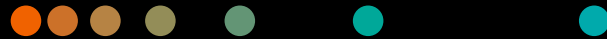


ACUSON Sequoia Ultrasound System

**Intelligent Imaging.
Expanded Insights.
User-Driven Design.**



Clarifying Confidence

Designed to address today's challenges in ultrasound imaging

Experts agree that a conventional one-size-fits-all approach to patient care falls short of addressing the challenges of demanding caseloads, patient diversity and user variability.

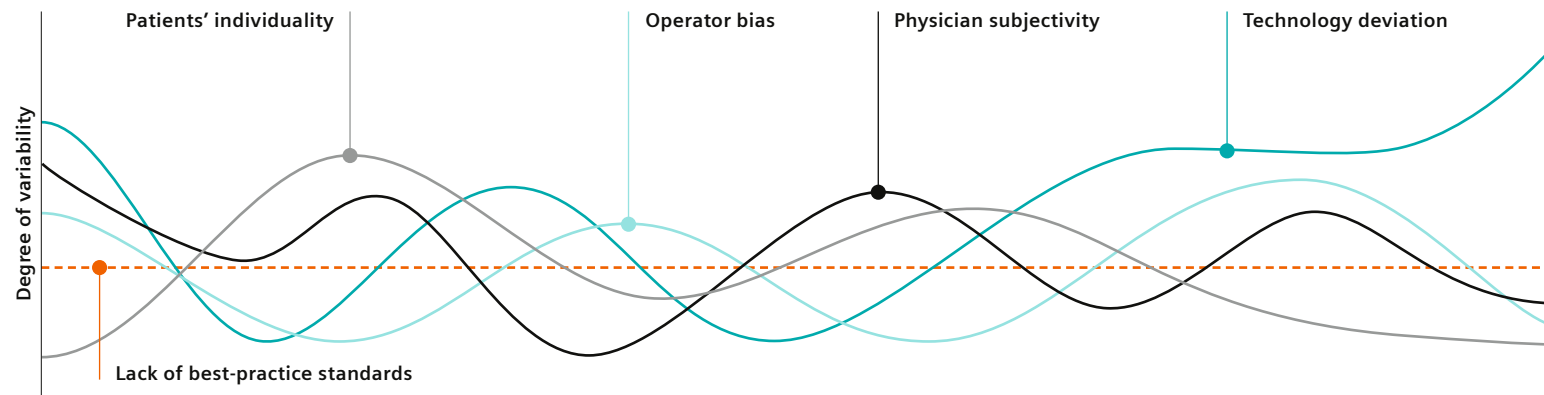
Healthcare providers want advanced technologies and applications that intelligently respond to both patient- and user-specific needs. Tailoring diagnosis and therapies to each patient's individual profile helps to improve clinical, operational and financial outcomes.

Get a clearer, deeper perspective than conventional ultrasound with the ACUSON Sequoia. Optimize your imaging with transducers designed for your specific clinical use cases.





Ultrasound's potential has been hampered and plagued by unwarranted variability



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

Ultrasound devices are complex products. Differences in technology can inhibit the 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.

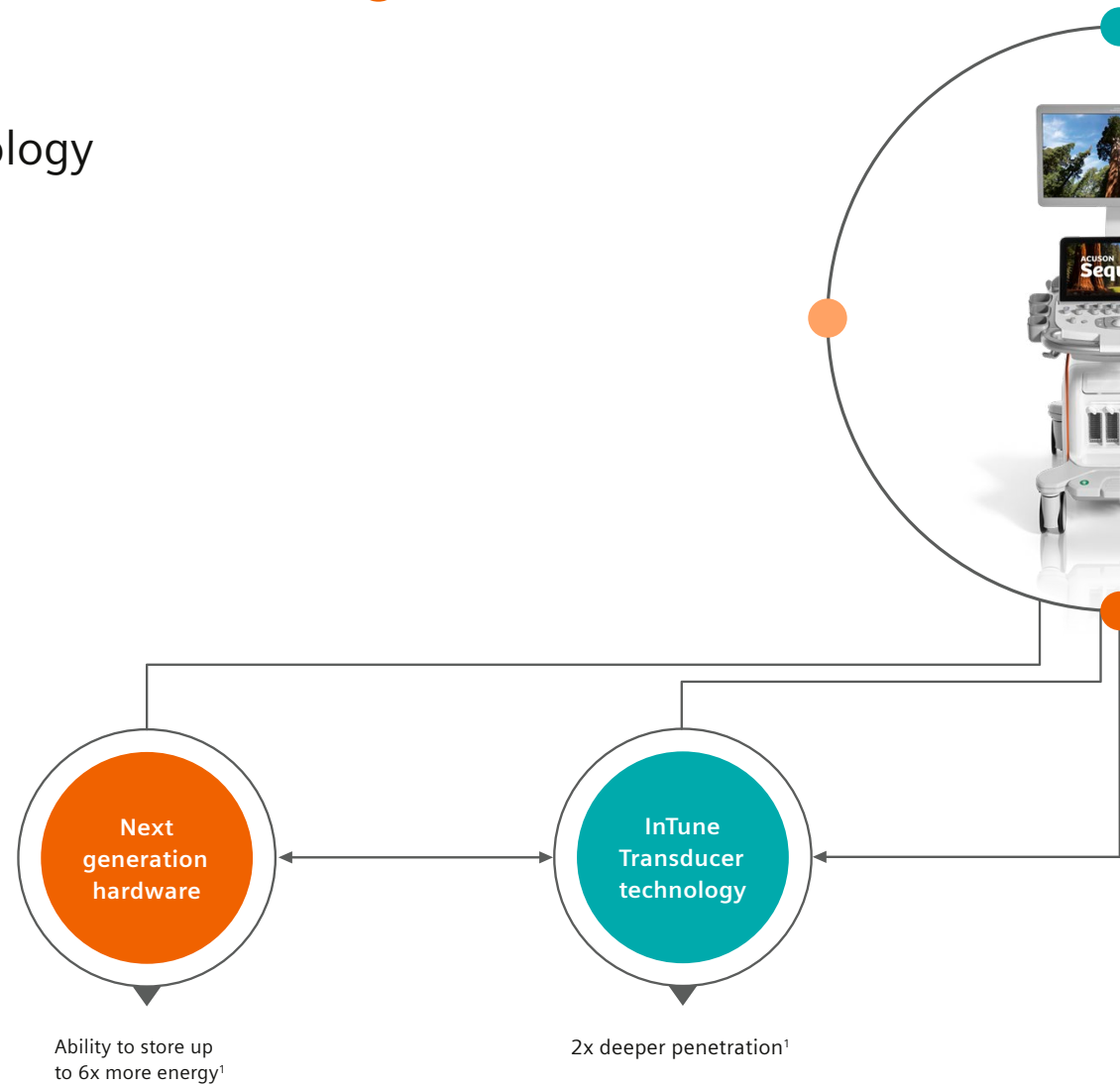
Intelligent Imaging. Expanded Insights. User-Driven Design.

Powered by BioAcoustic imaging technology

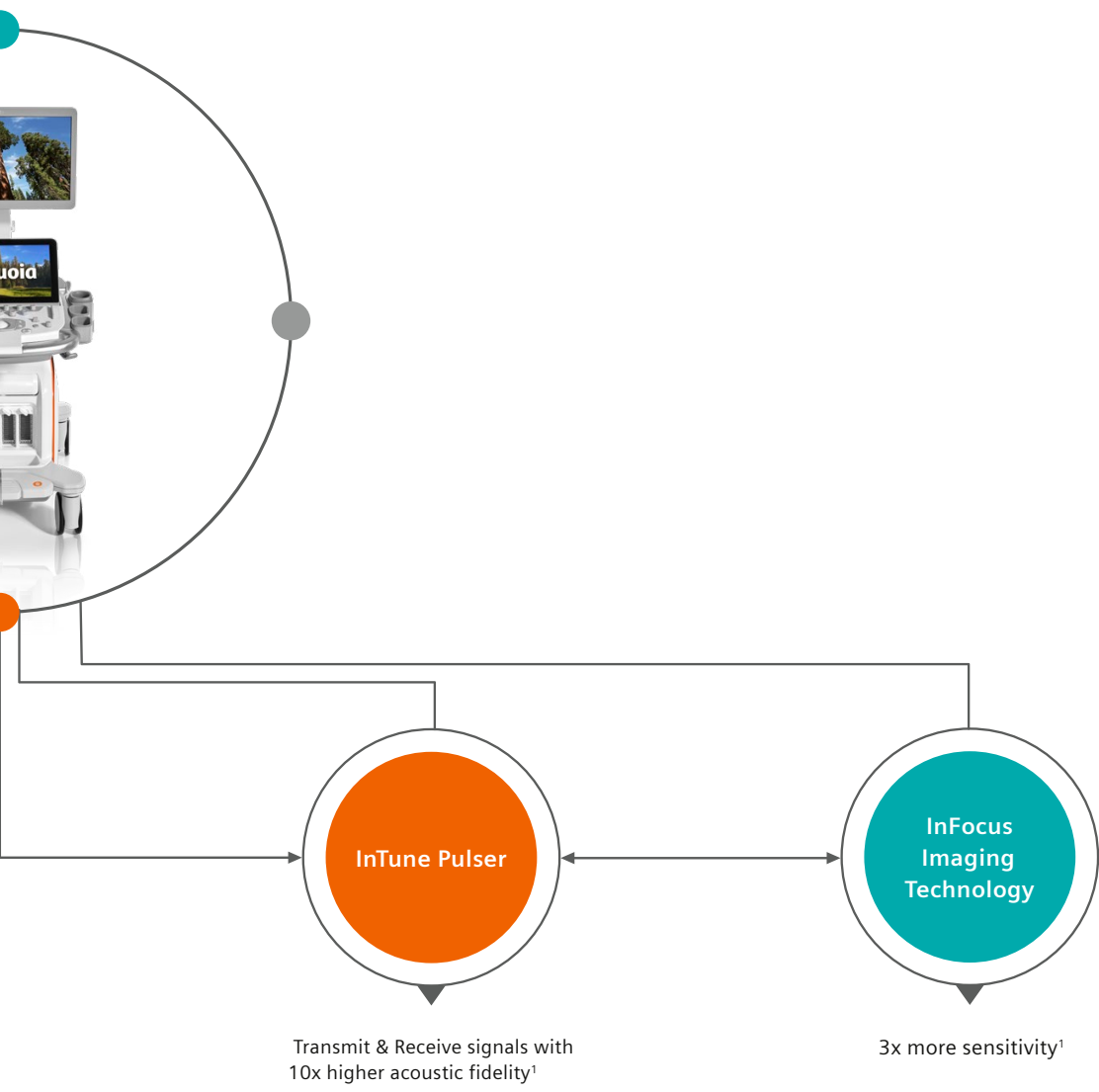
Boost your clinical confidence with a system designed to enhance your expertise. The ACUSON Sequoia gives you the power to know more by maximizing the sensitivity and depth of your scans, while reducing variability across patients, systems and users.

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

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



¹ Data on file.



 **Intelligent Imaging**

Diagnostic confidence is improved with deeper and clearer images using BioAcoustic imaging.

 **Expanded Insights**

Personalized advanced applications expand your clinical information with advanced imaging technologies that improve patient outcomes.

 **User-Driven Design**

User designed experiences that improve workflow usability.

Intelligent Imaging

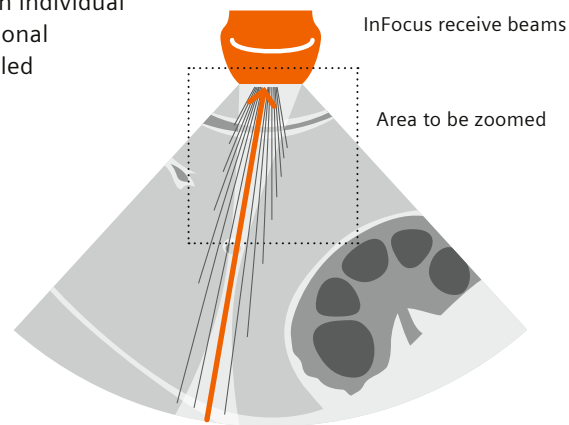
InFocus Imaging and InTune Transducer Technology for all patients

Fully focused images in record time

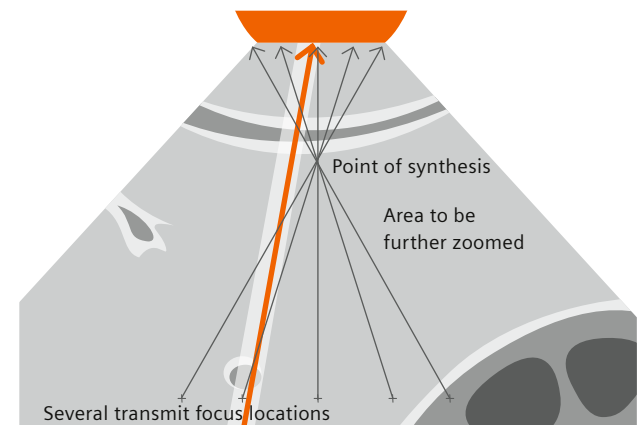
The ACUSON Sequoia ultrasound system's powerful architecture eliminates the need for conventional focal zones to create a fully focused image with faster frame rates than conventional systems.

InFocus uses synthesized, retrospectively focused transmit beams throughout the field of view that focuses at all depths. More information is harvested from the usual transmit sequence, using massive overlapping multibeam groups rather than individual or close parallel beam lines as in conventional systems. Secondary beamforming is enabled

with InFocus and physics-based delay technologies. Amplitude corrections can be made across transmit events to significantly sharpen the image and improve spatial resolution beyond what is typical for a given transducer frequency.



InFocus utilizes multiple simultaneous receive beams covering a region with a single transmit.



Many receive beams per transmit event leads to many interrogations per image point.

Get clearer deeper perspective

Next generation transducers specifically designed to produce optimal acoustics for each clinical use case. The acoustic matching between transducer and patient was optimized using advanced materials science and optimized test protocols, together with the electrical signal path between the transducer and system, resulting in superior signal fidelity.

Compact-pinless connectors further improve signal-to-noise ratio and feature one-handed plug and play connection.



DAX – a transducer so unique we had to give it its own name.



7L2 – deep linear transducer for additional diagnostic confidence.

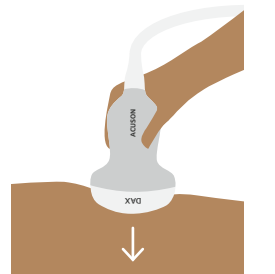
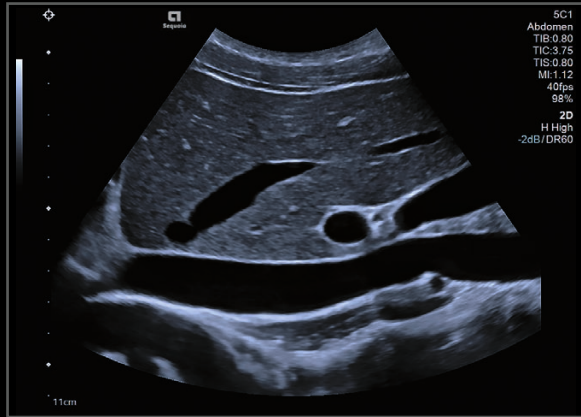


Image to deeper depths – up to 55 cm with DAX.

Boost your clinical confidence

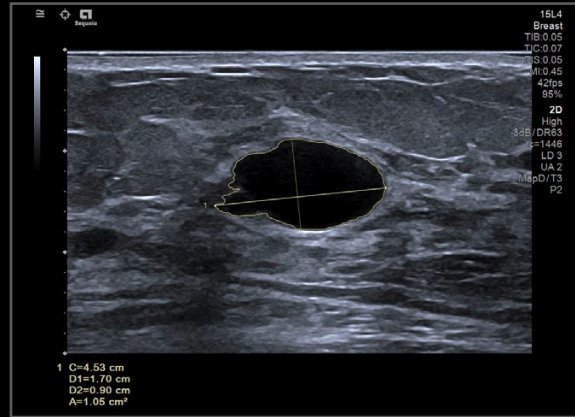
Scanning technically difficult patients can be a daily challenge for many ultrasound users. The innovative DAX and new 7L2 deep linear transducers are dedicated tools that allow you to see deeper, providing diagnostic confidence when you need it most.





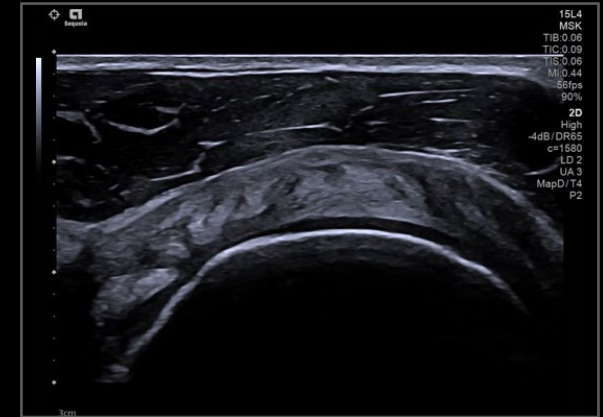
InFocus Imaging

Fully-focused imaging of the liver and IVC utilizing InFocus Technology that delivers image uniformity throughout the field of view.



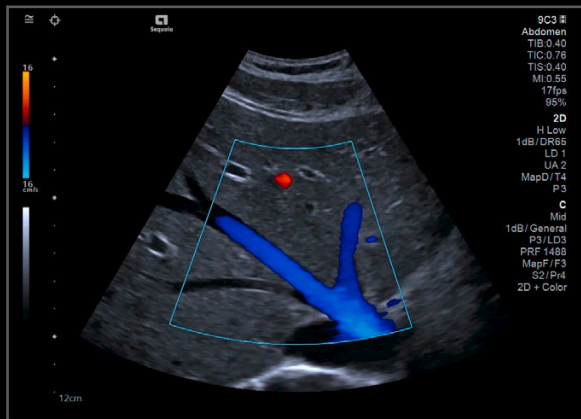
eSieCalcs

Fully-focused imaging of the thyroid utilizing InFocus Technology and eSieCalcs. eSieCalcs uses pattern recognition technology to find the borders of a mass, which may allow for quicker and more consistent measurements.



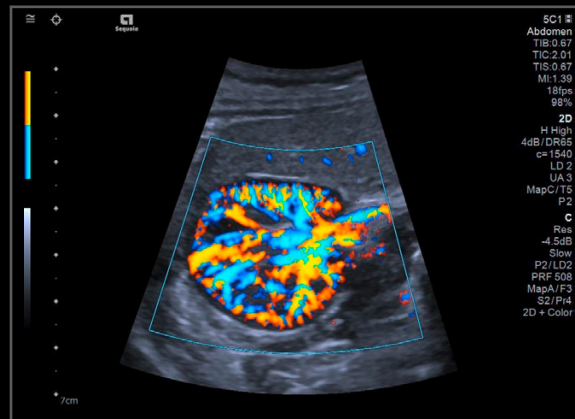
High Frequency Linear Transducer

Utilizing the high frequency 18L6 transducer, structures can be visualized in greater detail resolution as shown in this image of the supraspinatus tendon.



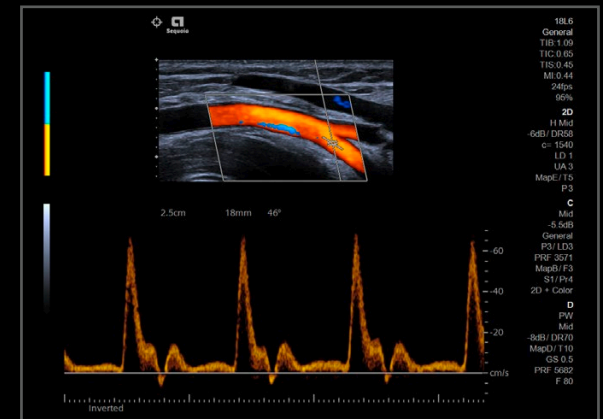
Color Flash Suppression Technology

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



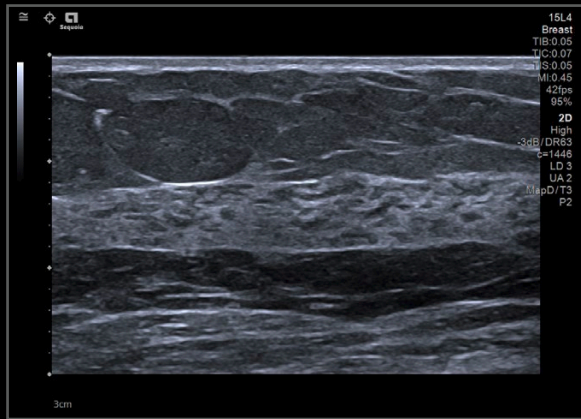
Slow Flow Color Doppler

Using smart filters and adaptive signal enhancement, slow flow can image smaller, low-flow vessels further into tissue like this kidney with reduced flash artifact.



Doppler TEQ

Visualize clean and clear Doppler waveforms thanks to Doppler TEQ. Scale, gain and baseline are adjusted automatically with full post-processing capabilities.



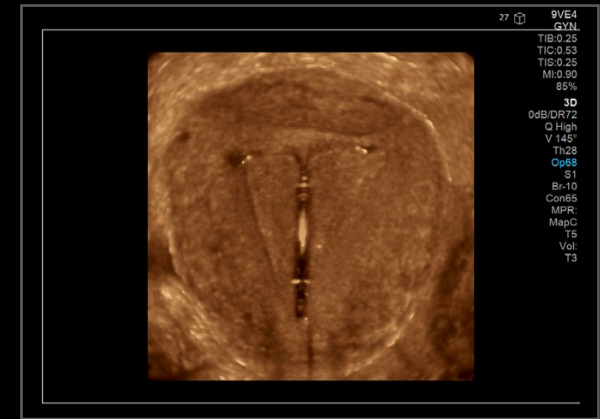
Speed of Sound Correction

Adjusting the speed of sound improves contrast and detail resolution, which allows for the most accurate representation of different types of tissues, as shown in this image of a breast.



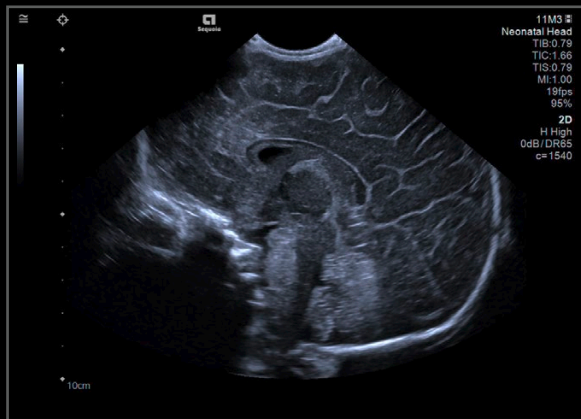
High Frequency Curved Transducer

The new 9C2 high frequency curved single crystal transducer provides superior contrast resolution in obstetric imaging.



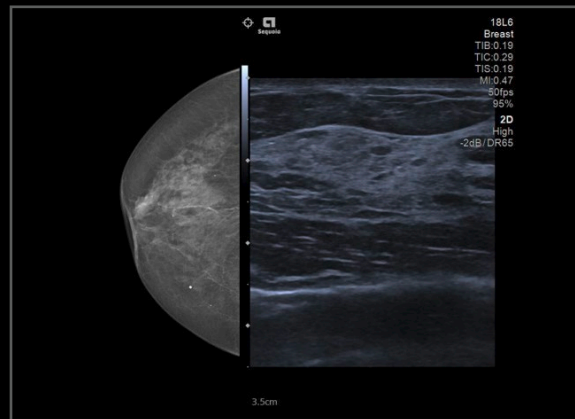
Volume Imaging

3D/4D imaging allows you to visualize anatomy in new dimensions for improved confidence as demonstrated in this coronal view of an IUD.



Single Crystal Technology

See highly detailed resolution like never before with the 11M3 micro-convex transducer as shown in this midline image of a neonatal head.



Modality Compare

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



Cardiac Imaging

An apical four chamber view with the 8V3 pediatric cardiac transducer offers exceptional tissue definition, valvular detail and blood flow visualization.

Expanded Insights

Designed to enhance your expertise

Improve diagnostic accuracy and confidence

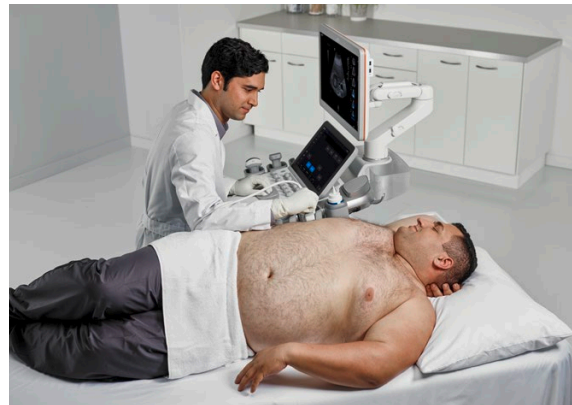
The ACUSON Sequoia ultrasound system was built from the ground up with dedicated hardware for exceptional performance in applications such as contrast enhanced ultrasound (CEUS) and elastography, and is setting a new benchmark in the quantification of liver fat with Ultrasound Derived Fat Fraction (UDFF).

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

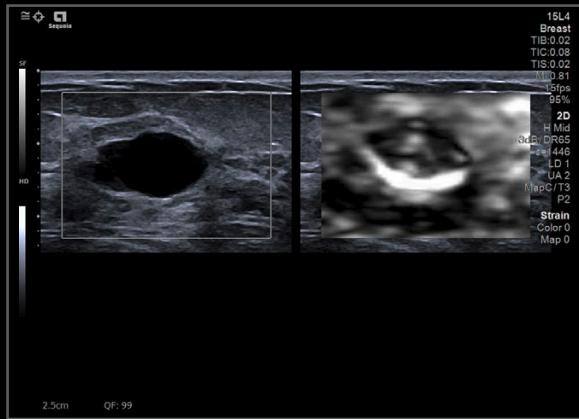
The ACUSON Sequoia is addressing clinical use cases leveraging the comprehensive advanced applications toolbox offered by the ACUSON Sequoia ultrasound system – from quantification and characterization of tissue to interventional procedures.



Tissue characterization using CEUS imaging can lead to faster diagnosis.

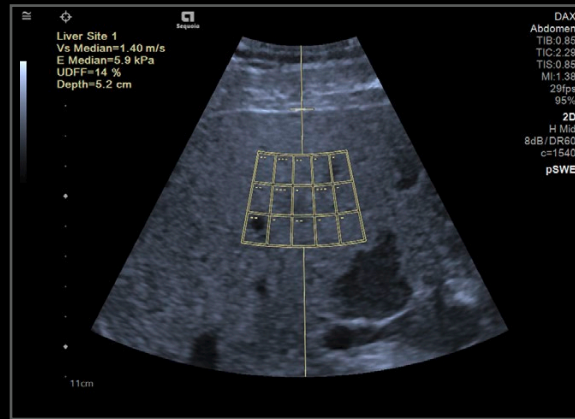


Tissue quantification using shear wave elastography imaging can improve diagnostic results while reducing costs.



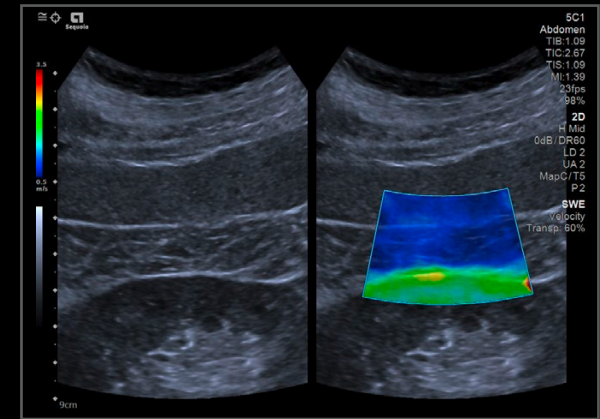
Virtual Touch Strain Elastography

Provides a simple and qualitative measurement of lesion stiffness relative to the surrounding tissue as demonstrated in this image of a breast cyst.



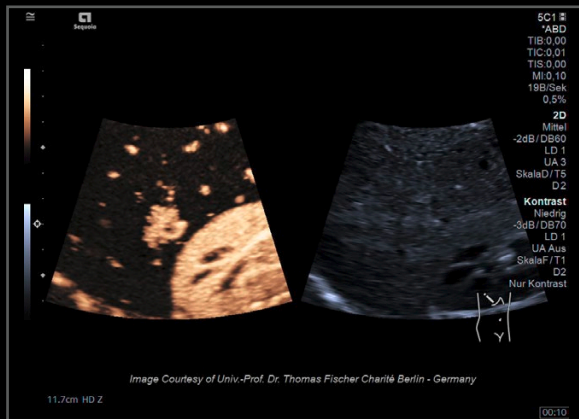
Auto pSWE and UDF

Rapidly reduce liver elastography acquisition time with a liver fat assessment tool that helps reduce time and operator variability by acquiring up to 15 valid pSWE measurements in less than 5 seconds.



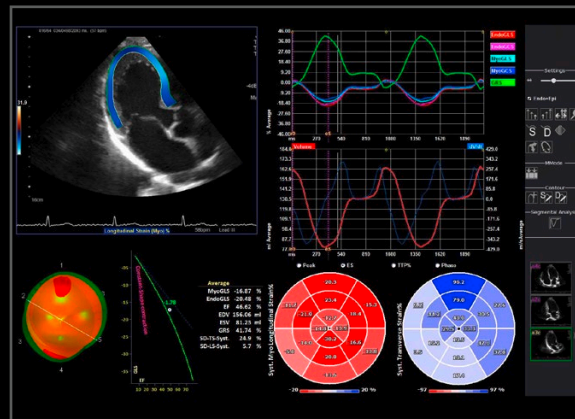
Virtual Touch 2D SWE

Display qualitative and quantitative color maps to measure shear wave speed with precision and repeatability, as demonstrated in this example between the perinephric fat and renal cortex.



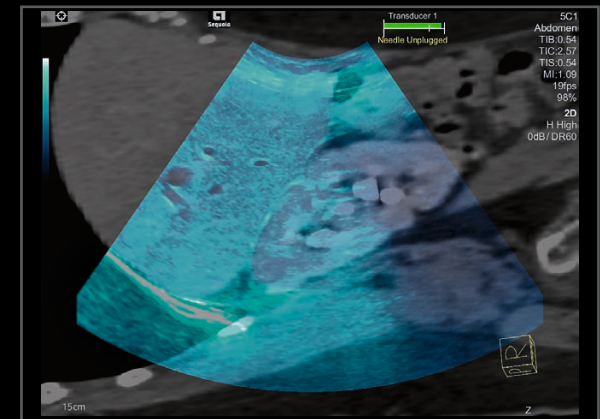
CEUS Imaging

In contrast imaging, the ACUSON Sequoia ultrasound system has twice the sensitivity than previous systems for improved diagnostic confidence¹.



Velocity Vector Imaging

Assess myocardial motion and mechanics with global longitudinal strain (GLS), global circumferential strain (GCS), and global radial strain (GRS) using semi-automated syngo VVI.



Fusion Imaging

Combine imaging modalities as demonstrated in this example of CT and ultrasound fusion for improved diagnostic confidence.

¹ Compared to ACUSON Sequoia 512 ultrasound system



User-Driven Design

Power your performance

The variability inherent in the ultrasound scanning process can pose a challenge for users. In an effort to eliminate variability, Siemens Healthineers hosted 170 workshops with 365 ultrasound users worldwide to create an ultrasound system designed by users, for users.

Leveraging automation, machine learning and listening to ultrasound users, every detail was re-imagined to reduce complexity and improve the user experience.

Preferred by users

Overall usability of an ultrasound system determines how well advanced technologies and diagnostic tools are able to expand healthcare professional's clinical capabilities. The ACUSON Sequoia ultrasound system was evaluated by an independent user experience design and development company in terms of user performance and user satisfaction.

The ACUSON Sequoia ultrasound system earned a system usability score (SUS) of 86% and user preference score of 82%, scoring higher than the conventional ultrasound systems participating in the study.¹

Sonographers are in pain

Everyone has the right to work and be safe from injury.

90%

of sonographers experience work-related pain for more than half of their career



20%

sustain a career ending work-related injury



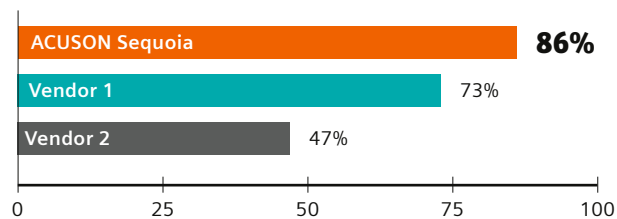
¹ Macadamian Usability Test Study using the ACUSON Sequoia. Study result data on file. More information also available at macadamian.com.



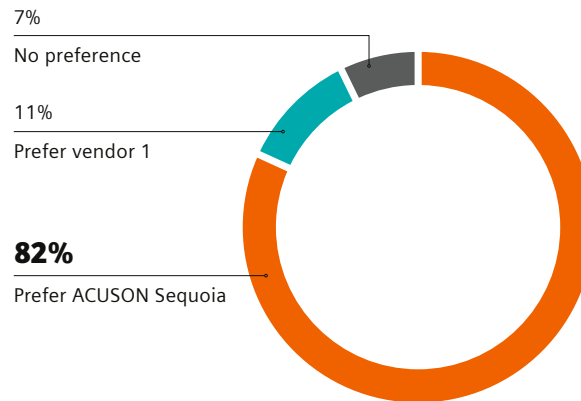


More information: macadamian.com

Average system usability score



User preference





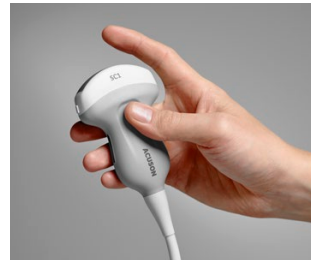
User-Driven Design

Increase productivity with built in automation and AI



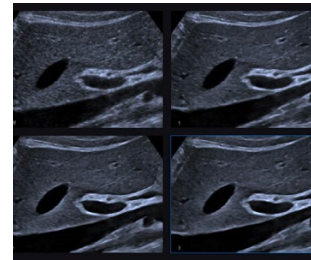
1-touch registration

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



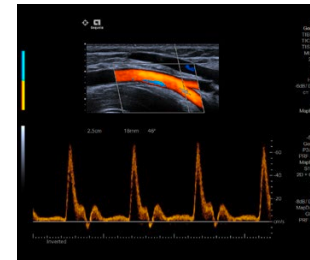
Gesture detecting transducers

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



UltraArt real-time quad-display

Exclusive UltraArt universal image technology allows users to select their image preference from a real-time touch screen display.



Doppler TEQ

Visualize clean and clear Doppler waveforms thanks to Doppler TEQ. Scale, gain and baseline are adjusted automatically with full post-processing capabilities.



Virtual Workstation

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

OLED monitor

High-dynamic range display with wide viewing angle.

Large intuitive touch display

A 15.6" touch display gives you more space to define your own intuitive workflow.

Floating control panel

Designed to fit every room and workflow, the control panel can swivel 180 degrees for a seamless workflow.

Central locking and steer pedals

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



Multiple storage areas

2 integrated storage bins and storage shelf option.

Integrated gel warmer

An integrated gel warmer which can be placed on either side of the system.

Optional ECG leads and pencil port

Shared-service cardiac functionality.

Compact Pinless connector ports

Improved signal to noise ratio and easy one handed connection.



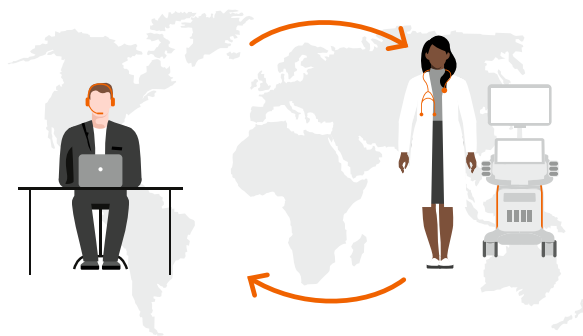
User-Driven Design

Solutions designed for maximum performance

Smart Remote Services (SRS) powered by eSieLink

SRS is the foundation for connecting your ultrasound system with a global Siemens Healthineers team of technical and application experts.

A secure SRS network connection allows for faster service response time, interactive application support and remote software updates. SRS enables the latest system software and performance enhancements reducing system down time and the ability to remotely monitor and improve system optimization.



¹ Subscription required. Availability of subscription depends on country.

teamplay Fleet

teamplay Fleet is a digital health platform solution that enables you to streamline the management of your fleet and optimize asset performance holistically—24/7.

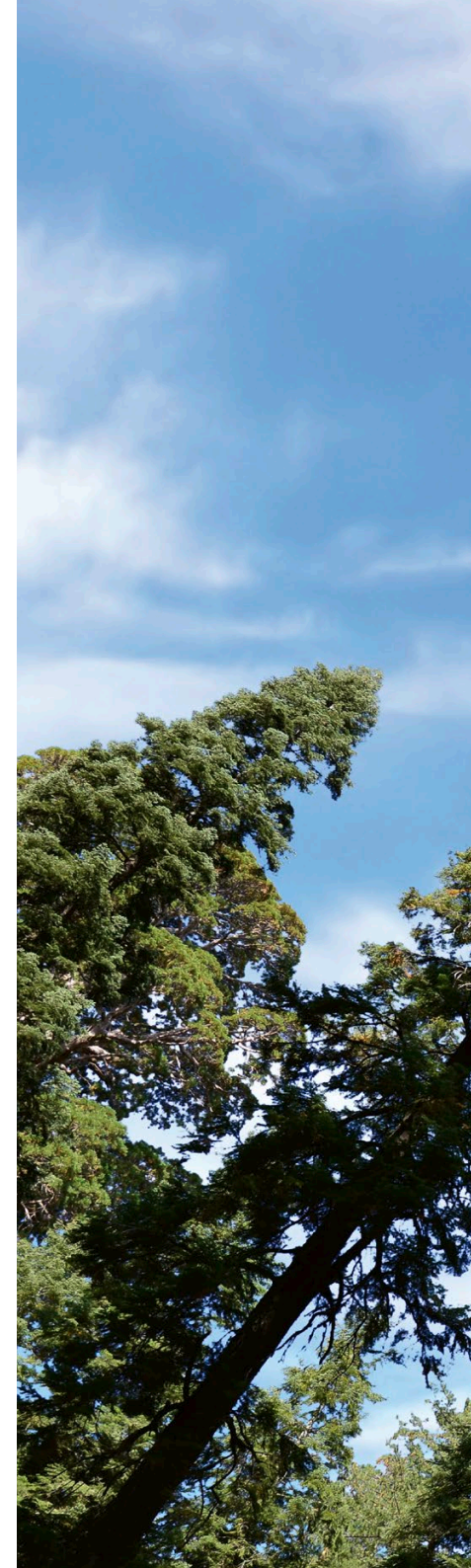
Digital education with PEPconnect

Engage in learning activities and earn credits at any time and on any device for a personalized learning experience with PEPconnect and PEPconnections¹. Access a workforce education management plan as well as analytics and progress report tracking.

Designed for Growth

Built for the future, the ACUSON Sequoia Ultrasound System offers Evolve – a technology anti-obsolescence program that keeps your ultrasound systems updated with the latest software upgrades and feature enhancements. Evolve is an add-on option to qualified Service contracts.

With this program, Siemens Healthineers helps you to improve patient outcomes and productivity, protect your investment, optimize operating costs, increase system security, and simplify technology management.







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.



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 scientific overlay is not that of the individual pictured and is not from a device of Siemens Healthineers.

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.

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