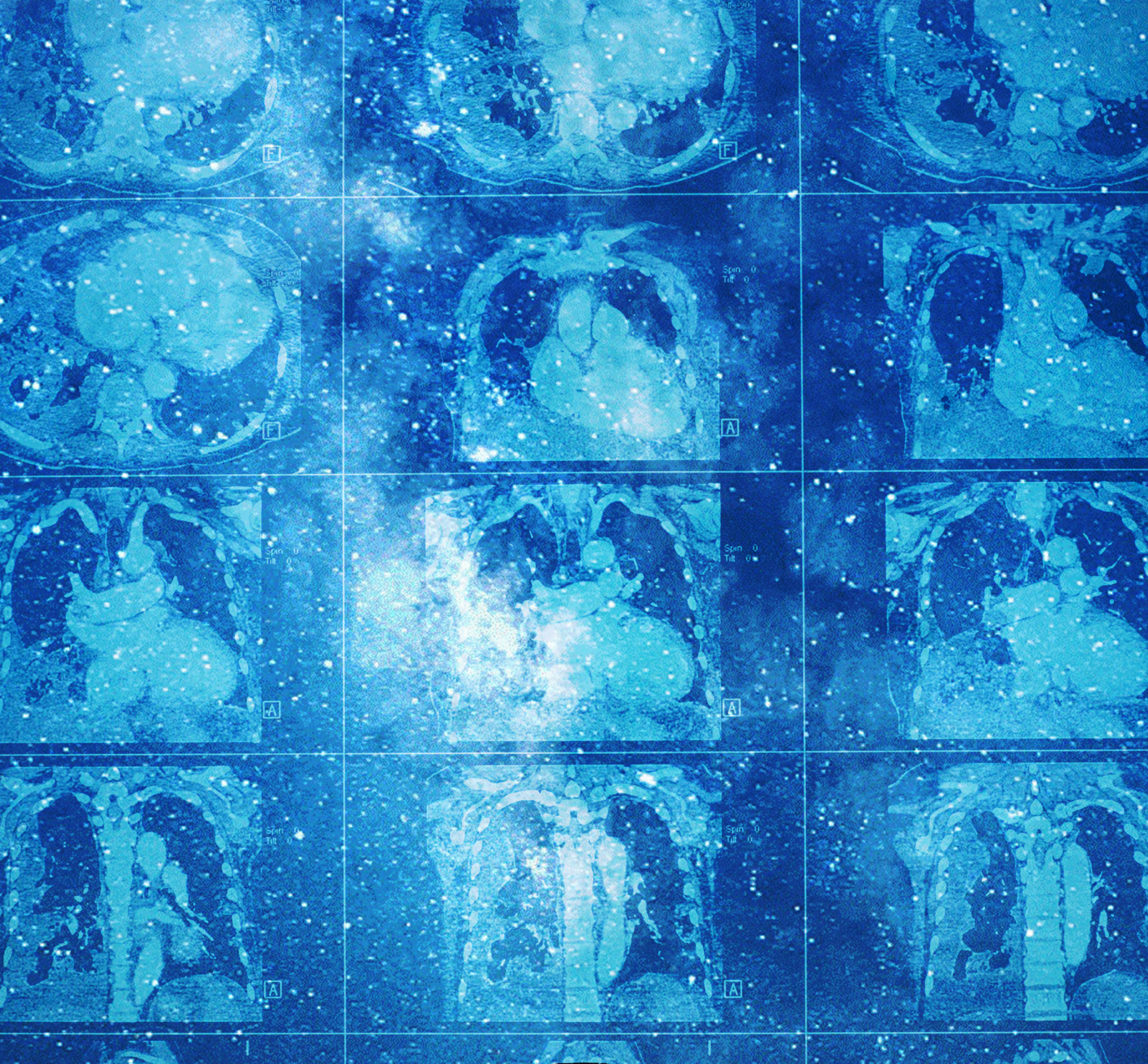
Your dedication makes TrueFidelity truly valuable.

GE is committed to helping you succeed. That's why GE's continuing education sets the standard. Our application trainers are there to help you make the most of TrueFidelity CT Images.

It's time to get a closer look at a better way of seeing.

Powered By Edison

GE Healthcare



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GE Medical Systems, Inc., doing business as GE Healthcare.

Not available for sale in all regions.
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