



GE Healthcare Receives FDA Clearance for Vivid Ultra Edition, AI-Powered Cardiovascular Ultrasound System Designed to Shorten Diagnostic Exam Time and Improve Measurement Consistency

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Chicago (October 12, 2020) – GE Healthcare today announced U.S. FDA 510k clearance for its Ultra Edition package on Vivid^[1] cardiovascular ultrasound systems, which includes new features based on artificial intelligence (AI) that enable clinicians to acquire faster, more repeatable exams consistently.

Methodical assessments of heart function are key in echocardiography but can be tedious and time-consuming to acquire. High quality data acquisition and operator skill are key elements to achieve accurate and complete exams. And, as patients undergo subsequent monitoring exams, the reproducibility of exam assessments is key to identifying improvement or disease progression. Vivid Ultra Edition brings increased efficiencies to the scanning process for reduced exam time through up to 80% fewer clicks^[3], 99% accuracy^[4] and less inter-operator variability.^[2]

“We use AI Auto Measure – 2D, AI Auto Measure – Spectrum Recognition, and Auto AFI together with Auto EF. We also use Scan Assist Pro, 4D biplane and 4D triplane. All of this in combination has saved us 7 to 10 minutes per scan, which is fantastic, so we really do have more time to spend with the patient,” said Rebecca Perry, PhD, Cardiac Sonography Program Stream Coordinator, University of South Australia, in a [Vivid Talk webinar](#).

Vivid Ultra Edition features leverage AI-driven, neural network-based algorithms designed to deliver repeatable and faster measurements in 2D echo imaging:

- **AI Auto Measure – Spectrum Recognition** can semi-automatically detect the appropriate measurement of spectral Doppler images, enabling the system to fast-forward the path from scanning to measurements with 98% accuracy and 100% reproducibility.^[3]
- **AI Auto Measure – 2D** can detect the relevant points in the image used to derive key measurements of the left ventricle, performing comparable to human users with 100% reproducibility.^[3]
- **AI-based View Recognition** can automatically detect with 99% accuracy and 100% reproducibility which standard 2D scan plane is acquired and store this label in the image file. Our AFI package is designed to use these data to automatically select views for strain analysis, streamlining workflow and increasing efficiency.^[4]

“With the Vivid Ultra Edition, we offer AI capabilities that help address healthcare providers’ two key challenges in echo exams – how time consuming the exam is and the degree of variability that exists in the quantitative results,” said Dagfinn Saetre, General Manager of Cardiovascular Ultrasound at GE Healthcare. “This package supports our vision of where we need to go with cardiovascular ultrasound: tools to support less variability and improved productivity. The Vivid Ultra Edition is a solid step in our strategic roadmap.”

Vivid Ultra Edition also provides uncompromised image quality and advanced visualization and navigation capabilities:

- **HD Color** displays anatomy and jet using shadowing, reflections and transparency to enhance the 3D perception.
- **FlexiLight** offers photorealistic images to help improve visualization of moving structures and depth perception of tissues.
- **4D TTE Pediatric probe (6VDC)** provides excellent 2D and 4D imaging for a range of pediatric patients from neonates to teenagers.

For more information visit <https://gevidultraedition.com/>.

About GE Healthcare:

GE Healthcare is the \$16.7 billion healthcare business of GE (NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enable clinicians to make faster, more informed decisions through intelligent devices, 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](#), [Instagram](#) and [Insights](#) for the latest news, or visit our website www.gehealthcare.com for more information.

^[1] Vivid systems include Vivid E95/E90/E80 / S70N/S60N/ T9/T8/iq

^[2] AI Auto Measure -2D feature internal comparison, DOC2361011 and JB80498XX

^[3] AI Auto Measure-Spectrum Recognition feature internal reference JB80498XX

^[4] View Recognition feature internal reference JB80498XX

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