ACUSON Sequoia
ultrasound system

Clarify with confidence

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SIEMENS
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ACUSON Sequoia

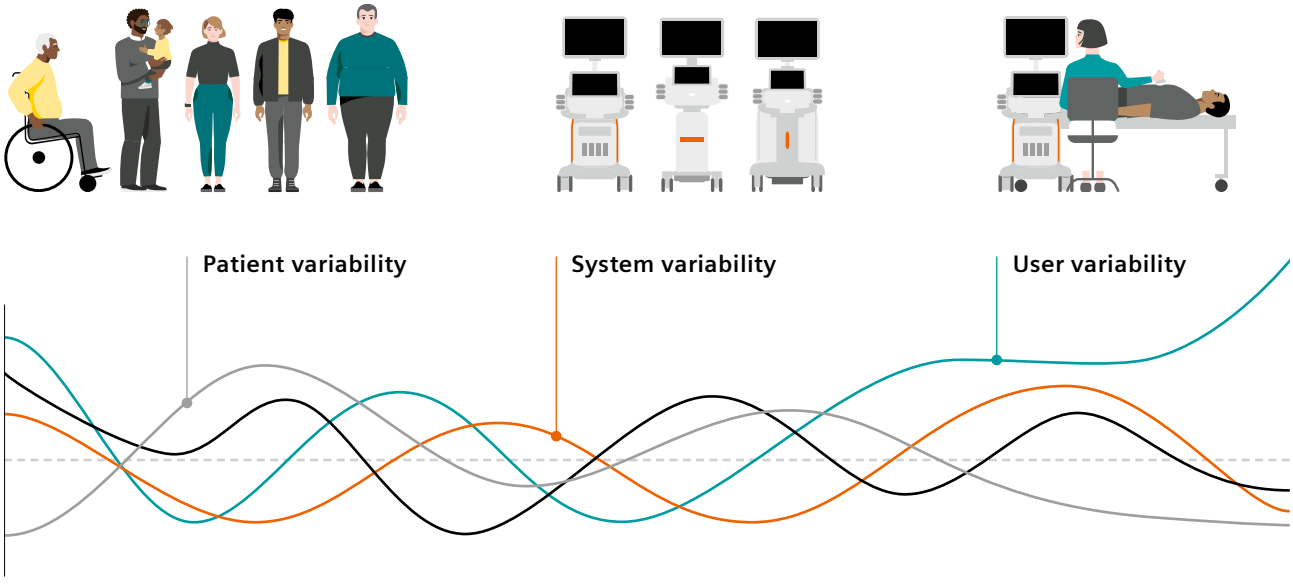
Delivering clinical excellence across ultrasound specialties

ACUSON Sequoia is an ultra-premium ultrasound system that integrates cutting-edge technology and AI-powered applications to help streamline diagnostic processes. This system is designed to cater to patient-specific needs, delivering superior performance and efficiency in various clinical settings such as radiology, OB/GYN, shared service cardiology, and beyond.

ACUSON Sequoia uses the power of groundbreaking, practical AI for abdominal, OB, and cardiac cases. It includes advanced breast visualization to deliver new levels of image quality confidence, and tackles the toughest challenges in musculoskeletal imaging – all while saving your team from needless strain and pain.

ACUSON Sequoia's new advanced features are designed to improve diagnostic confidence and workflow across a wide range of clinical settings.

Ultrasound's potential has been limited by unwarranted variability



Ultrasound users are faced with a patient population that is increasingly more difficult to scan.

Ultrasound devices are complex products. Differences in technology can inhibit a user's ability to generate accurate and reproducible measurements during an exam.

Studies have demonstrated that significant intra- and inter-observer variability can pose a challenge to the standardization of care delivery.

Intelligent imaging. Expanded insights. User-driven design.

Boost your clinical confidence with a system designed to enhance your expertise. ACUSON Sequoia gives you the power to know more by maximizing the sensitivity and depth of your scans, while reducing variability across patients, systems, and users.

A comprehensive list of advanced application offerings allows clinicians to personalize ultrasound to a patient's specific needs.

Powerful AI-enabled tools and user-centric interfaces help improve workflow efficiency allowing clinicians to focus more on their patients.

Intelligent imaging

Experience powerful imaging with automation in each major mode with a wide selection of advanced transducers, helping to reduce variability amongst users.

Expanded insights

Expand your expertise with advanced tools and AI innovations designed to improve diagnostic confidence and patient outcomes.

User-driven design

Embrace advanced productivity with AI-powered tools and an intuitive design for the ultimate user experience.


ACUSON
Sequoia
ACUSON
Sequoia

AI powered

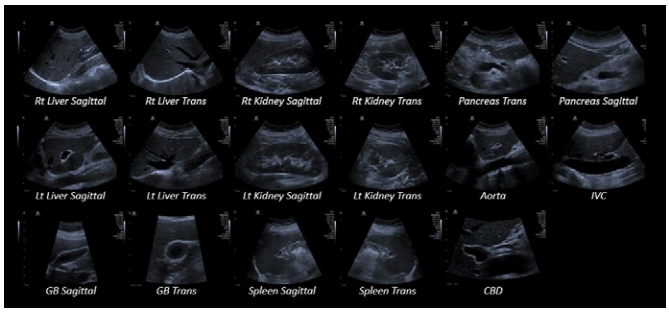
Powering ultrasound with practical AI

Healthcare professionals are facing multiple challenges: an increasing shortage of trained workforce and the lack of standardization that drives better outcomes.

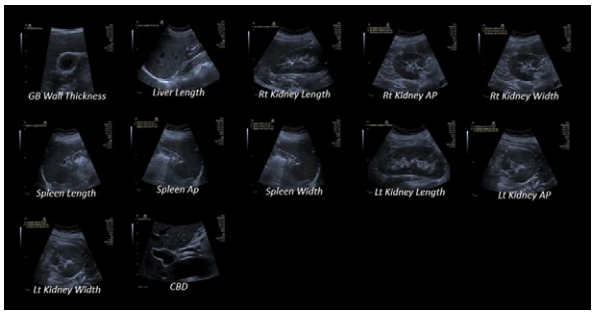
With the innovations onboard ACUSON Sequoia, we're addressing your challenges directly with practical AI that supports improvements in your quality of care and solves these issues in entirely new ways.

We're committed to making exams faster and more efficient to improve quality and throughput. We are striving to reduce the amount of manual movement required during an exam to mitigate injuries and fatigue. And we're working to reduce variability across users and systems with proprietary AI and transducers, enabling you to make the most of your clinical team's time and talent, so they can focus on patient care.

- Faster exams from automated measurements
- Fewer keystrokes with automated labeling
- Easier protocol adherence from automatic image ordering achieved by AI and transducers
- Increased standardization achieved by AI and transducers



AI Abdomen offers 17 anatomical views for standard abdominal exams to provide a comprehensive assessment of the abdomen, covering all vital anatomical views.



12 key measurements are available in milliseconds, saving time and improving standardization across users.

5600+

AI-powered measurements

Improve diagnostic confidence and reduce time to treatment by decreasing task complexity, standardizing exam quality, and resolving resource shortages.

AI Abdomen

Faster, smarter abdominal exams, recognizing and labeling 17 anatomical views and calculating 12 key measurements – in milliseconds.

Auto Calcs

Semi-automated measurements that can enhance efficiency by standardizing exams across users for enhanced consistency and reproducibility.

Auto OB

AI-powered measurements of fetal biometry save time and optimize exam workflow by removing manual processes and routine measurements.

AI Assist

Automatic identification and classification of cardiac structures has the potential to reduce exam time, standardize examinations, and improve consistency and reproducibility.

2D Heart+AI

AI-powered chamber analysis for ejection fraction, volumes, and cardiac strain to improve exam efficiency and workflows.

4D HeartAI

One-click cardiac assessment to process complex cardiac data instantaneously and measure essential cardiac metrics, including strain, global longitudinal strain (GLS), ejection fractions, and volumes.

AI Measure

Offers 120 AI calculations to alleviate tedious, time-consuming, and variable routine echo calculations to reduce exam time and promote standardization across users.

TraceAI

AI-powered measurement tool detecting borders of orifices to quickly measure anatomical structures in cardiac and structural heart imaging.

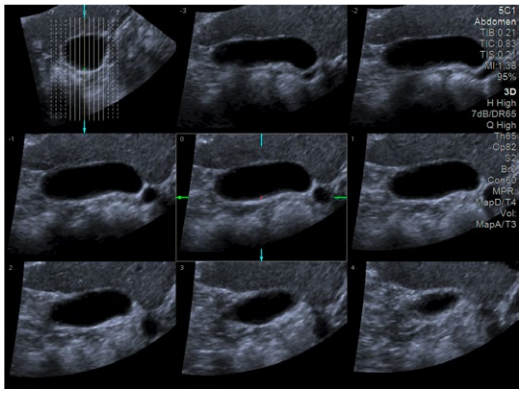
Intelligent imaging

Powerful automation and advanced transducers for easier imaging

Scanning patients can be a daily challenge. Experience powerful imaging and reduced variability with automation in each major mode. ACUSON Sequoia offers a wide selection of advanced and specialty transducers to provide diagnostic confidence when you need it most.

InFocus imaging technology

Eliminates manual focusing delivering exquisite image uniformity throughout the field of view.



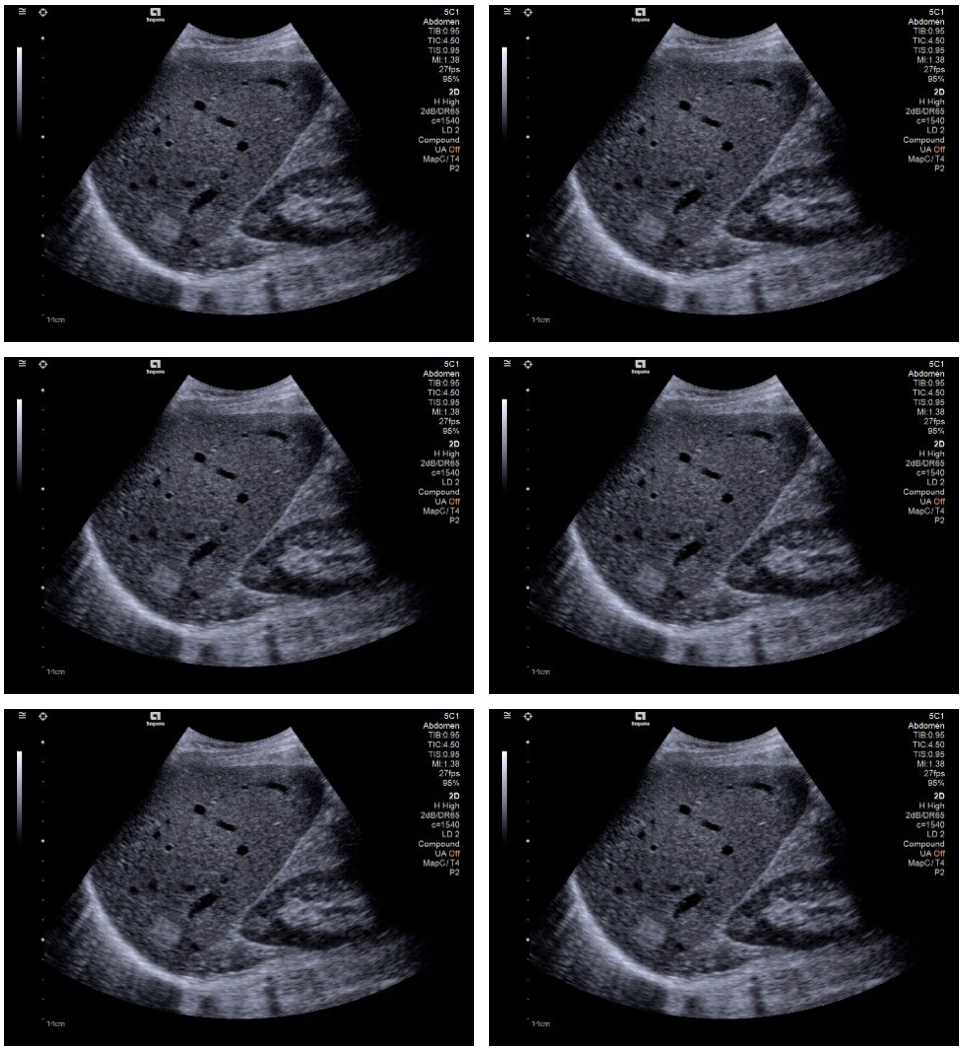
Freehand 3D technology

Eliminates the need to change to specialty transducers mid exam on standard curved, linear and endocavity transducers.

Deep abdominal imaging
with a depth of 55 cm[1] for difficult-to-image or high-BMI patients

Deep peripheral vascular
with 58% deeper color penetration[1] for difficult vascular exams

BiPlane matrix array transducer
for abdominal, gynecology, and cardiac adult and pediatric imaging



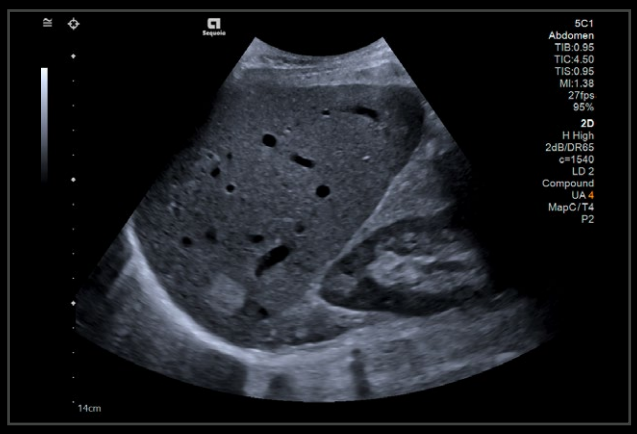
UltraArt image processing

Ultrasound the way you want it: real-time, six-choice display for your imaging aesthetic preferences at the touch of a button.

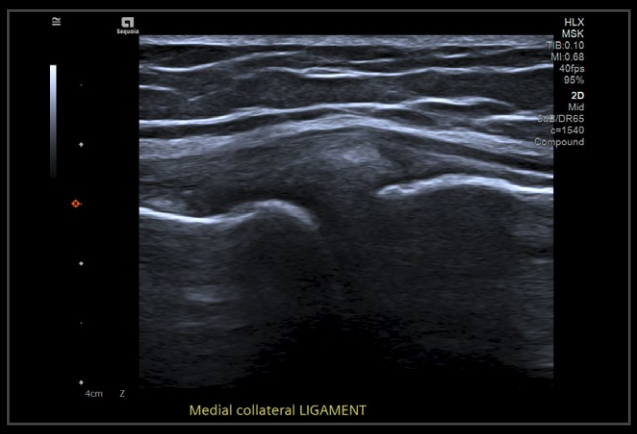
Small Parts, breast, vascular MSK superficial –
HLX high-frequency linear with a narrow shape for tight access

Pediatrics and small adults –
improved intercostal scanning in kids with a 15% smaller lens[1]

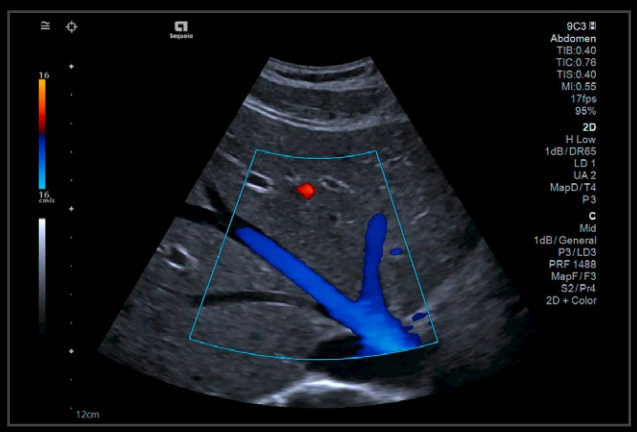
Neonatal and small adults –
small footprint with superb imaging for managing tiny acoustic windows



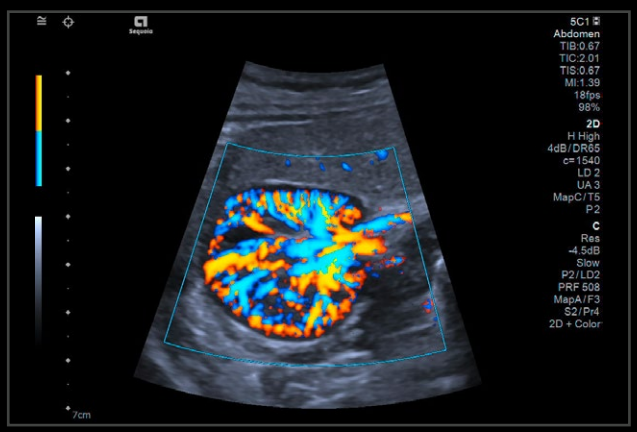
InFocus imaging
Fully focused imaging of the liver and right kidney utilizing InFocus technology that delivers image uniformity throughout the field of view.



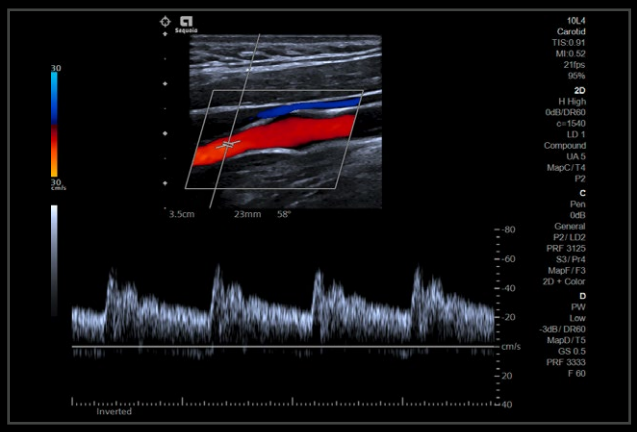
High-frequency linear transducer
Utilizing the high-frequency HLX transducer, structures can be visualized in greater detail resolution as shown in this image of the medial collateral ligament.



AutoFlash color suppression technology
Reduced color flash artifacts without user interaction for improved color sensitivity and performance, even when a patient is actively breathing.

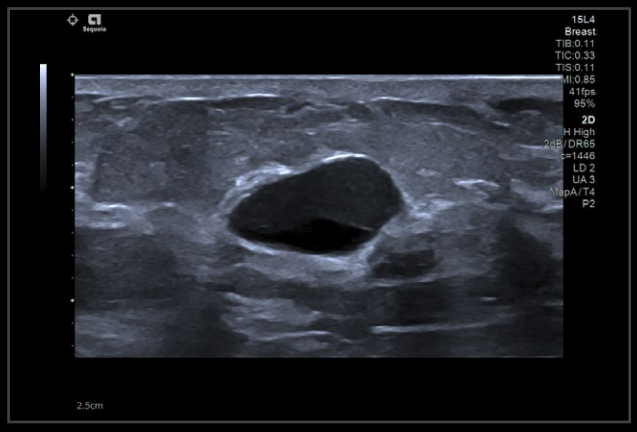


Slow Flow color Doppler
Using smart filters and adaptive signal enhancement, Slow Flow can image smaller, low-flow vessels further into tissue like this kidney.



Auto Doppler and Auto Spectral
Auto Doppler can reduce the number of exam keystrokes by more than 25%.[2] It automatically places the Doppler gate for fast and accurate sampling of the flow velocity. Auto Spectral Doppler automatically optimizes the gain, baseline, scale, and wall filter, keeping operator adjustments to a minimum.

Auto Calcs
Delivers comprehensive measurements of complex lesions. Uses a machine learning algorithm that instantly calculates maximum length, AP, and circumference improving measurement efficiency and variability.

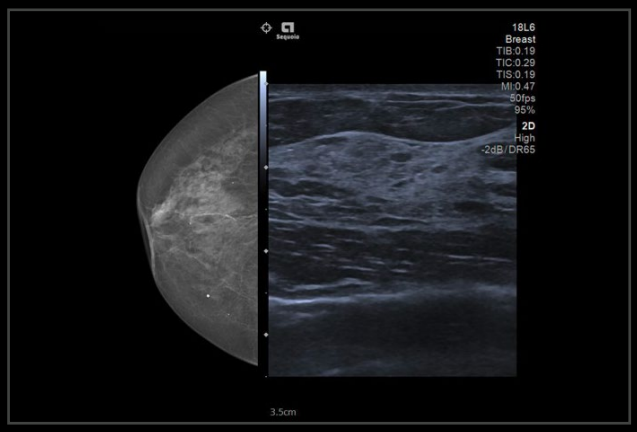


Speed of Sound adjustment
Adjusting the speed of sound can improve contrast and detail resolution, which allows for the most accurate representation of different types of tissues, as shown in this image of a breast mass.

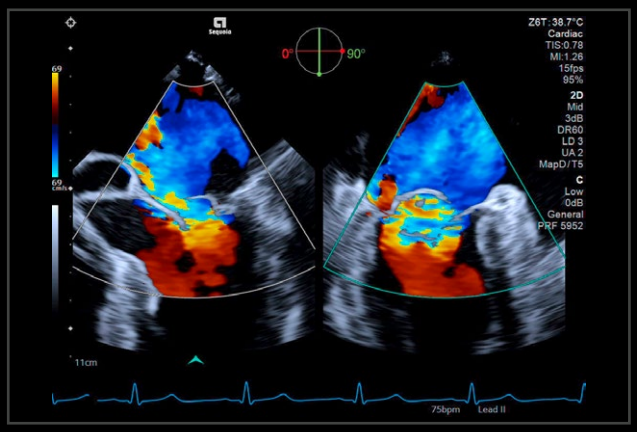
Wide-field-of-view imaging
Wide-field-of-view imaging, as demonstrated here with the Deep Abdominal transducer (DAX), offers an extended view of anatomy with one simple touch of a button.

Volume imaging
3D/4D imaging allows you to visualize anatomy in new dimensions for improved confidence, as demonstrated in this surface rendering of an early OB.

Single-crystal technology
See highly detailed resolution like never before with the 11M2 microconvex transducer, as shown in this midline image of a pediatric pancreas.



Modality Compare
Easily pinpoint regions of interest and improve procedural efficiency by importing and viewing previous patient studies alongside real-time ultrasound images.



Bi-plane with color Doppler
Bi-Plane+ image of a mitral valve prolapse with color Doppler demonstrates severe regurgitation utilizing the Z6T transesophageal transducer.

Expanded insights

Advanced tools and applications
that deliver deeper clinical insights

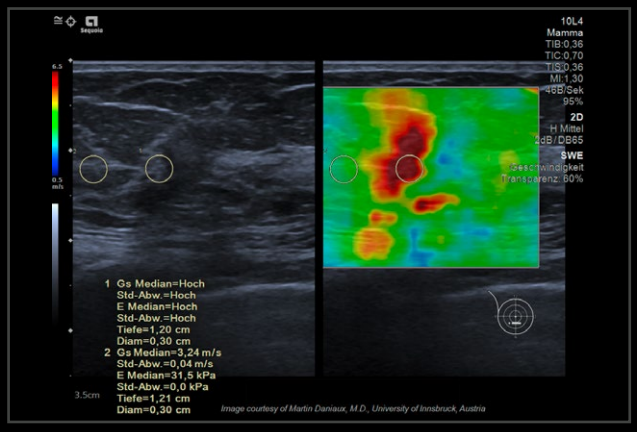
Improve diagnostic confidence

The ACUSON Sequoia ultrasound system is designed for outstanding performance and features, including AI for abdomen and shared services, contrast-enhanced ultrasound (CEUS), and elastography. It sets a new standard in quantifying liver fat through ultrasound-derived fat fraction (UDFF).

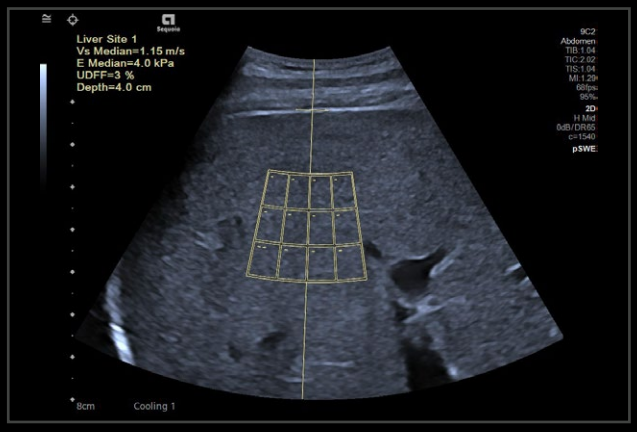
With its industry-defining performance, the ACUSON Sequoia system enables healthcare professionals to access the clinical information needed for personalized precision medicine.

ACUSON Sequoia is addressing clinical use cases leveraging the comprehensive advanced applications toolbox that it offers – from quantification and characterization of tissue to interventional procedures.

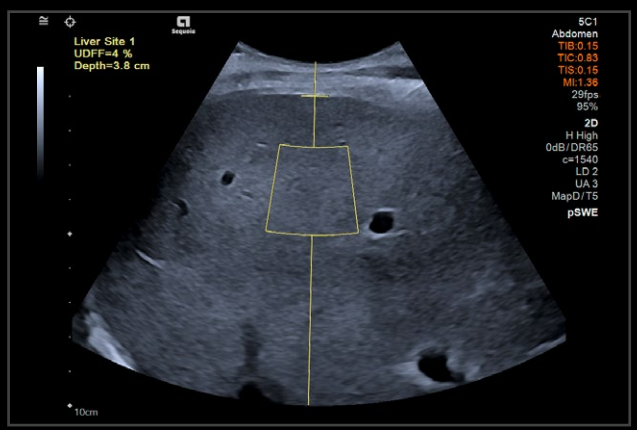
Next-generation breast 2D SWE helps characterize breast lesions as benign or malignant.



Next-generation 2D SWE
Experience greater sensitivity in the detection and visualization of malignant breast lesions with next-generation breast elastography.

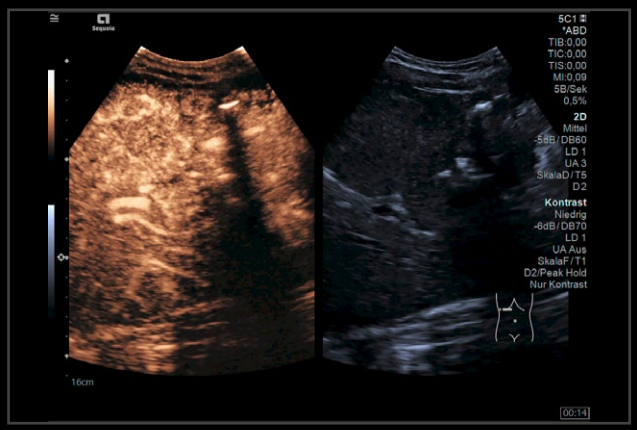


Auto pSWE
Rapidly reduce liver elastography acquisition time by up to 75%[1] by acquiring up to 15 valid pSWE measurements in less than 5 seconds[1].

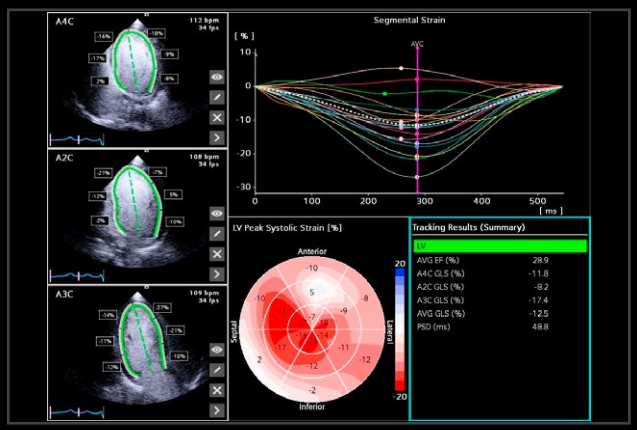


Ultrasound-derived fat fraction (UDFF)
UDFF shows good agreement with magnetic resonance imaging proton density fat fraction (MRI-PDFF) in adults and children.

AI Abdomen
AI-powered imaging recognizing and labeling 17 views in a routine abdominal exam, along with placing a body marker on the image. It can be used with or without protocol scanning.



Contrast-enhanced ultrasound (CEUS)
CEUS provides clinicians with relevant, real-time information about blood flow and tissue perfusion to help improve the treatment of patients with liver disease.



2D Heart^{AI} – Contrast quantification
The AI-powered 2D Heart^{AI} application provides single-click analysis of size, function, and bull's-eye analysis with segmental strain curves. Measurements can be performed on contrast-enhanced images without the need of an ECG.

User-driven design

Increase productivity with built-in automation and AI

1-click registration

Machine learning technology automatically selects the correct transducer and exam type for a patient scan supporting a seamless workflow.

Gesture-detecting transducers

Tap on the transducer handle to quickly activate and start scanning with the ACUSON Sequoia ultrasound system's unique sensor technology.

Virtual workstation

Establish a connection to a remote computer or server to access remote applications directly from the ultrasound system.

Convenient storage areas

Multiple on board storage options include storage bin, storage shelf, double wipes barrel storage, and back pocket.

Easy-access air filter

The air filter is located on the side of the system for easier access when cleaning. No more crawling behind the system to clean the filter.

Central locking and steer pedals

A central locking mechanism eliminates the need to lock each wheel individually, enhancing maneuverability.

Barco medical-grade monitor

Dual-layer technology medical imaging display brings image consistency from the exam room to reading room.

Intuitive touch control panel

Touch screen controls provide an enhanced user interface that improves ergonomics and workflow.

Adjustable controls

Designed to adjust to users and room conditions, the main controls can be raised and lowered while powered off; they can swivel 180 degrees for improved ergonomics in tight spaces.

Customer services

Beyond service. Peace of mind.

Choosing Siemens Healthineers as your ultrasound service partner gives you more than performance reliability. With our partnership comes dedication to helping you advance patient care.

Partnering with Siemens Healthineers means:

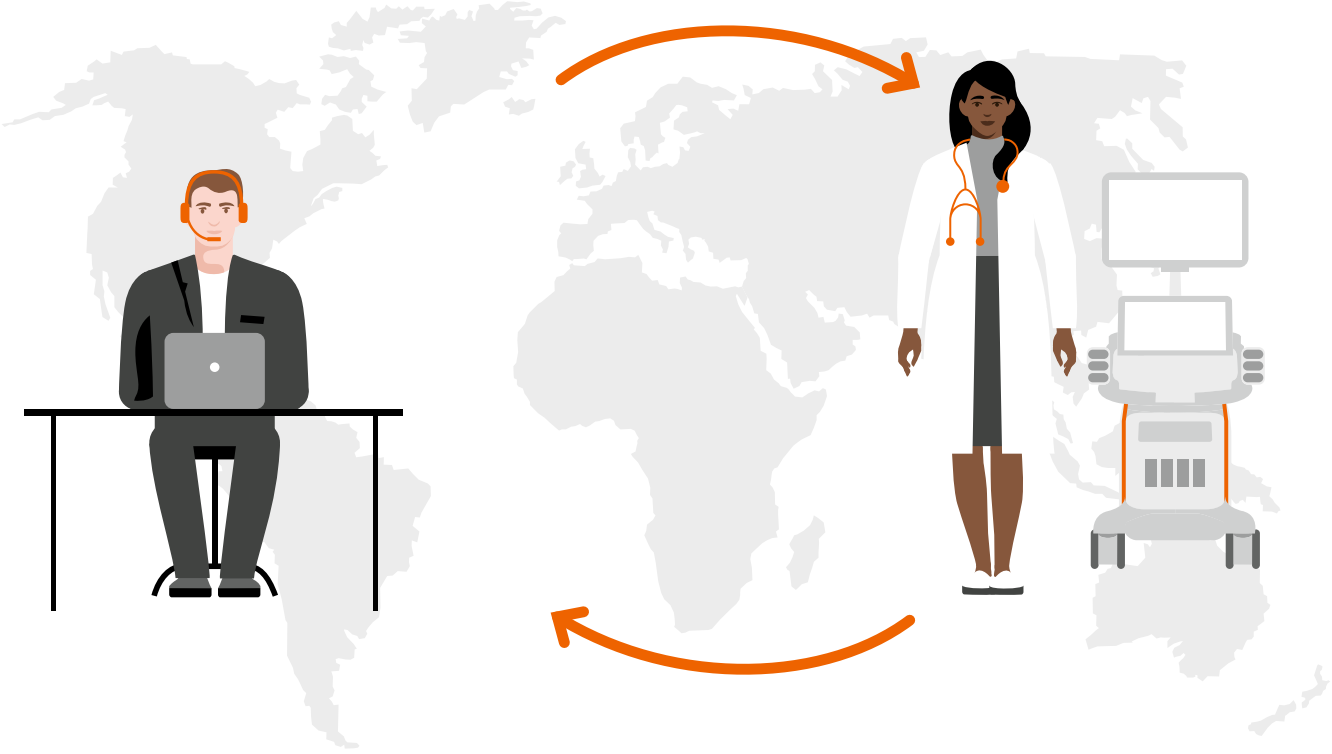
- Optimized uptime, including real-time service resolution through remote connection
- Access to our fleet management portal
- Online courses to stay up to date with your systems
- Service contracts to protect your investment

With Siemens Healthineers, you gain a trusted partner committed to your success and the excellence of your patients' care – giving you ultimate peace of mind.

Kinectus Remote Service

Kinectus Remote Service is a secure, easy-to-use, cloud-based solution that keeps your ultrasound system connected, your software up to date, all while minimizing service costs and adhering to current security and compliance guidelines.

Powered by Amazon Web Services (AWS), Kinectus service enables quicker resolution via remote technical support and remote application support. It also provides faster updates through on-demand and automatic remote software updates – all with a secure connection.



teamplay Fleet

teamplay Fleet is an online portal supporting easy management of service, cybersecurity, and evolution of your Siemens Healthineers fleet. It is available 24 hours daily from any device.

Digital education with PEPconnect

Personalized education and performance experience to increase staff competency, efficiency, and productivity.

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.

Standalone clinical images may have been cropped to better visualize pathology.

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leader in medical technology, we want to advance a world in which breakthroughs in healthcare create new possibilities with a minimal impact on our planet. By consistently bringing innovations to the market, we enable healthcare professionals to innovate personalized care, achieve operational excellence, and transform the system of care.

Our portfolio, spanning in vitro and in vivo diagnostics to image-guided therapy and cancer care, is crucial for clinical decision-making and treatment pathways. With the unique combination of our strengths in patient twinning1, precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the greatest challenges in healthcare. We will continue to build on these strengths to help overcome the world's most threatening diseases, enable efficient operations, and expand access to care.

We are a team of more than 73,000 Healthineers in over 70 countries passionately pushing the boundaries of what is possible in healthcare to help improve the lives of people around the world.

[1] *Personalization of diagnosis, therapy selection and monitoring, aftercare, and managing health.*

[1] *Data on file.*

[2] *Data on file. Keystroke is defined as any interaction with the ultrasound machine including touchscreen taps and swipes, mouse movement, flat key presses, soft key twists, and soft key presses.*

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