



## YOUR PATIENTS RELY ON **YOU**. YOU CAN RELY ON **US**.



ULTRA EDITION

gehealthcare.com

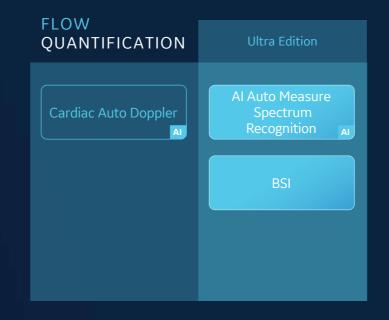
# VIVID CLINICAL APPLICATIONS

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

The Ultra Edition<sup>1</sup> applications highlighted **in bold are referent to our latest release.** 













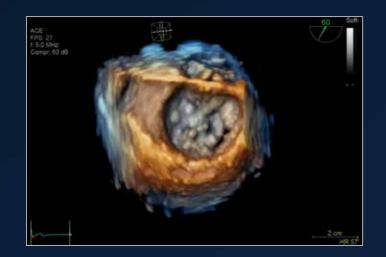


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# VISUALIZATION

## WHY GUESS WHEN YOU CAN SEE.

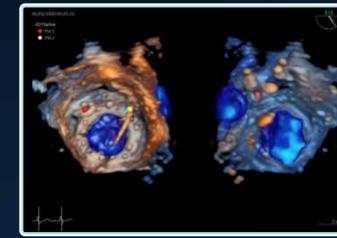


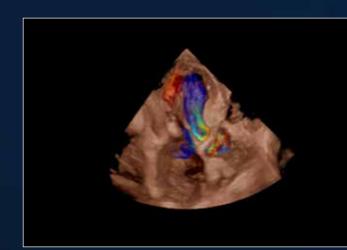


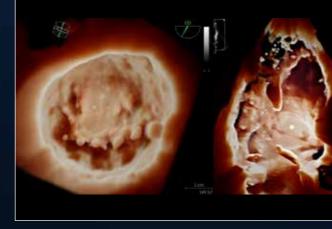
#### HDlive™

Simulates light propagation and scattering through tissue Provides enhanced visualization of anatomical structures.

# ULTRA EDITION









#### **Dual Crop**

Visualizes a structure, such as a valve or device, from two opposing directions

Fast and efficient visualization of complex structures from both sides simultaneously, enhancing clinical assessment of valve anomalies or device deployment.

#### **HD** Color

4D color flow rendering technique for semi-transparent visualization of origin and size of high velocity jets

Enhance spatial relationships between flow and surrounding structures; suppress non-diagnostic low flow information.



#### FlexiLight

Rendering technique for photo-realistic light-source based illumination of heart structures

Comprehensive visualization of leaflets, trabeculae, regurgitant orifices, clefts, aneurisms, and thrombi.

# NAVIGATION

#### WHY GUESS WHEN YOU CAN SEE.



# Method Method</td

#### View-X

See X-ray from fluro in real time on ultrasound screen as a picture in picture Facilitates communication between team members during procedures.

#### FlexiViews

Quick access to predefined 4D/multiplane views during live mode

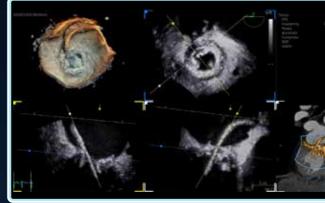
Potentially reduce scan time during complex interventional procedures.

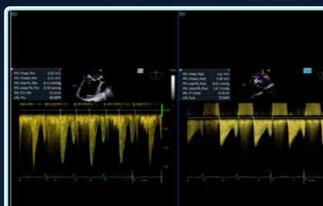
#### 4D Markers

Annotations viewable from all angles on 4D ultrasound volume data set and 2D views

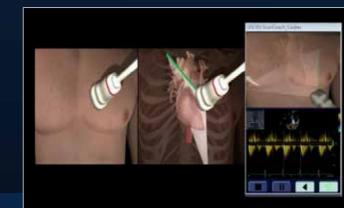
Enhance communication in echo lab, cath lab, and OR

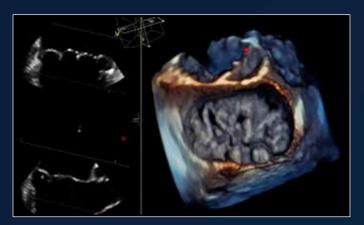
## **ULTRA EDITION**













#### **CT Fusion Live**

Fuse CT and 4D ultrasound data in both live and replay

Extend field-of-view for better understanding of heart anatomy during interventional planning and procedures



#### Pre-Post Compare

Label measurements and images acquired in different stages of an exam or procedure, to compare pre & post procedure

Obtain a clear record of performance in different stages within a procedure, helping to quantify impact and verify effective deployment of implanted devices.

#### FlexiSlice Extend

Ability to rotate the view direction of the volume rendering independently of slice orientations

Increases flexibility of FlexiViews, improving clinical workflow efficiency and easier to see details of structures of the volume rendering.

#### Scan Coach

Provides modules depicting basic scanning techniques with animated graphics and reference clinical images

Helps inexperienced users performing echo scans, and assists in positioning the probe and orientation.

# FLOW QUANTIFICATION

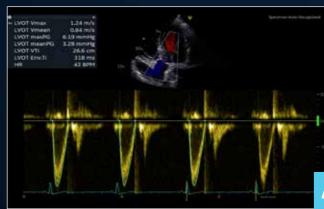
YOUR TIME IS PRECIOUS. SAVE IT.

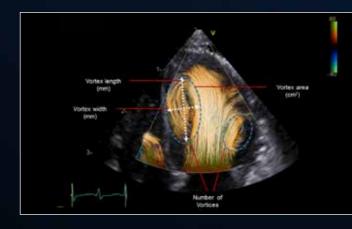
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#### **Cardiac Auto Doppler**

Semi-automated Cardiac Doppler measurements Enhances reproducibility of follow-up studies, offers Doppler measurement in multiple cardiac cycles, supporting less experienced users.

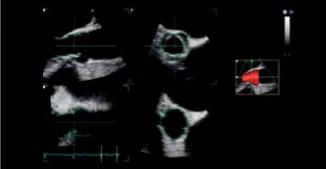
# ULTRA EDITION



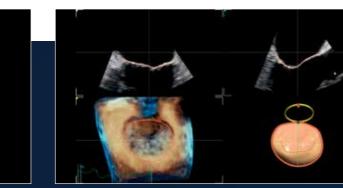


# VALVE QUANTIFICATION

## PRECISION AT THE HEART OF QUANTIFICATION



#### 4D Auto AVQ Semi-automated 4D tool enables fast quantification of aortic valve Automatically segment, align, and quantify the aortic outflow tract.



#### 4D Auto MVQ

Mitral Valve quantification tool derived from volume ultrasound data

Helps visualize and quantify mitral valve via a semi-automatic surface detecting algorithm.

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#### Al Auto Measure Spectrum Recognition

Semi-automatic selection of appropriate spectral Doppler measurements

Fewer manual interactions, enhancing reproducibility of follow-up studies, and supporting less experienced users.

#### **Blood Speckle Imaging 2.0**

# Insights into complex blood flow patterns such as vortex formation and duration

Provides multiple modes for visualizing blood flows, and complimentary information for assessment of dilated cardiomyopathy and heart failure.

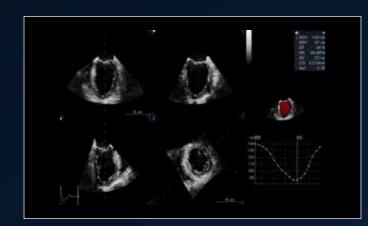
#### 4D Auto TVQ

Semi-automated 4D tool enables fast visualization and quantification of the tricuspid valve anatomy

Cost effective alternative to traditional tricuspid annulus assessment; handles 3D shape of tricuspid valve and provides 15 static and dynamic measurements.

# CHAMBER QUANTIFICATION

## PRECISION AT THE HEART OF QUANTIFICATION.



#### 4D Auto LVQ

Semi-automatic quantification of left ventricle Fast, easy, two-click method to define initial endocardial border.



Semi-automatic quantification of the right ventricle Helps visualize and quantify the right ventricle.

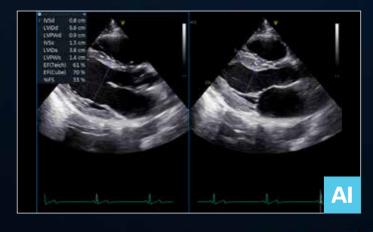


#### 4D Auto LAQ

**Semi-automatic quantification of left atrium** Fast, reproducible, and accurate left atrial volumes, ejection fraction, global longitudinal and circumferential strain.

# ULTRA EDITION





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#### Easy AutoEF

Automated one-click ejection fraction measurement

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

#### Al Auto Measure 2D

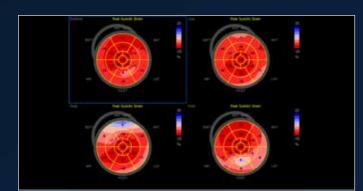
Semi-automated LV dimension measurements in parasternal long axis view

Fast measurements of LV dimensions, up to 80% fewer clicks, reducing manual workflow during analysis of cardiac images.

# AFI FUNCTIONAL IMAGING

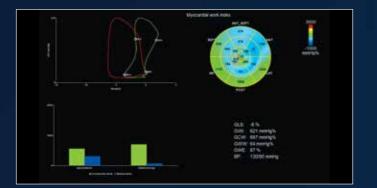
## FROM DIAGNOSIS TO PROGNOSIS.





#### **AFI Stress**

**Quantify wall motion at all stress levels** Quantify longitudinal segmental and global strain for contractility assessment at each stress level.

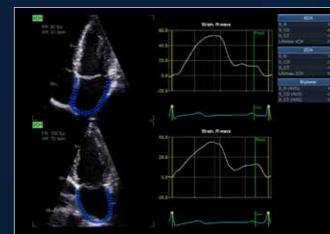


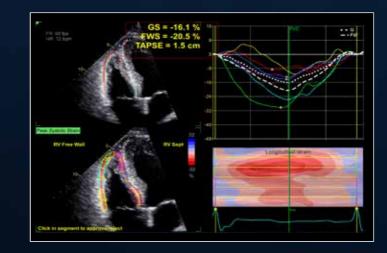
#### MyocardialWork

Strain tool accounts for systolic blood pressure MV and AV opening and closure times May provide more accurate and reproducible results based on new and reduced load dependent parameters.

# ULTRA EDITION









#### Easy AFI LV

#### Automated one-click AFI LV analysis

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.



#### **AFI LA**

Assess left atrial function by advanced speckle tracking echocardiography Supports left atrium strain, volumes, and emptying faction measurements.

#### **AFI RV**

Assess right ventricular function by advanced speckle tracking echocardiography

Supports right ventricle free wall strain, global strain, and TAPSE.



# VIVID CLINICAL APPLICATIONS

	Vivid E series	Vivid S series	Vivid T series	Vivid <b>iq</b>	EchoPAC™
VISUALIZATION					
CT Fusion	•				•
HDlive™		•			
HD Color		•		•	
Dual Crop		•		•	
FlexiLight					

### NAVIGATION

CT Fusion Live	•			
FlexiSlice Extend		•	•	
Pre-Post Compare		•	•	
4D Markers		•	•	
FlexiViews		•	•	
View-X		•	•	
LVO contrast		•	•	
Scan Coach			•	

## **AFI FUNCTIONAL**

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Easy AFI LV	•	•	•	•	•
AFI RV		•		•	
AFI LA		•		•	
Myocardial Work					
AFI Stress					

	Vivid E series	Vivid S series	Vivid T series	Vivid <b>iq</b>	EchoPAC™
CHAMBER QUANTIFI	CATION				
Easy AutoEF	•	•	•	•	•
Al Auto Measure 2D	•	•		•	
4D Auto LAQ					
4D Auto RVQ		•			
4D Auto LVQ		•		•	

## **VALVE** QUANTIFICATION

4D Auto TVQ	•			•
4D Auto AVQ		•	•	
4D Auto MVQ		•	•	

## **FLOW QUANTIFICATION**

Al Auto Measure Spectrum Recognition	•	•	•	•	•
Blood Speckle Imaging 2.0					
Cardiac Auto Doppler		•		•	

#### **About GE Healthcare:**

GE Healthcare is the \$18 billion healthcare business of GE (NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enables 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, and Insights for the latest news, or visit our website www.gehealthcare.com for more information.

#### **References:**

1. Ultra Edition is not a product name. The cont'ent herein refers to the 2022 release of the Vivid portfolio.

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