

Discovery MI Gen 2



Next generation. Even more in sight.

Built with breakthrough digital PET technology, the latest in diagnostic CT and advanced quantitative software, Discovery™ MI was created to both accelerate your research and enhance your clinical work. Now, with Discovery MI Gen 2, we see an evolution of this incredible imaging technology. Discovery MI Gen 2 combines trusted Q.Clear quantitation and the proven clarity of MotionFree images with 30 centimeters of coverage¹, deep-learning based image reconstruction and a more efficient technologist experience.

Welcome to a new generation
of digital PET/CT.



Highest sensitivity

Engineered to achieve
leading sensitivity
per cm (cps/kBq/cm)²



TrueFidelity™

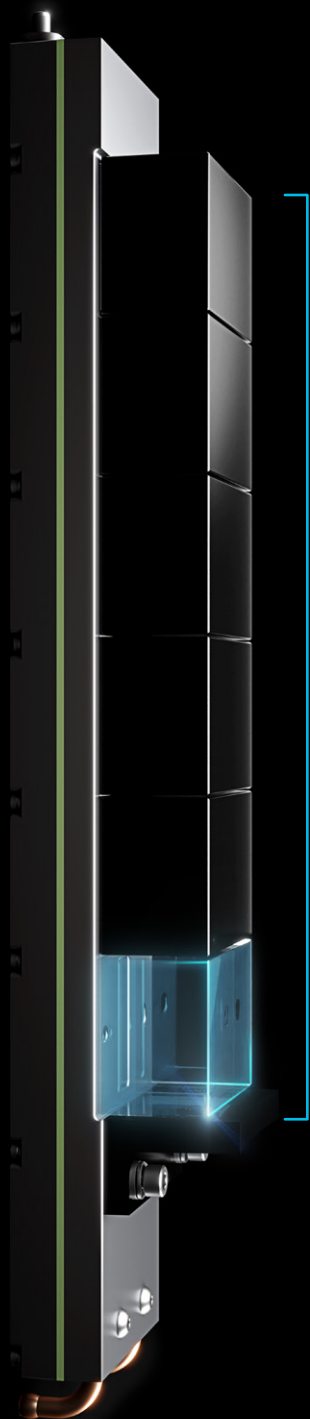
Deep-learning based
image reconstruction with
Revolution™ EVO Gen 3 CT



AutoIN

Reduce technologist
radiation exposure and
improve workflow





Digital detection, remastered

The LightBurst Digital Detector is a key component of what made Discovery MI the leading digital PET system. This innovative digital PET detector technology combines a small lutetium-based scintillator crystal array with a Silicon Photomultiplier (SiPM) block design for significant improvements in sensitivity, scan times and required dose levels compared to analog ToF technology.

What does one more detector ring give you? A whole lot.

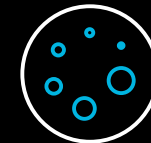
Discovery MI Gen 2 is designed for next-level digital detection with an axial FOV scalable up to 30 centimeters and the corresponding potential to reach even greater levels of sensitivity.¹



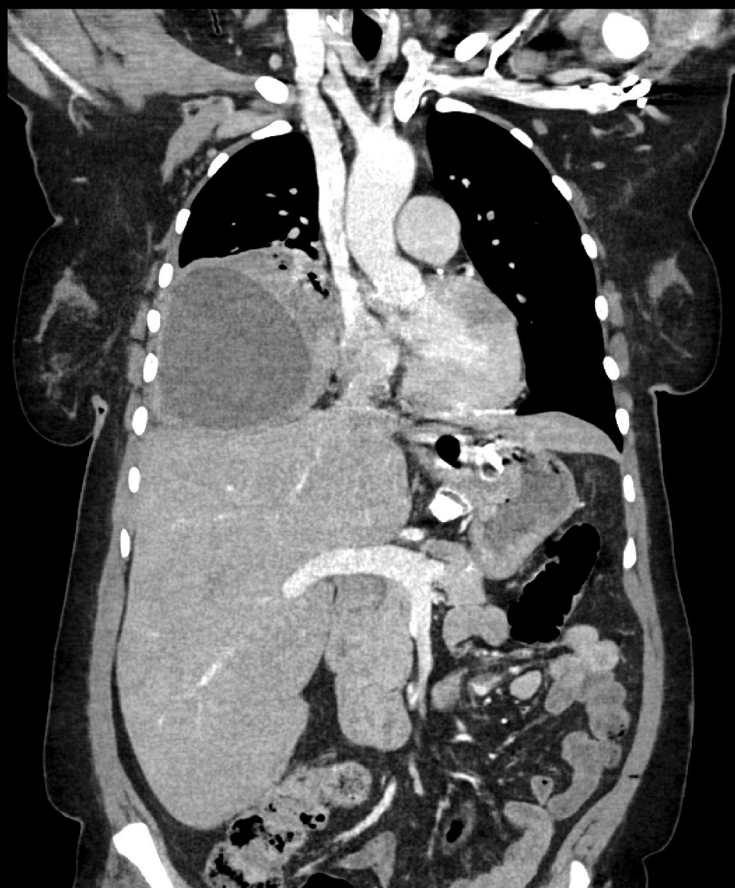
30 cm FOV

Focus on what is most important. High sensitivity per cm.

Discovery MI Gen 2 is engineered to provide a 60 percent increase in NECR, as well as exceptional system sensitivity that reaches 30 cps/kBq.¹ This translates to a system designed to provide a 50 percent improvement in scan times or dose amounts.¹



30 cps/kBq



See precisely what you need to see

TrueFidelity

Revolution EVO Gen 3 brings the precision of diagnostic CT to digital PET.

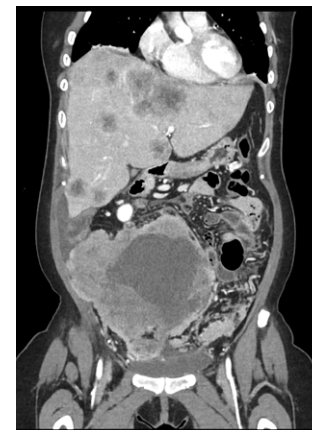
For years, low dose was the benchmark for image quality. We helped set the standard for low-dose imaging with the industry's first iterative reconstruction technology capable of lowering dose. Over the years, the benchmark has changed. While dose is still important, radiologists are looking for an image texture reminiscent of the textbook-quality images they studied in medical school. To that end, we've introduced TrueFidelity, or Deep Learning Image Reconstruction. Using artificial intelligence, it combines the low dose of iterative reconstruction with a "classic-looking" image texture.



FBP



ASiR-V™ 50%

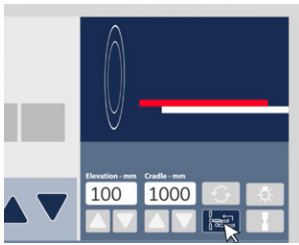


TrueFidelity

Plan on making an entrance by leaving the room

AutoIN

AutoIN gives your technologists the ability to landmark and position the patient table from the console in the control room. Not only does this improve the imaging workflow, but it also serves as an important safety measure. By keeping technologists at the console, AutoIN helps reduce exposure to radiation as well as limits contact with contagious diseases.



Step one

Enter the required cradle and elevation value, then enable AutoIN



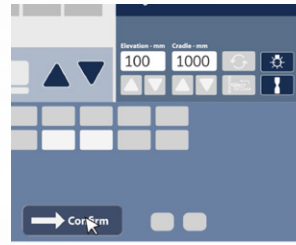
Step two

Position your patient with the push of a button



Step three

Landmark your patient's position from the console



Step four

Click confirm to begin your scan



Accurate data points to trusted treatment

Q.Clear

Since its introduction, Q.Clear has delivered fast and efficient quantitation readings for confident diagnosis and precise treatment response assessment.



Up to a 2x improvement in quantitative SUV (SUV_{mean})



Up to a 2x improvement in image quality (SNR)

Clear the way for clear images

MotionFree

MotionFree is the first-ever digital respiratory motion management solution that completely eliminates the need for a gating device.



Up to a 30 percent improvement in quantitation accuracy (SUV_{mean}) compared to non-processed (STATIC, no motion correction) data³



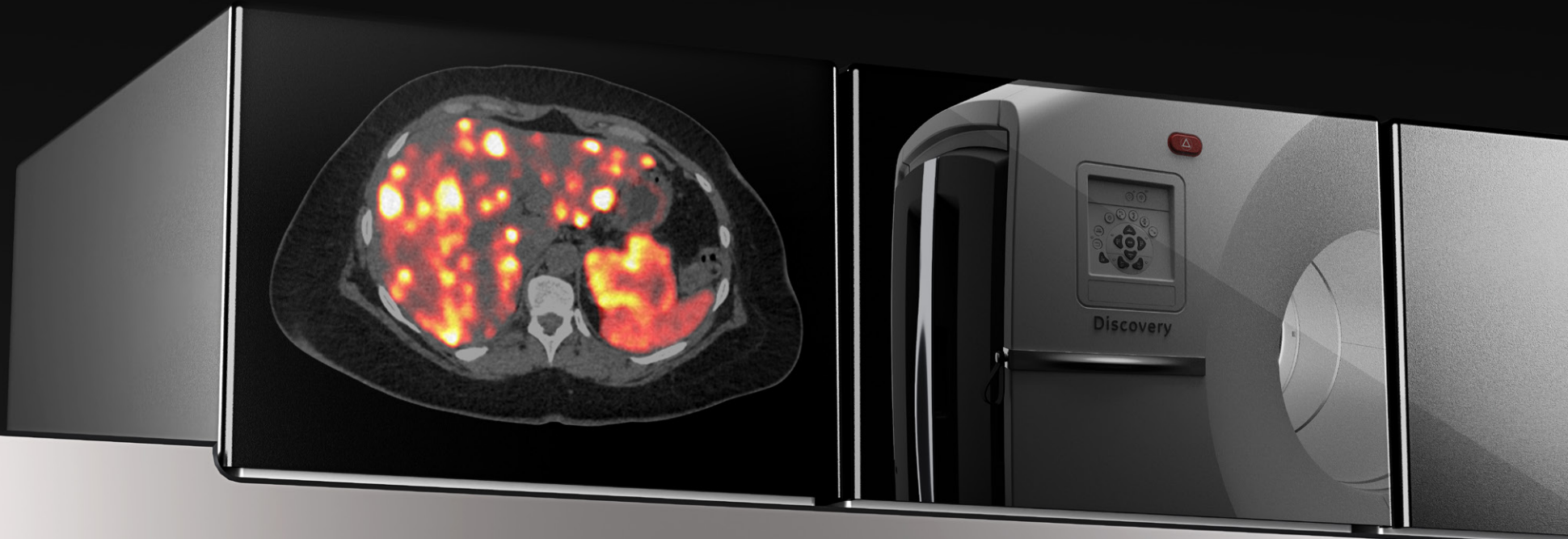
Up to a 67 percent improvement in lesion volume measurements⁴



Avoid adding up to 11 minutes to patient setup time compared to an external gating device⁵

A new generation of digital PET

Discovery MI Gen 2 is designed for a new generation of digital PET imaging. Our goal is to expand your clinical perspective with up to 30 centimeters of coverage¹, system sensitivity of up to 30 cps/kBq¹, trusted Q.Clear quantitation and the proven clarity of MotionFree images. By combining next generation digital PET technology with an efficient technologist experience and the potential for deep-learning based CT image reconstruction, the promise of the digital PET experience is stronger than ever.





GE Healthcare is a leading global medical technology and digital solutions innovator. GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, diagnostic pharmaceuticals, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world. Follow us on Facebook, LinkedIn, Twitter and Insights or visit our website www.gehealthcare.com for more information.

- ¹ Optional works in progress. 30 cm AFOV configuration not for sale. Not approved by the U.S. FDA or any other global regulator for commercial availability.
- ² Discovery MI Gen 2 has the highest NEMA sensitivity in the market, comparing with common PET/CT systems with same or similar AFOV, (based on IMV's Medical Information Division's 2019 report as the manufacturers representing more than 90% of the US Installed Base).
- ³ As demonstrated in phantom testing using a typical and fast respiratory model and OSEM reconstruction. Quantitative accuracy improvements are based on SUV_{mean} .
- ⁴ Compared to non-processed (STATIC, no motion-correction) data. As demonstrated in phantom testing using a typical and fast respiratory model, 18 mm ^{68}Ge spheres and OSEM reconstruction.
- ⁵ Based on clinical practice at University Hospital Zurich, using 5-Ring PET/CT with MotionFree and RPM. These results are for illustrative purposes only and represent specific customer experiences; actual results could vary depending on clinical practice and circumstances.

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