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.

CT-HS70A with Prime V2.0-GI-FT-161010-EN

* S-Vue™ is not the name of a function, but stands for Samsung's advanced transducer technology.
* S-Vision™ is not the name of a function, but stands for Samsung's ultrasound imaging technology.
* In Canada and USA, a recommendation for whether the result is benign or malignant is not applied.
* In Canada and USA, strain value for ElastoScan is not applied.
* Availability of some products, features, options and transducers mentioned in this catalog may vary from country to country and is subject to varying regulatory requirements.
* 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.

SAMSUNG MEDISON CO., LTD.

Daily inspiration

Ultrasound system
HS70A with Prime V2.0

Scan code or visit
www.samsungmedicalsolution.com
to learn more

SAMSUNG

Daily inspiration

We, Samsung, aim to **continually improve the image quality of our ultrasound systems** and **develop clinically proven tools designed for your needs**. The HS70A with Prime is built upon these principles. 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.

Discover new innovations every day that give you an inspiration.

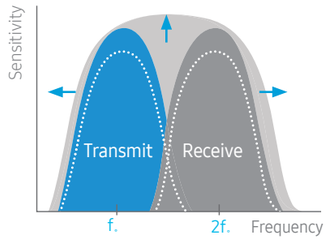
S-Vision™ imaging engine

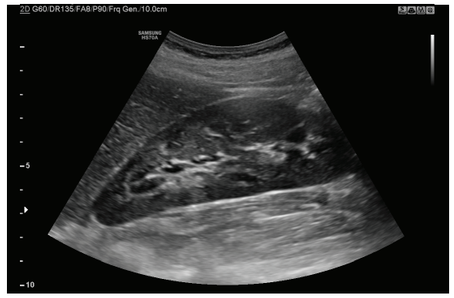
With the S-Vision™ imaging engine built into HS70A with Prime, the digital signals produce **clear, detailed resolution and tissue uniformity for various types of applications** in general imaging.

Samsung Ultrasound System HS70A with Prime

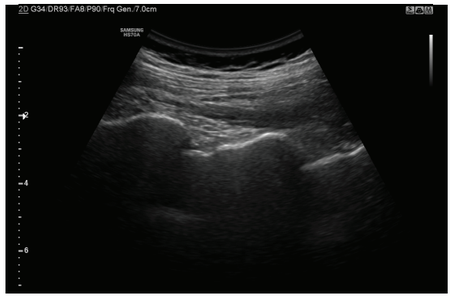
S-Vue™ transducers (CA1-7A, CA3-10A, CA2-9A, CV1-8A)

HS70A with Prime incorporates **single crystal technology**. Employing an innovative crystal design, S-Vue™ transducers provide **more efficient piezoelectric properties, resulting in wider bandwidths** that enable **better penetration and higher quality resolution** on even challenging patients.





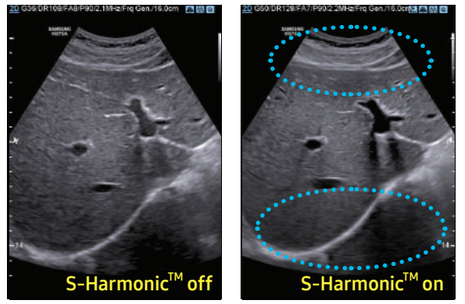
Kidney with CA1-7A



Spine with CA3-10A

S-Harmonic™

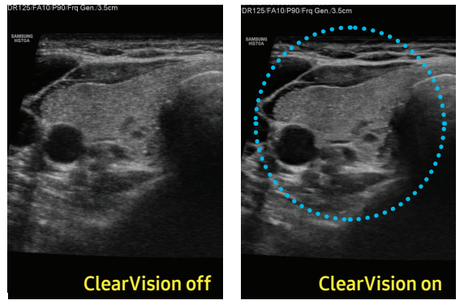
This new harmonic technology provides **greater image uniformity from near to far field while reducing signal noise**. Combined with S-Vue™ transducers and S-Vision™ imaging engine, S-Harmonic™ improves the image quality of HS70A with Prime.



Liver *

ClearVision

The noise reduction filter **improves edge enhancement and creates sharper 2D images** for optimal diagnostic performance. The integration of specialized Samsung technology results in a notable improvement in image quality. In addition, ClearVision provides **application-specific optimization and advanced temporal resolution in live scan** mode.



Thyroid

* The asterisks on this page are the clinical images acquired by the HS70A V1.00 ultrasound system.

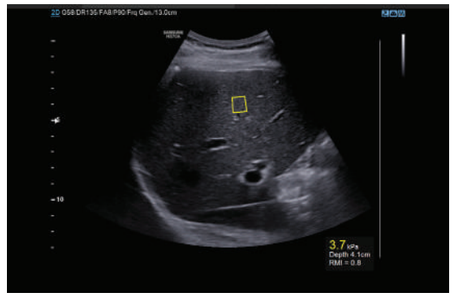
Advanced tools for simple and precise assessment

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

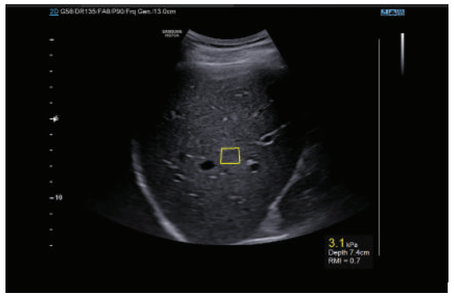
Samsung Ultrasound System HS70A with Prime

S-Shearwave™

S-Shearwave™ is **non-invasive, helping you to measure liver stiffness easily**. It 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).

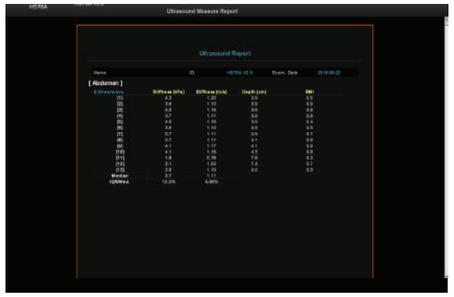


Liver (common depth)



Liver (deep depth)

S-Shearwave™ profile

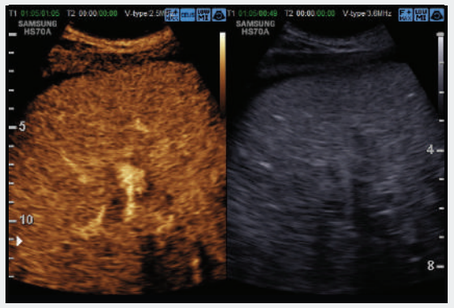


S-Shearwave™ report

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

CEUS+

CEUS+ technology uses the **unique properties of ultrasound contrast agents.** When stimulated with low acoustic pressure, the oscillating microbubbles reflect both fundamental and harmonic frequency signals. In addition, Samsung's latest technologies, *VesselMax and *FlowMax, provide **a clear visualization of vessels and blood flow for a more informed and confident diagnosis**.



Liver with Ascites

* VesselMax™ : Samsung technology for improved vessel visualization
* FlowMax™ : Samsung technology for improved blood flow visualization

※ VesselMax™ and FlowMax™ are the name of Samsung's ultrasound imaging technology included in CEUS+.

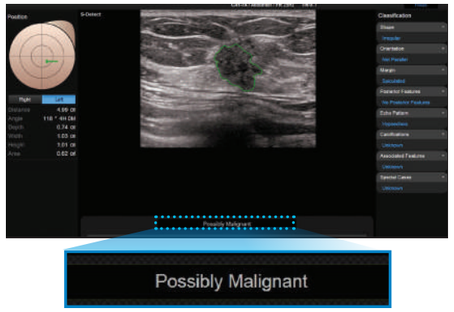
Trustworthy assistance in making the right decision

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

S-Detect™

S-Detect™ for Breast

S-Detect™ for Breast employs ***BI-RADS® scores** for standardized analysis and classification of suspicious lesions. It provides the **characteristics of displayed lesion** and a **recommendation on whether the lesion is benign or malignant** by adopting advanced detection algorithm. **With * 3 selectable sensitivity modes,** S-Detect™ for Breast can help **users perform a breast biopsy with confidence.** Such technology assists in a more **accurate diagnosis, while reducing the time users spend** in repetitive tasks.



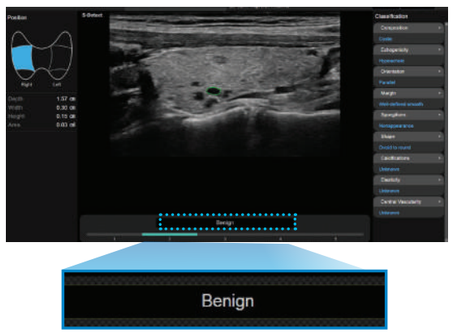
* 3 selectable sensitivity modes

- **High Sensitivity** Detecting any lesions that have a small chance of being malignant.
- **High Accuracy** Providing higher accuracy in classifying whether a lesion is benign or malignant, compared to other modes (default).
- **High Specificity** Detecting suspicious lesions that have a higher chance of being malignant.

* BI-RADS® : Breast Imaging-Reporting and Data System (2013)

S-Detect™ for Thyroid

S-Detect™ for Thyroid uses the advanced technology based on ***K-TIRADS, RUSS and ATA guideline** in **detecting and classifying suspicious thyroid lesions semi-automatically**. This state-of-the art technology helps you diagnose your patients with confidence and ease, providing accurate, consistent results and an **automatic reporting feature.**

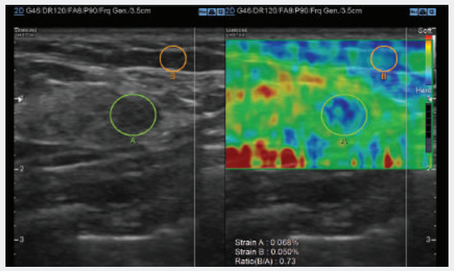


* K-TIRADS : Korean-Thyroid Imaging Reporting and Data System
RUSS : Russ' TIRADS
ATA : American Thyroid Association

ElastoScan™

E-Breast™ (ElastoScan™ for breast)

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.



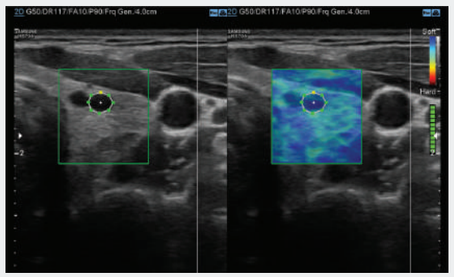
Breast (E-Strain™)

E-Strain™

E-Strain™ is designed to enable **quick and easy calculation of the strain ratio between two regions** of interest for day-to-day practice. Simply by setting the two targets, you can receive accurate, consistent results and make informed decisions in **many types of diagnostic procedures.**

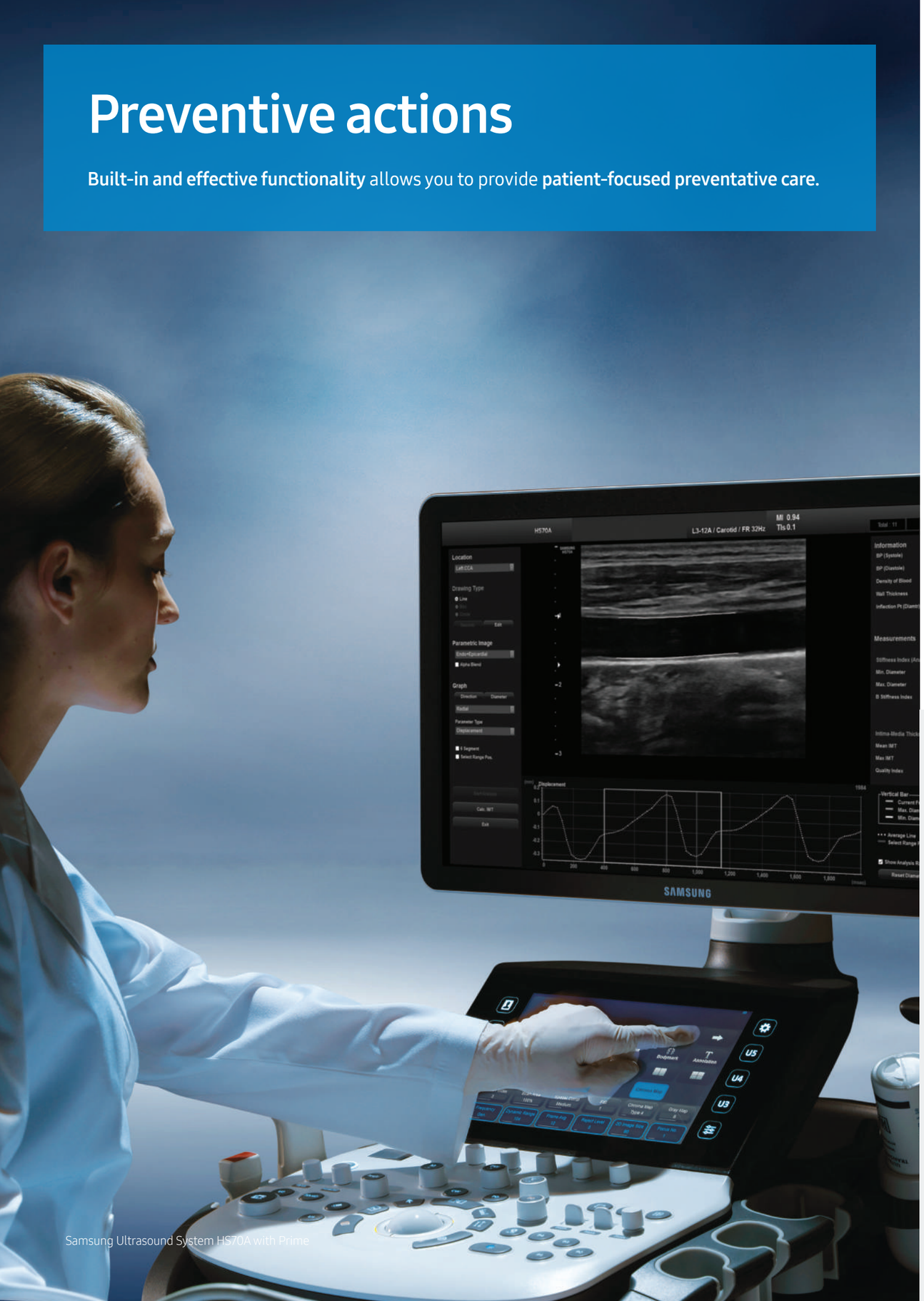
E-Thyroid™ (ElastoScan™ for thyroid)

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.


Thyroid

Preventive actions

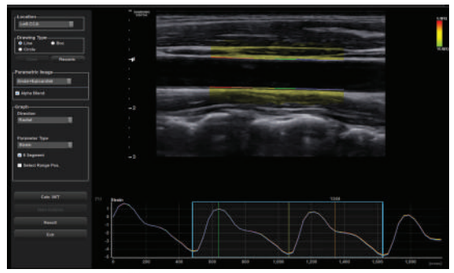
Built-in and effective functionality allows you to provide **patient-focused preventative care.**



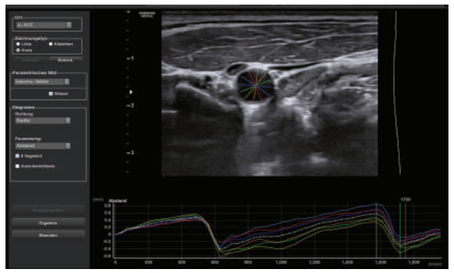
Samsung Ultrasound System HS70A with Prime

Arterial Analysis™

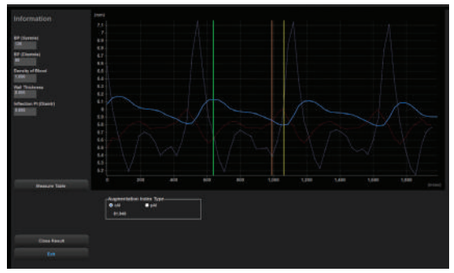
Arterial Analysis™ **detects changes in vessels**, providing **measurement values** such as stiffness and intima-media thickness. Since functional changes occur before morphological changes, this technology **supports the diagnosis of issues related to heart vessels at an early stage**.



Arterial Analysis™ *



2D Arterial Analysis™ radial *

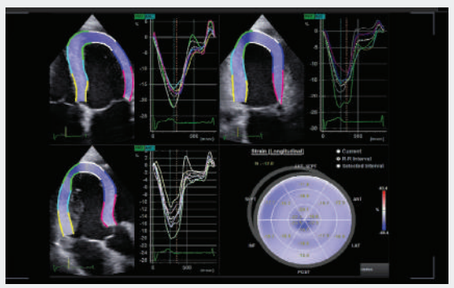


Arterial Analysis™ report *

Measurement table of Arterial Analysis™ *

Strain+

Strain+ is a **quantitative tool for 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.



LV views and a Bull's eye *

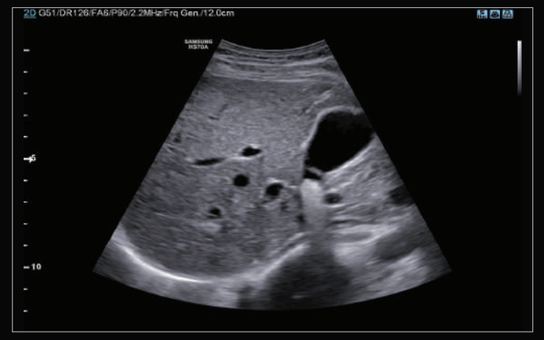
Stress Echo

The Stress Echo package i**ncludes wall motion scoring and reporting**. It includes exercise Stress Echo, pharmacologic Stress Echo, diastolic Stress Echo and free programmable Stress Echo.

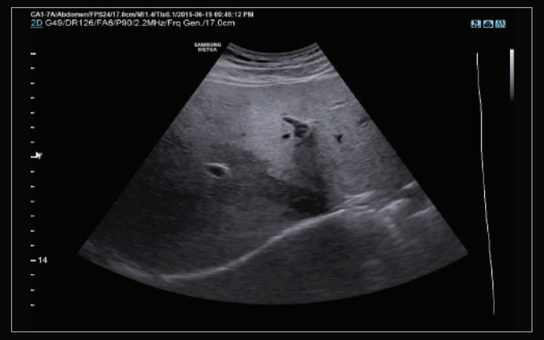
Protocol template *

* The asterisks on this page are the clinical images acquired by the HS70A V1.00 ultrasound system.

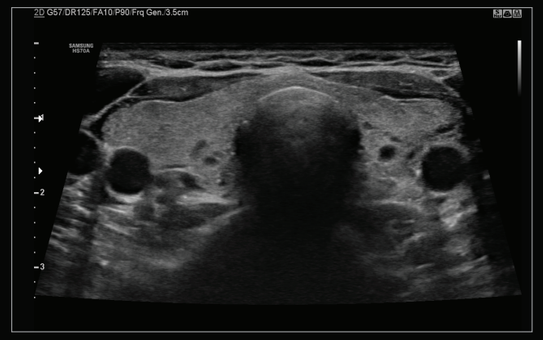
Image gallery



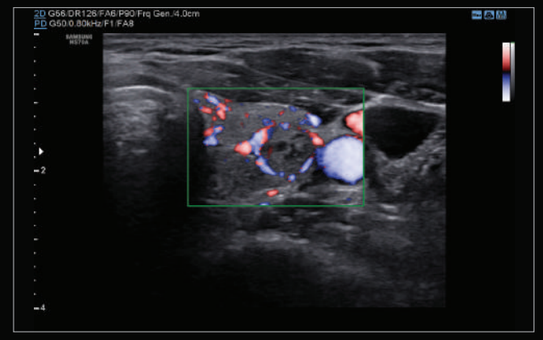
GB stones *



Focal fatty liver *

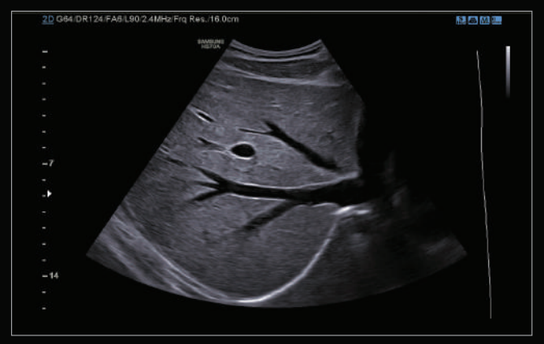


Thyroid trapezoid

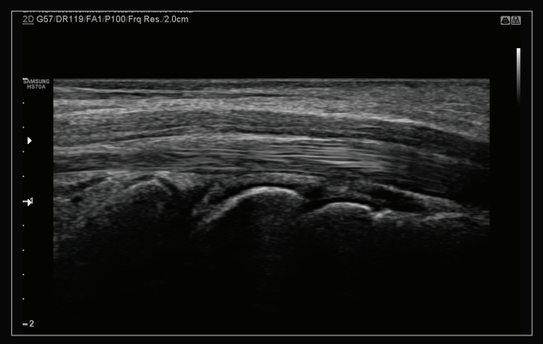


Thyroid nodule with S-Flow *

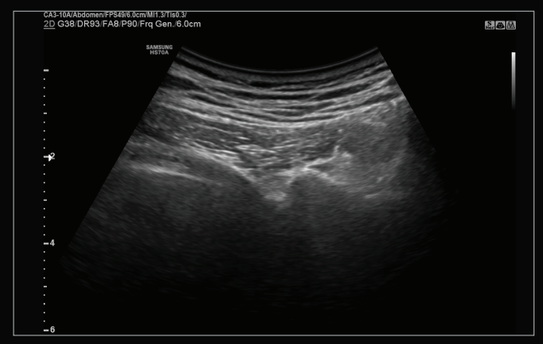
Pancreas *



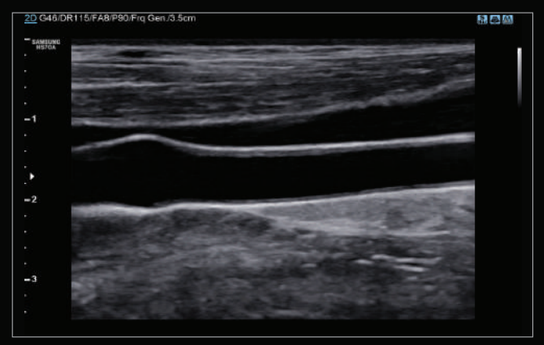
Liver *



Wrist

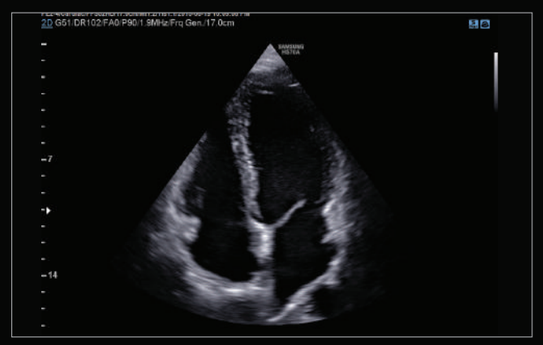


Spine

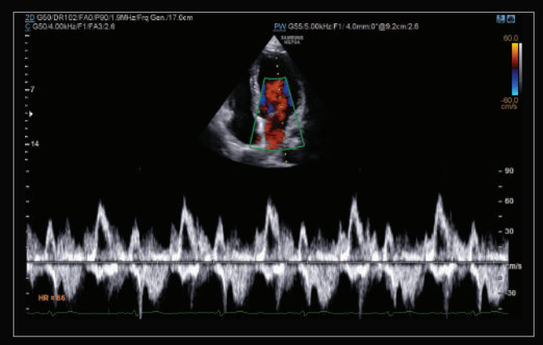


CCA *

CCA with PW



4 chamber view *



MV inflow *

* The asterisks on this page are the clinical images acquired by the HS70A V1.00 ultrasound system.

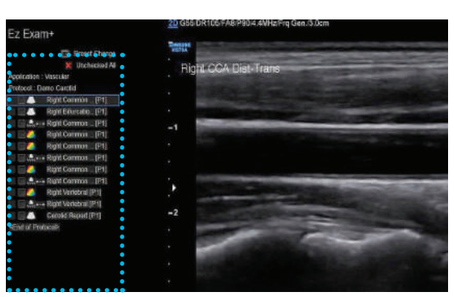
Intuitive, streamlined workflow

Quick Preset

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

EZ-Exam+™

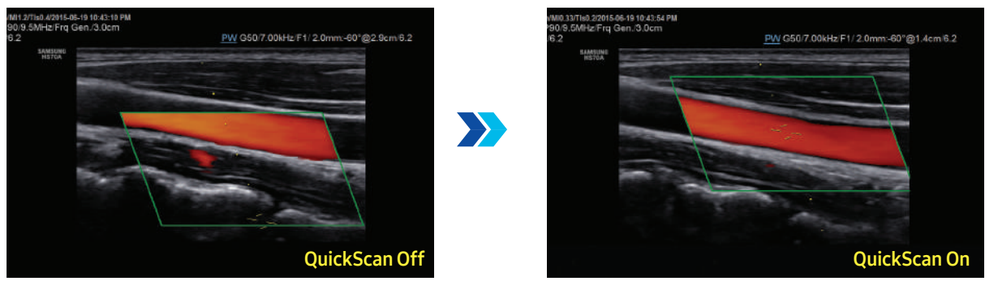
EZ-Exam+™ **enables users to build or to use predefined protocols**. It transforms the **ultrasound investigation into a streamlined process**. EZ-Exam+™ ensures the full investigation is performed, eliminating the risk of forgetting an image or loop capture, as well as measurement and transducer preset changes.



Set up display of EZ-Exam+™ *

Advanced QuickScan

Image optimization **can be done simply with one touch of the QuickScan button**. Samsung's advanced QuickScan technology provides **intuitive optimization of both grayscale and Doppler parameters**.



CCA *

23-inch Full HD LED monitor

The HS70A with Prime features a 23-inch full HD LED monitor, delivering **excellent contrast resolution, image clarity and vibrant color** in any lighting condition.

10.1-inch touch screen

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

Gel warmer

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

Silent operation

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

* The asterisks on this page are the clinical images acquired by the HS70A V1.00 ultrasound system.

Comprehensive selection of transducers

Curved array transducers

CA1-7A

- Application : abdomen, obstetrics, gynecology

CA2-8A

- Application : abdomen, obstetrics, gynecology

CA2-9A

- Application : abdomen, obstetrics, gynecology

CA3-10A

- Application : abdomen, obstetrics, gynecology

CF4-9

- Application : pediatric, vascular

Volume transducers

CV1-8A

- Application : abdomen, obstetrics, gynecology

V5-9

- Application : obstetrics, gynecology, urology

LV3-14A

- Application : small parts, vascular, musculoskeletal

Linear array transducers

LA4-18B

- Application : small parts, vascular, musculoskeletal

L3-12A

- Application : small parts, vascular, musculoskeletal

LA3-16A

- Application : small parts, vascular, musculoskeletal

LA2-9A

- Application : abdomen, small parts, vascular, musculoskeletal

LA3-16AI

- Application : musculoskeletal

Endocavity transducers

EA2-11B

- Application : obstetrics, gynecology, urology

E3-12A

- Application : obstetrics, gynecology, urology

VR5-9

- Application : obstetrics, gynecology, urology

TEE transducer

MMPT3-7

- Application : cardiac

CW transducers

DP2B

- Application : cardiac

DP8B

- Application : cardiac, vascular

Phased array transducers

PA4-12B

- Application : cardiac, pediatric

PE2-4

- Application : abdomen, cardiac, TCD

PA3-8B

- Application : abdomen, cardiac, pediatric