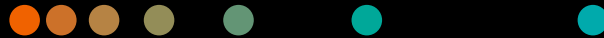


# ACUSON Redwood Ultrasound System

## Ultrasound Reimagined

Release 2.0

[siemens-healthineers.com/redwood](http://siemens-healthineers.com/redwood)



# Addressing the needs of an aging population

Worldwide people are living longer. By the year 2050, more than 2 billion people will be over 60. 80% of these people will be living in low and middle-income countries<sup>1</sup>.

Globally, approximately one in three of all adults suffer from multiple chronic conditions<sup>2</sup>, creating an ever-increasing need for premium imaging that is accessible.

Managing the costs of treating chronic diseases of a growing, aging population requires an ultrasound system that delivers on all fronts.

## People are living longer

559 million people are 60+ years old



**2 billion +**  
by 2050

→ Increased risk of chronic disease and health management costs

## The Ever-growing Burden

38 million people die each year of chronic diseases



**+37%**  
by 2030

→ Healthcare's need to strengthen early detection and timely treatment

# Introducing the ACUSON Redwood Ultrasound System

Ultrasound redefined

The ACUSON Redwood ultrasound system is a premium ultrasound system that delivers detailed image quality, advanced technologies and greater workflow efficiency.



## Detailed

From improved sensitivity of our latest single-crystal transducer technology to the next generation of coherent image formation (CIF) along with Siemens Healthineers exclusive UltraArt Universal Image Processing, ACUSON Redwood delivers imaging with confidence.



## Advanced

Highly flexible and portable with a host of advanced technologies supporting Radiology, Cardiology, Obstetrics, and Gynecology applications.



## Efficient

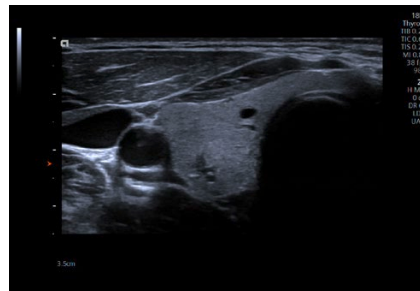
Cut exam time with AI-powered tools including eSie Measure, eSie OB and eSie Left Heart, so users can focus on assisting their patients' needs and the continuity of quality care.

# Detailed

Imaging that inspires confidence

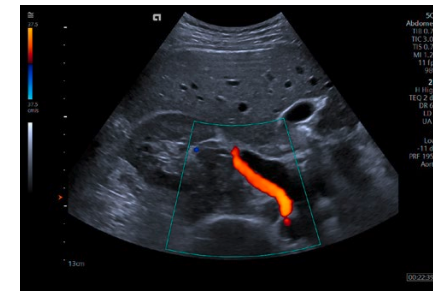
From the improved sensitivity<sup>3</sup> of our latest InTune transducer technology to our next generation coherent image formation (CIF) beamformer, the ACUSON Redwood system delivers imaging with confidence.

## Coherent Image Formation (CIF) for Harmonic Imaging



Using both Phase and Amplitude information to form an image enables high resolution and high frame rates when compared to conventional<sup>4</sup> ultrasound systems.

## Color Flash Suppression Technology

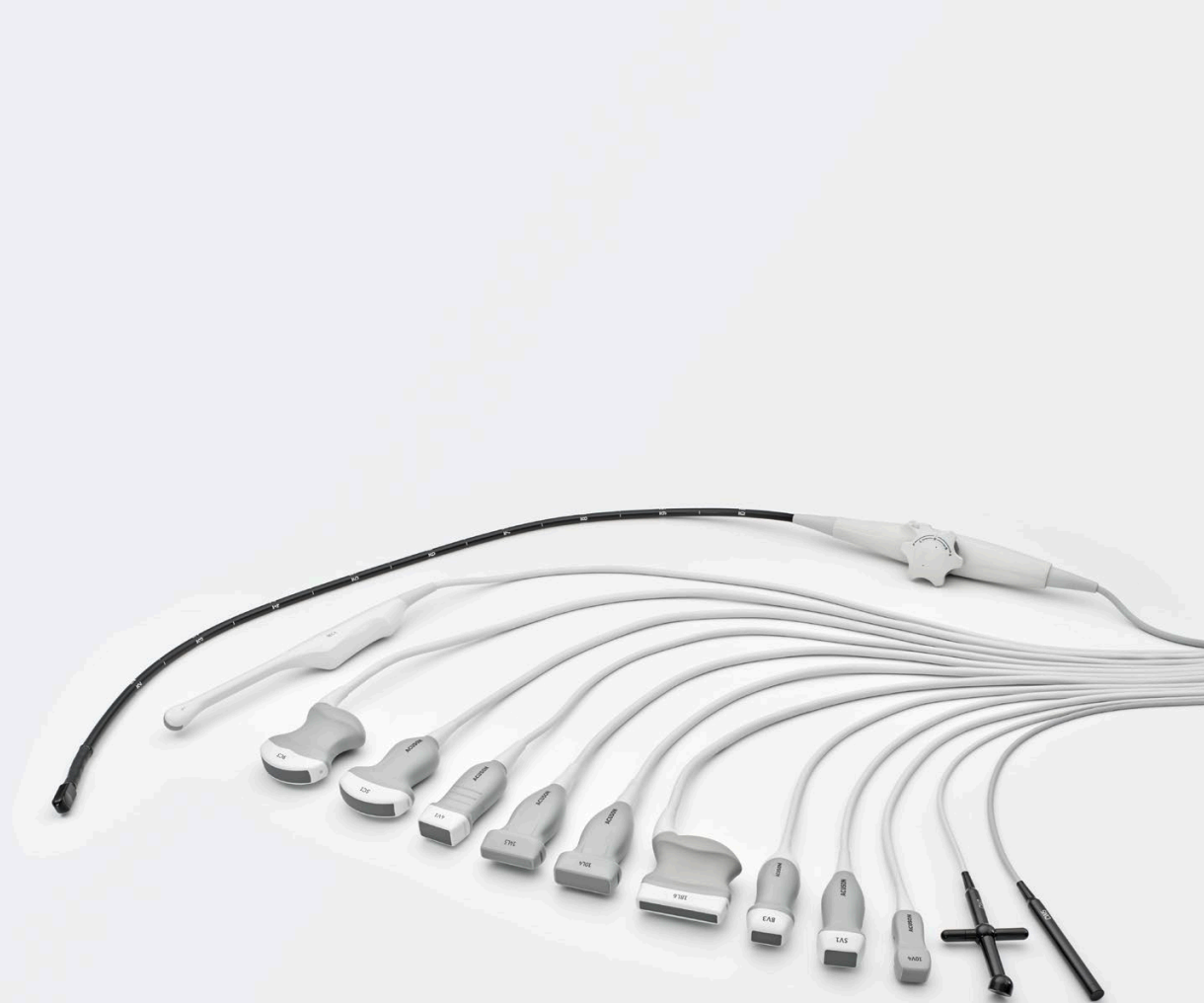


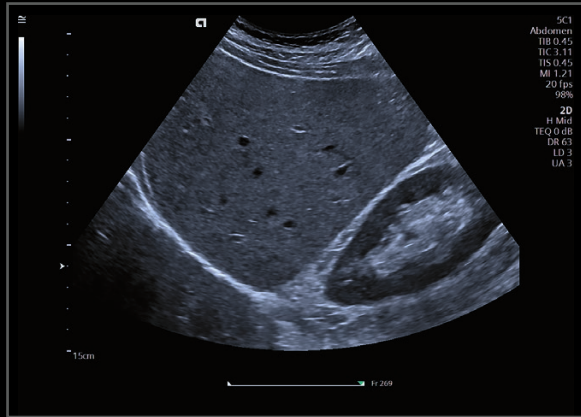
Reduce color flash artifacts with no user interaction, improving color sensitivity and performance, even when a patient is actively breathing.

## Family of InTune Transducers

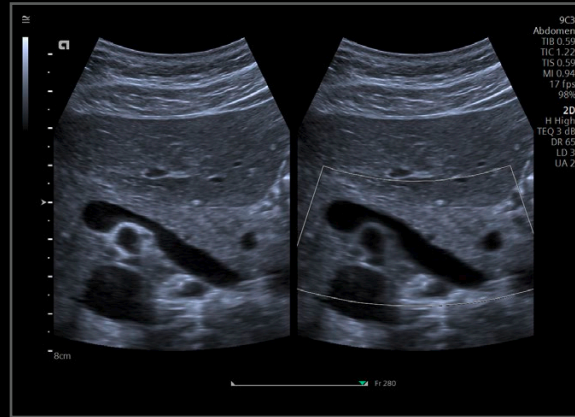
Next-generation InTune transducer technology with advanced materials, optimization and manufacturing resulting in the highest signal fidelity throughout the entire imaging chain.

- **Comprehensive suite of over 16 transducers** supporting a diverse range of clinical applications
- **Complete Abdominal Solution** – Delivers diagnostic quality 2D, color and Doppler imaging superficially, at depth and everywhere in between
- **Comprehensive Cardiac Solution** – Addresses a full range of patient size, age and approaches
- **Compatibility and shared transducers with the ACUSON Sequoia ultrasound system** – Increases value and cost-effectiveness

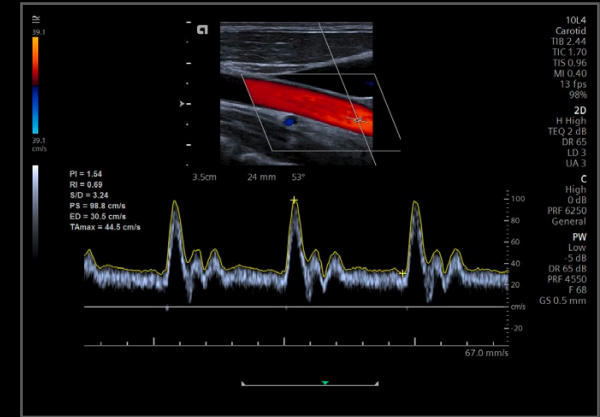




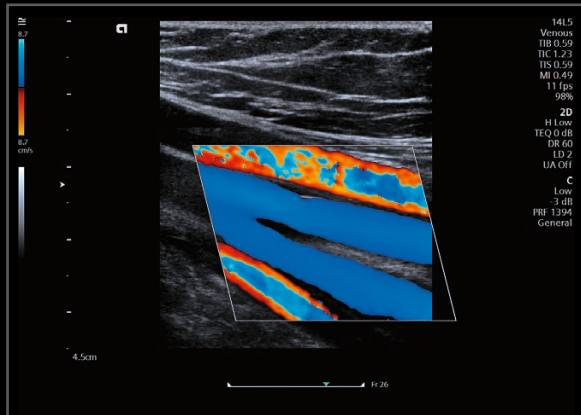
Sagittal image of the liver and right kidney utilizing the 9C3 transducer demonstrating excellent penetration, spatial and contrast resolution, as well as image uniformity from the near to the far field.



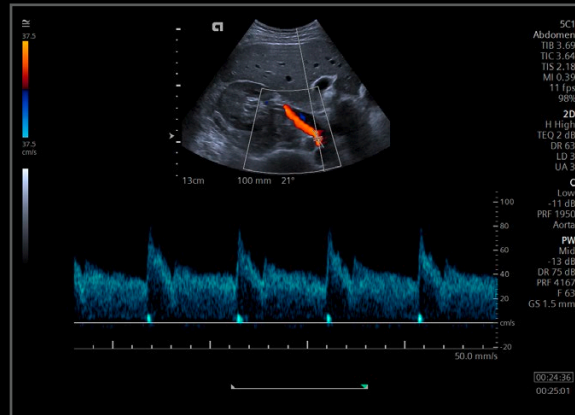
Transverse Live Dual image of the pancreas utilizing Clarify vascular enhancement (VE) technology which uses the power color Doppler amplitude information and superimposes it on the 2D image to help remove noise and better delineate the lumen of blood vessels.



Color and Spectral Doppler image of the common carotid artery using the 10L4 transducer demonstrating the use of Auto Flash Artifact Suppression and Auto trace. These technologies may help improve image quality and reduce exam time, resulting in increased diagnostic confidence.



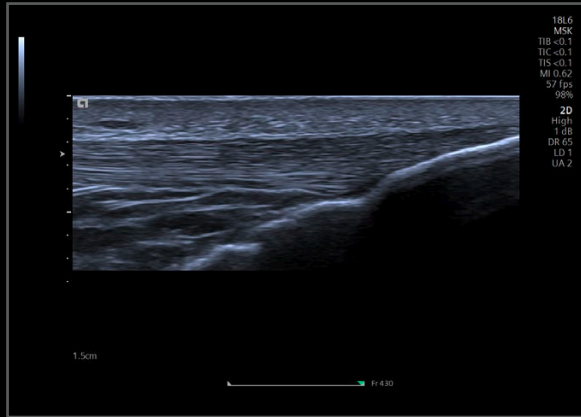
14L5 sagittal image of the superficial and deep femoral veins as they form the common femoral vein. Exceptional spatial resolution and hemodynamic color flow are demonstrated.



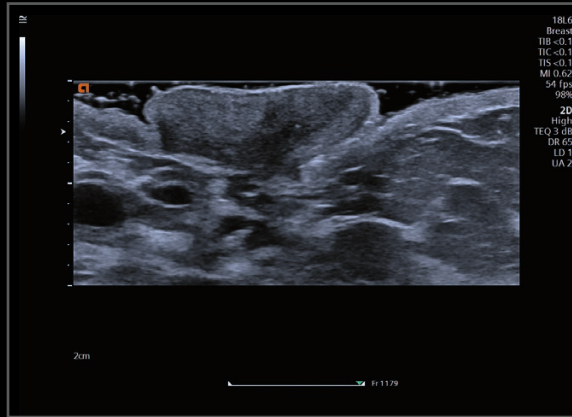
Transverse color and spectral Doppler image of the right kidney, liver and renal artery, demonstrating the expected low resistance waveform on the spectral display.



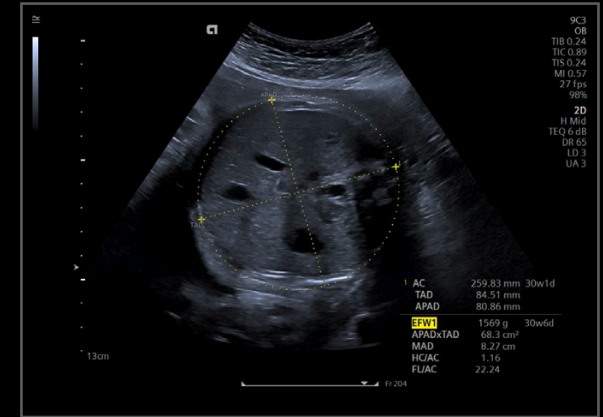
This image of a 4 Chamber fetal heart using the 7VC2 transducer with UltraArt universal image processing, a state-of-the-art speckle reduction algorithm developed by Siemens Healthineers.



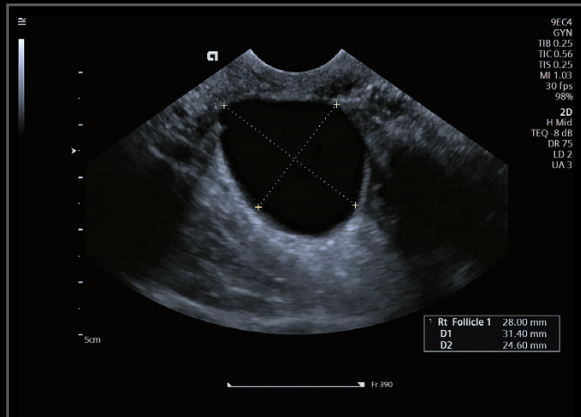
Exceptionally high resolution sagittal musculoskeletal image of the patellar tendon showing exquisite tendon fiber striations utilizing the 18L6 transducer.



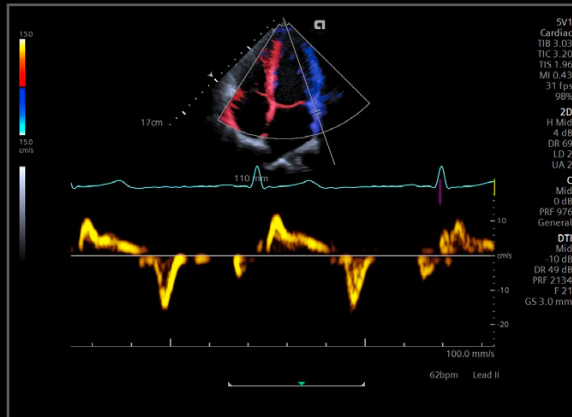
Highly detailed breast imaging is possible with the 18L6 transducer as demonstrated in this image showing excellent penetration without loss of information behind the nipple.



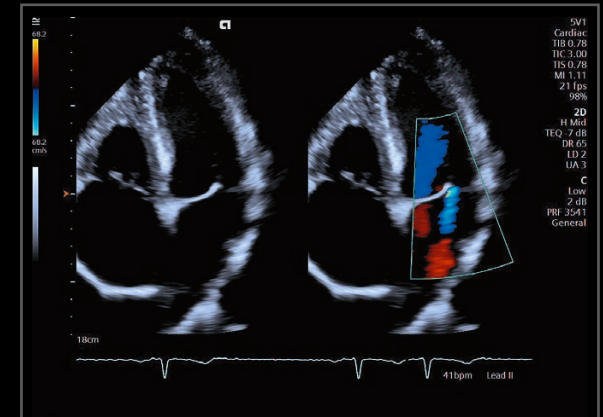
eSie OB provides automated biometric measurements for obstetric scanning. While this technology reduces scan time and keystrokes, it also increases exam consistency.



eSie Follicle automates the measurements of follicles for fast and accurate assessment, which may help reduce scan time and increase department consistency.



Color and Spectral Doppler Tissue Imaging (DTI) permits the assessment of myocardial motion using Doppler ultrasound imaging.



Apical 4 chamber view with color flash suppression technology adjusts persistence relative to operator motion by reducing the amount of extraneous color speckle.

# Advanced

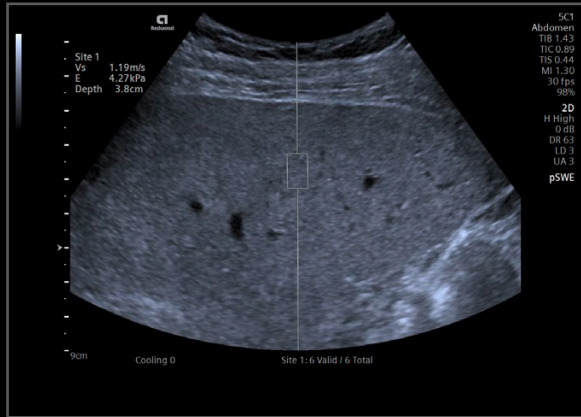
Tailored applications that improve patient outcomes

Meeting the demand for early detection, diagnosis and timely treatment of a variety of chronic diseases is tremendously challenging for a clinician. Ultrasound imaging must enable answers to a breadth of important clinical questions – fast. To do that in the most accurate and reproducible way, the ACUSON Redwood system offers a comprehensive suite of advanced applications.

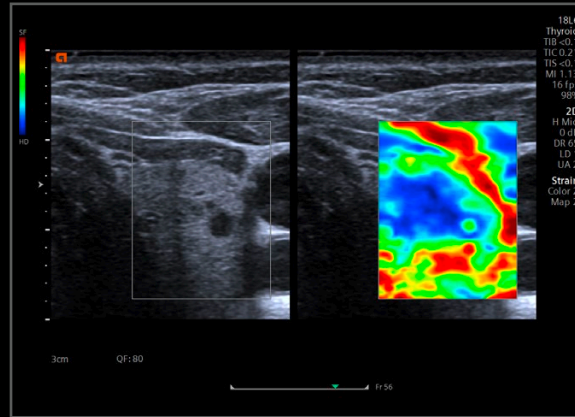




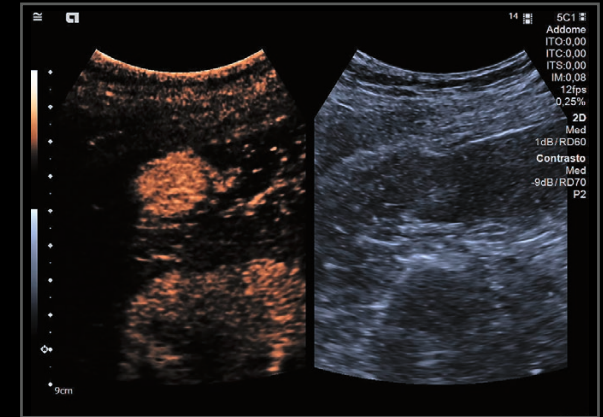




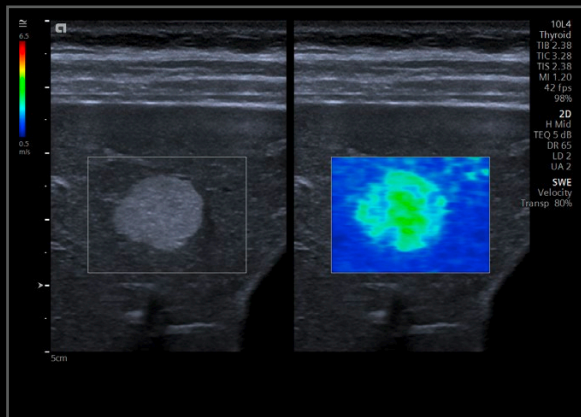
Reproducible, reliable and detailed tissue stiffness information supporting liver assessment can be quickly and easily obtained using our one-touch point shear wave elastography technology.



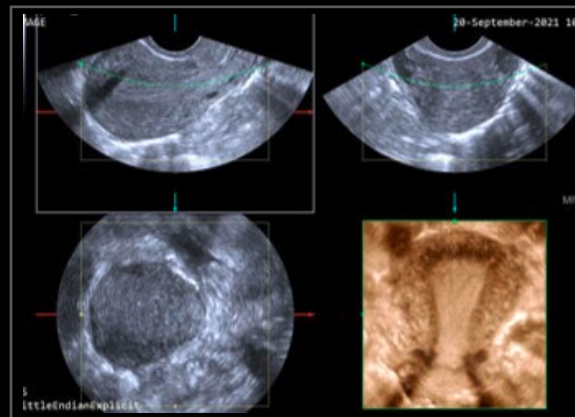
Virtual Touch strain elastography provides a simple and qualitative measure of lesion stiffness relative to the surrounding tissues.



Contrast Pulse Sequencing (CPS) and flash sequencing technologies enable greater diagnostic confidence in the characterization of focal liver lesions.



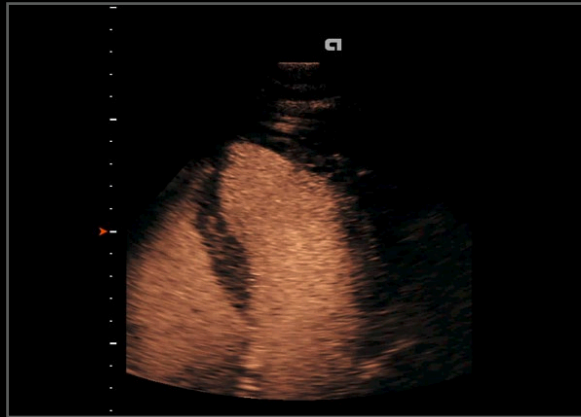
A Virtual Touch 2D Shear wave elastography (SWE) image of a liver mass showing the velocity map provides clear delineation of the area of interest to aid clinical diagnosis.



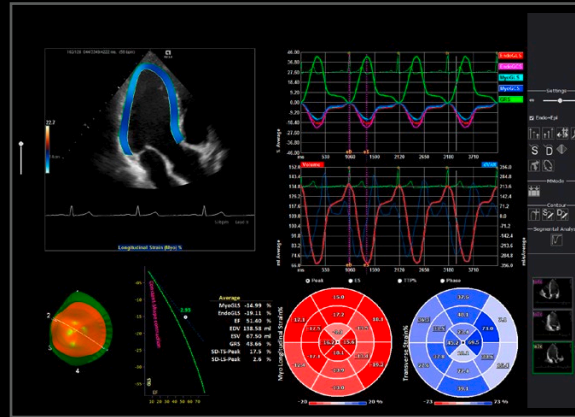
A Uterine image demonstrating 3D endometrial multiplanar reconstruction (MPRs) and volume to enhance the visualization of anatomical structures.



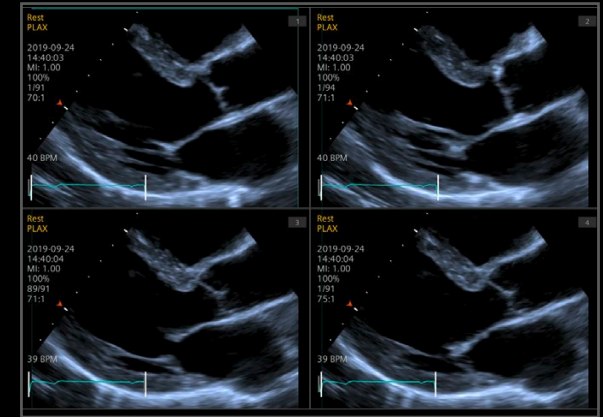
The new 7VC2 transducer with 3D/4D functionality, highlighting surface rendering method in the fetal face.



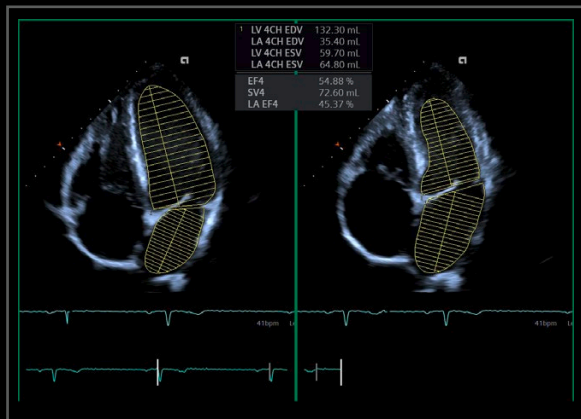
Left ventricular opacification (LVO) technology for enhanced cardiac visualization. LVO improves signal-to-noise ratio and penetration, while lowering the MI to provide longer contrast duration.



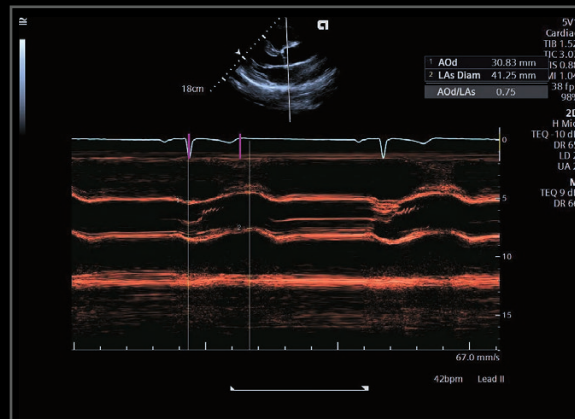
syngo VVI is a non-invasive method to assess myocardial motion and mechanics that quantifies Global Longitudinal Strain (GLS), Global Radial Strain (GRS), and Global Circumferential Strain (GCS).



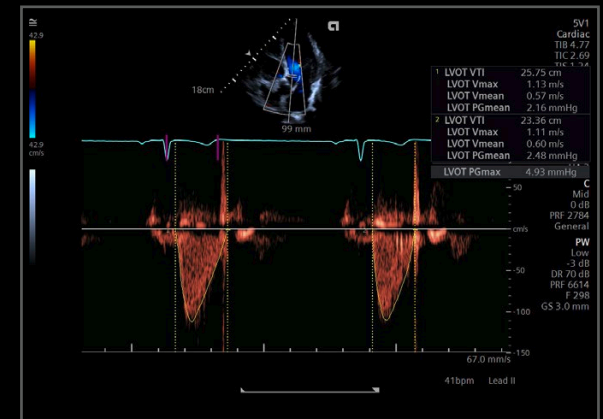
Comprehensive and flexible stress echo package includes configurable stress echo protocols and wall-motion scoring features.



AI-Powered<sup>5</sup>, eSie Left Heart identifies and automatically contours the left ventricle and left atrium while improving consistency and reproducibility of left ventricular and left atrial quantification.



AI-Powered eSie Measure workflow package enables 1-click cardiac measurements for 2D, M-mode, and Doppler providing increased consistency and reproducibility while minimizing keystrokes.



Spectral pulsed wave (PW) Doppler interrogation of the left ventricular outflow tract using eSie Measure one touch quantification reduces keystrokes and increases quantification reproducibility.



# Efficient

## Smart workflow

From the very beginning, the ACUSON Redwood system was developed and refined utilizing a global perspective. Using input from 170 workshop sessions and 600 ultrasound users worldwide, its effective workflow has been designed by those who know it best and it shows.

Starting an exam is easy with the 1-Click Registration – the correct transducer and exam type is automatically selected for each patient to streamline workflow.

Efficiency is further enhanced with tools powered by artificial intelligence (AI). These tools may improve workflow and save examination time by removing manual processes and reducing the burden of repetitive routine measurements.

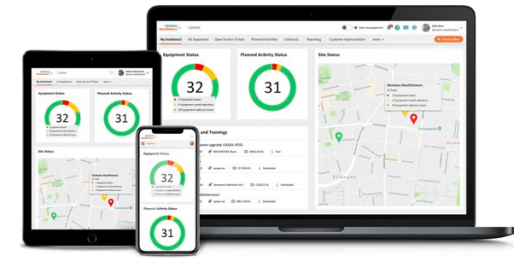


### UltraArt real-time quad display

Select your personalized image preference from a real-time touch screen display.



## Real-time ultrasound needs real-time support



**Smart Remote Services (SRS)**, powered by eSieLink, is your fast, secure and powerful data link that connects your systems to our experts.

- Communicate in real-time with experts from Siemens Healthineers when you need proactive and interactive services
- Diagnose and repair remotely with fast support to optimize your operational efficiency
- Receive software updates to protect against cyber threats

Remote technical support



Remote Assist



Remote software updates



**PEPConnect<sup>6</sup>** is your smarter connection to knowledge – designed to increase staff competency, efficiency and productivity.

- Engage in learning activities such as e-learnings, webinars, job aids, videos, virtual instructor-led events and more
- Create your own learning experience with an individual profile, plan and transcript to record your education
- Connect, communicate, and be part of social learning groups

Education experience



**teamplay Fleet<sup>6</sup>** is your faster connection to insights. It is a digital health platform solution that enables you to streamline the management of your fleet from Siemens Healthineers and to optimize your asset performance holistically, 24/7, and from any browser capable device.

- Monitor efficiently by knowing the status of your equipment and service tickets at a glance
- Plan ahead and maximize your productivity by scheduling upcoming upgrades, maintenance and training
- Manage effectively with access to in-depth service and equipment reports

Manage effectively



Plan ahead



Monitor efficiently



# Why Siemens Healthineers?

We pioneer breakthroughs in healthcare.  
For everyone. Everywhere.

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. By constantly bringing breakthrough innovations to market, we enable healthcare professionals to deliver high-quality care, leading to the best possible outcome for patients.

Our portfolio, spanning from in-vitro and in-vivo diagnostics to image-guided therapy and innovative cancer care, is crucial for clinical decision-making and treatment pathways. With our strengths in patient twinning, precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the biggest challenges in healthcare. We will continue to build on these strengths to help fight the world's most threatening diseases, improving the quality of outcomes, and enabling access to care.

We are a team of 66,000 highly dedicated employees across more than 70 countries passionately pushing the boundaries of what's possible in healthcare to help improve people's lives around the world.



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## Keeping you protected from Cyber Threat

The Windows 10 operating system and state-of-the-art cybersecurity program protects the privacy of your data and strengthens your systems' resiliency from external cyberattacks.



The products / features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

Stand-alone clinical images may have been cropped to better visualize pathology.

ACUSON Redwood, ACUSON Sequoia, Auto TEQ, Clarify, Doppler tissue imaging capability (DTI), eSie Left Heart, eSie Measure, eSieLink, InTune, UltraArt, Velocity Vector Imaging technology (VVI), and Virtual Touch are trademarks of Siemens Medical Solutions USA, Inc.

syngo® is a registered trademark owned by Siemens Healthcare GmbH.

#### Endnotes

<sup>1</sup> World Health Organization (WHO): Ageing and Health (<https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>), WHO: Ten Facts on Ageing and Health (<https://www.who.int/features/factfiles/ageing/en/>) and United Nations World Population 2017 ( [https://population.un.org/wpp/Publications/Files/WPP2017\\_Wallchart.pdf](https://population.un.org/wpp/Publications/Files/WPP2017_Wallchart.pdf))

<sup>2</sup> World Health Organization: The Global Burden of Chronic Disease ([https://www.who.int/nutrition/topics/2\\_background/en/](https://www.who.int/nutrition/topics/2_background/en/))

<sup>3</sup> When compared to 6C1HD with the ACUSON S3000 ultrasound system.

<sup>4</sup> When compared to the ACUSON S3000 ultrasound system.

<sup>5</sup> Software application leveraging machine learning-based Artificial Intelligence to achieve the intended outcome.

<sup>6</sup> Included in every purchase.

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