

# Secure your care

## Samsung Healthcare Cybersecurity

### Bringing peace of mind to your hospital and patients

To address this emerging need for cybersecurity, Samsung provides a solution to support our customers by offering the tools to protect against cyberthreats that may compromise invaluable patient data and ultimately degrade the quality of care. Samsung's Cybersecurity Solution strives to abide by the CIA triad (Confidentiality, Integrity, and Availability) and takes a comprehensive approach to providing impeccable protection with the following pillars: Intrusion prevention, Access control, and Data protection.



#### Intrusion prevention

Tools for protecting against cyber threats from external attacks

- Security tools include Anti-virus & Firewall
- Secured operating system



#### Access control

Strengthened surveillance for tracking the access of patient information

- Account management
- Enhanced audit trail



#### Data protection

Encryption functions for safeguarding data whether at-rest or in-transit

- Data protection
- Transmission security

### About Samsung Medison CO., LTD.

Samsung Medison, an affiliate of Samsung Electronics, is a global medical company founded in 1985. With a mission to bring health and well-being to people's lives, the company manufactures diagnostic ultrasound systems around the world across various medical fields. Samsung Medison has commercialized the Live 3D technology in 2001 and since being part of Samsung Electronics in 2011, it is integrating IT, image processing, semiconductor and communication technologies into ultrasound devices for efficient and confident diagnosis.

- This product, features, options and transducers are not commercially available in all countries.
- Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local sales network for further details.
- S-Vue Transducer™ is not the name of a function, but is the name of Samsung's advanced transducer technology.
- This product is a medical device, please read the user manual carefully before use.

1. This is an optional feature which may require additional purchase.
2. Clinical image acquired by the HS70A V1.00 ultrasound system.
3. Clinical image acquired by the HS70A V2.01 ultrasound system.
4. S-Detect™ for Breast and S-Detect™ for Thyroid are not available in Canada.  
In the United States, the Margin, Posterior Features, and Echo Pattern, the classification items of S-Detect for Breast are manual, thus these classification items are not automatically provided.  
Also the recommendations about whether results are benign or malignant in S-Detect™ are not applicable in the United States.
5. Strain value for ElastoScan+™ is not applicable in Canada and the United States.
6. Clinical image acquired by the HS70A V2.02 ultrasound system.

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# Daily inspiration

## Ultrasound system HS70A Powered by CrystalLive™



CT-HS70A V2.03-GI-IMC-201120-EN

Scan code or visit  
[www.samsunghealthcare.com](http://www.samsunghealthcare.com)  
to learn more



EXPERIENCE  
A New Healthcare  
Solution

SAMSUNG



# Powered by CrystalLive™

CrystalLive™ is Samsung's up-to-date ultrasound imaging engine with enhanced 2D image processing, 3D rendering and color signal processing, to offer outstanding image performance and efficient workflow during complex cases.

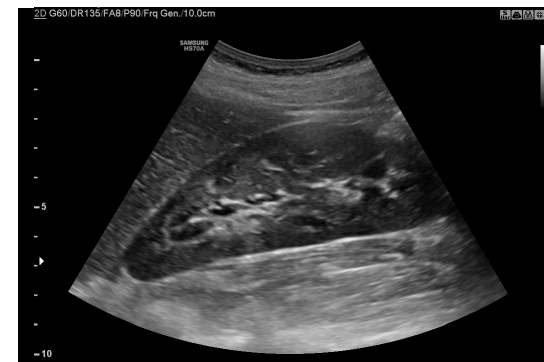
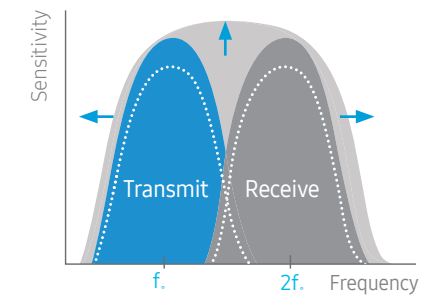


Boost diagnostic accuracy to new heights with the Samsung ultrasound HS70A with Prime. Its superior imaging performance, specialized features, and accurate quantification tools enable you to conduct a wide range of general imaging exams, from the routine to the complex.



## S-Vue Transducers™ (CA1-7A, CA3-10A, CA2-9A, CV1-8A, PA1-5A)

S-Vue Transducers™ provide more efficient piezoelectric properties, resulting in wider bandwidths that enable better penetration and higher quality resolution.



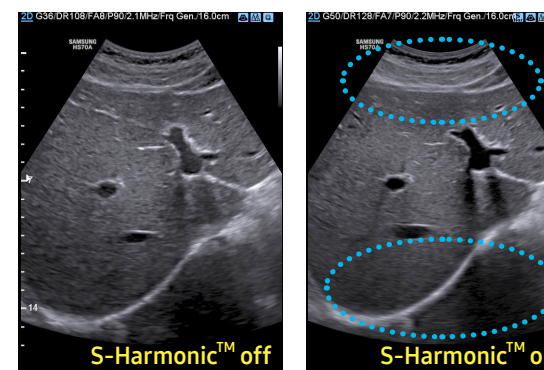
Kidney with CA1-7A<sup>3</sup>



Spine with CA3-10A<sup>3</sup>

## S-Harmonic™

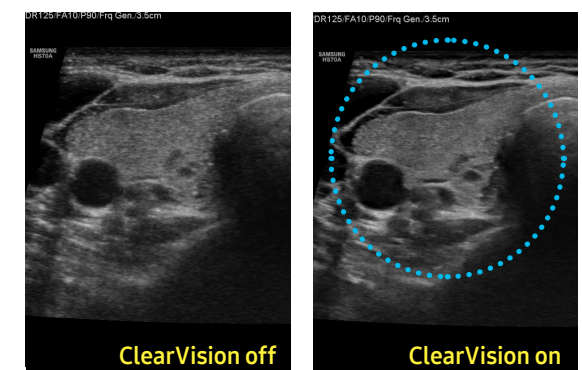
S-Harmonic™ mitigates the signal noise, enhances contrast, and provides uniform image performance of overall image area from near-to-far.



Liver<sup>2</sup>

## ClearVision

The noise reduction filter improves edge enhancement and creates sharp 2D images for optimal diagnostic performance. In addition, ClearVision provides application-specific optimization and advanced temporal resolution in live scan mode.



Thyroid<sup>3</sup>



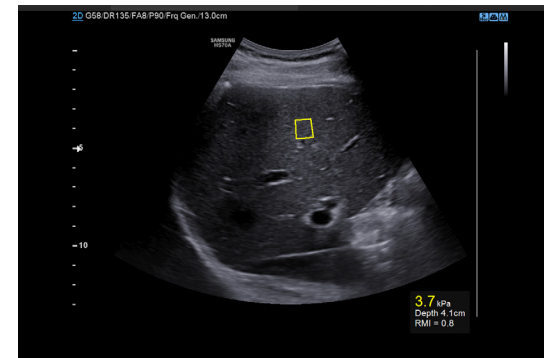
# Advanced tools for simple and precise assessment

With Samsung's S-Shearwave™ and CEUS+, precise assessment becomes easier and simpler even with difficult-to-image patients.

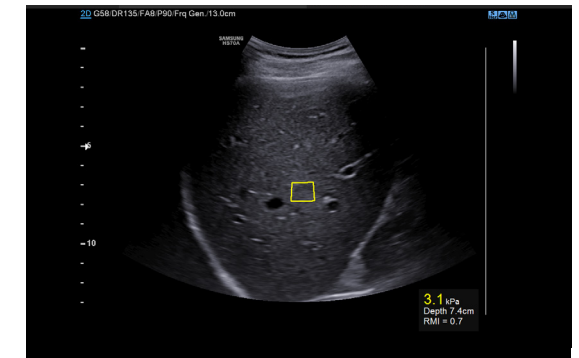


## S-Shearwave™ 1

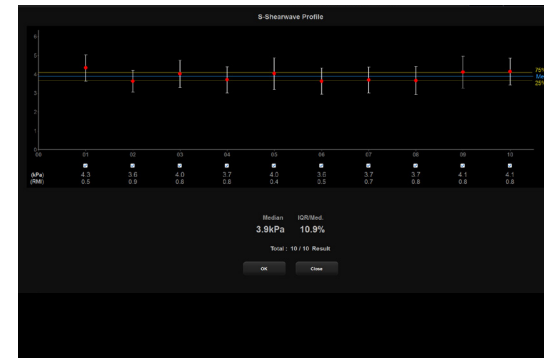
S-Shearwave™ detects the speed of the shearwave propagated through the targeted lesion and displays the numerical measurement of stiffness in kPa or m/s together with a Reliable Measurement Index (RMI)\*. A graphic profile provides an intuitive Variation Range (VR) to depict uniformity of tissue stiffness within the Region of Interest (ROI). S-Shearwave™ is non-invasive, helping you to measure liver stiffness easily.



Liver (common depth) 3



Liver (deep depth) 3



S-Shearwave™ profile 3

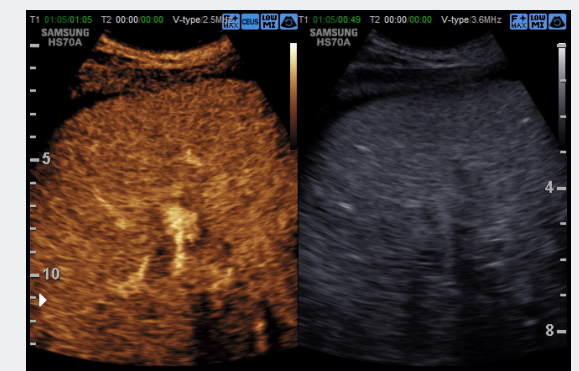
Stiffness (kPa)	Depth (cm)	RMI
4.3	3.9	0.5
3.6	3.9	0.9
4.0	3.9	0.8
3.7	3.9	0.8
4.0	3.9	0.4
3.6	3.9	0.5
3.7	3.9	0.7
3.7	4.1	0.8
4.1	4.1	0.8
4.1	4.3	0.8
1.8	7.8	0.2
3.1	7.4	0.7
3.6	4.0	0.8

S-Shearwave™ report 3

\*Reliable Measurement Index (RMI) : An indicator that computes the reliability of the calculated stiffness to support the selection of optimal measurements.

## CEUS+ 1

CEUS+ is a contrast enhancement imaging technology that utilizes the characteristics of ultrasound contrast agents. The microbubble contrast agent injected into the body through the vein or alike is subjected to perform nonlinear resonance due to stimulation of ultrasound energy. In addition to the nonlinear signal generated by this method, the ultrasound contrast image is implemented by using the harmonic signal and thus utilized for the diagnosis based on the contrast characteristics over time.



Liver with Ascites 3



# Trustworthy assistance in making the right decision

With its advanced quantification tools, the HS70A supports your knowledge and experience to help you to make clear, confident decisions.

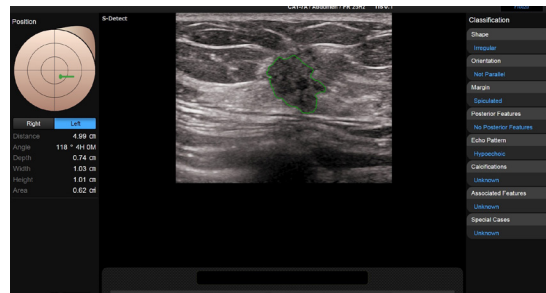


## S-Detect™

### S-Detect™ for Breast<sup>1,4</sup>

The feature, which analyzes selected lesions in the breast ultrasound study and shows the analysis data, applies BI-RADS ATLAS\* (Breast Imaging-Reporting and Data System, Atlas) to provide standardized reporting; and helps diagnosis with the streamlined workflow.

\* It is a registered trademark of ACR and all rights reserved by ACR.

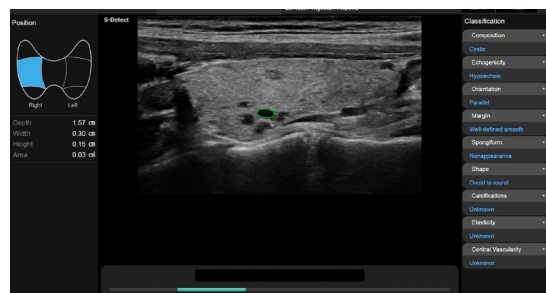


S-Detect™ for Breast<sup>3</sup>

### S-Detect™ for Thyroid<sup>1,4</sup>

The feature, which analyzes selected lesions in the thyroid ultrasound study and shows the analysis data, provides standardized reporting based on the ATA and K-TIRADS guidelines; and helps diagnosis with the streamlined workflow.

\* ATA : American Thyroid Association  
K-TIRADS : Korean-Thyroid Imaging Reporting and Data System

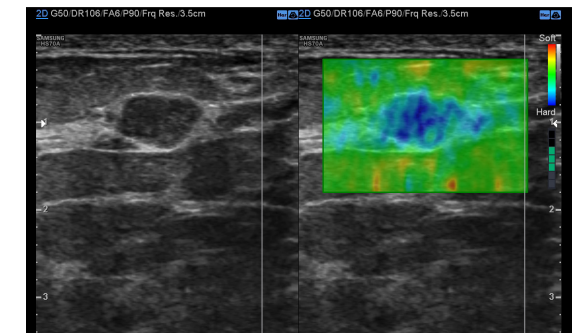


S-Detect™ for Thyroid<sup>3</sup>

## ElastoScan™

### E-Breast™ (ElastoScan™ for Breast)<sup>1,5</sup>

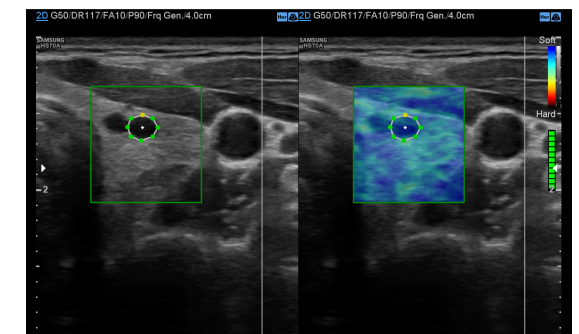
E-Breast™ is a technology that calculates the strain ratio between the selected target and surrounding fatty tissues. Especially, it requires only one ROI to be selected by the user. This simplified process enhances consistency and reduces the chance of error by eliminating the step of manual selection of the surrounding fatty tissue region.



ElastoScan™<sup>6</sup>

### E-Thyroid™ (ElastoScan™ for Thyroid)<sup>1,5</sup>

E-Thyroid™ uses the pulsations of the adjacent common carotid artery (CCA), eliminating the need for manual transducer compression and offering greater consistency in the ElastoScan™ image. E-Thyroid™ provides an elasticity contrast index that is calculated by comparing the elasticity of the lesion and normal tissue within the ROI.



E-Thyroid™<sup>3</sup>



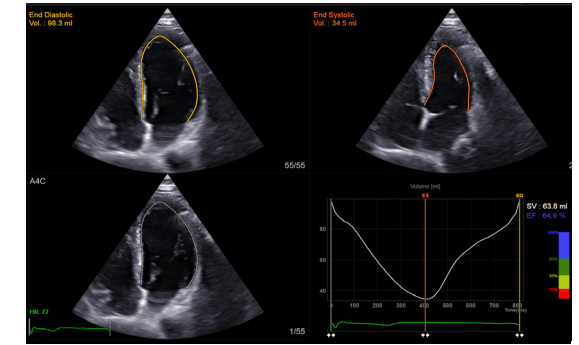
# Preventive actions

Built-in and effective functionality allows you to provide patient-focused preventative care.

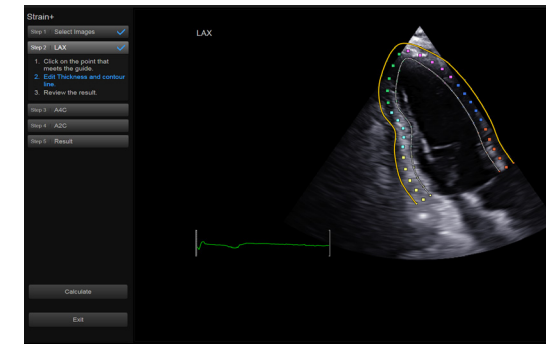


## Strain+<sup>1</sup>

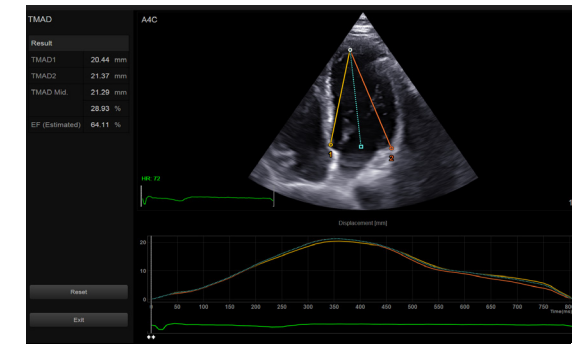
Strain+ is a quantitative tool for measuring global and segmental wall motion of the left ventricle (LV). In Strain+, three standard LV views and a Bull's Eye are displayed in a quad screen for easy and quick assessment of the LV function.



Auto EF<sup>3</sup>



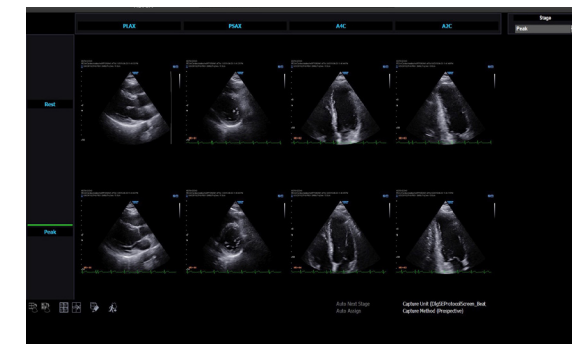
Contour edit<sup>3</sup>



TMAD<sup>3</sup>

## StressEcho<sup>1</sup>

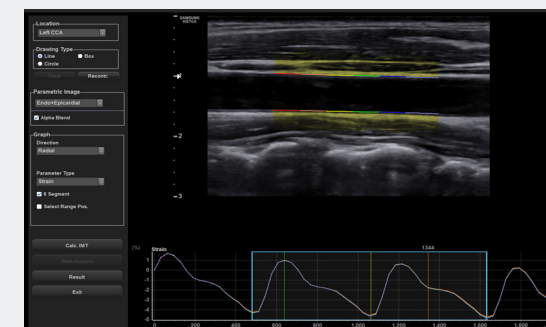
The StressEcho package includes wall motion scoring and reporting. It includes exercise StressEcho, pharmacologic StressEcho, diastolic StressEcho and free programmable StressEcho.



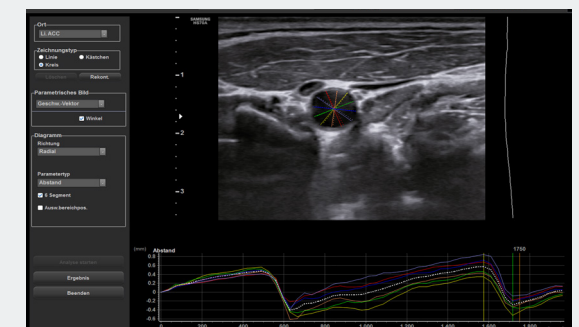
Protocol template<sup>2</sup>

## ArterialAnalysis™<sup>1</sup>

ArterialAnalysis™ detects functional changes of vessels, providing measurement values such as the stiffness, intima-media thickness and pulse wave velocity of the common carotid artery. Since the functional changes occur before morphological changes, this technology supports the early detection of cardiovascular disease.

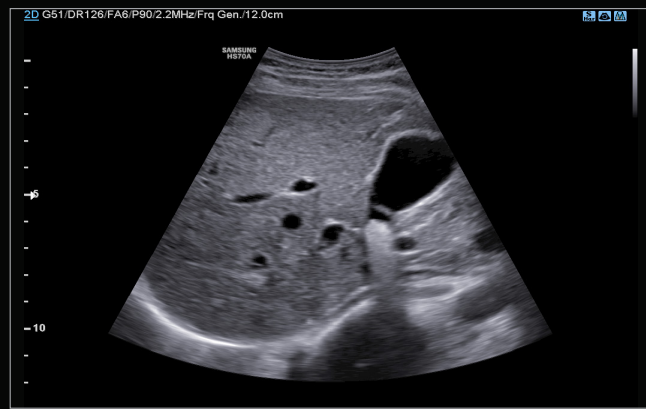


ArterialAnalysis™<sup>2</sup>

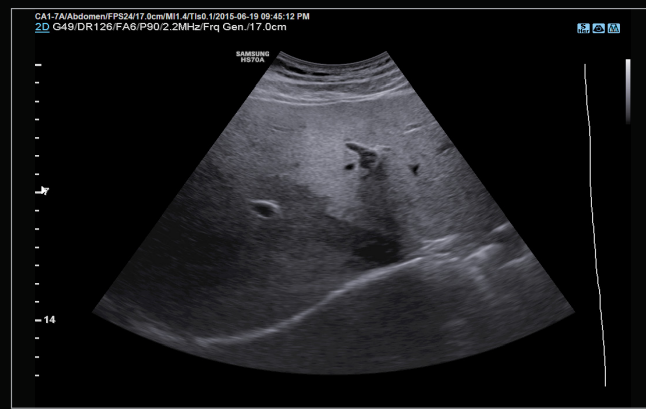


2D ArterialAnalysis™ radial<sup>2</sup>

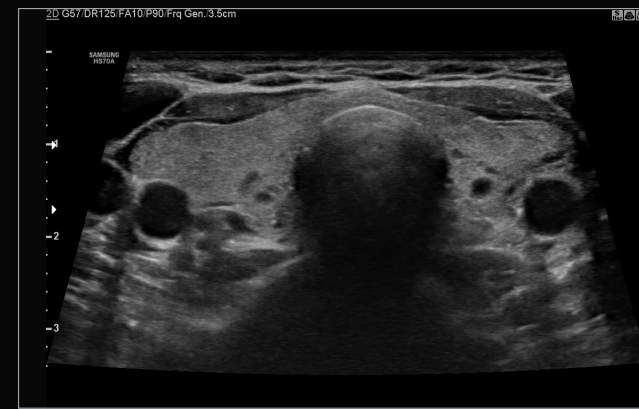




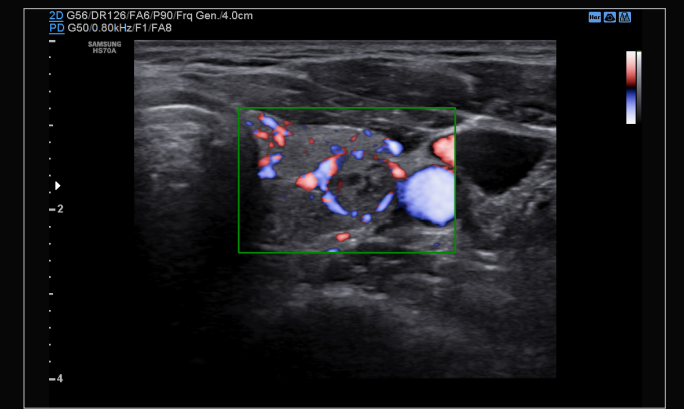
GB stones<sup>2</sup>



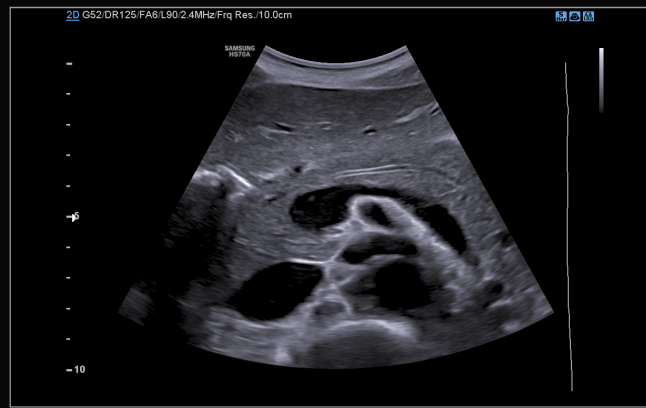
Focal fatty liver<sup>2</sup>



Thyroid trapezoid<sup>3</sup>



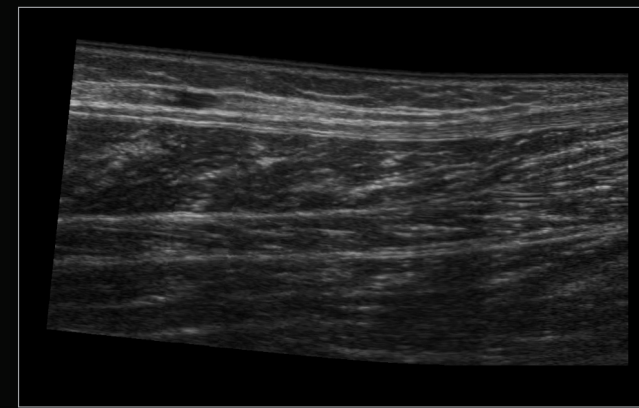
Thyroid nodule with S-Flow<sup>2</sup>



Pancreas<sup>2</sup>



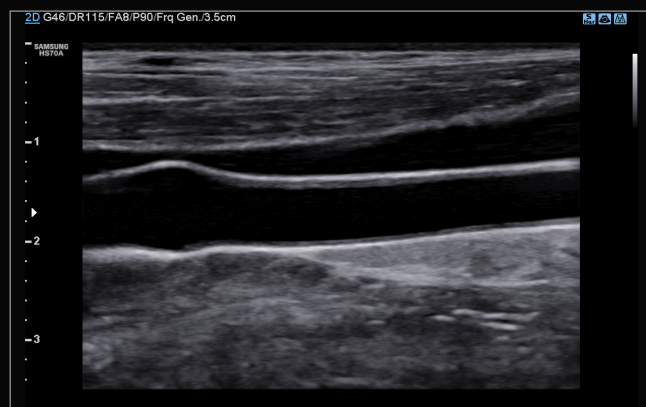
Liver<sup>2</sup>



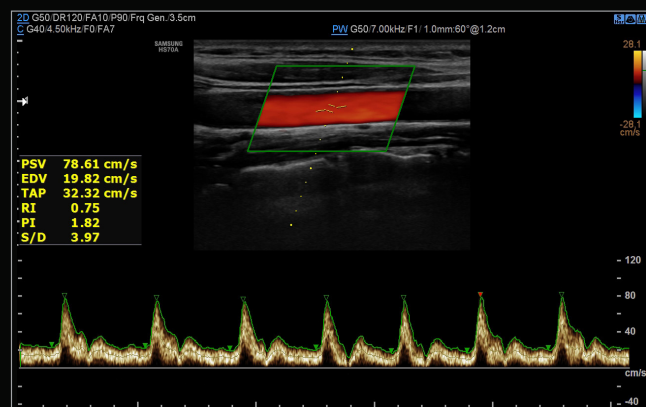
Calf<sup>6</sup>



Spine<sup>3</sup>



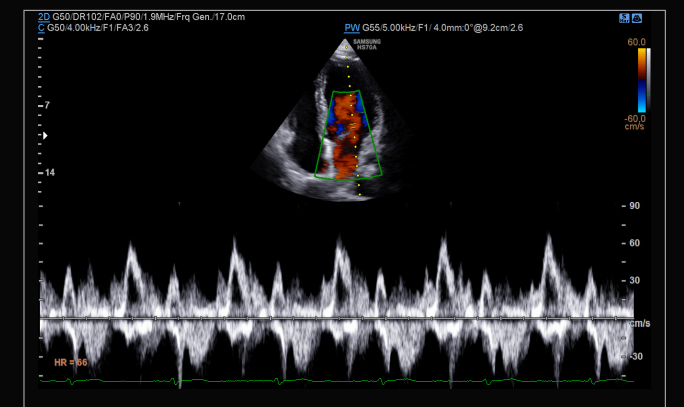
CCA<sup>2</sup>



CCA with PW<sup>3</sup>



4 chamber view<sup>6</sup>



MV inflow<sup>2</sup>



# Intuitive, streamlined workflow

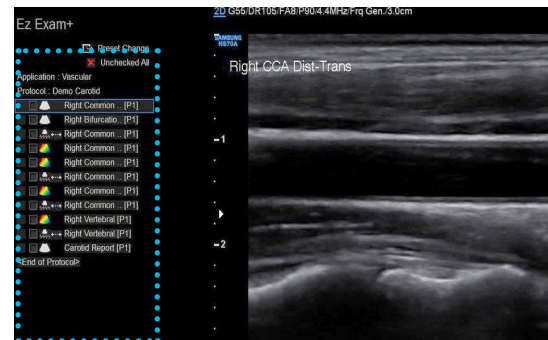
## QuickPreset

With one touch, the user can select the most common transducer and preset combinations. QuickPreset increases efficiency to make a full day of scanning simple and easy.



## EzExam+™

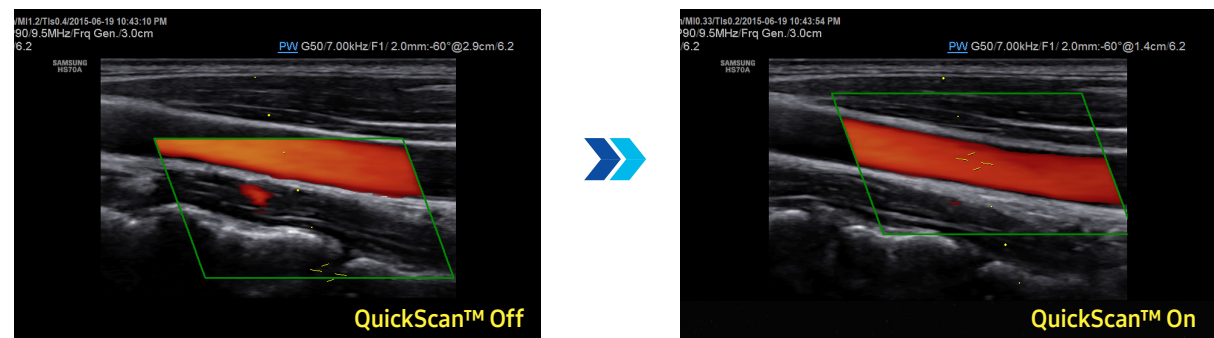
EzExam+™ enables you to build or use a predefined protocol, and assign protocols for examinations that are regularly performed in the hospital in order to reduce the number of steps that you have to go through. For fetus diagnosis, in particular, you can arrange the examination order according to the fetus position using the touchscreen, and automatically apply the BodyMarker, Annotation, Measurement, etc.



Set up display of EzExam+™ 2

## QuickScan™

QuickScan™ technology provides intuitive optimization of gray scale and Doppler parameters. QuickScan™ enables users to adjust ROI box location with one touch of a button.



CCA 2

## 23.8-inch Full HD LED monitor \*

The HS70A features a 23.8-inch full HD LED monitor, delivering excellent contrast resolution, image clarity and vibrant color in any lighting condition.

## Gel warmer

Two-level adjustable gel warmer maintains ultrasound gel at a comfortable temperature.



## 10.1-inch touchscreen

The 10.1-inch touchscreen is highly sensitive, allowing an efficient interaction during the examination.

## Low noise

This exceptionally quiet device allows physical exams to be performed, including auscultation, while the ultrasound system is turned on.



\* The monitor size will be changed to 23.8-inch, but the change schedule varies by region.



# Comprehensive selection of transducers

## Curved array transducers



**CA1-7A**

- Application : abdomen, obstetrics, gynecology, musculoskeletal

**CA2-9A**

- Application : abdomen, obstetrics, gynecology

**CA3-10A**

- Application : abdomen, obstetrics, gynecology, pediatric

**CA2-8A**

- Application : abdomen, obstetrics, gynecology

**CF4-9**

- Application : pediatric, vascular

## Linear array transducers



**LA4-18B**

- Application : small parts, vascular, musculoskeletal

**L3-12A**

- Application : small parts, vascular, musculoskeletal, obstetrics, abdomen

**LA3-16A**

- Application : small parts, vascular, musculoskeletal

**LA2-9A**

- Application : abdomen, small parts, vascular, musculoskeletal

**LA3-16AI**

- Application : musculoskeletal, intraoperative

## CW transducers



**LM4-15B**

- Application : small parts

**DP2B**

- Application : cardiac

**DP8B**

- Application : cardiac, vascular

## Volume transducers



**CV1-8A**

- Application : abdomen, obstetrics, gynecology

**EV2-10A**

- Application : obstetrics, gynecology, urology

**V5-9**

- Application : obstetrics, gynecology, urology

**LV3-14A**

- Application : small parts, vascular, musculoskeletal

## Endocavity transducers



**EA2-11B**

- Application : obstetrics, gynecology, urology

**VR5-9**

- Application : obstetrics, gynecology, urology

## TEE transducer



**MMPT3-7**

- Application : cardiac

## Phased array transducers



**PA1-5A**

- Application : abdomen, cardiac, TCD

**PE2-4**

- Application : abdomen, cardiac, TCD

**PA3-8B**

- Application : abdomen, cardiac, pediatric

**PA4-12B**

- Application : cardiac, pediatric