

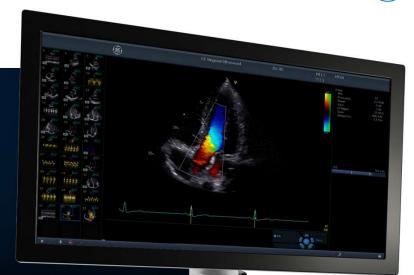
gehealthcare.com/vivid

# Vivid T9 ULTRA EDITION

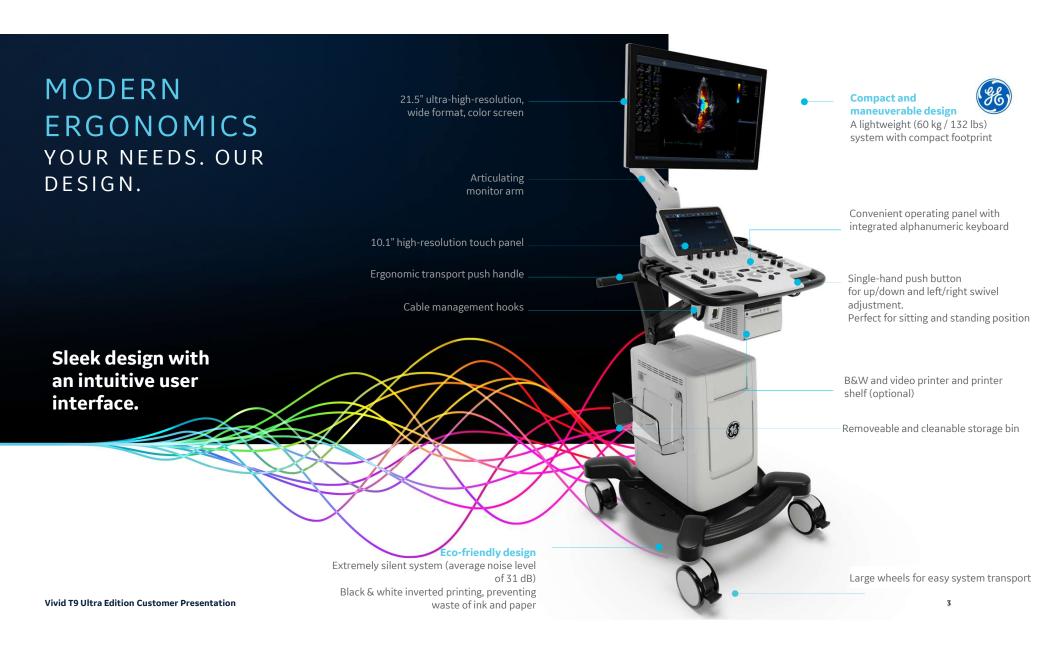
(gg)

Designed for your busy practice, Vivid T9 Ultra Edition provides reliable and ergonomic design, powered with AI applications for extreme productivity without compromising quality of care.<sup>7</sup>

Enjoy long-term peace of mind with modern and secure software design, remote updates, and warranty coverage.



7 - The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX. Ultra Edition is not a product name; it refers to the 2022 release of the Vivid portfolio.





# Vivid T9 Product Highlights



## IMAGE QUALITY

#### YOUR VISION. OUR SUPERB IMAGES.

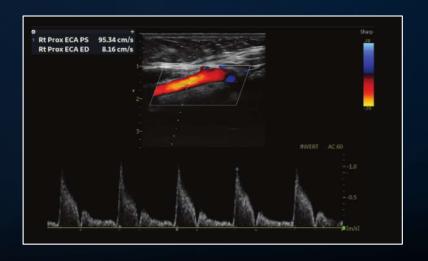




#### **Penetration QuickApp**

#### **Helps improve visibility**

Optimizes penetration in technically difficult studies with one click.



#### L4-20t-RS Single Crystal Linear Probe<sup>8</sup>

#### Beautifully clear vascular imaging

Four configurable control buttons allow you to ergonomically position yourself at the bedside, performing essential functions such as Freeze, Store, mode switch, among other functions, away from the scanner.

#### EXTREME PRODUCTIVITY

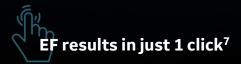
YOUR TIME. OUR WORKFLOW TOOLS.

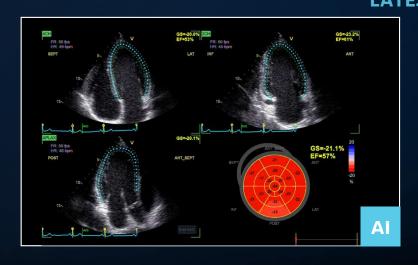




#### Easy AutoEF<sup>9</sup>

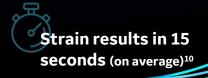
Our Al-based Auto ROI detection algorithm allows users to measure ejection fraction, with no manual interaction apart from initiating the tool and approving the results.





#### **Easy AFI LV with View Recognition**

Our AI-based global and segmental strain measurements require no manual interaction apart from initiating the tool and approving the results. Additionally, you will be able to view EF measurements.



 $<sup>7 -</sup> The \ Role \ of \ AI \ in \ Streamlining \ Echocardiography \ Quantification \ White \ Paper, \ Kristin \ McLeod, \ Jurica \ Sprem \ JB20789XX$ 

<sup>9 -</sup> Easy AutoEF is restricted for use with adult TTE on GE Healthcare raw B-mode dataloops of the LV. Easy Auto EF does not support left ventricles with septal bulge

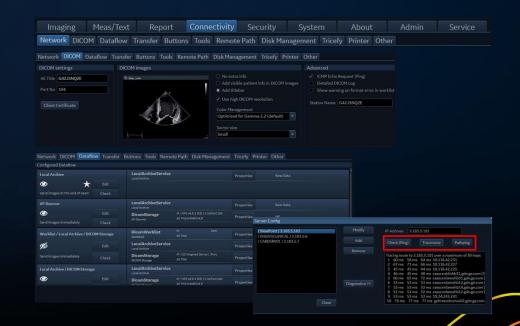
<sup>10 -</sup> Time to strain measurement result may vary with heart rate, frame rate and Vivid system. Verification of performance done by GEHC clinical application specialists using Vivid system (DOC2739637)

# CONECTIVITY CONFIGURATION & DIAGNOSTICS YOUR IT NEEDS. OUR SIMPLE TOOLS.



Simplifying setting up the connectivity between the ultrasound scanner and hospital IT system

- Reorganized and renamed the Connectivity tabs for more efficient & intuitive usage
- Improved grouping of Config elements belonging together
- "Dashboard" (one-stop-shop) for dataflow and transfer setups
- Improved connectivity diagnostics capabilities





# ... and what do the experts say?



#### CUSTOMER FEEDBACK ON LATEST RELEASE



#### **Extreme Productivity**

The Vivid T9 Ultra Edition Al-based automated measurements help my staff complete a standard echo exam faster, and with less variability. The new Penetration button on the touch screen helps give the sonographers the extra boost we often need with challenging imaging windows. As a busy private cardiology practice, we appreciate having these advanced options available on an affordable cardiovascular ultrasound system"

- Dr. Adurthy Ananth Shankar, MD

Director Cardiovascular division
Essen Healthcare, New-York, USA

#### **Image Quality**

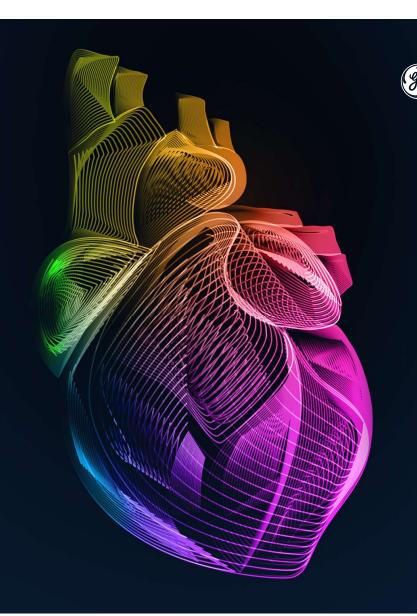
With Vivid T9 you can achieve an accurate diagnosis with confidence in any cardiac pathology."

- Dr. Angela López Sainz

Cardiologist
Hospital Clinic in Barcelona

# VIVID CLINICAL APPLICATIONS

A wide range of clinical applications for use in Core Echo Lab, Interventional and Pediatrics.



#### **VIVID**<sup>™</sup> **CLINICAL** APPLICATIONS



#### YOUR SKILLS. OUR SUPPORT.

In the core echo lab and even beyond cardiology, smart applications support your know-how.



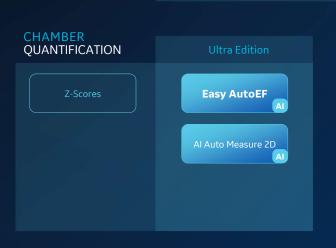


PLOW QUANTIFICATION

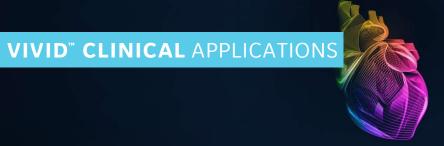
Cardiac Auto Doppler

Al Auto Measure Spectrum Recognition

Al Auto Measure Spectrum Re









# VISUALIZATION AND NAVIGATION

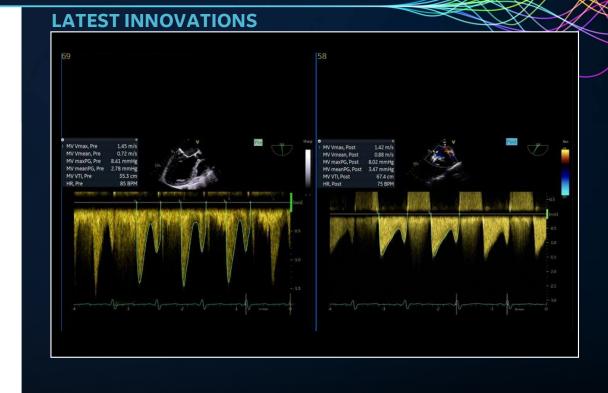
Why guess? When you can see.



### PRE-POST COMPARE

Labelling images and measurements with 'Pre' or 'Post' (pre & post repair)

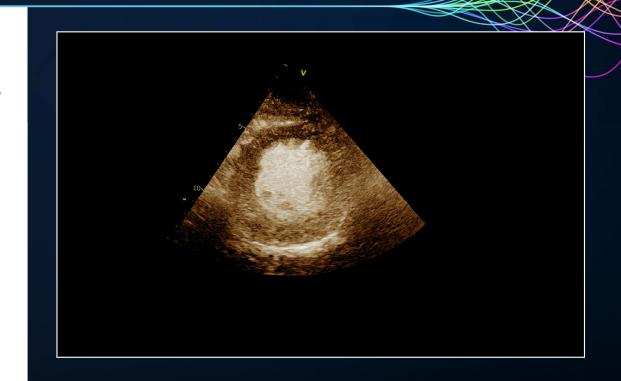
- Allows users to differentiate between measurements done before and after a procedure step
- "Pre" and "Post" tags images are acquired in the upper right corner, when this feature is activated
- Pre and Post measurements will be displayed separately and transferred as two different measurements



# 96)

### LVO CONTRAST

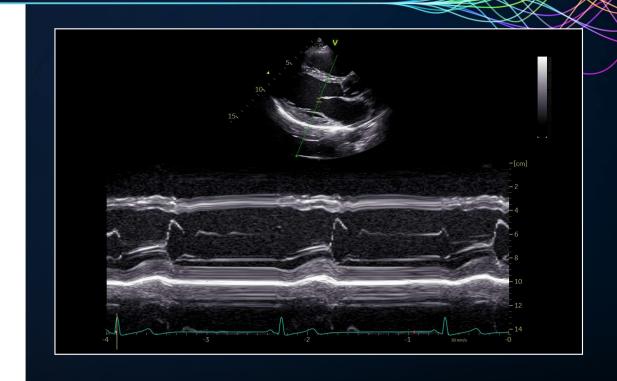
Benefit from high-resolution detection of contrast in the LV cavity with LVO Contrast and excellent suppression of myocardial tissue signals on the Vivid T9 Ultra Edition new Coded Phase Inversion (CPI).



**Vivid T9 Ultra Edition Customer Presentation** 

## ANATOMICAL M-MODE

View anatomy and tissue velocity in M-mode. Adjust the cursor at any plane, in live imaging or with recalled images.



**Vivid T9 Ultra Edition Customer Presentation** 

## BLOOD FLOW IMAGING

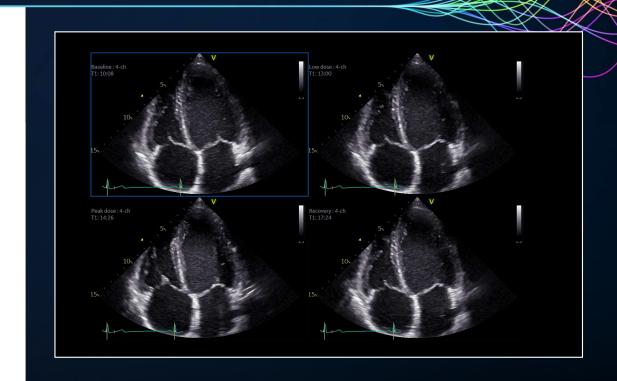
Enhance blood flow dynamics visualization using a signal-processing algorithm for visualizing blood flow data.



**Vivid T9 Ultra Edition Customer Presentation** 

### **SMART STRESS**

Over 17 imaging parameters from each plane can be saved and recalled at each stress level, reducing system adjustments during acquisition.



**Vivid T9 Ultra Edition Customer Presentation** 

#### **VIVID**<sup>™</sup> **HEART** APPLICATIONS





# FLOW QUANTIFICATION

Your time is precious. Save it.

# AI CARDIAC AUTO DOPPLER

Semi-automatic Cardiac Doppler measurements.

#### **Benefits:**

- Enhances reproducibility of follow-up studies when used in automated mode<sup>12</sup>
- Offers Doppler measurement in multiple cardiac cycles as recommended by guidelines for irregular heart rhythms<sup>13,14</sup>
- Supports less experienced users with advanced automation

**REDUCED TIME PER MEASUREMENT** 

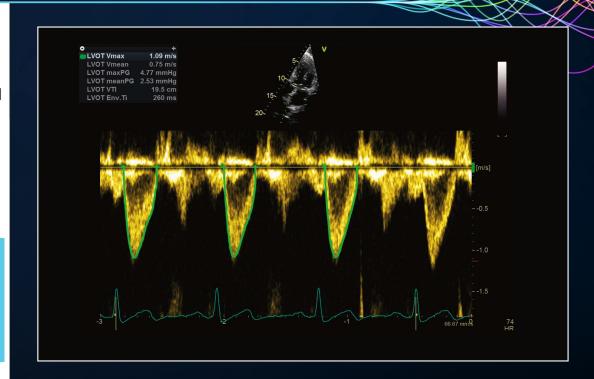
keystrokes<sup>12</sup>

**LOWER INTER OPERATOR** VAR Reduce variability

> Standardized exams with greater reporducibility<sup>12</sup>

**ACCELERATED** 

Productivity improvement



<sup>12 -</sup> Based on results of time and motion study conducted by GE "JB49055XX - Cardiac Auto Doppler"; study results indicated time savings related productivity increase up to ~8 on an annual basis for a facility per sonographer.

<sup>13 -</sup> European Association of Echocardiography recommendations for standardization of performance, digital storage and reporting of echocardiographic studies (Eur Journal of Echo 2008 - Evangelista, Badano, Monaghan, Zamorano, Lancellotti).

<sup>14 -</sup> Recommendations for Quantification of Doppler Echocardiography: A Report From the Doppler Quantification Task Force of the Nomenclature and Standards Committee of the American Society of Echocardiography (JASE 2002).



### AUTO MEASURE SPECTRUM RECOGNITION

Semi-automatic selection of appropriate spectral Doppler measurement tool.

#### **Benefits:**

- Enables fewer manual interactions by automatically opening the appropriate measurement tool<sup>7</sup>
- Works seamlessly with Cardiac Auto Doppler
- Enhances reproducibility of follow-up studies when used in automated mode<sup>7</sup>
- Supports less experienced users with advanced automation

<sup>10. 12.6</sup> cm/s Sample Vol. 2.5 cm/s Sample Vol. 2.5 cm/s Sy Depth 10.0 cm

<sup>7</sup> - The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX.





# VALVE AND CHAMBER QUANTIFICATION

Precision at the heart of quantification.

## EASY AUTOEF

Our AI-based Auto ROI detection algorithm allows users to measure ejection fraction, with no manual interaction apart from initiating the

tool and approving the results.7

**EF** results in just 1 click

**LATEST INNOVATIONS** 

<sup>7 -</sup> The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX.

## MAUTO MEASURE 2D

Semi-automated LV dimension measurements (2D calipers) in the parasternal long axis view, reducing manual interactions.

#### **Benefits:**

- Achieves fast measurements of left ventricle dimensions:
  - Up to 80% less clicks7
  - No need to scroll to look for ED and ES frames
  - Reduce manual workflow during analysis of cardiac images
- Improves reliability and repeatability of measurements – potentially increasing reproducibility for follow-up studies<sup>7</sup>

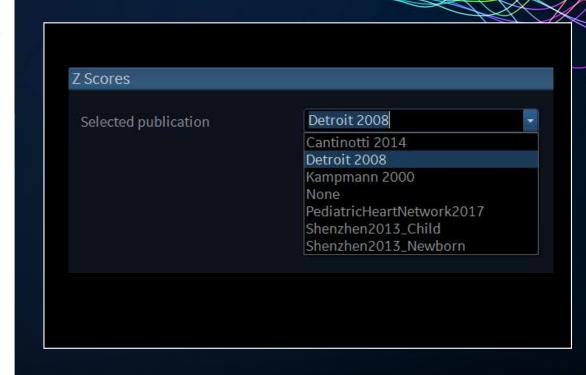


<sup>7</sup> - The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX.



#### **Z-SCORES**

Vivid T9 Ultra Edition Support for six sets of user selectable Z score publications covering the most common pediatric dimension measurements.



**Vivid T9 Ultra Edition Customer Presentation** 





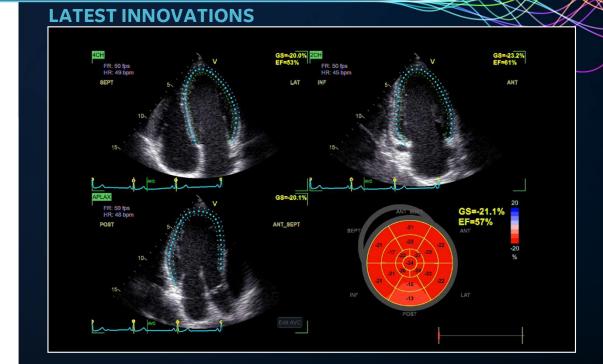
# AFI FUNCTIONAL IMAGING

From diagnosis to prognosis.



# A EASY AFI LV

Our AI-based global and segmental strain measurements require no manual interaction apart from initiating the tool and approving the results. Additionally, you will be able to view EF measurements.<sup>7</sup>



<sup>7</sup> - The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX.

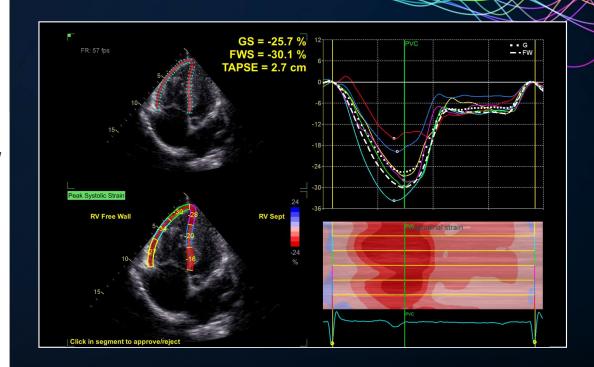
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#### **AFIRV**

AFI RV is a tool to assess the right ventricular function by advanced speckle tracking echocardiography.

#### **Benefits:**

- Offers renown Vivid<sup>™</sup> AFI user interface and workflow to allow current and new users easy adoption
- Supports right ventricle free wall strain, global strain and Tricuspid Annular Plane Systolic Excursion (TAPSE)
- Follows the 2018 EACVI-ASE Strain Standardized Task Force guidelines<sup>15</sup>
- Supports right ventricle images also from previous releases



<sup>15 -</sup> Standardization of left atrial, right ventricular, and right atrial deformation imaging using two-dimensional speckle tracking echocardiography: a consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. Badano et al. European Heart Journal – Cardiovascular Imaging (2018) 0, 1–10 doi:10.1093/ehjci/jey042.

# **%**

#### AFI LA

AFI LA Strain is a method to assess the left atrial function allowing global strain to be measured using speckle tracking echocardiography.

#### **Benefits:**

- Offers Vivid<sup>™</sup> renown AFI user interface and workflow allowing users to easily adopt
- Supports left atrium strain, volumes and emptying fraction measurements
- Follows the 2018 EACVI-ASE Strain Standardized Task Force guidelines<sup>15</sup>
- Supports left atrium images also from previous releases



<sup>15 -</sup> Standardization of left atrial, right ventricular, and right atrial deformation imaging using two-dimensional speckle tracking echocardiography: a consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. Badano et al. European Heart Journal – Cardiovascular Imaging (2018) 0, 1–10 doi:10.1093/ehjci/jey042.



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Windows is a registered trademark of Microsoft Corporation.

Ultra Edition is not a product name; it refers to the 2020 release of the Vivid portfolio.

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