Feb, 2026 (Rev.01)

SAMSUNG Ultrasound Insight Book

EVO Q10

v1.00

SAMSUNG

EVO Q10

Quickly meets Quality

The EVO Q10 is more than just a portable ultrasound; it is a decisive tool engineered for the dynamic Point-of-Care environment. It is meticulously designed to empower clinicians where it matters most—at the patient's side—enabling rapid screening, confident diagnosis, and precise procedural guidance. With its exceptional image clarity, AI-powered automated tools, and a remarkably intuitive workflow, the EVO Q10 removes complexity, allowing you to make critical decisions with speed and certainty. This system not only accelerates the diagnostic process but also elevates the standard of immediate, patient-focused care

General Imaging

- AutoIMT+
- BowelAssist™
- Button Probe
- ClearVision
- CrystalVue™/CrystalVue Flow™
- ElastoScan+™ (E-Strain™)
- EzAssist™
- EzCompare™
- EzDiagram™
- EzExam+™
- EzFlow™
- EzGuide™
- EzHRI™
- EzPrep™
- EzStructure™
- EzTrainer™
- HQ-Vision™
- LumiFlow™
- MirrorTouch
- Mobile Export
- MultiVision
- MV-Flow™
- NeedleMate+™
- NerveTrack™
- Panoramic+
- QuickScan™
- QUS(TAI™, TSI™)
- RFA Viewer
- S-Detect™ for Breast
- S-Detect™ for Thyroid
- S-Shearwave Imaging™
- SonoSync™ and System Requirements
- Voice Command
- Transducer Line-up

Gyn

- 2D Follicle™
- 5D Follicle™
- EzPictogram™
- IDEA
- IETA
- IOTA-ADNEX
- IOTA-SRrisk
- UterineAssist™
- UterineContour™
- EzTrainer™
- Free Angle Plane
- MirrorTouch
- Transducer Line-up

OB

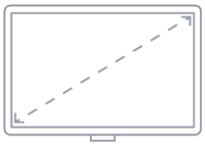
- 5D CNS+™
- 5D Heart Color™
- 5D Limb Vol. ™
- 5D NT™
- ADVR (Video Recording)
- BiometryAssist™
- EzCheck™
- EzTrainer™
- Free Angle Plane
- HDVI™
- LaborAssist™
- MirrorTouch
- RealisticVue™
- Smart 4D - 3D XI > MSV(Multi Slice View)
- Smart 4D - 3D XI > Oblique View
- Smart 4D - 3D XI > VOCAL
- Smart 4D - 3D XI > Volume CT
- Smart 4D - MagiCut™
- Smart 4D - XI-STIC
- ViewAssist™
- Transducer Line-up

CV

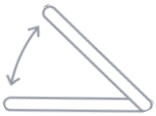
- ArterialAnalysis™
- AutoEF
- AutoIMT+
- EzAssist™
- EzDiagram™
- EzGuide™
- EzTrainer™
- HeartAssist™
- MirrorTouch
- Strain : Clinical summary & overview
- Strain+ (LV Strain)
- StressEcho
- Transducer Line-up

Ergonomics

SAMSUNG



15.6” (LED Backlight Unit)



Mirror Touch

Streamlines workflow with mirrored touchscreen for instant, intuitive control

Flexible positioning

Quick tilt and height adjustments for any scenario

Clutter-free workspace

Smart cable management keeps the focus on your patient

Multi-purpose basket

Versatile basket for variety of items

Compact and mobile

Small footprint allows

For exceptional maneuverability

Ergonomics

SAMSUNG

Main System

Sophisticated Design with High Durability from Magnesium

Camera & Sensor/MIC

Camera Activated

IP22 Water resistance
*Applied to CP only

Complies with IEC 60529 IP22: Protected against solid objects of 12.5 mm and greater, and against vertically falling water drops when the enclosure is tilted up to 15°, for 10 minutes.

Track pad / ball (optional)

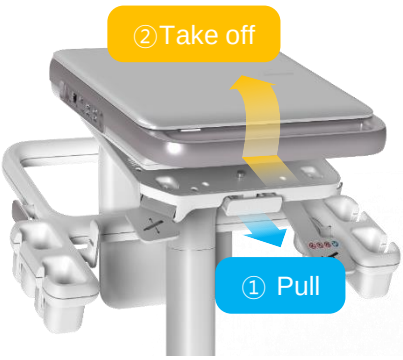
High resolution speaker

Ergonomics

SAMSUNG

Cart (Option)

System detachment from the cart



ECG tray

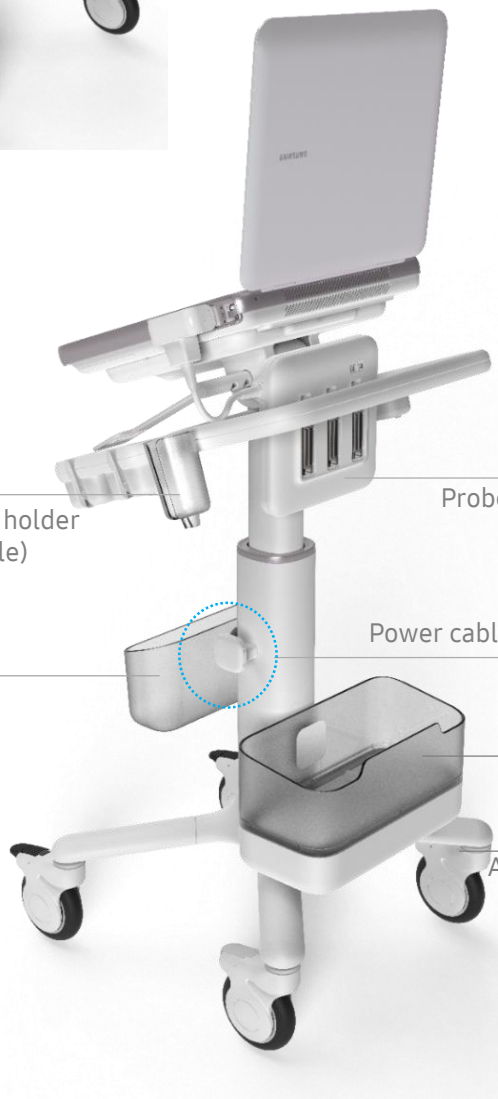
Cable Hanger
(Right 2 units, Left 2units)
Gel warmer (L/R interchangeable)

Up-Down lever

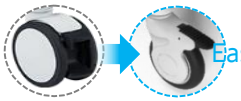
Tilt lever

Front tray
(Large / Small optional)

External battery (EPP)



5” Single Castor (4 locks)



Easily rolls over the floor cables

HM70 EVO Dual Caster

EVO Q10 Single Caster

Vaginal probe / Gel holder
(L/R interchangeable)

Probe extension
(3 port)

Front tray

Power cable hook

Rear tray

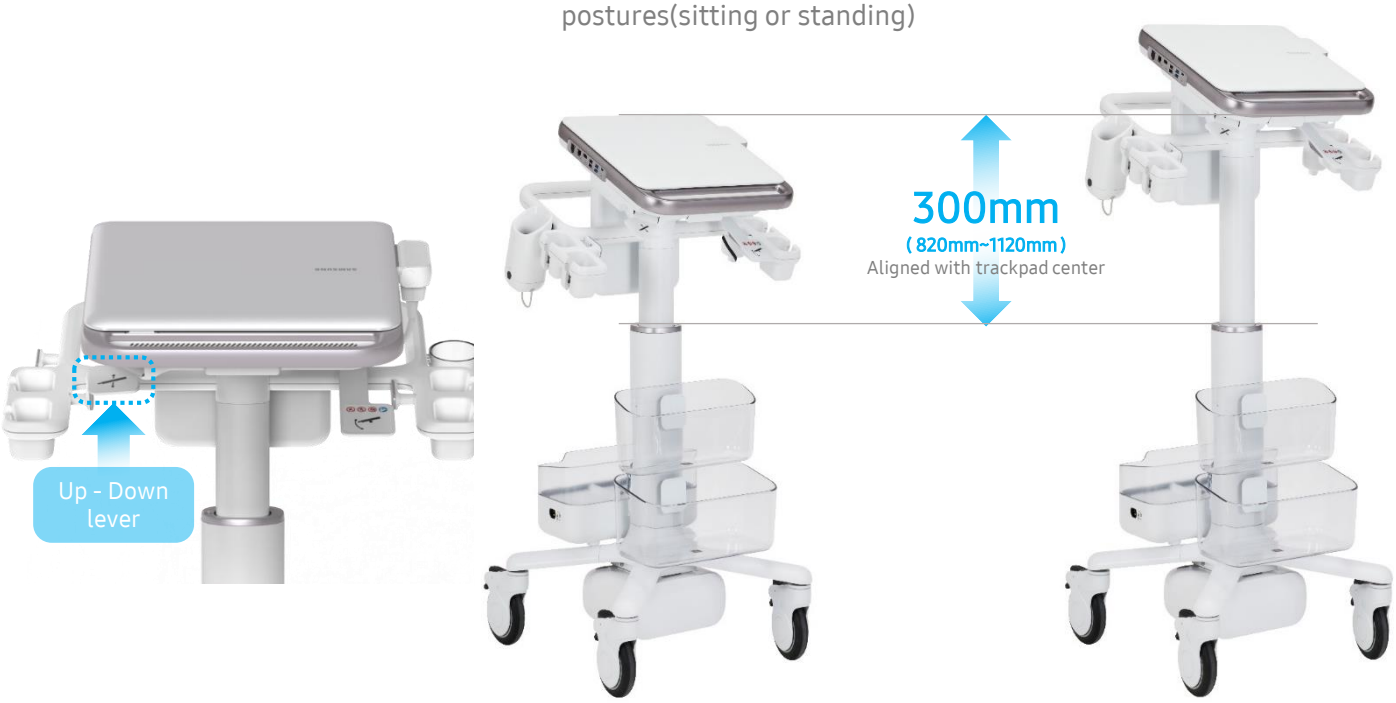
Adaptor storage

Ergonomics

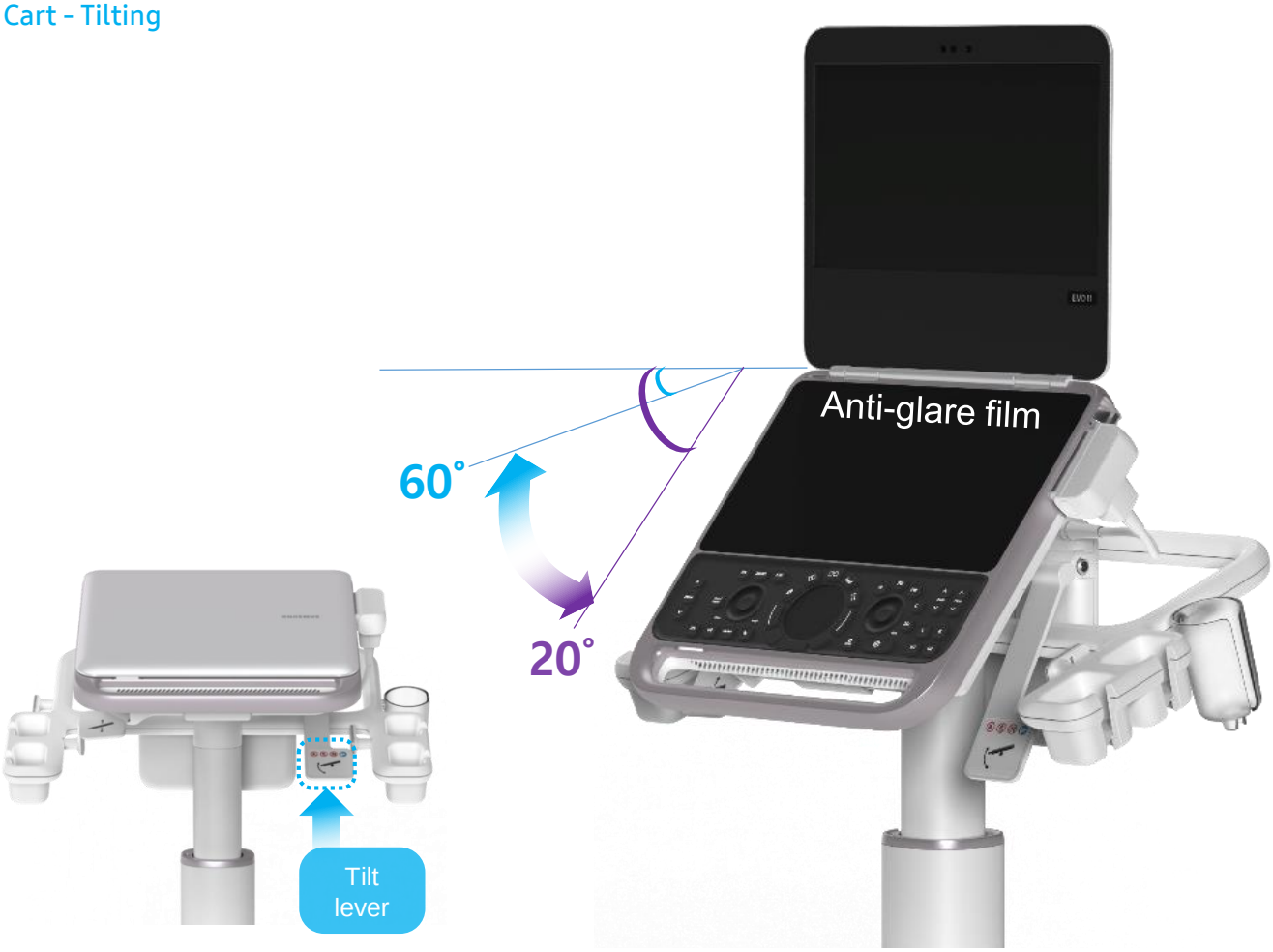
SAMSUNG

Cart - Height adjustment rage

Height adjustment 300mm range
Accommodates various body sizes and scanning postures(sitting or standing)



Cart - Tilting

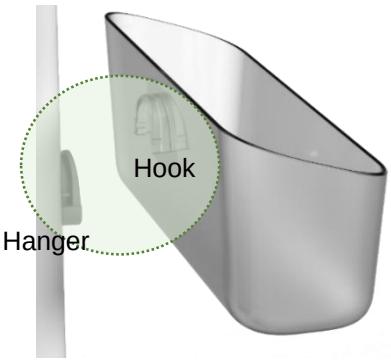


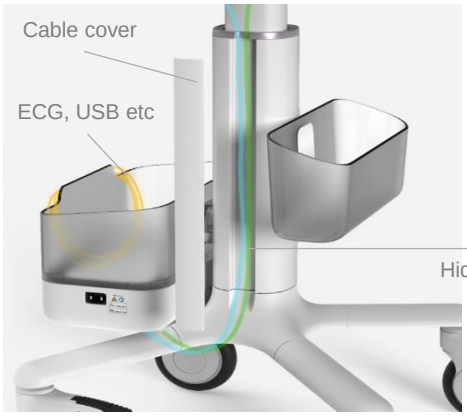
Ergonomics

SAMSUNG

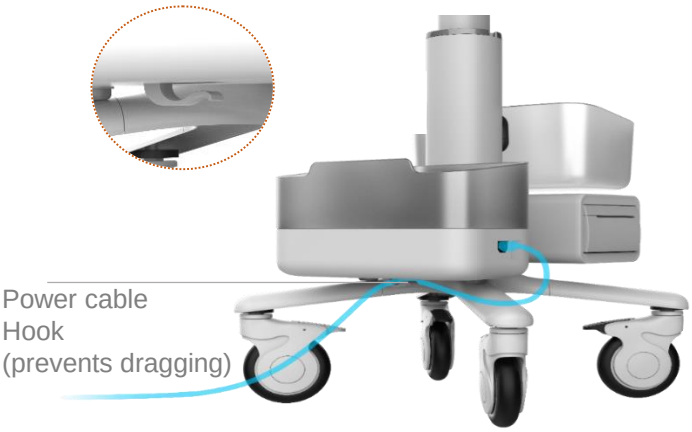
Cart – Accessories

Detachable w/o any tools

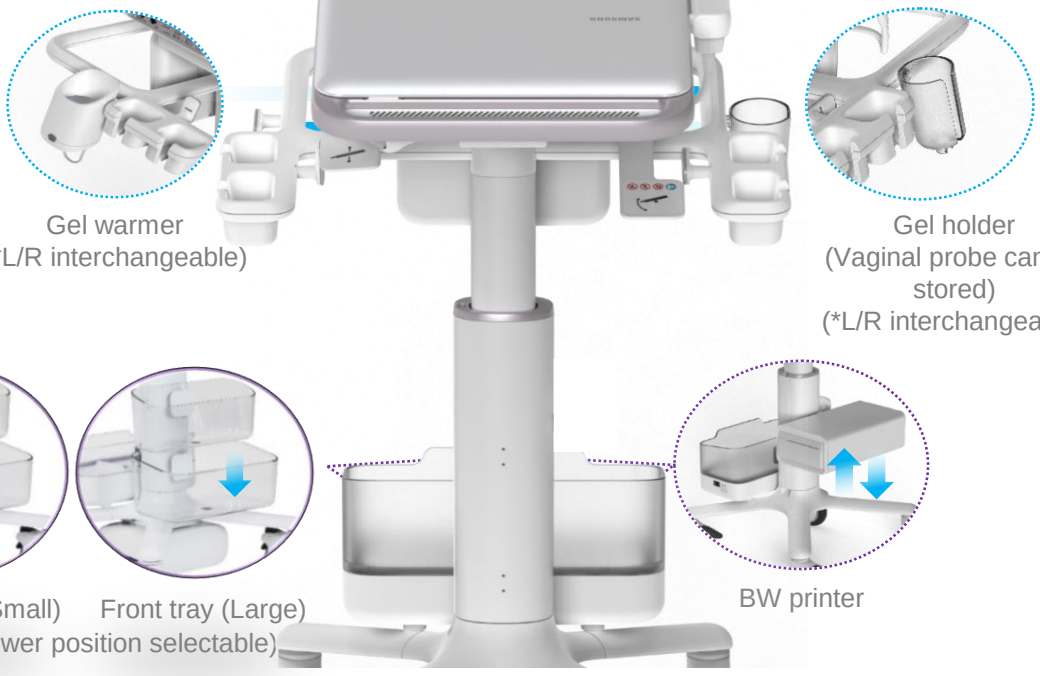




Probe cable
Rubber band hook



Power cable
Hook
(prevents dragging)



Gel warmer
(*L/R interchangeable)

Gel holder
(Vaginal probe can be stored)
(*L/R interchangeable)

Front tray (Small)
Front tray (Large)
(Upper/Lower position selectable)

BW printer

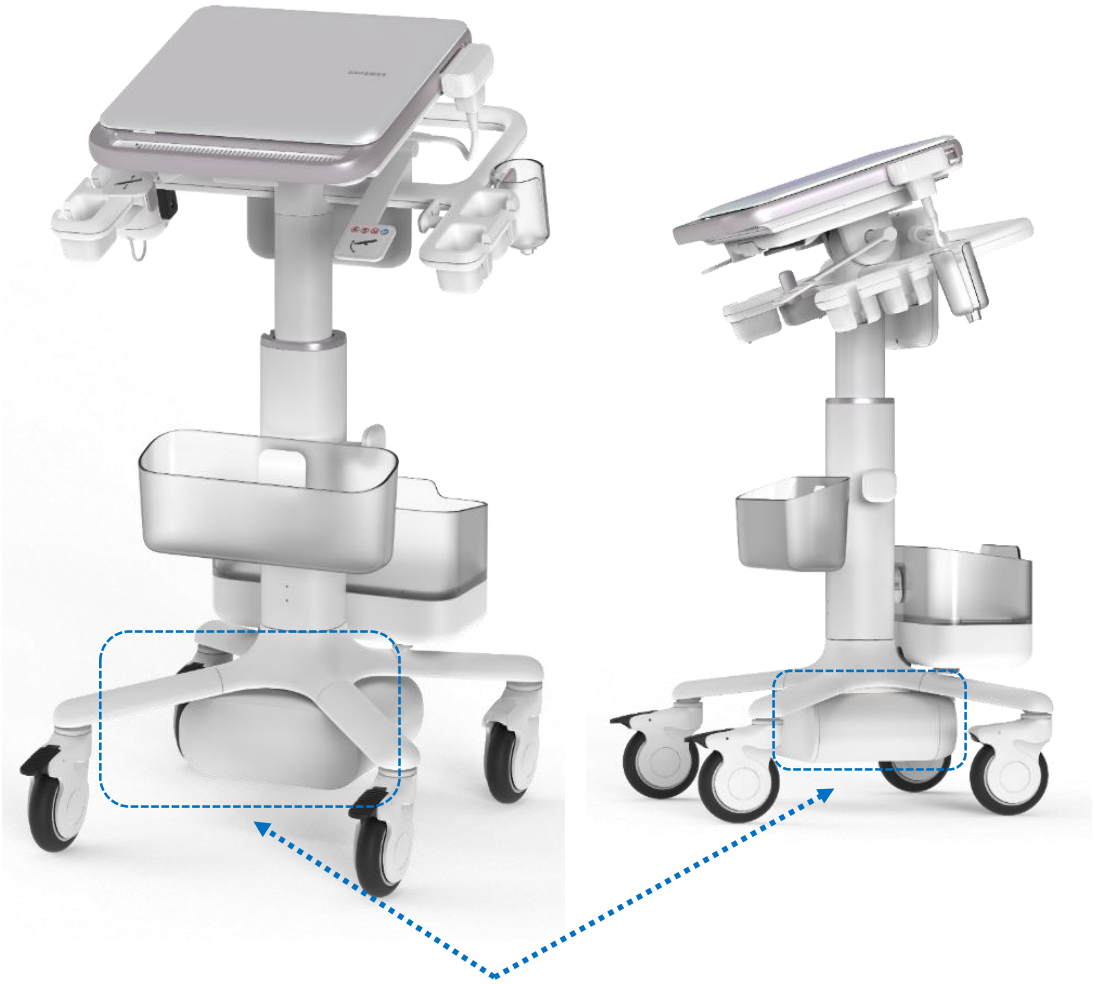
Ergonomics

Battery

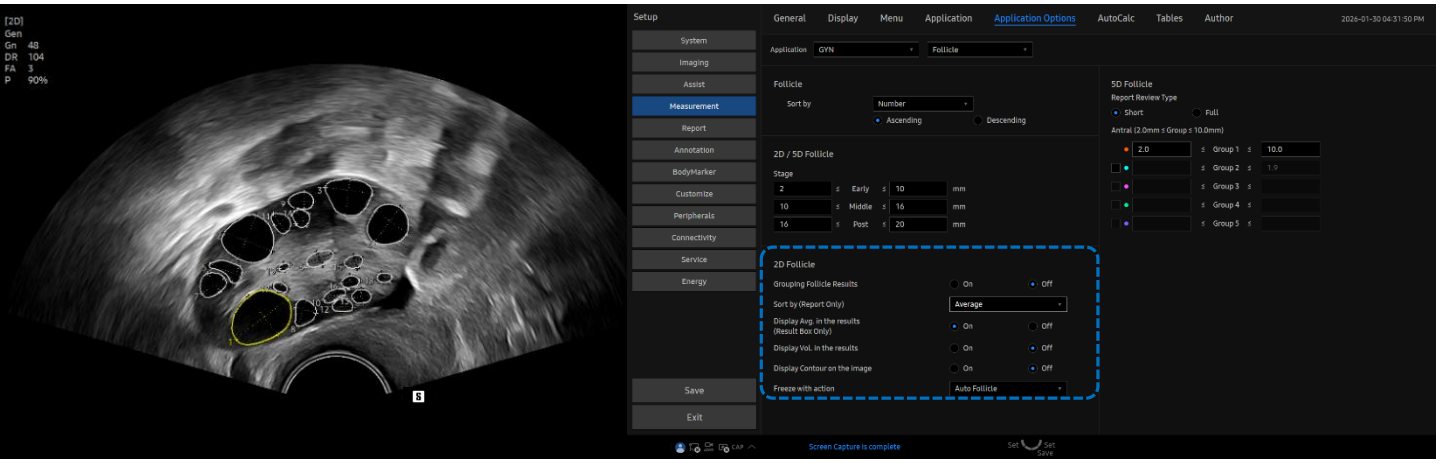
SYSTEM battery (2 units)

Battery Life

Internal: 90min.
External: 270min.
Total 360min.



EPP(Cart-mounted battery module)
: 6 Battery Units



Feature

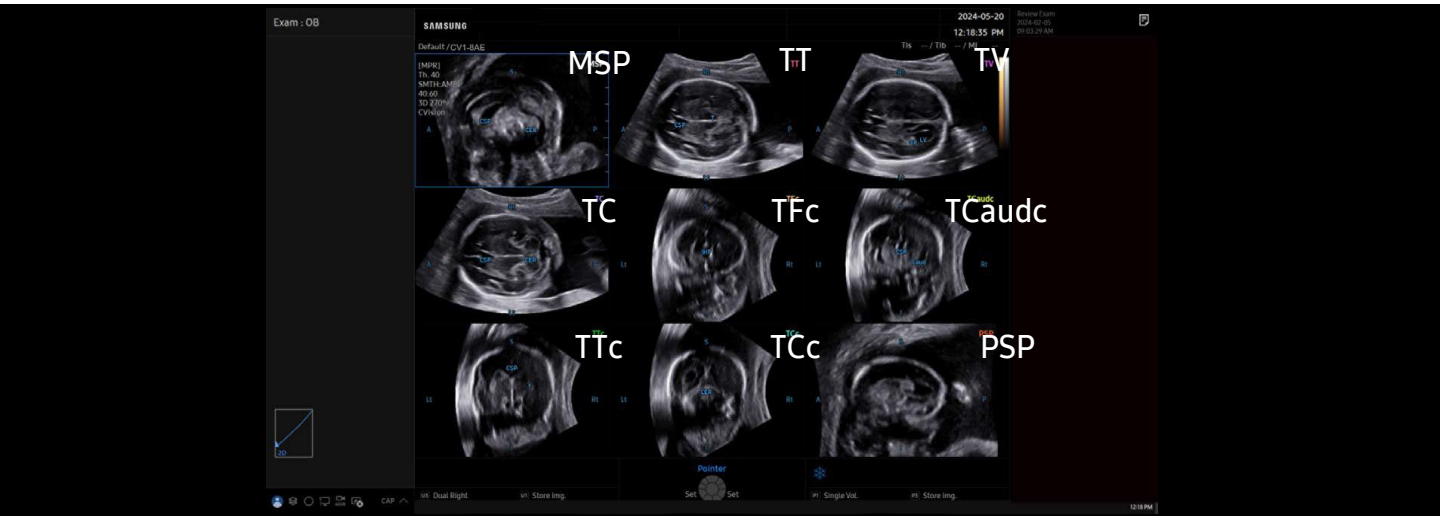
- A feature based on Deep Learning technology.
- Detects follicle's boundaries and contouring to present a size and volume.
- Individual follicles are listed up in order to its size.

Clinical Benefit

- Follicle size measurement is routine study in IVF, helps to reduces keystrokes and improve patient throughput compare to the manual measurement.
- Long, short, Average and Volume is shown as result, and able to assign the Laterality.
- Easy of usage – Freeze the view and tap the 2D Follicle button on the TouchScreen, all the result will be provided with a single step.

Tips

- Endocavity Transducers are supported.
- Decrease a depth to get ovary image bigger and access the 2D Follicle.
- Follicles can be selectively displayed by Early, Middle, Post stage.
- Select the Follicle by hovering your arrow or rotate the knob key on the far left to remove from the result and image.
- Utility › Setup › Measurement › Application option › GYN page.
  - Set each stage's standard size and sorting criteria as user preference.
  - Follicle's Average information can be hidden.
- Enter "Day of Stimulation" on the patient page.



Feature

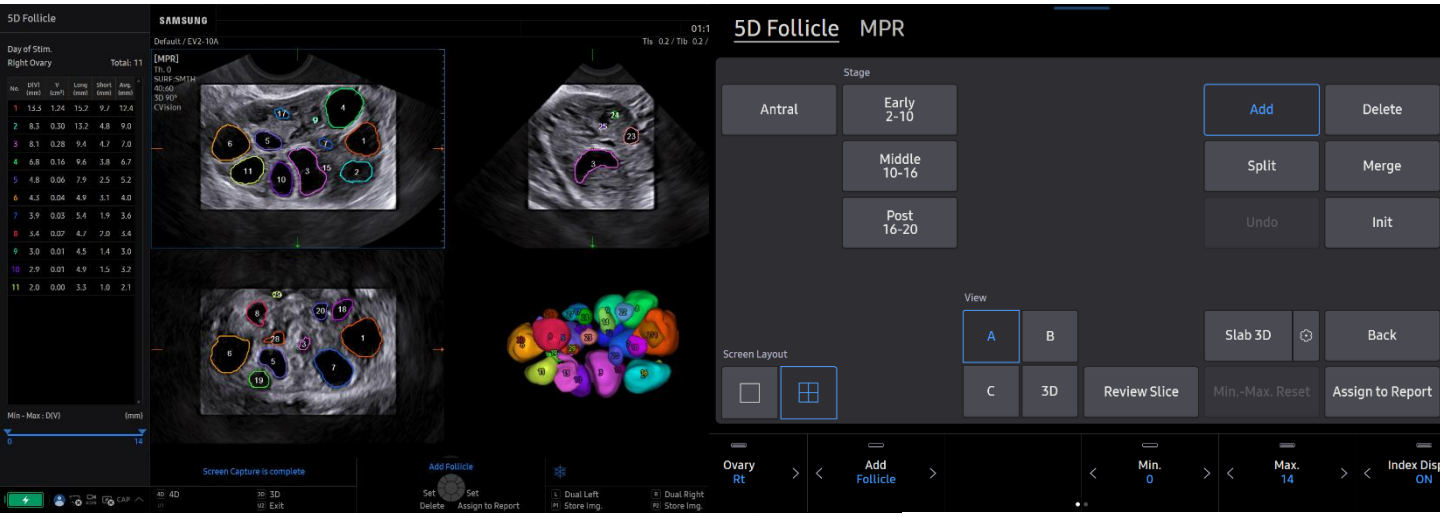
- Based on deep learning technology, feature for fetal brain assessment with 3D volume data.
- Extracts 9 diagnostic planes (MSP, TT, TV, TC, TFc, TCaudc, TTc, TCc, PSP) with anatomical landmarks and biometric measurements (BPD, OFD, HC, Vp, CM, CEREB) automatically.

Clinical Benefit

- Provides additional anatomic information to identify the brain structural anomalies and defects, with robust detection within a short time with fully automated process.
- Simplifies fetal brain assessment and improves workflow efficiency.
- Reduces inter-observer variability of acquiring 9 diagnostic planes.

Demo & Manipulation Tips

- Optimize the 2D image in Transverse fetal brain view and acquire a 3D volume.
- Required view: Take the Trans-Thalamic View and do a 3D rendering
- Acquire a 3D when baby is stable to take a good volume image quality.
- Fully automated: No seed point is required.
- Position, Bias, Chroma map adjustment would be useful to optimize the result image more sharper or better contrast.



Feature

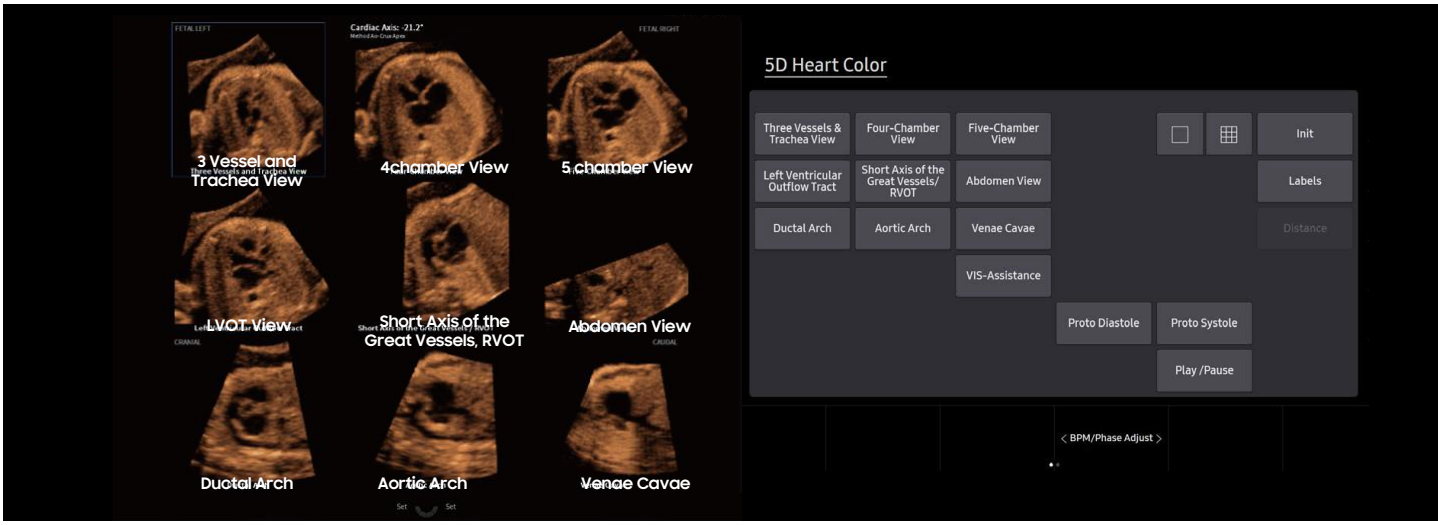
- A feature based on Deep Learning technology.
- Automatically identifies and calculates follicles to display the chart : Volume, Size and total numbers based on 3D data in different colors intuitively in left side.

Clinical Benefit

- Able to observe and understand targeted follicles relationship between adjacent structures in multi-planar view with 3D volume, would be useful for IVF procedure.
- Improve a diagnostic confidence on assessing ovarian follicles by accurate detection and measurement, decrease user dependency.
- Supports to raise a productivity and patient throughput.

Tips

- Volume transducers are supported : EV2-10A
- Optimize 2D image to take a good 3D quality, usually increasing a contrast would be helpful to improve a detection rate.
- Fit your 3D ROI to the Ovary to exclude an unnecessary area.
- Follicles can be selectively displayed by Early, Middle, Post stage or Min-Max.
  Each stage's standard size setting is available in the setup page, Intuitive visualization for both user and patient.



Feature

- Fetal Intelligent Navigation Echocardiography method was applied to STIC dataset to exam a fetal echo.
- Fetal heart Color information can generate successfully nine standard fetal echocardiography views outlined by AIUM and ISUOG Guidelines with single volume dataset.

Clinical Benefit

- Contributes to a comprehensive fetal echocardiogram by showing 9 different views simultaneously, will give valuable information on cardiac structural and functional integrity, especially clinicians with less experience.
- An Operator-independent tool –VIS-Assistance- specifically designed for further improvement of successful diagnostic plane reconstruction is offered.
- Able to evaluate each view of fetal cardiac motion as well as hemodynamics.

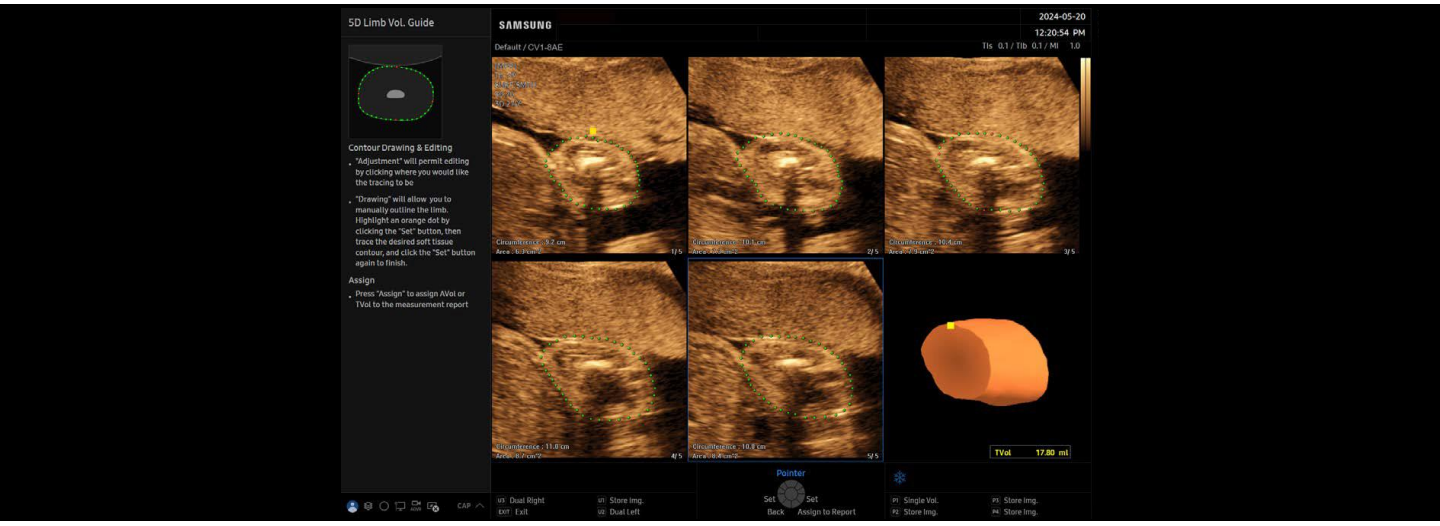
Tips

- 2nd to 3rd Trimester fetus is recommended.
- 9 Standard Fetal Echocardiography Views.

: 3VV and Trachea, 4ch, 5ch, LVOT, RVOT, Abdomen, Ductal Arch, Aortic Arch, Vena Cava

- Cardiac Axis value, Fetal Echo View name, Anatomical Labels can be shown in Diagnostic Planes.

A: Transverse aortic arch	RA: Right atrium
Ao: Aorta	RV: Right ventricle
Desc: Descending	RVOT: Right Ventricular Outflow Tract
IVC: Inferior Vena Cava	Superior vena cava
LA: Left Atrium	Stom: Stomach
LV: Left Ventricle	SVC: Superior Vena Cava
P: Pulmonary artery	TR: Transverse
PA: Pulmonary Artery	Vent: Ventricular



Feature

- Semi-automated to measure fractional limb volume for fetal weight estimation.
- The Volume result that taken by 5D Limb.Vol™ (Fractional Arm volume, Thigh volume) can be added to conventional 2D measurements, BPD, AC to improve the precision of EFW.

Clinical Benefit

- Address challenges that conventional fetal weight prediction model doesn't include soft tissue parameters.
- Improved the precision of estimated fetal weight by adding a volume result to 2D anatomic measurement.

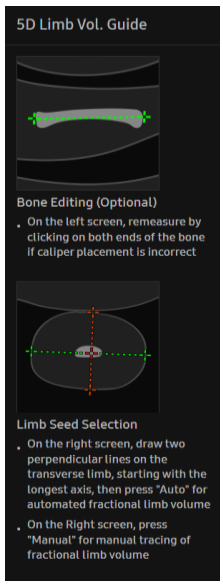
Tips

- EFW Author table need to be assigned as Lee1 or Lee 2 in advance to the study.

  - Lee1 is for BPD, AC and Avol.

  - Lee2 is for BPD, AD and Tvol.

- Scan a Long bone's Longitudinal plane, make it parallel to the 3D ROI line acquire a 3D volume prior to do the 5D Limb Vol™.



**Avol: Lee W, Balasubramaniam M, Deter RL, Yeo L, Hassan SS, Gotsch F, Kusanovic JP, Goncalves LF, Romero R. New fetal weight estimation models using fractional limb volume. Ultrasound Obstet Gynecol, in press.*

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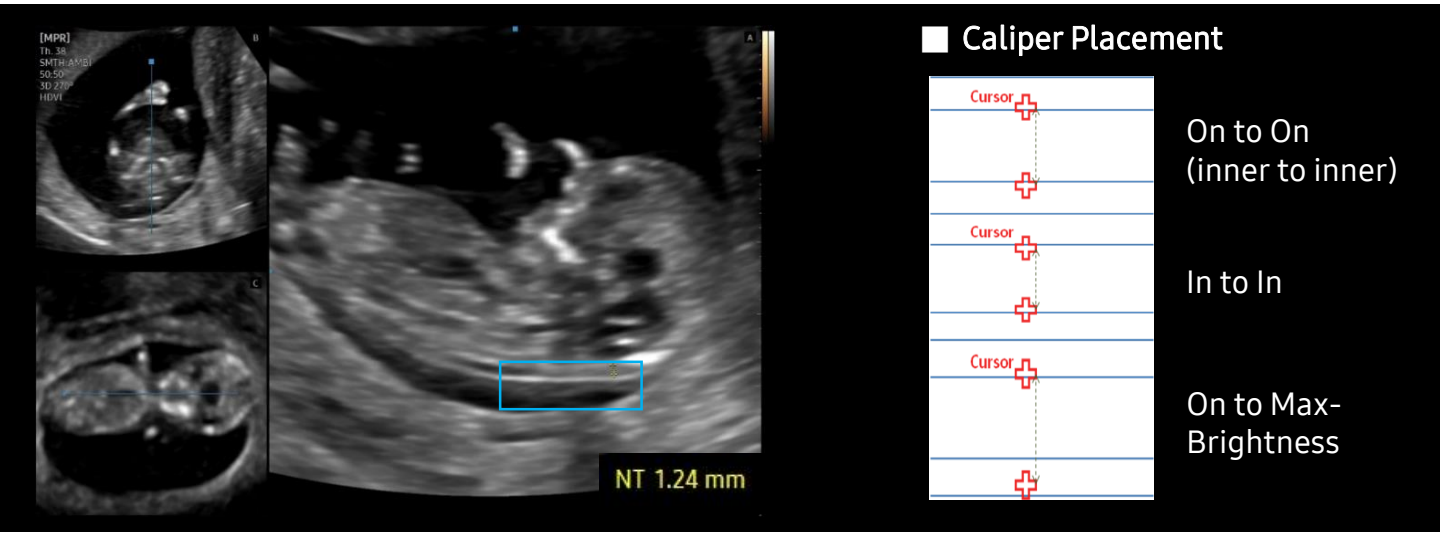


Feature

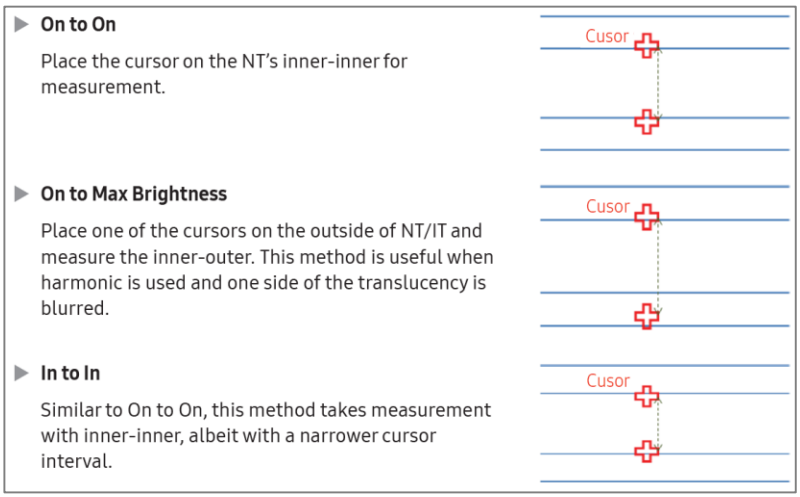
- Semi-automatically finds the right plane to assess a reliable NT measurement and calculation based on volume data. Automatically finds the mid-sagittal plane from acquired volume data and measures the maximum NT(or IT) distance in few seconds.

Clinical Benefit

- Proper measurement at the maximum distance of NT may difficult to perform especially to beginners who is not used to find a true mid sagittal view.
- Provides High inter- and intra observer reproducibility between experienced and inexperienced physicians.

Tips

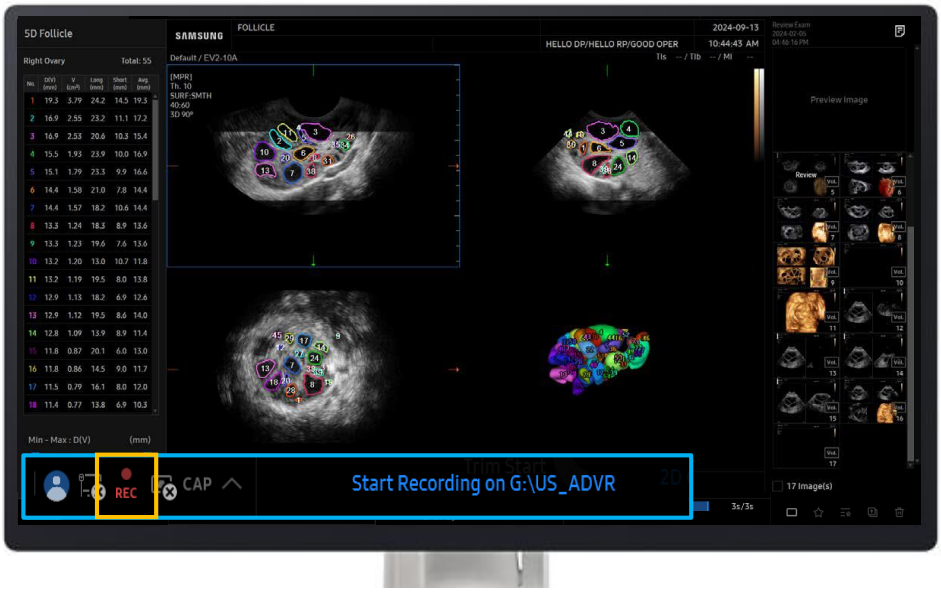
- Find a standard nuchal translucency plane as much as close to the mid sagittal view and take a volume.
- Click the cursor on fetal diencephalon.
- Caliper placement method can be selected depends on user's preference in the TouchScreen.

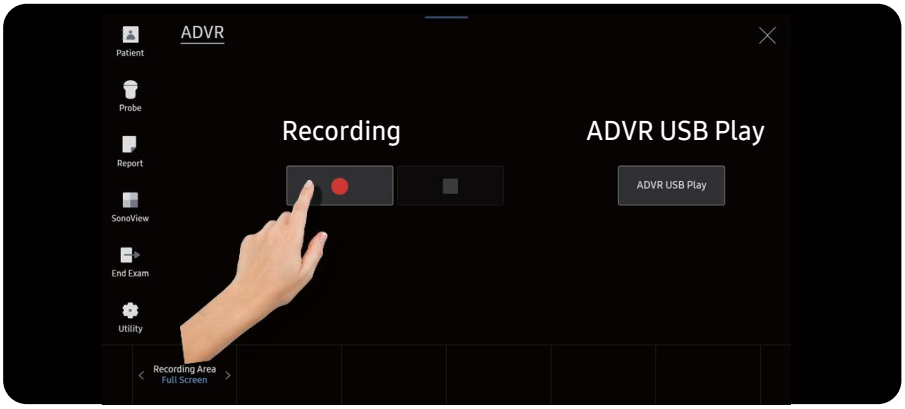


** NT (Nuchal Translucency) : Between 11-13 weeks and 6 days of pregnancy. To assess the risk of chromosomal or genetic conditions such as Down syndrome, Edwards syndrome and Patau syndrome.*

** IT (Intracranial Translucency) : Between 11-13 weeks of gestation Translucent area in the fourth ventricle, parallel to the nuchal translucency , Neural tube defects such as open spina bifida.*

ADVR (Video Recording)



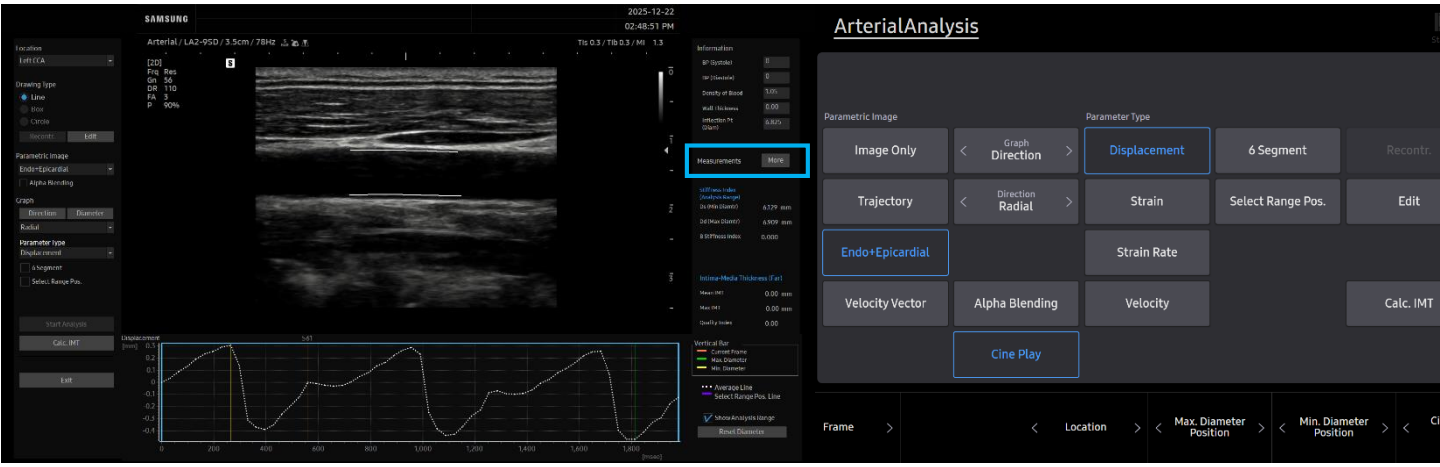


Feature

- Video recording tool, useful to save a specific time range of video for training or lecture for physicians, trainees or for family to memories a baby's ultrasound.

Tips

- Video recording file is stored on the connected External storage via USB Port.
- Able to start and stop a recording while ultrasound scanning with User key.
- Two type or Recording Area is provided : Scan Area / Full Screen.
- Red recording icon is displayed on the left bottom corner of a monitor when ADVR™ is working.
- To review the recorded video, Go to ADVR™ USB Play and select a specific file to play.
- Recording time and capacity is depends on the media's storage.



Feature

- Provides consistent images and clear resolution across various view depths from a near area to a far area of an ultrasound image without requiring the user to manually adjust the focus.

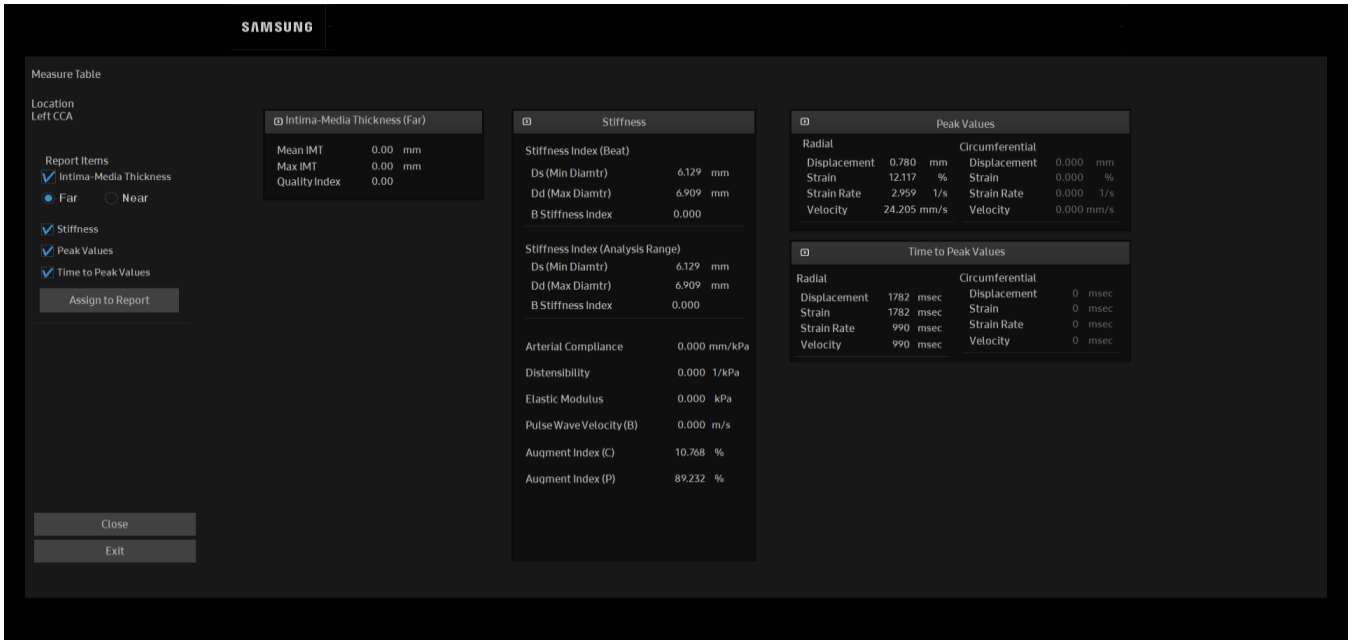
Benefit

- It detects function changes in blood vessels, providing measurements such as carotid artery stiffness, IMT thickness and pulse wave velocity.
- Since functional changes occur before morphological changes, ArterialAnalysis™ aids in the diagnosis of cardiovascular disease.

Tips

- Linear transducers are supported, with single-mode imaging, ECG trigger off, and patient information entered.
- Early detection: Enables preventive care by identifying cardiovascular risks early.
- Risk assessment: Offers quantitative measures (e.g., carotid stiffness, IMT) for personalized risk stratification.
- Treatment monitoring: Tracks changes in vascular function to guide therapy adjustments.

- Measure Table : Press “More” button



Index	Definition	Unit
Stiffness Index	The ratio of the natural logarithm of SBP/DBP to the relative change in diameter	
Arterial Compliance	The absolute change in vessel area for a given change in pressure	mm/kPa
Distensibility	The relative change in vessel diameter for a given change in pressure	kPa^{-1}
Elastic Modulus(Peterson)	The pressure change required for (theoretical) 100% stretch from resting diameter (inverse of distensibility)	kPa
Pulse Wave Velocity(Beta)	Speed with which the pulse wave travels along a length of artery	m/s
Augmentation Index(Central)	A measure of wave reflection and arterial stiffness (defined for a central pressure (diameter) waveform)	%
Augmentation Index(Peripheral)	A measure of wave reflection and arterial stiffness (defined for a peripheral pressure (diameter) waveform)	%

Feature

- Auto EF is an automatic tool for measurement of global ejection fraction.
- It is a measurement, expressed as a percentage of how much blood the left ventricle pumps out with each contraction.
- The percentage of End Diastolic Volume (EDV) ejected after each contraction. (Systole)

- EF = (EDV-ESV)/EDV * 100% (Normal range is 56~78%)

- If resting EF is < 30% a person's exercise capability will be significantly reduced.

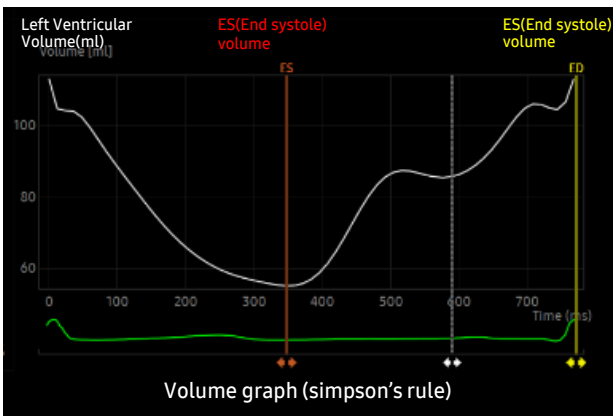
	Male				Female			
	Normal range	Mildly abnormal	Moderately abnormal	Severely abnormal	Normal range	Mildly abnormal	Moderately abnormal	Severely abnormal
LV EF(%)	52-72	41-51	30-40	<30	54-74	41-53	30-40	<30
Maximum LA volume/ BSA(Ml/m²)	16-34	35-41	42-48	>48	16-34	35-41	42-48	>48

** ASE Guidelines (Long et al. J Am Soc Echocardiography 2012;25:3-36)*

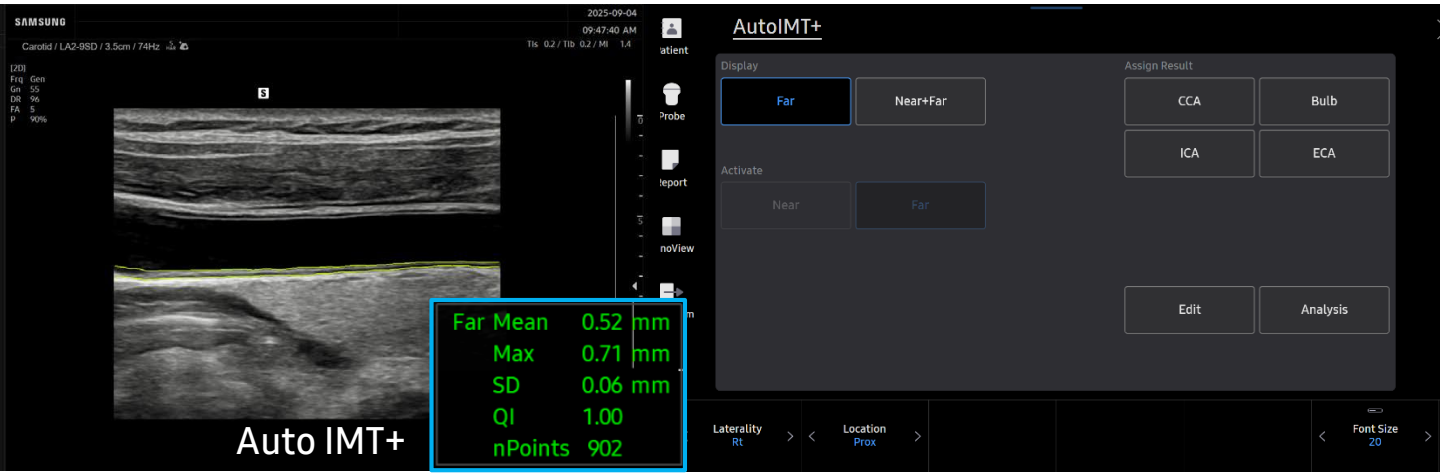
Clinical Benefits

- Auto EF provides fast, accurate and reproducible LV ejection fraction measurements.

Measurement : SV (Stroke Volume), EF (Ejection, Fraction), GLS (Global Longitudinal Strain)



Volume graph (simpson's rule)



Feature

- Automatically detects an intima-media thickness of the Carotid (Common carotid artery, Internal Carotid Artery, External Carotid Artery).
- Presents Mean, Max, SD Thickness of the intima/Adventitia pair and Standard deviation as a result.

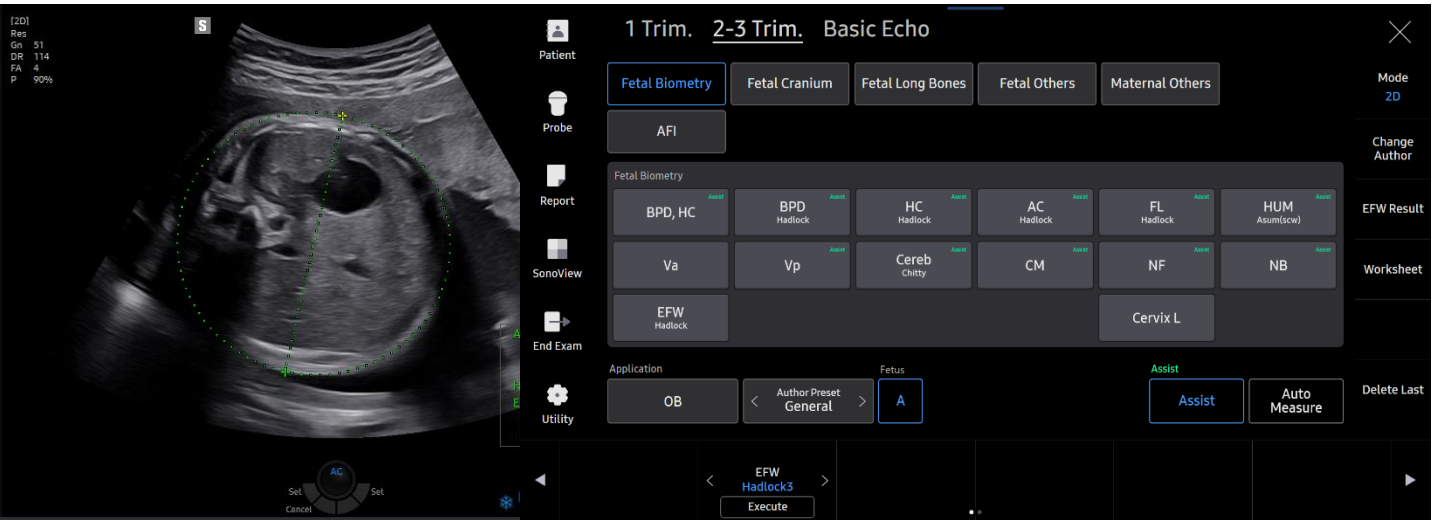
Clinical Benefits

- Quick and simple assessment for IMT measurement is supported.
- Intuitively show the detected line as different color (Green to red) depends on the IMT thickness result.
- Both Near and Far IMT can be assessed.
- Provides the distance ratio of the measured point in a distance for Quality Index measurement.

Tips

- If the vessel image quality is poor, select an area that is close to the Intima to be measured when user need to update the result.
- Contrast image is recommended, increase a reject level or decrease a gain would be helpful.
- Measurement results table.

Mean	The average thickness of the Intima/Adventitia pair
Max	The maximum thickness of the Intima/Adventitia pair
SD	Standard Deviation
QI	The distance ratio of the measured point in a distance for Quality Index measurement
nPoints	The total number of the measured Intima/Adventitia pairs



Feature

- A feature based on Deep Learning technology, is an semi-automatic function for fetal biometric measurement.
- It enables users to measure the fetal growth parameters with one click while maintaining exam consistency.
- Semi-Automatically measures the following anatomical structures: BPD, HC, AC, FL , HUM, those are main items required for estimating fetal weight. Tap the desired item on the TouchScreen.

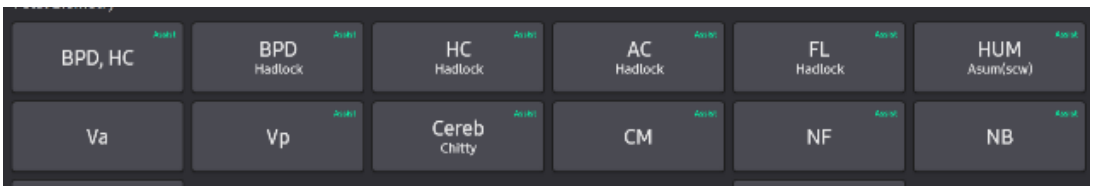
Benefit

- Enables users to measure the growth of the fetus quickly with greater accuracy while maintaining exam consistency.
- Reduces repetitive measurement tasks in ultrasound examination.

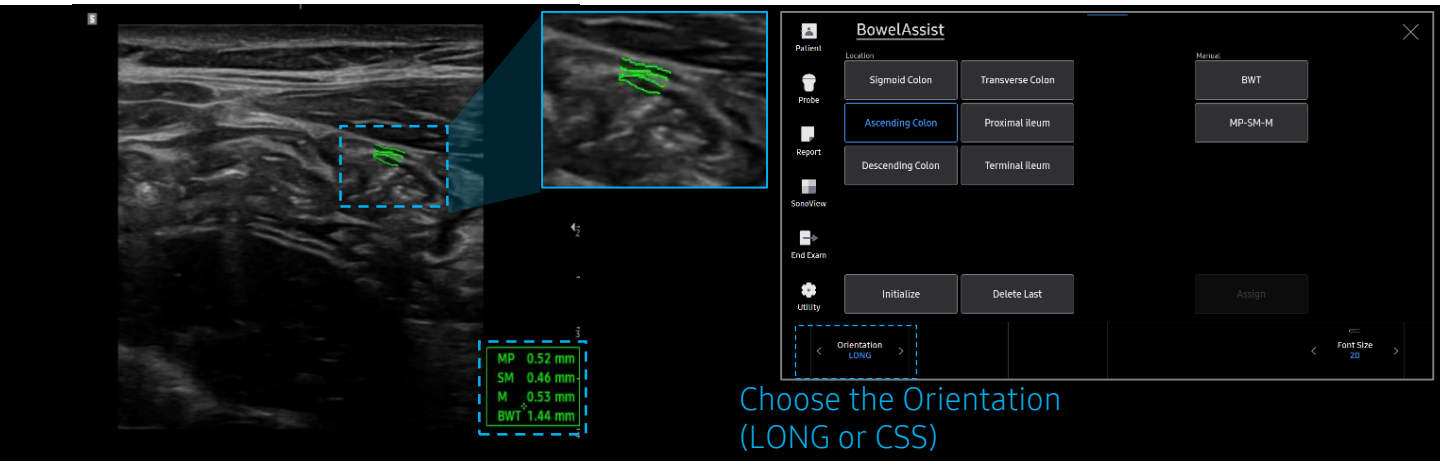
- For experienced users, it shortens examination time.
- For beginners, standardized measurements help obtain consistent results, increasing confidence in diagnosis.

Tips

- BiometryAssist™ items are selectable in the Utility > Setup > Assist > OB Page.
- “Assist” is shown on the measure items on the button that is working as the BiometryAssist™.



BowelAssist™



Choose the Orientation (LONG or CSS)

Feature

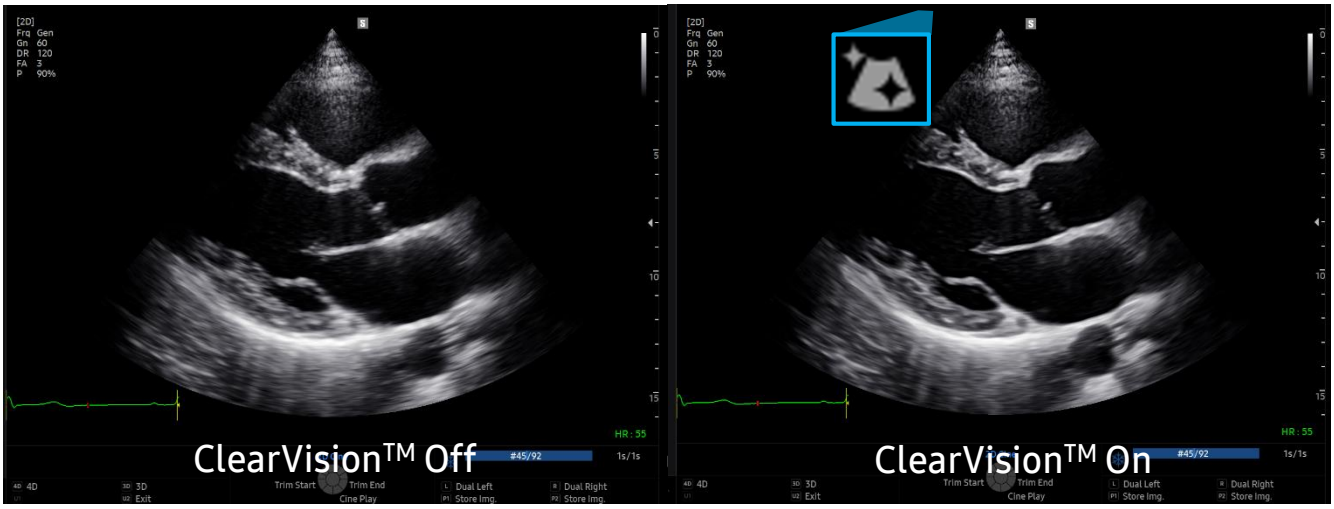
- BowelAssist™, powered by deep learning, reduces keystrokes by up to 80%.
- The user simply draws a box-shaped target area over the bowel wall, and the system automatically measures: MP (Muscularis Propria), SM (Submucosa), M (Mucosa), and BWT (Bowel Wall Thickness)

Clinical Benefit

- Provides standardized and reproducible measurements of bowel wall layers, which are critical for assessing disease activity and monitoring treatment response in Inflammatory Bowel Disease (IBD), including Ulcerative Colitis and Crohn's Disease.

Tips

- Linear transducer is supported : LA2-9SD
- Select the desired Orientation (LONG or CSS) at the bottom of the screen.
- If needed, select a Location (e.g., Caecum, Ileum, Ascending Colon, Transverse Colon, Descending Colon, Sigmoid Colon, Rectum).
- Draw a box over the target area to initiate automatic detection and measurement.
- Tap Assign to link the selected Location and Orientation to the result, which will be recorded in the Report.
- If BowelAssist™ does not appear on the touchscreen,
  go to Utility > Touch Customization and verify that BowelAssist™ is enabled.



Feature

- A speckle (granular texture) reduction technology.
- The noise reduction filter that is designed to remove distracting speckle noise artifact.

Clinical Benefit

- Noise at tissue boundaries is removed to provide a clear tissue interface, create clear images, and improve contrast differentiation.
- Reduces halo artifacts that occur when tissue contours are enhanced.

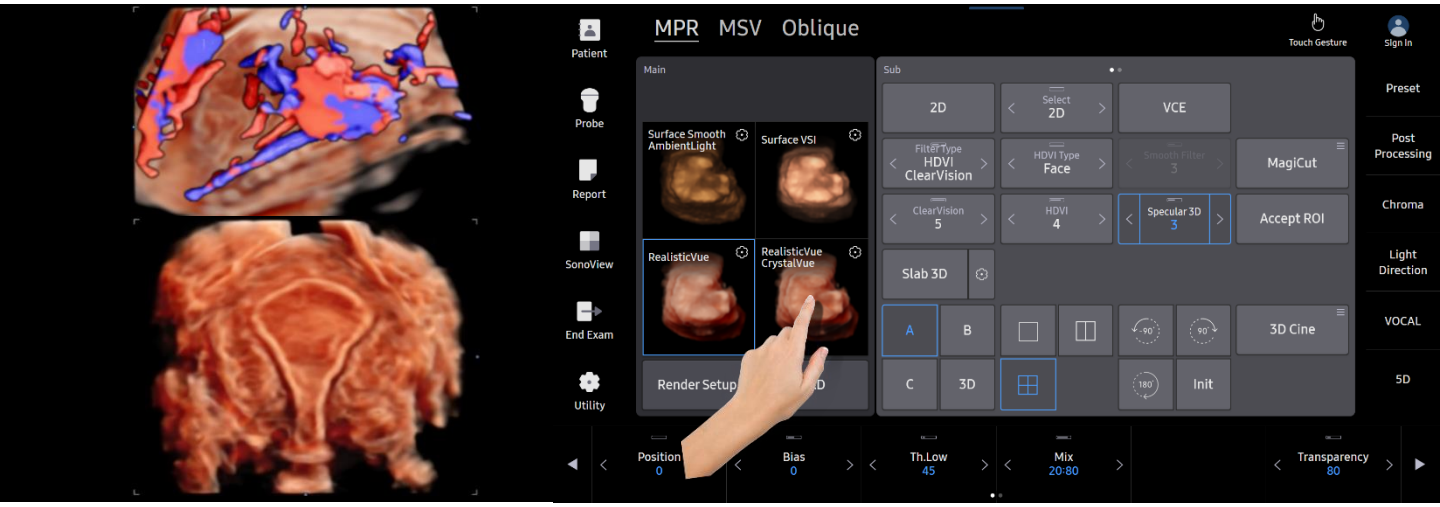
Tips

- The index can be adjusted according to the user's preference.

- A lower index helps to make the speckle and natural pattern.
- The higher the index, the smoother the image.

- Supports post-processing.

- You can change the index from the stored image in any time to change it into various patterns and save it again.



Feature

- CrystalVue™ is context preserving rendering technology and provides morphological information, while conventional 3D visualize only surface information.
- Visualize both interior and exterior structures, anatomical details in transparency mode with the ability to differentiate between different tissues as well as vascular.

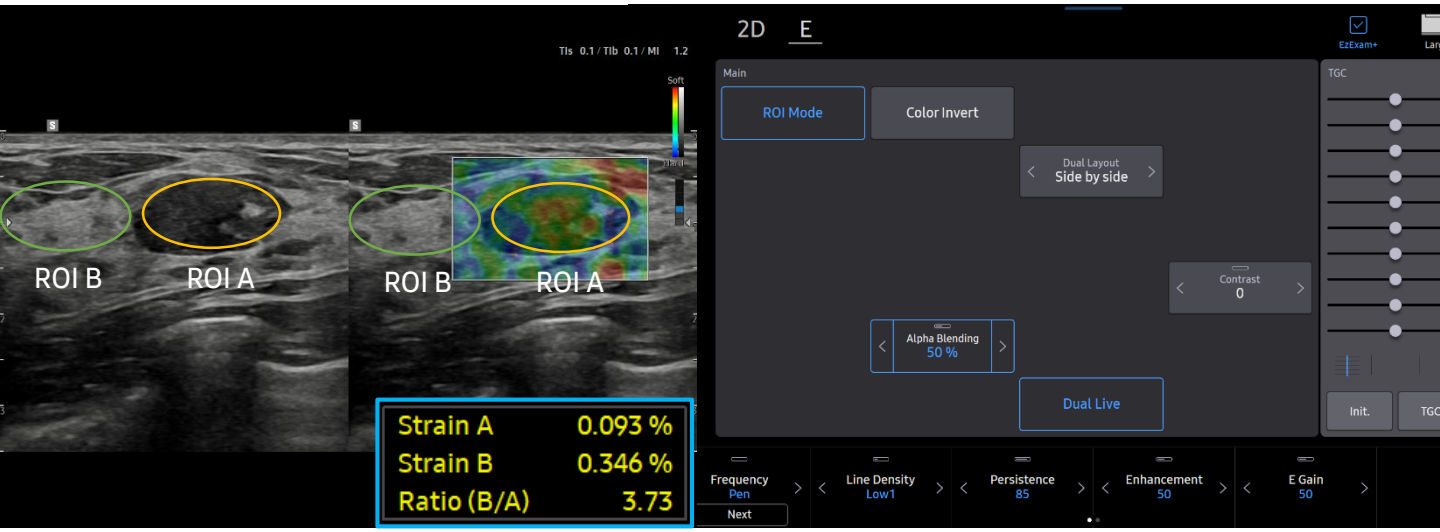
Clinical Benefits

- Displaying normal anatomy and fetal malformations with high volume image quality, useful throughout all trimesters either in normal or in pathologic cases.
- More detailed structures which having a different level of voxel strength can be demonstrated such as Bony, cartilage, skin, vascular branching or parenchimatous organs, even cavity organs.

Tips

- Quickly accessible to the CrystalVue™ by tapping the RealisticVue/CrystalVue of the Render Preview on MPR Mode TouchScreen, based on the Color 3D data.
- Able to optimize an image with more opacity or transparently or enhance a context information using the Strength, Transparency, Complexity. 5 different default User preset is provided in RenderSetup page.

ElastoScan+™ (E-Strain™)



Feature

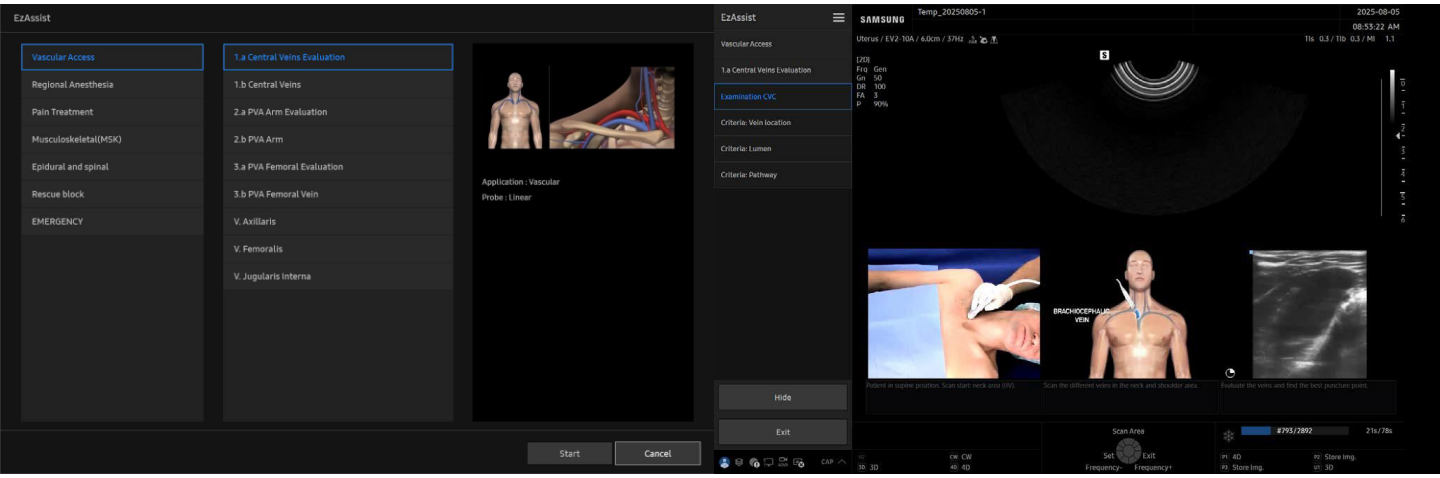
- Non-invasive diagnostic tool based on differences of stiffness between malignant and benign lesions based on ElastoScan map.
- Mainly useful in breast application, stiffness ratio between the lesion and reference could be one of a criterion to define malignancy risk.
- Intuitively noticeable the lesion's hardness with stiffness map's pattern and color.

Clinical Benefit

- Qualitative evaluation is supported by providing a compression guide bar, helps to reduce an user dependency.
- Quantitative assessment is available by providing the strain ratio. ** Ratio (B/A) = Reference ROI/Target ROI*

Tips

- Fit the Compression guide bar as level 3-5 is recommended with natural compression.
- ROI A would be Target lesion and ROI B would be a Reference, which is a fat tissue in Breast.
- Make ROI size fit to the lesion, to include a region.
- Same ROI size and place them in similar depth is recommended for an accurate comparison.



Feature

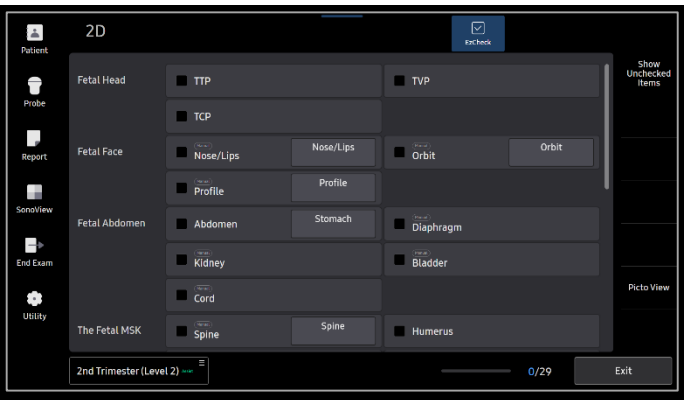
- Provides the anatomical information of the human body at the screen to guide easy ultrasound scanning for untrained people.

Clinical Benefit

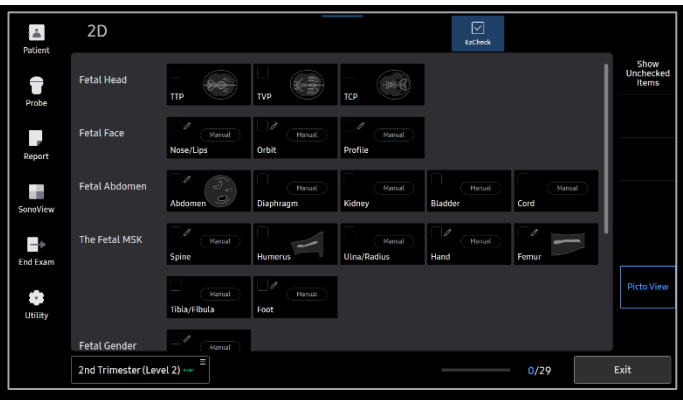
- A reference tool to be used at the discretion of a professional caregiver in non-clinical settings.
- It is helpful to use as a educational tool for beginners who need to get used to the procedure with ultrasound scanning, such as Vascular access, Regional Anesthesia, Pain treatment (Nerve block), MSK scanning, Emergency and so on.

Tips

- Assign the EzAssist on the User key and use as a shortcut function is available.
- All transducers are applicable except the Pencil probe.
- Procedure lists
  - Vascular, Regional Anesthesia, Pain Treatment, MSK, Epidural and spinal, Rescue block, Emergency



▲ List View



▲ Picto View

Feature

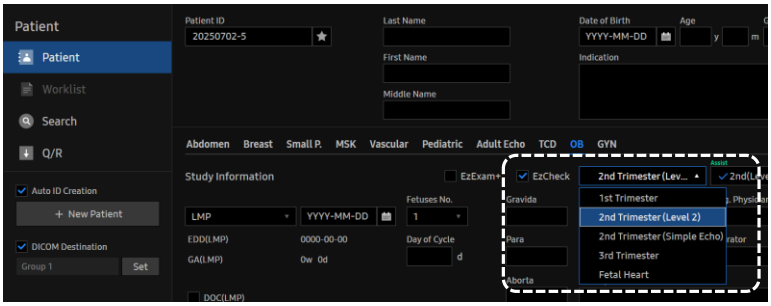
- EzCheck™ identifies whether required images or biometry values have been acquired during the exam.

Clinical Benefit

- It displays an intuitive scan progress status, helping users complete the exam by tracking missing items in real time. The standard pictogram view on the touchscreen is especially helpful for beginners in identifying and scanning required views.
- Measurement results and GA (gestational age) information are shown below each corresponding view, allowing users to review all key data at a glance without accessing the report page.

Tips

- Activate EzCheck™ from the patient registration screen before starting the exam.



- Users can choose between List View or Picto View, and monitor scanning progress in real time with a clear display of completed items vs. total items (e.g., 5/29).

EzCompare™

Feature

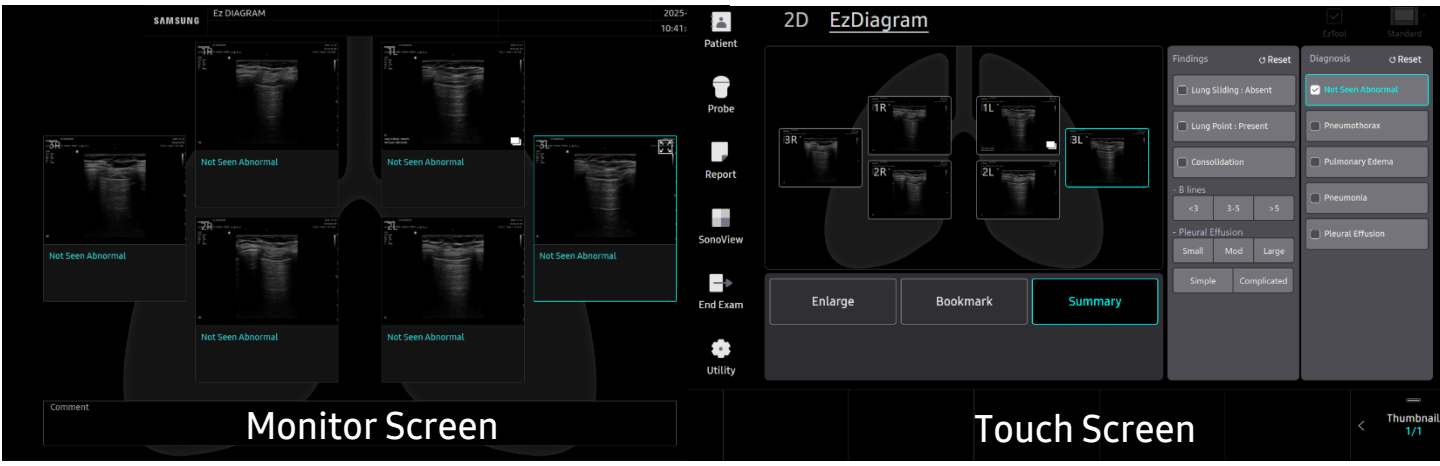
- Allows easy access to previously taken exams to evaluate corresponding views in a side-by-side display.
- EzCompare™ automatically set image settings, Annotations and Bodymarkers from the prior study.

Clinical Benefit

- The cases that require follow up, it creates the same scan environment such as image parameter, Color PRF to support accurate and easy comparative study.
- Provides improved usability, EzCompare™ enables to save a time consumption and reduce keystrokes.

Tips

- Find a exam on Search Tab on the Patient page › Select an Exam › Click the EzCompare button. Multiple exams can be selected under the Same Patient ID.
- Previously stored images are listed up on the right side on a Scan Mode.
- Select the images that you desired to make a comparison.
- Same image parameters of previous image are presented regardless of the preset.



Feature

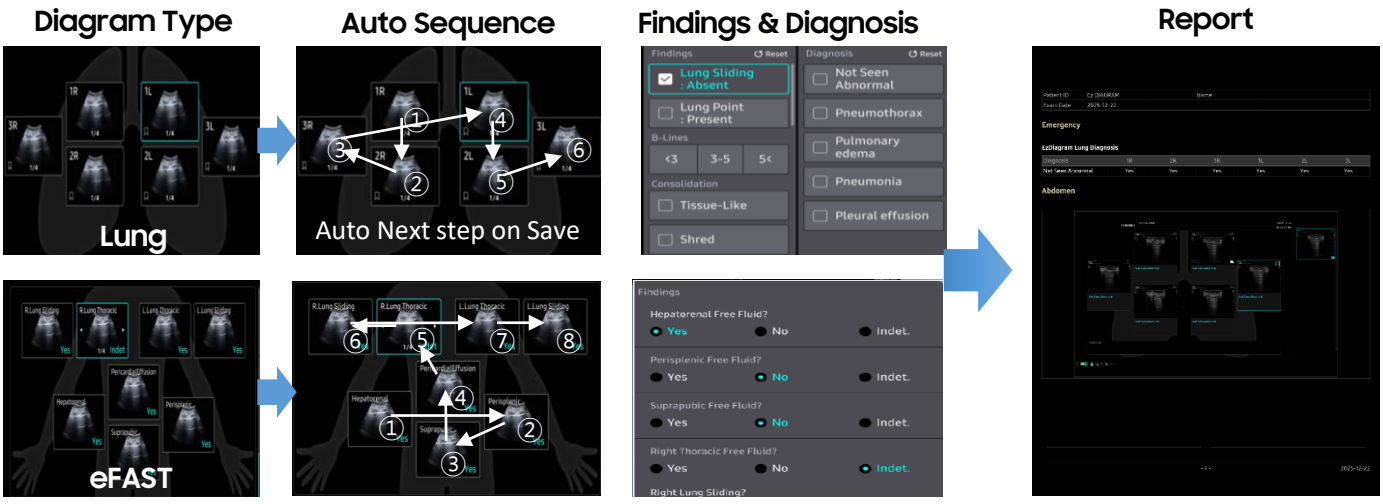
- EzDiagram is a feature that helps users easily create standardized reports by placing ultrasound images with specific findings on a predefined body map diagram and adding descriptions during exams such as Lung Ultrasound, eFast.

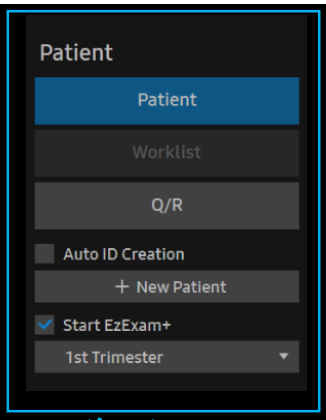
Clinical Benefit

- EzDiagram offers lung/eFAST with a truly streamlined workflow, seamlessly integrating real-time documentation and connected to report.

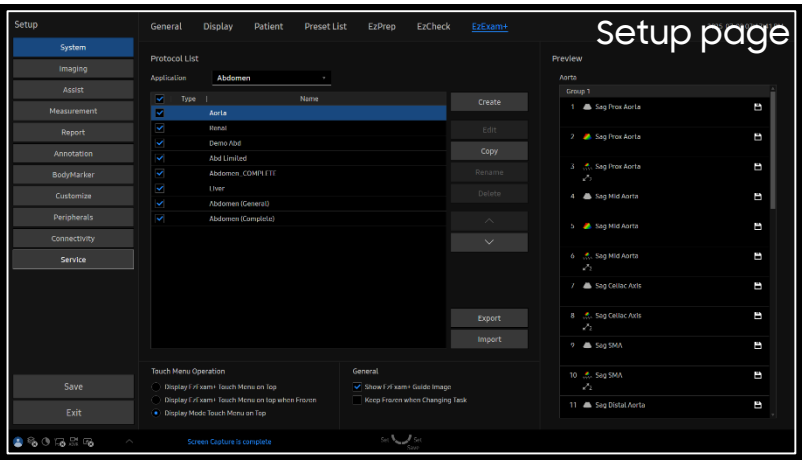
Tips

- You can configure EzDiagram related items in Utility > Setup > Imaging > Features.





Patient screen



Feature

- You can create routine ultrasound examination protocols to reduce the number of steps required to press multiple buttons and supporting complete the exam.

Benefit

- It helps to reduce keystrokes and repetitive motions therefore reducing the risk of RSI (Repetitive Strain Injury).
- It is very useful in hospital settings and sonographers where certain images are necessarily required.

Tips

- It provides customizable automation at each step of an ultrasound exam providing a fast, comfortable & consistent scanning experience.
- The whole exam sequence is displayed down the side of the monitor.
- It is also possible to go back to the previous step or jump forwards to other steps if necessary during the examination.
- Setup an user's protocol with EzExam+ creator

  Utility › Setup › System › EzExam+
- To check for using EzExam+

  Patient › Start EzExam+

▲ Abdomen Application

▲ OB Application

Feature

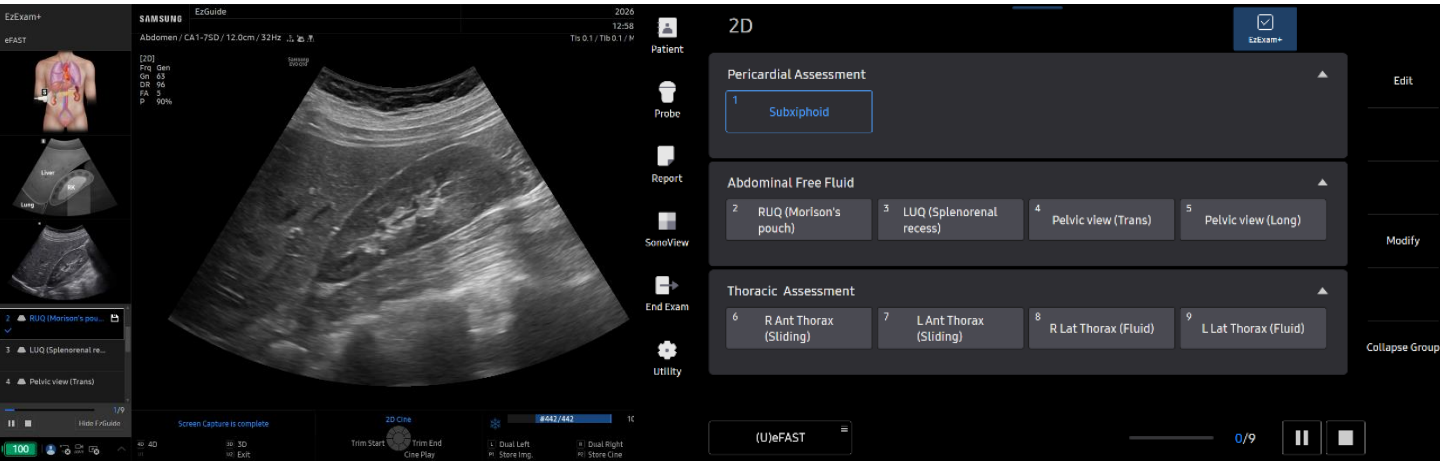
- Automatically fine-tunes imaging parameters — including gain, scale, wall filter, and baseline — with just one button press. It streamlines the optimization process for C/PD/PW modes, helping users quickly obtain high-quality vascular images without manual adjustment and enabling quick optimization for specific vascular structures, acting like a color preset.

Benefit

- Improves efficiency in routine Doppler exams by reducing manual adjustments, delivering optimized vascular imaging for confident diagnosis with less effort.
- For the Abdomen preset, EzFlow™ provides targeted optimization for structures like renal vessels or conditions like twinkling artifacts, enabling consistent image quality in routine exams.
- For the OB preset, up to six kinds of detailed EzFlow™ presets can be configured per preset unit. For example, Uterine A., MCA, Umbilical A., Ductus Venosus, Fetal Heart and Pulm. Veins color presets can be set for the 2nd Trimester preset.

Tips

- In C/PD/PW Doppler modes, press the desired EzFlow™ preset on the touchscreen to instantly apply optimized settings for the target vessel.
- In Utility > Setup > Imaging > EzFlow™, you can manually adjust individual imaging parameters.



Feature

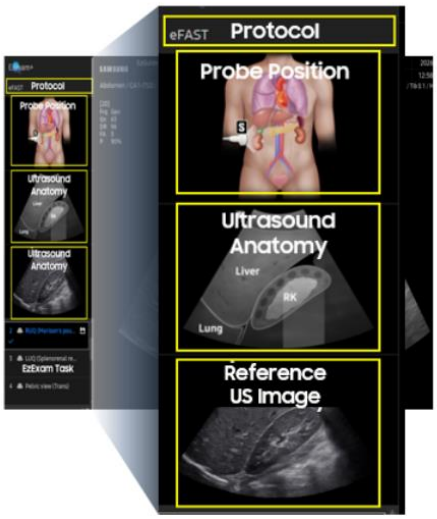
- EzGuide™ acts as an expert guiding you. Anyone can achieve an accurate scan just by following the anatomical drawings and reference images.
- It provides major protocols such as eFAST, Blue, Rush, and Basic Cardiac, which are ideal for beginners.

Clinical Benefit

- By providing a scan guide based on major protocols, it helps users, especially non-experts, to perform accurate examinations, and can also be useful for educational purposes.

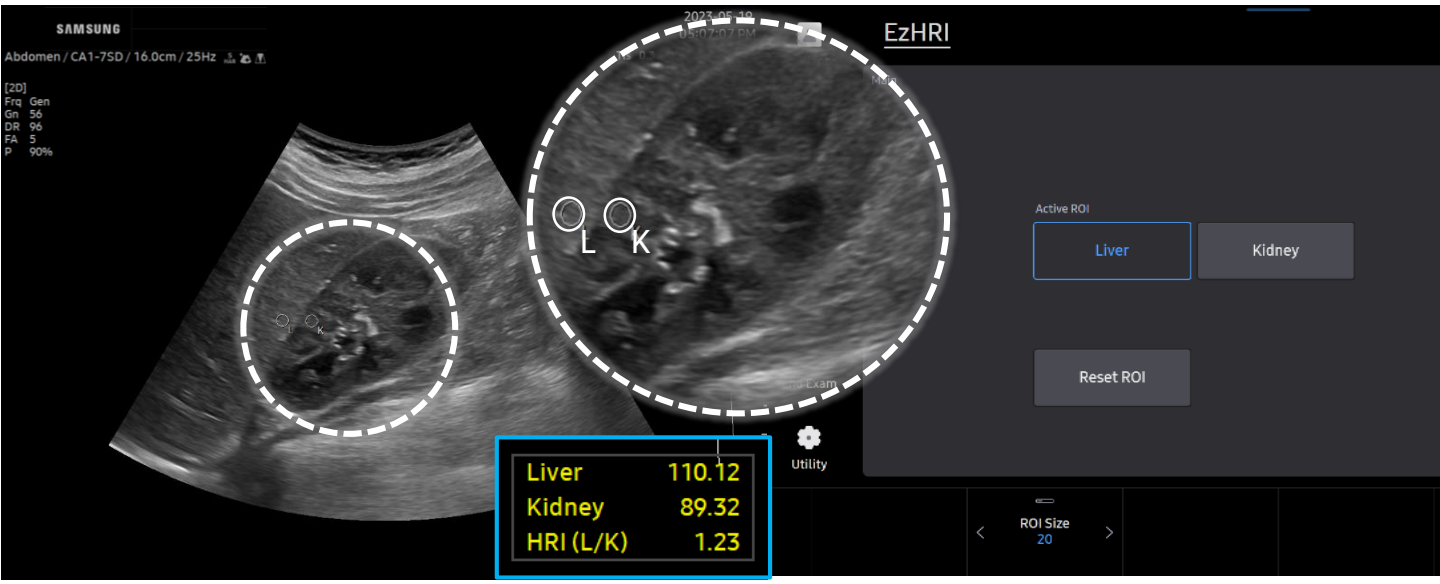
Tips

- When used with EzExam+, it ensures you complete the protocol in the set order without omission, further enhancing the quality of the exam.



"Create your own Scan-guide Protocols"

Customizable Protocol	Default Protocol in EM/CC
Display menu • Probe Position • Ultrasound Anatomy • Reference	eFAST
• Editable Protocol	BLUE
• Image insertion - JPEG, BMP, PNG, - AVI (up-to 10MB)	RUSH
	Basic Cardiac



Feature

- Hepato Renal Index(HRI) is an index used to compare the brightness level in the hepatic parenchyma with that in the renal cortex.
- A feature based on deep learning technology, Two ROI is automatically shown in liver parenchyma and renal cortex based on segmentation information once user launch the EzHRI™

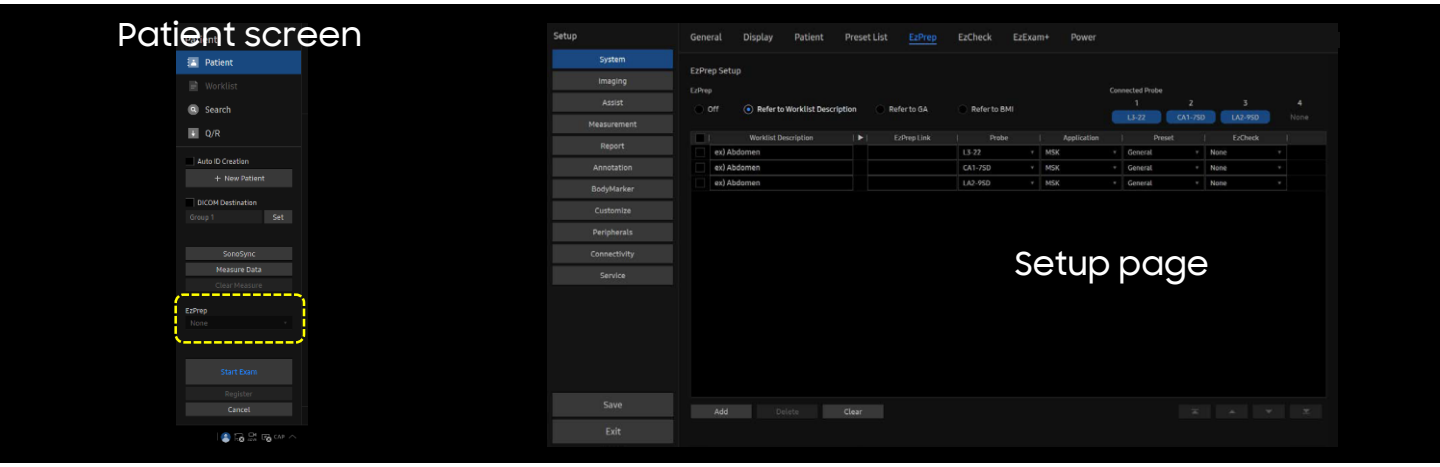
Benefit

- Suggests quantitative value which could be useful to grading the fatty liver stage rather than visually compare the Hepato-renal echo intensity.
- Improve workflow efficiency with automation features that reduce the number of steps required to enter measurements and annotations for each item each time.

Tips

- The performance of EzHRI™ can be affected by shadow artifact and unclear margin between liver and Kidney, which means, image parameter and image quality could affect to the result value.
- Please refer to the below table : Probe/Preset Configuration

Probe	Application	Preset
CA1-7SD	Abdomen	Abdomen, Penetration, Renal
	Emergency	Abdomen, FAST
CA2-8AD	Abdomen	Abdomen, Renal
	Emergency	Abdomen, FAST



Feature

- EzPrep™ is a function that automatically selects the transducer and preset based on the Worklist or manually inputted in the System Setup page when start an exam on the patient page.

Clinical Benefit

- Doesn't need to select a Transducer/Preset selection as exam started, so it improves repeated work-steps.
- EzPrep can be addressed based on Worklist Description/Obstetrics GA/BMI information which would be frequently on User's behaviors.

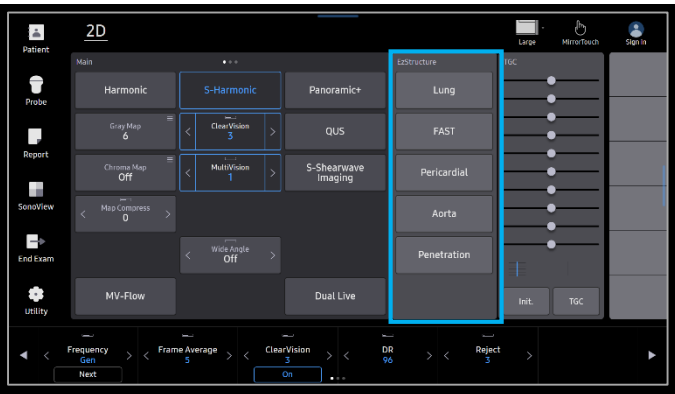
Tips

- Utility > Setup > System > EzPrep™

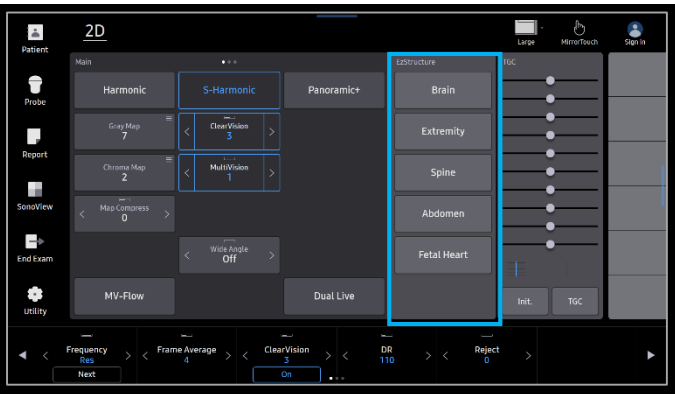
  - Refer to worklist description and refer to GA type are provided.

  - Probe connection is required for EzPrep™ setting.

  - UserPreset can be assigned as a EzPrep well.



▲ Abdomen Application



▲ OB Application

Feature

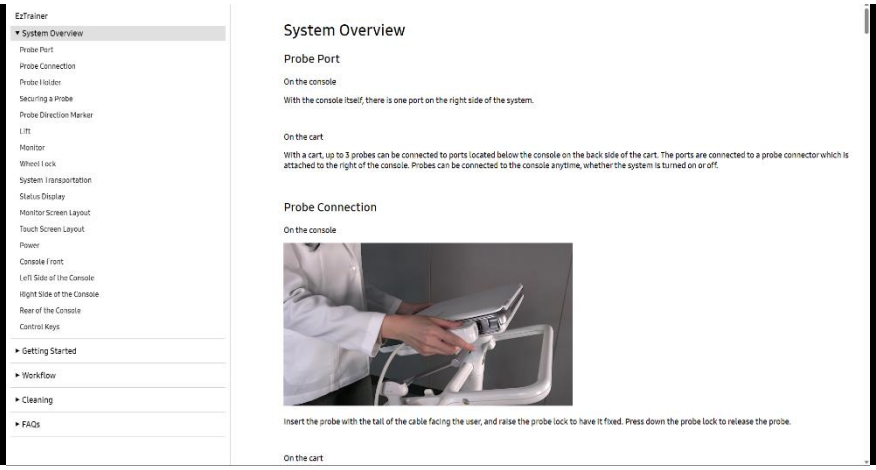
- EzStructure™ is a 2D image optimization tool designed to deliver preset-specific image tuning based on the target anatomy.
- For example, in the Abdomen preset, users can instantly optimize the image for Lung, FAST, Pericardial, Aorta or penetration by selecting the corresponding button — with manual adjustments available as needed.

Benefit

- Improves image consistency and saves time by providing fast, anatomy-tailored optimization during real-time scanning, especially helpful in exams covering multiple abdominal structures.

Tips

- In real-time 2D mode within the selected preset, tap the desired EzStructure™ option from the touchscreen.
- It is available in Abdomen, Small Parts, Emergency, OB, GYN and MSK Applications.
- Parameters such as frequency, gray map, and ClearVision are instantly applied for optimal visualization.
- In Utility › Setup › Imaging › EzStructure™, you can configure each individual image parameter, and assign a corresponding EzFlow™ to be applied with each EzStructure™ selection.
- If EzStructure™ does not appear on the touchscreen, go to Utility › Touch Customization and verify that EzStructure™ is enabled.



Feature

- Basic instructions for the user who just get started the System.

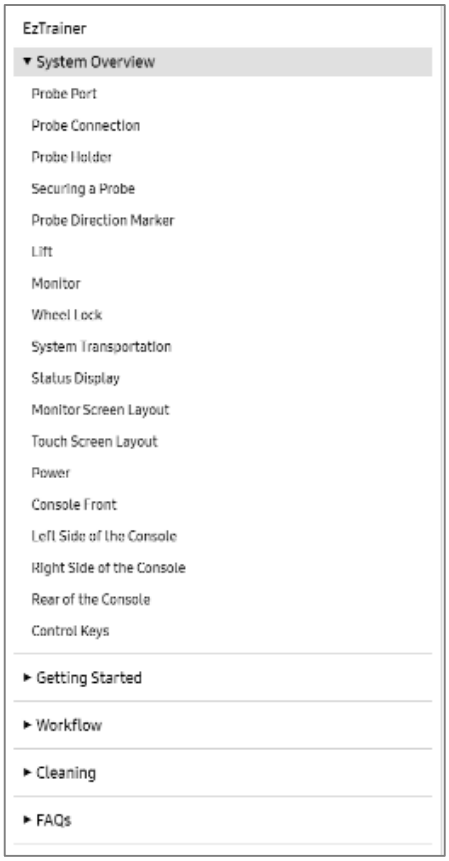
Clinical Benefit

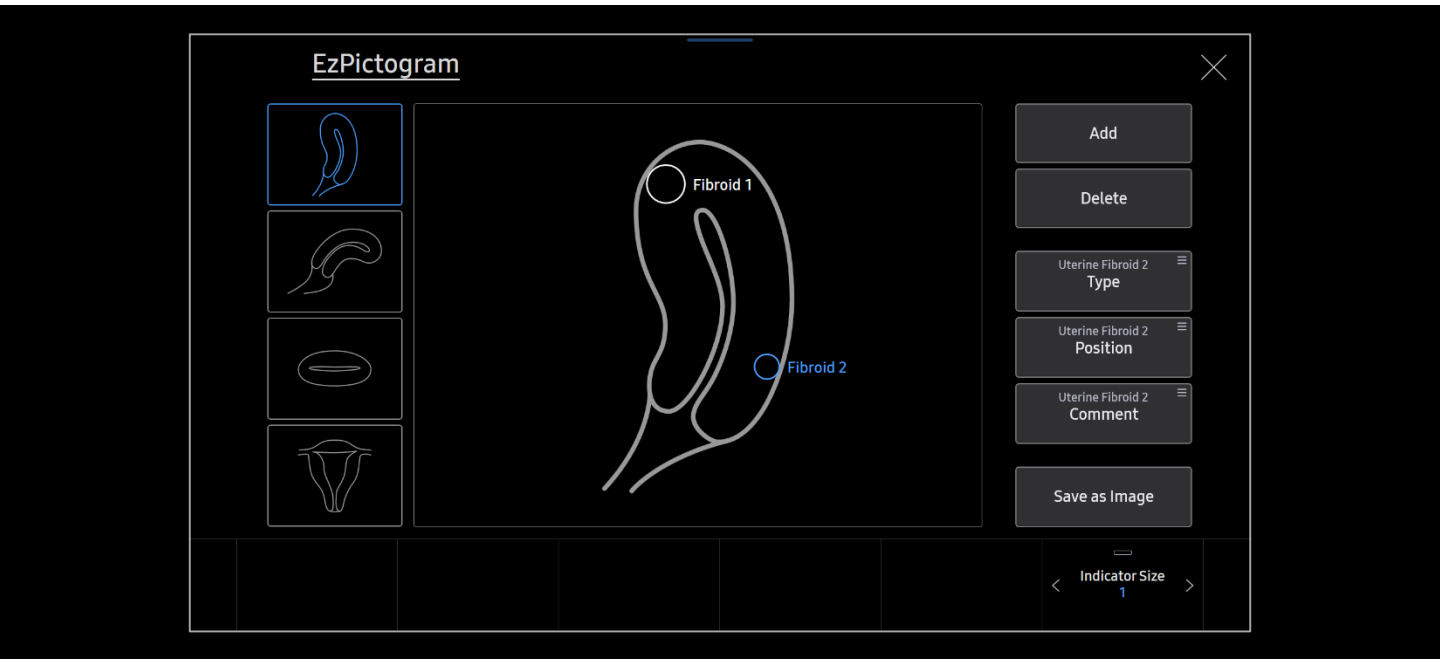
- For the user : By implementing brief and essential user guide on the system, it is helpful to find quickly and is well informed of how to use the system themselves.
- For the Sales/Application specialists : Use the EzTrainer as a introduction tool to the users who just getting started the system.

Tips

- Utility > EzTrainer
- EzTrainer's contents are;

  - System overview, Getting started, Workflow, Cleaning, FAQs





Feature

- Simplify reporting with optimized workflow of picturing and recording the location of the lesion instead of drawing manually.

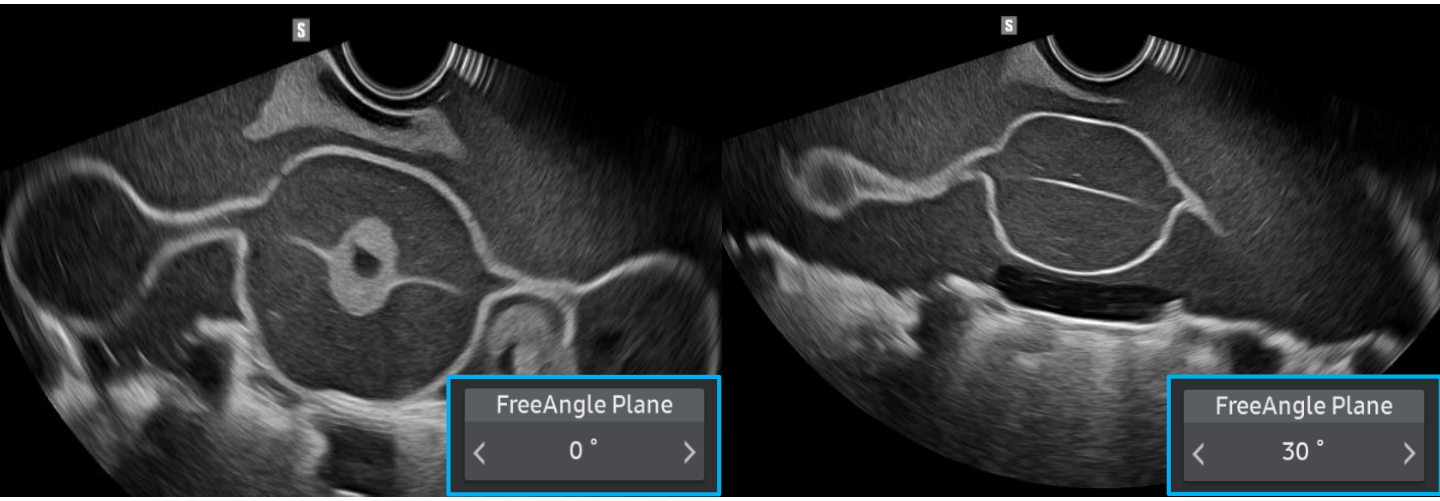
Benefit

- An advantage of this approach is that it allows physicians to show the location, size and righting of the fibroid, along with the ultrasound images, in a system that does not draw them directly on paper, but rather in conjunction with the PACS in their consulting room.

Tips

- Directly assign the Fibroid type, Position and Comment, those are linked with the Report page.
- Supports options to be shown on the Pictogram: Uterus flexion type, Transverse, Coronal view of uterus.
- To convey more accurate information, the size of the Fibroid can also be displayed differently by adjusting the indicator size.
- Pictogram can be saved as an image itself with “Save as image”
- This function can be accessed by entering Measurement and pressing EzPictogram on the touch screen.

Free Angle Plane



Feature

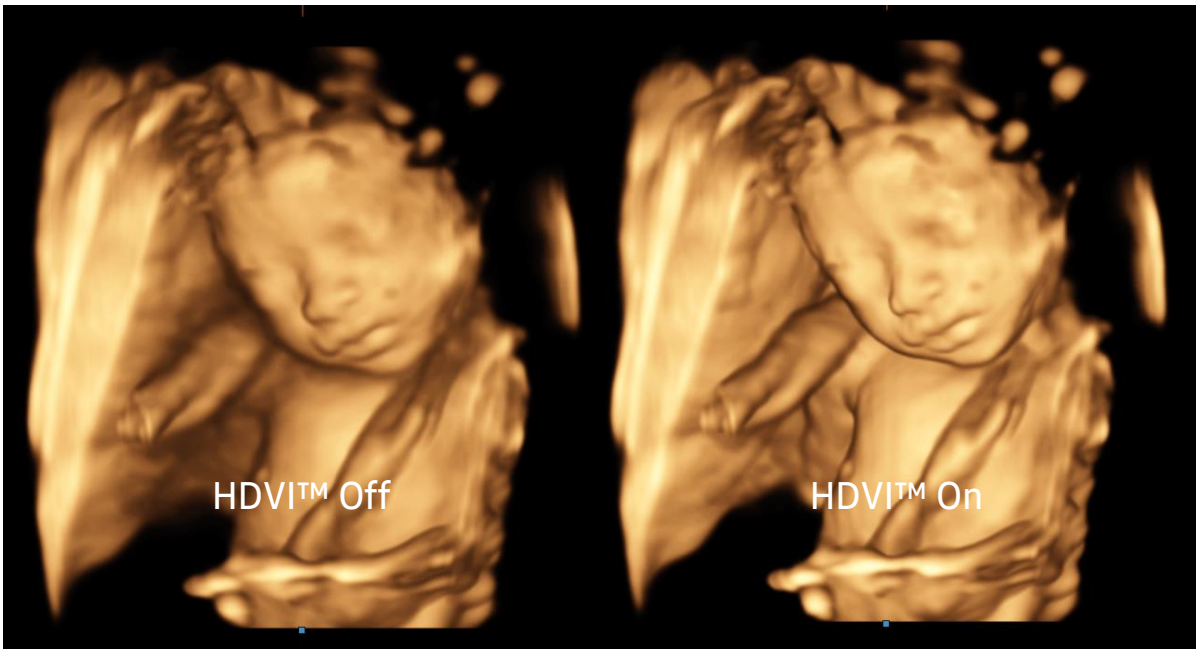
- Free Angle Plane feature allows for flexible imaging by enabling clinicians to obtain views at various angles without physically repositioning the 3D transducer.

Clinical Benefit

- Increased Efficiency : Time-saving , Streamlined workflow
- Enhanced Patient Comfort : Reduce movement, Less disruption, Reduced stress

Tips

- Useful for gynecology application like uterus, both ovaries and adnexa.
- For a patient with challenging ovarian visualization due to lateral or superior adnexal positioning, a postmenopausal patient experiencing significant discomfort during transvaginal examinations, or a patient with an ectopic pregnancy or complex cyst/mass in severe pain.
- This feature is available on the 3D vaginal transducer. It allows the scan head to be adjusted to the desired angle without moving the transducer, enabling the observation of sequential planes on both sides.
- User can observe images by sweeping based on the elevation angle without moving the probe and it supports a range from -40°~40.



Feature

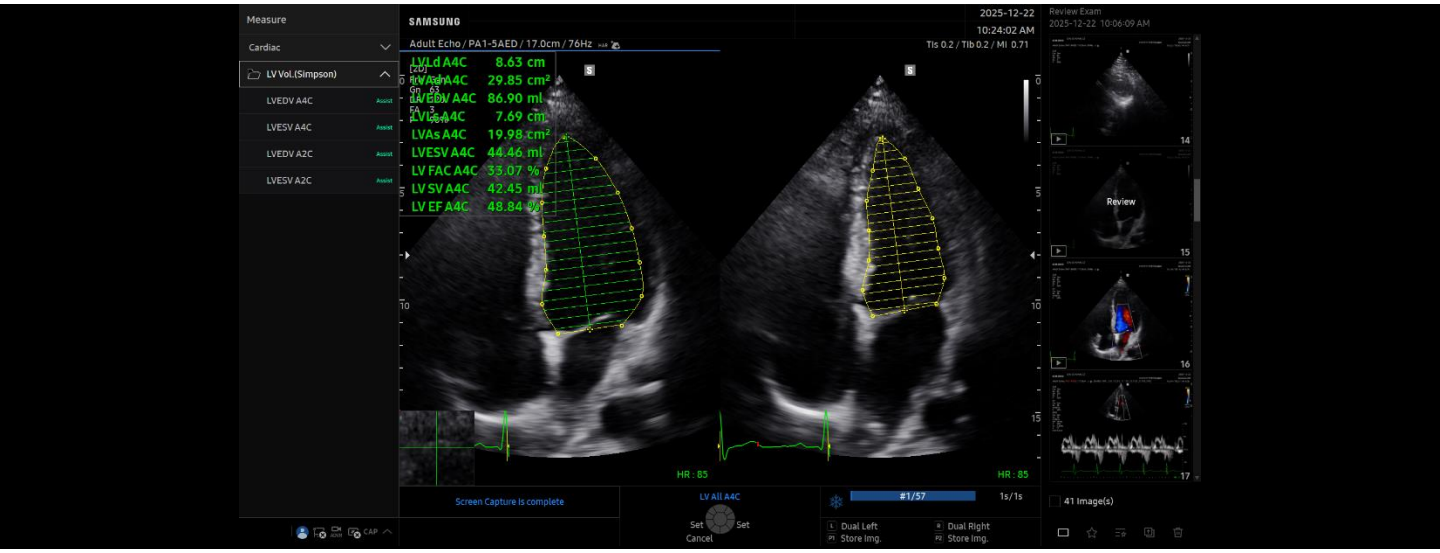
- HDVI™ (High Definition Volume Imaging) is a volume rendering technology that improves visualization of edges and small structures in volume data.
- A feature that applies 3D Matrix processing based on voxel by voxel of 3D volume data as well as A/B/C Plane's image quality.

Benefit

- Improves the ability to distinguish boundaries and structures in 3D images.
- The expression of different textures for each organ can be improved.

Tips

- Provides various types considering the characteristics of anatomical structures. Usually Face, Surface type is recommended for the 2nd -3rd Fetal Face and Early OB for 1st Trimester.
- Step-by-step settings are possible by adjusting the index.
- Upgraded marginal expression and image saturation expresses the very details from angle to shadow of the fetus.



Feature

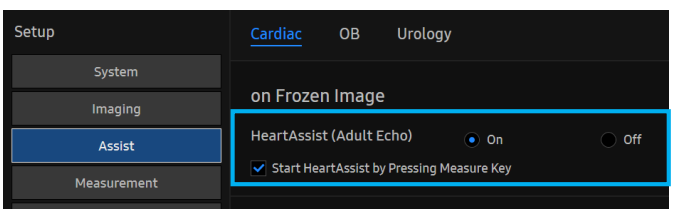
- A feature based on Deep Learning technology, provides automatic classification of ultrasound image into measurement views required for adult/pediatric heart diagnosis and provides measurement results.

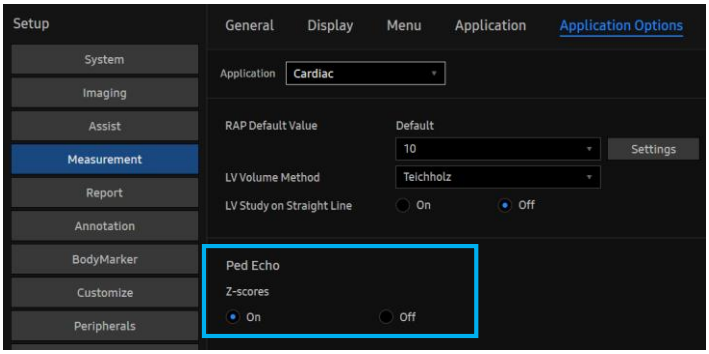
Benefit

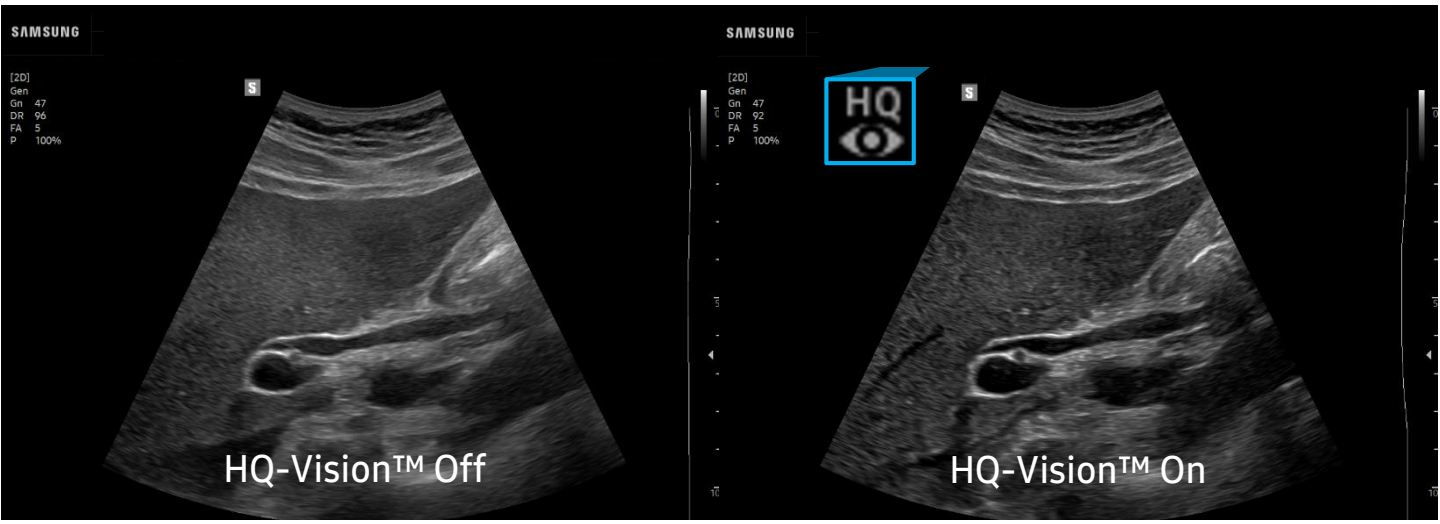
- Simplifies the time-consuming measurement process, improving examine efficiency and increasing the accuracy and reproducibility of measured values.
- Presents Pediatric Z-Score as well.

Tips

- It is enabled under the following conditions:
  - Application: Cardiac
  - Operation mode: 2D, M, PW, CW, TDW(Freeze 상태)
- HeartAssist™ and Ped Echo Z-Score should be turned on in the Setup Page.
  Utility > Setup > Assist > Cardiac > HeartAssist On.
  Utility > Setup > Measurement > Application Options > Application (Cardiac) > Z-scores On.

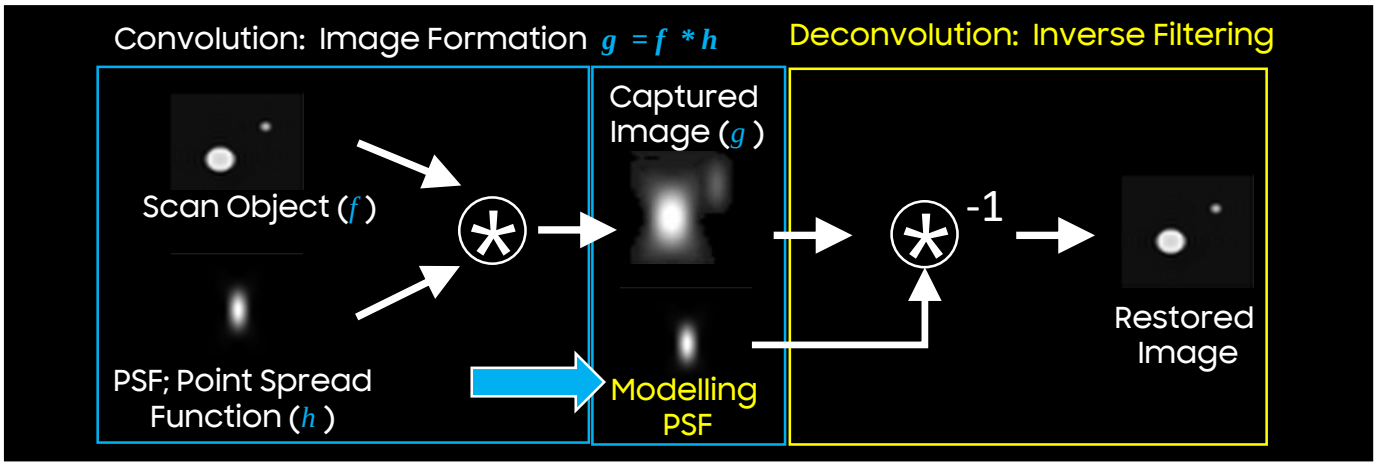






Feature

- An image processing algorithm that provides clearer images by mitigating blurring of real objects due to the physical properties of ultrasound.



Clinical Benefit

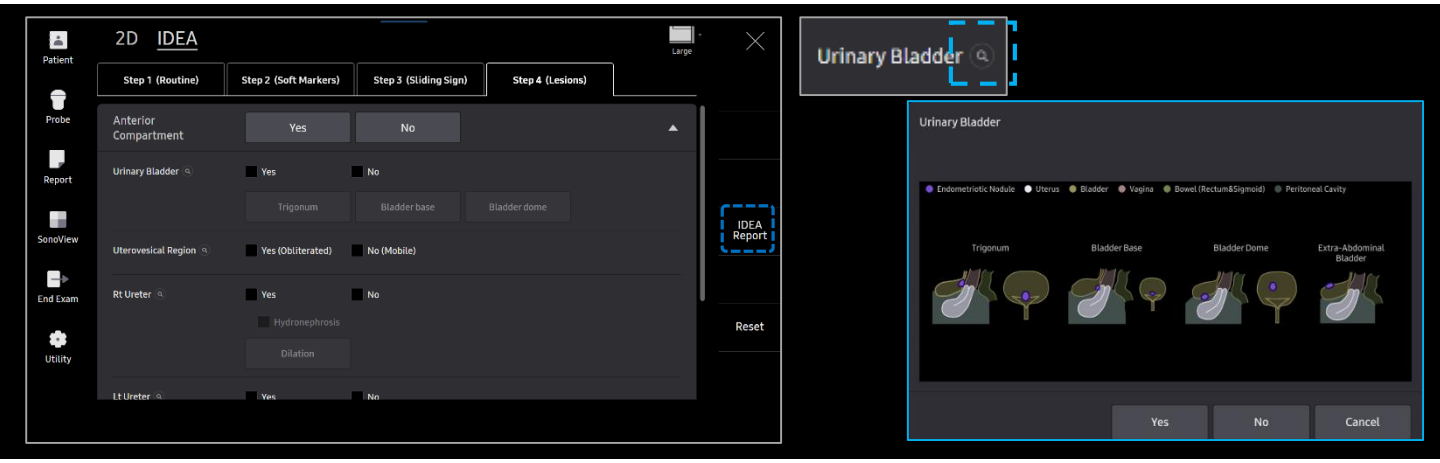
- Enhances spatial resolution which improves the sharpness of structure.

Tips

- HQ-Vision™ cannot be used with NeedleMate+™ while in 2D mode.
- HQ-Vision™ can be used in 2D mode, 2D/C mode, and Write Zoom.

OB	Useful when performing detailed imaging of the fetal spine as well as its subtle interfaces. (e.g. NT, NB, etc.) Could be recommended to the users who prefers sharp image patterns as well as for 1st Trimester study.
MSK	Useful when performing detailed imaging of the nerve's fibrillary pattern
Abdomen	Reduces noise and clearly expresses boundaries when checking structures such as liver capsule and CBD

IDEA (International Deep Endometrioses Analysis group)



Feature

- Provides a standardized reporting system for deep endometriosis based on the latest IDEA consensus guidelines.
- Offers a systematic and structured approach to ultrasound examinations for endometriosis, ensuring all relevant anatomical locations are assessed.
- Includes standardized terminology and pictograms for accurately mapping and describing the location, size, and extent of endometriotic lesions.

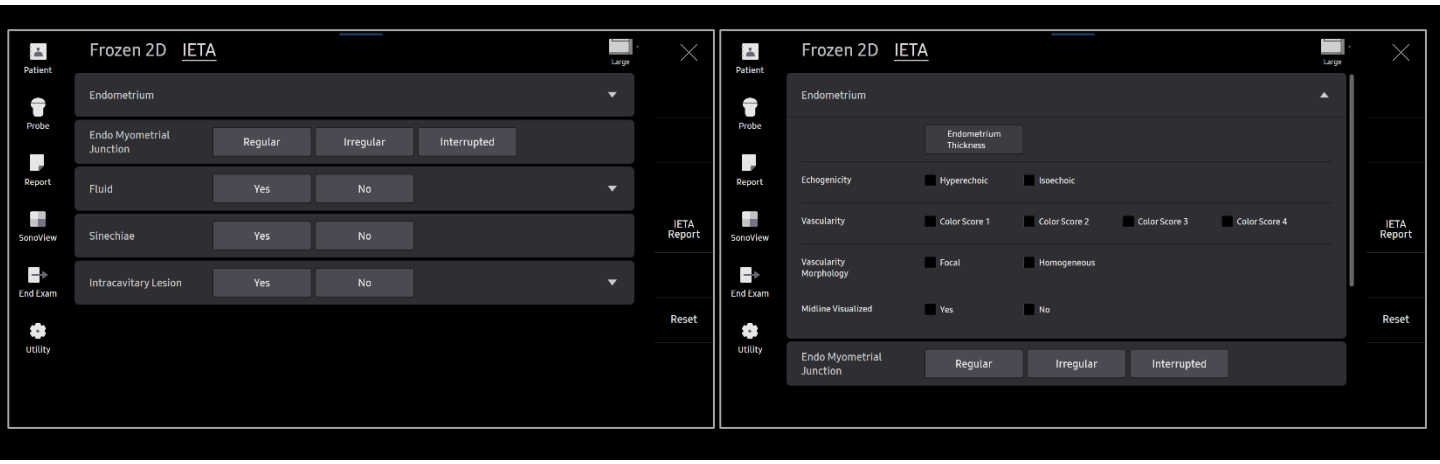
Clinical Benefit

- Supports beginners, who may lack an understanding of IDEA Consensus Terminology and protocol, in following the guideline.
- A streamlined study is available, from ultrasound image acquisition and description to reporting, all in front of the system.

Tips

- Directly access the IDEA report section with the 'IDEA Report' button.
- Pictograms are provided for each criterion for comprehensive understanding.

IETA (International Endometrial Tumor Analysis)



Feature

- Implements the IETA (International Endometrial Tumor Analysis) consensus statement on terms, definitions, and measurements used to describe the sonographic features of the endometrium and uterine cavity, including Grayscale, Color Doppler, and Saline Infusion Sonohysterography (SIS).

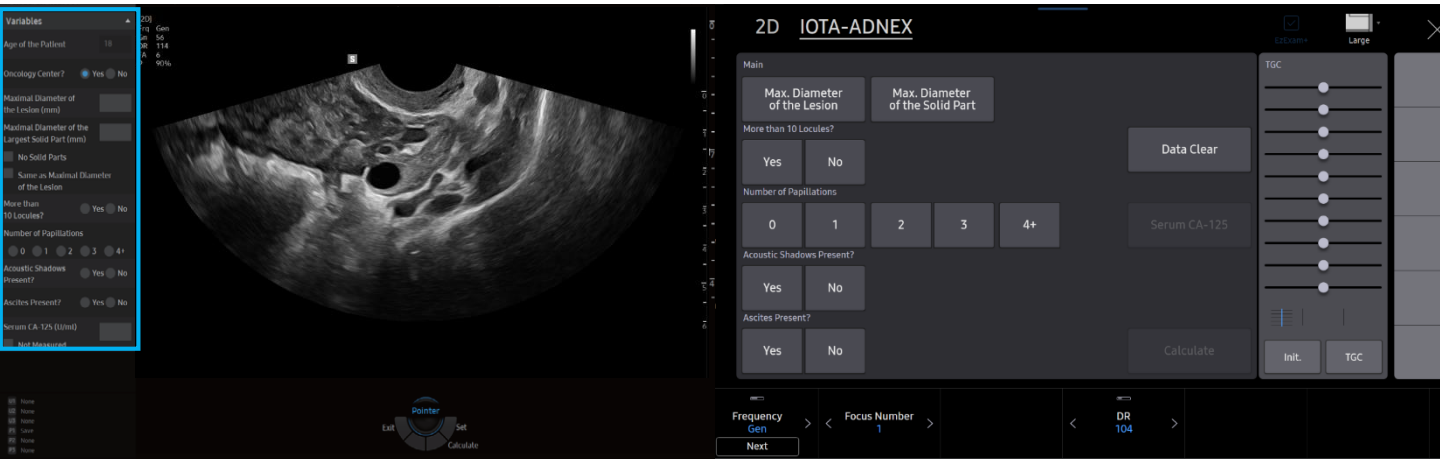
Clinical Benefit

- Assists non-experts or beginners who may be unfamiliar with the IETA consensus terminology for describing ultrasound findings related to endometrial tumors.
- Helps users create accurate and standardized descriptions by providing the IETA criteria directly on the system.
- Enables a streamlined workflow, allowing users to perform ultrasound image acquisition, record descriptions, and generate reports—all directly on the system.

Tips

- Directly access the IETA report section with the 'IETA Report' button.

IOTA-ADNEX



Feature

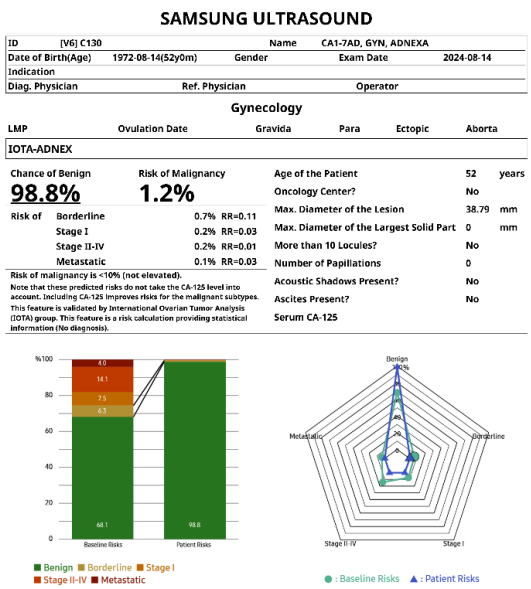
- The ADNEX Model developed by Ovarian tumor classification solution of IOTA Group, is applied to ultrasound system.
- The risk model to differentiate between benign, borderline tumors, stages 1 - 4 and metastatic cancer.

Clinical Benefit

- IOTA-ADNEX provides an auto fill-in function for ultrasound predictors(Diameter of lesion) as soon as they are measured, provides streamlined workflow and supports user-convenience.
- Provides seamless workflow that all procedures can be performed in one system, from the image measurement to an analysis with reporting.

Tips

- Patient's age is required start the IOTA-ADNEX, enter the patient page in advance is recommended.
- Serum CA-125 information would be make result more accurate.



SAMSUNG ULTRASOUND

ID	[V6] C130	Name	CA1-7AD, GYN, ADNEXA
Date of Birth(Age)	1972-08-14(52y0m)	Gender	Exam Date 2024-08-14
Indication			
Diag. Physician		Ref. Physician	Operator

Gynecology

LMP	Ovulation Date	Gravida	Para	Ectopic	Aborta

IOTA-ADNEX

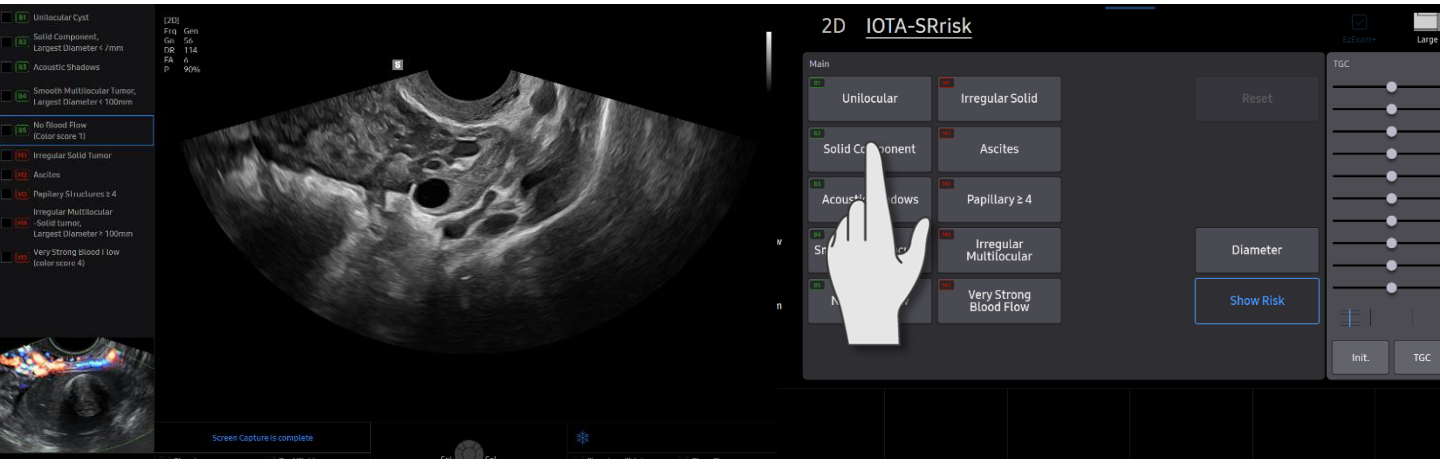
Chance of Benign	Risk of Malignancy
98.8%	1.2%

Risk of			
	Borderline	0.7%	RR=0.11
	Stage I	0.2%	RR=0.03
	Stage II-IV	0.2%	RR=0.01
	Metastatic	0.1%	RR=0.03

Risk of malignancy is <10% (not elevated).
Note that these predicted risks do not take the CA-125 level into account. Including CA-125 improves risks for the malignant subtypes. This feature is validated by International Ovarian Tumor Analysis (IOTA) group. This feature is a risk calculation providing statistical information (No diagnosis).

Age of the Patient	52	years
Oncology Center?	No	
Max. Diameter of the Lesion	38.79	mm
Max. Diameter of the Largest Solid Part	0	mm
More than 10 Locules?	No	
Number of Papillations	0	
Acoustic Shadows Present?	No	
Ascites Present?	No	
Serum CA-125		

IOTA-SRrisk (Simple Rules risk)



Feature

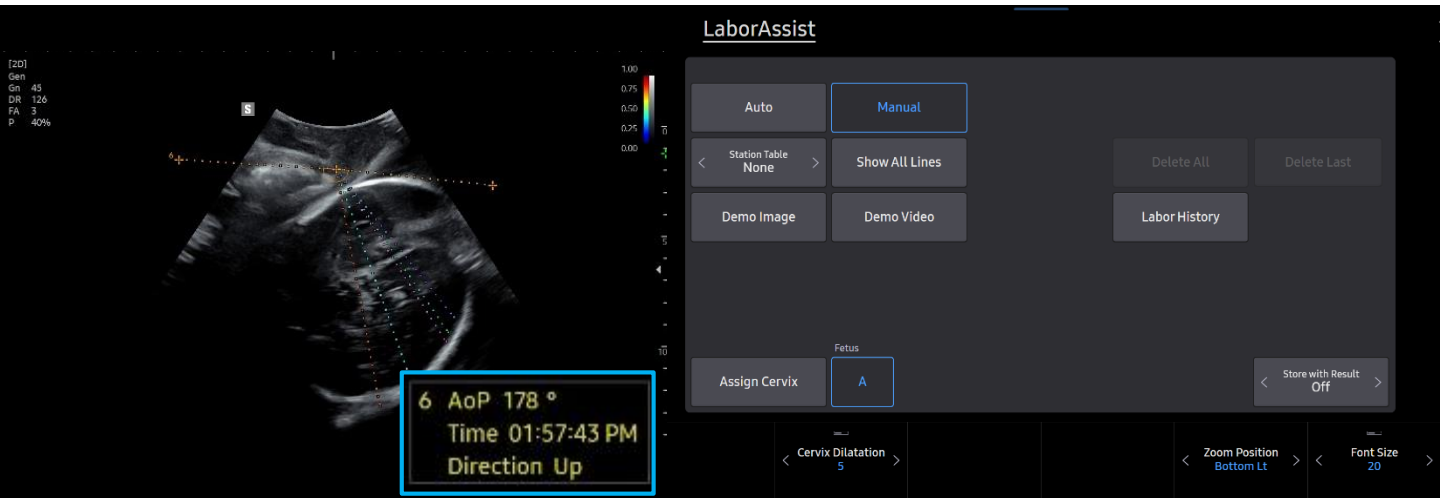
- IOTA-SRrisk is a tool that calculates the probability of malignancy in adnexal masses using the IOTA Simple Rules model.
- It analyzes morphological features such as solid areas, papillary projections, and acoustic shadows to support diagnostic decisions.

Clinical Benefit

- Provides standardized malignancy risk estimation based on internationally recognized criteria.
- Reduces diagnostic variability and supports confident clinical decision-making in adnexal mass assessment.
- Easy-to-understand results enhance communication between clinicians and patients.

Tips

- Select from Simple Rule features: B-rules (benign) or M-rules (malignant) such as:
  - ▶ B1: unilocular cyst, B2: presence of solid components <7mm, etc.
  - ▶ M1: irregular solid tumor, M2: ascites, etc.
- If age is not entered during patient registration, please ensure to input age, as it may affect risk estimation.



Feature

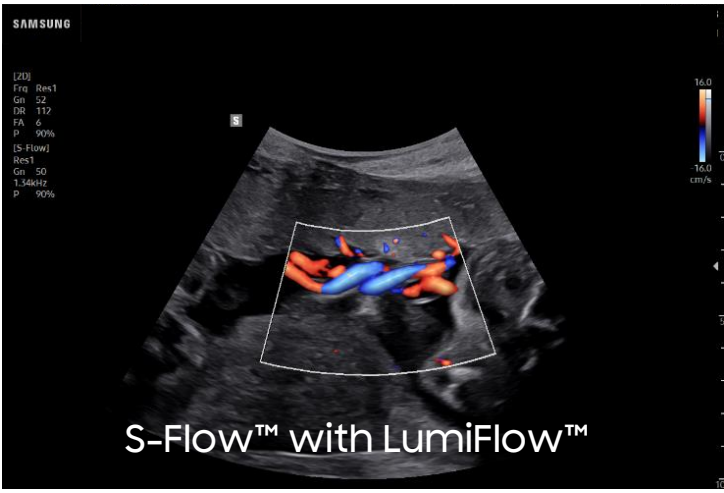
- Automatically detects and contour the pubic symphysis outline with fetal head outline to show the AoP (Angle of Progress), complies with the metrics specified in the ISUOG Guideline.

Clinical Benefit

- More accurate and less subjective than digit examination (Palpation) to see the descent of the fetal head to decide upon the mode of delivery.
- An ultrasound examination is not only useful during labor, but also facilitates an easy measurement and a quantitative assessment, as it is non-invasive and requires relatively less skill to scan the patient.
- Simple to manage the delivery plan with the labor history and easy to make understand a pregnant women with Demo Video Animation about current descent status.

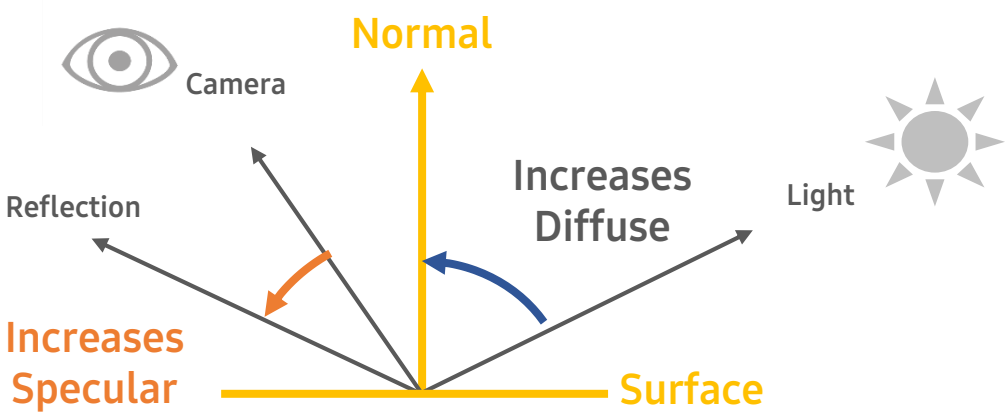
Tips

- In Utility › Setup › Measurement:
  - Set LaborAssist™ mode (Auto/Manual) under Application Options with OB selected.
  - Choose reference table (Tutschek, Barbera, Kalache) under Tables according to preference.



Feature

- A function that uses light source effects to visualize blood flow in three dimensions.



Benefit

- Helps to understand the structure of blood flow and small vessels more intuitively.
- It would be useful for evaluating fetal heart abnormalities in Color Mode for hemodynamics such as dysplasia and regurgitation of the valves and so on.

Tips

- Supported in Color, Power Doppler, S-Flow and MV-Flow™ mode.
- Bright areas of blood flow do not reflect actual high blood flow velocities.
- Would be helpful to express the boundaries more tightly.

Feature

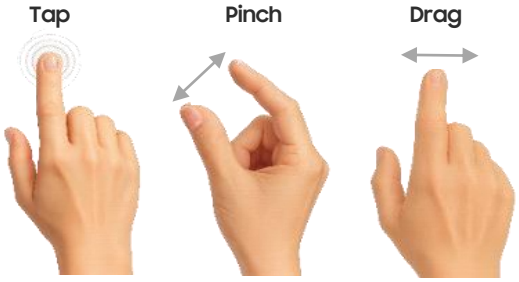
- This feature mirrors the ultrasound image and menus from the main monitor onto a separate touchscreen. This allows the user to operate the equipment by directly touching the screen while viewing the same interface.

Clinical Benefit

- It provides intuitive control and image viewing on a single screen, which allows for fast and efficient operation during quick procedures.

Tips

- You can demonstrate the intuitive controls, such as using pinch-to-zoom to magnify or shrink the image, or dragging the image with a finger to move to the desired area on the touchscreen.



Function list

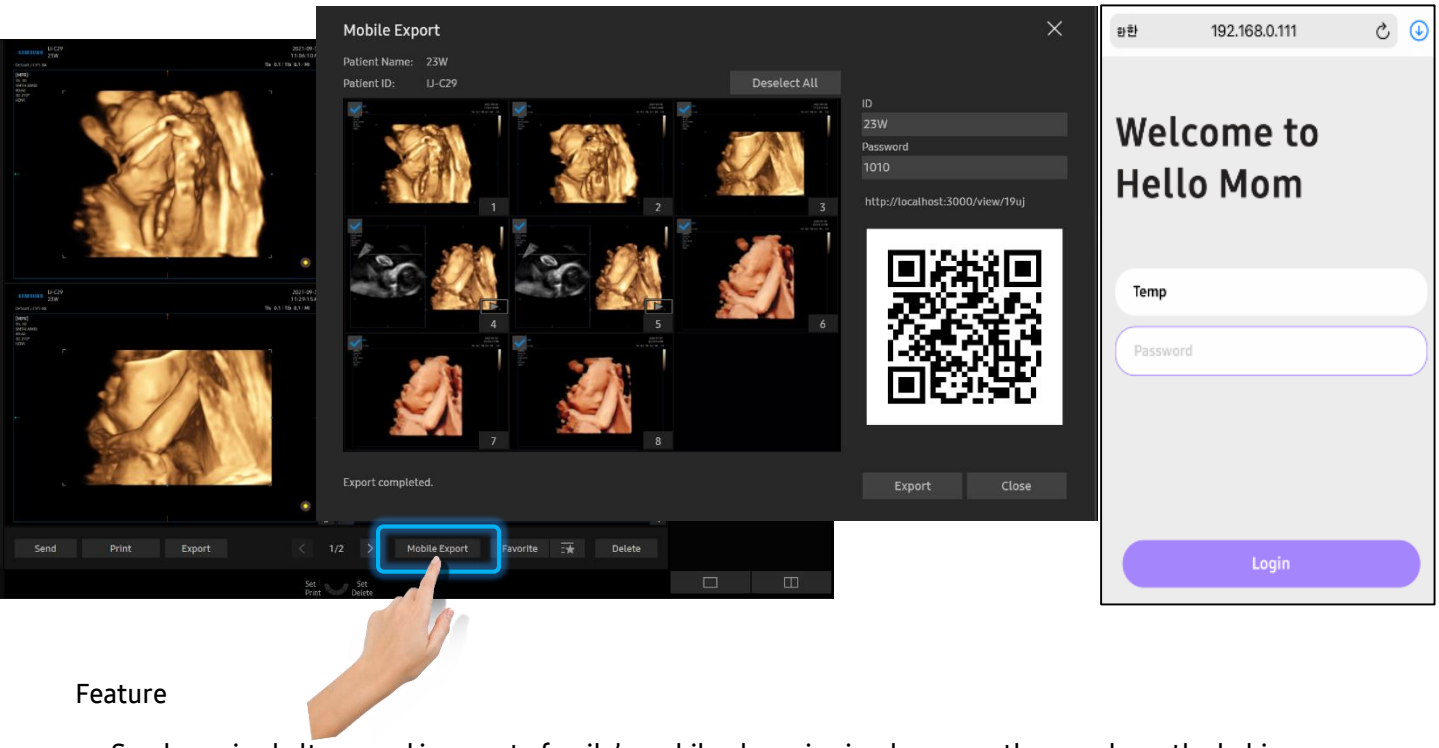
- Basic mode
- Freeze/Save
- EzStructure/Flow
- Depth/Gain/Focus
- Cine Control

Mobile Export

SAMSUNG

Monitor Screen

Mobile device



Feature

- Send acquired ultrasound images to family's mobile phone in simple way so they can keep the babies pictures as a handy data instead of hardcopies or printed one.

Clinical Benefit

- Usually Baby's 3D images are preferred, helpful to increase the customer's satisfactory and amusement as well.
- The workflow steps of sending and receiving is simple and easy via QR Code.

Tips

- User

  1) Enter "Sonoview"

  2) Click the images to select and transfer to customer's mobile.

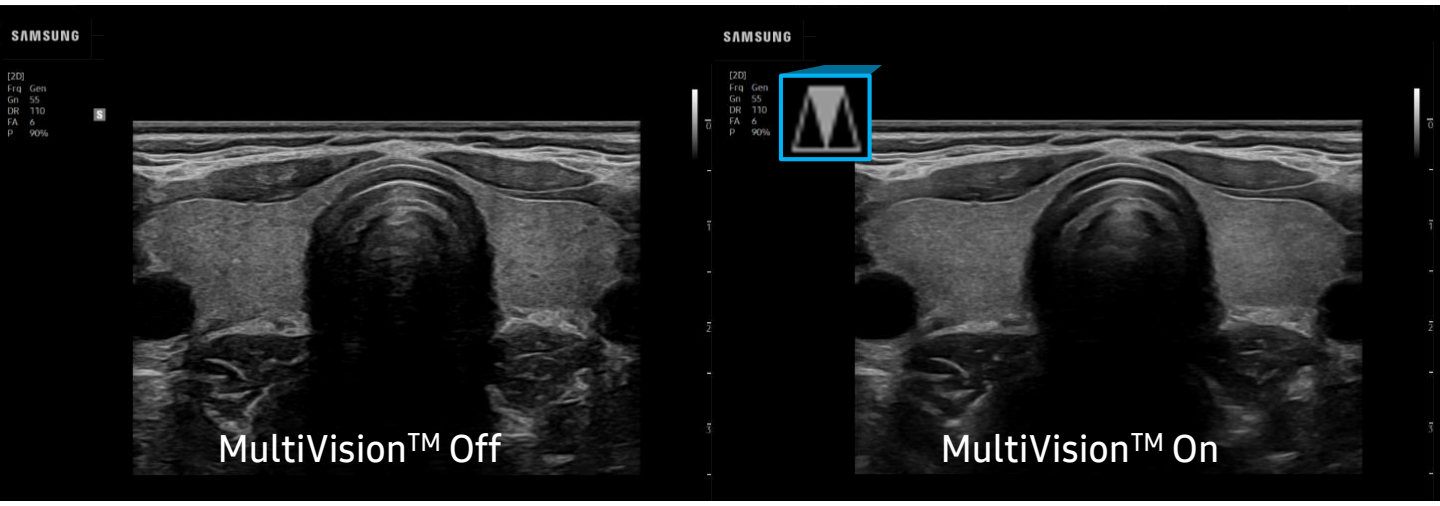
  3) Click the "Mobile Export" button of the bottom.

  4) Click the Export button when customer's device is ready to get.

- Customer

  1) Tag the QR code through a Mobile phone's Camera.

  2) Check the ID is same as monitor screen and enter the Password when confirmed.



Feature

- A spatial compounding technology.
- By transmitting beam-steering technology, multiple images are acquired from various viewing angles and these angled images are combined into a single compounded image in real-time.
  - For multiple images : The number of images is used as an odd number, such as 3, 5, 7, 9, etc.
  - For various viewing angles : The angle is used between 2 and 12 degrees, and is modified and applied according to the situation.

* The reason why the angle cannot be widened too much is because grating lobe artifacts may occur.

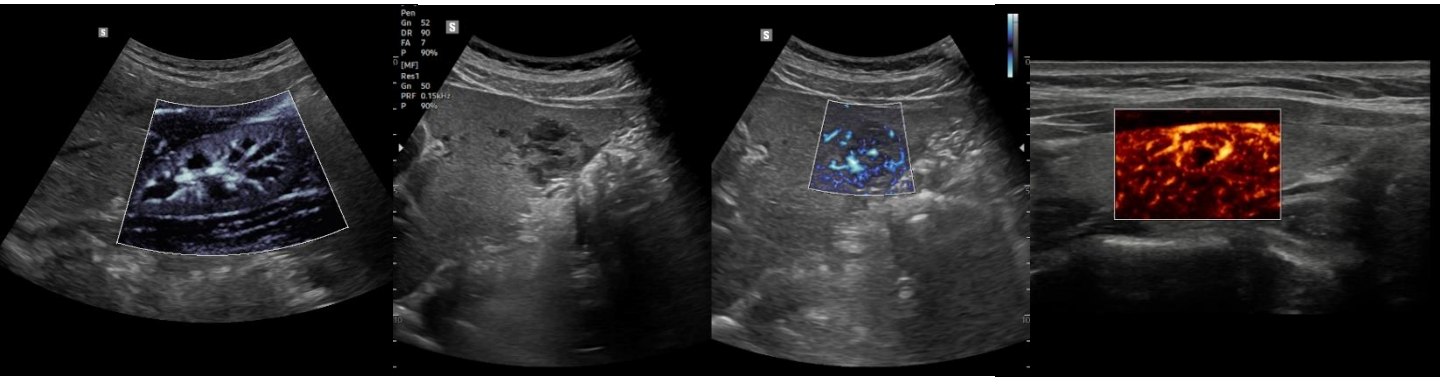
Clinical Benefit

- Angle-generated and speckle noise artifacts could be reduced, and structures with curved and irregular borders are more readily visualized.
- The boundaries of lesions or structures appear improved and vertical shadowing artifacts are reduced.

Tips

- As the index increases, there is an increased possibility of motion artifacts and a loss of temporal resolution.

** Using a high index can slow down the image and may result in visible grating lobe artifact.*
** Recommend to use considering temporal resolution.*



Feature

- Advanced Doppler Imaging for micro vessels with Slow Velocity, visualizes microcirculatory and slow blood flow.
- Advantages with Superior sensitivity, Higher Resolution and Fast Frame rate.
- Supports advanced assessment for various applications like OB, GYN, Abdomen, Small part and MSK.

Clinical Benefits

For Obstetrics,

- Helpful to define the Fetal Central nervous system, straight sinus and pericallosal artery, which could be one of criteria to diagnose a congenital defect anomaly.
- Renal, suprarenal artery, placenta, cervix vascularity that suggested in the context of suspected placenta accrete spectrum.

For General Imaging,

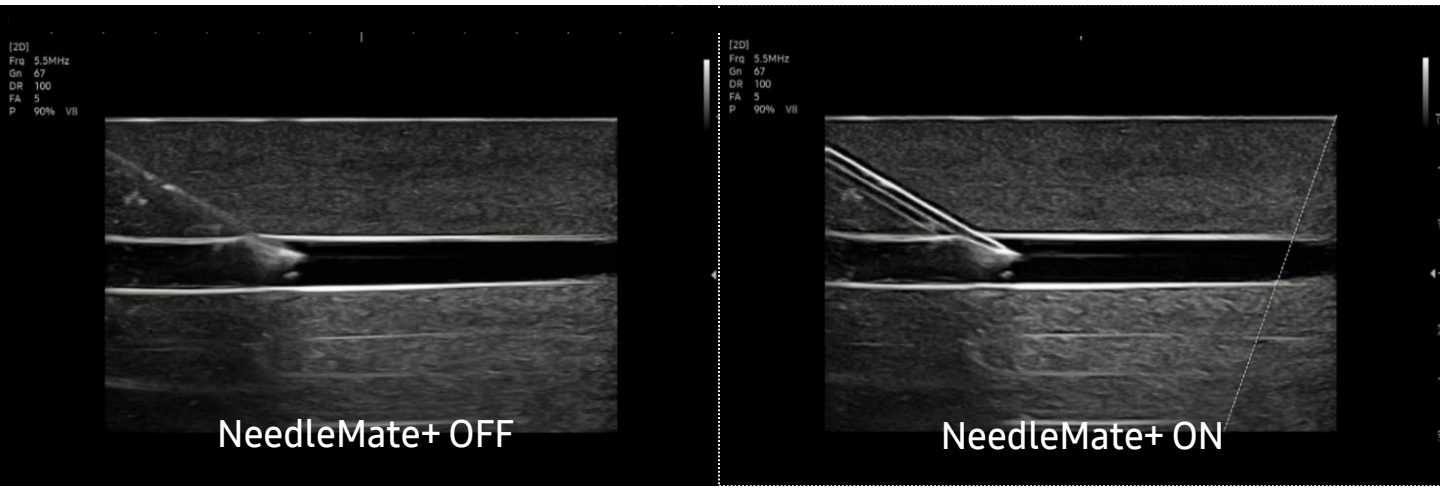
- By visualize more sensitive, smaller, slower vascular morphologies compare to the conventional color Doppler, it is more supportive to evaluate the Color Doppler aspect.

Tips

- To reduce a Flash artifact or Tissue noise, turn up a few step of Filter or Suppression.
- Vascularity Index measurement is supported, which is a quantitative tool to measure amount of blood flow in defined ROI. (e.g) Placenta assessment in FGR (Fetal Growth Restriction) Case.
- LumiFlow™ is compatible, may helpful to depict vessels more clearly.

	Power	ROI	Ratio(%)
Pixels	736	1558	47.2
cm²	0.03	0.06	

Vascularity Index



Feature

- Beam steering is additionally applied to the image to make the angle of the needle path and the beam perpendicular, making the needle more visible.

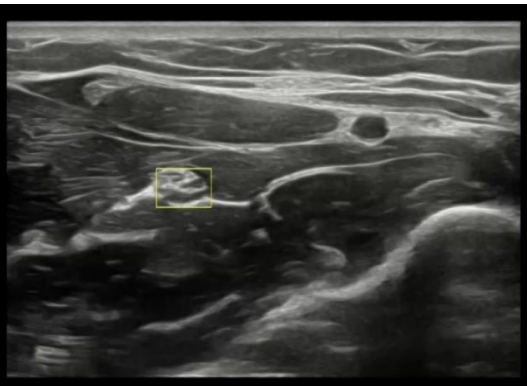
Benefit

- It is easy to determine the position of the needle tip during intervention such as nerve blocks.

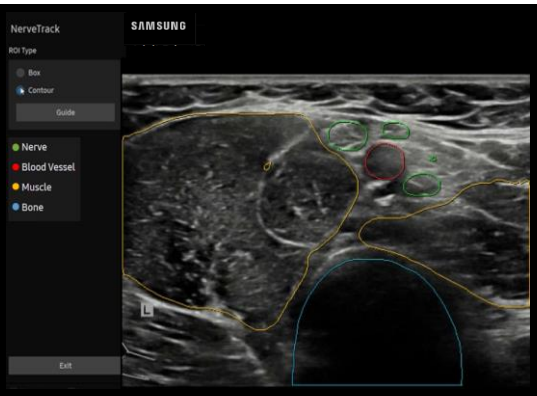
Tips

- Needle Direction: Sets the entry direction of the needle in images.
- Needle Angle: Sets the entry angle of the needle in images.
- Needle Enhance: Sets the enhancement and thickness of the needle.

Enhance Level	Description
1	Needle thickness is thin and needle enhancement is low
2	Needle thickness is thin and needle enhancement is high
3	Needle thickness is thick and needle enhancement is low
4	Needle thickness is thick and needle enhancement is high



NerveTrack™ : ROI



NerveTrack™ : Segmentation

Feature

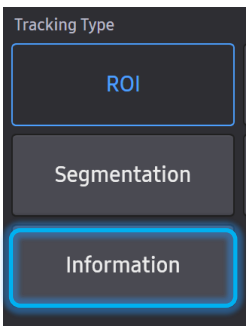
- A feature based on deep learning technology.
- Identify nerve structures in real time during the application of anesthesia.
- Real-time nerve tracking ultrasound feature that helps anesthesiologists identify nerves in a patient's arm and leg to help administer anesthesia quickly and accurately.

Benefit

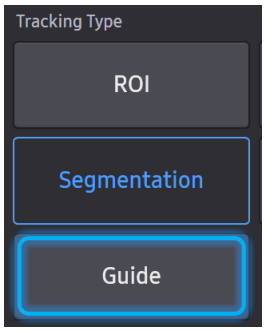
- Automatically identify nerves in real time for anesthesiologists reducing the possibility of complications while improving workflows.
- Shorten inspection time, finding the nerves in real time even if the doctor does not trace from the wrist to the proximal direction. Help safe needle procedure by allowing the nerves to be separated from the surrounding tissues and vessels.

Tips

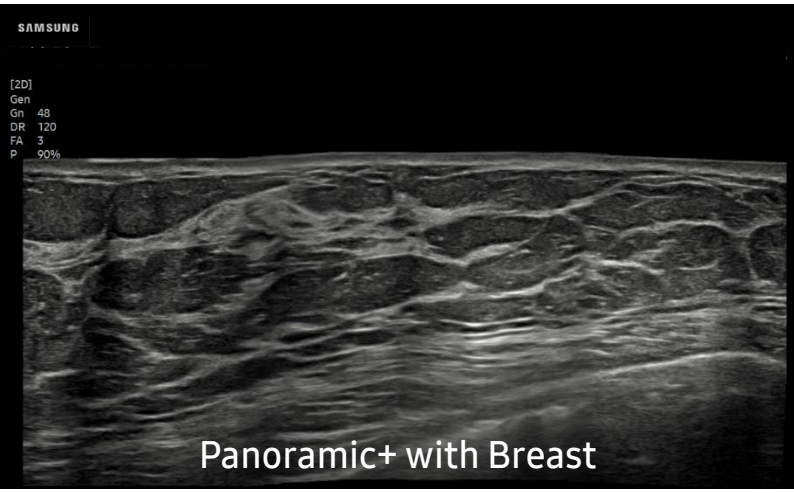
- Can be used with NeedleMate™ and Probe center Line with NerveTrack™
- ROI: Pressing [Information] allows you to check the traceable nerve area information.
  Segmentation: Pressing [Guide] displays a guide window for each nerve area.



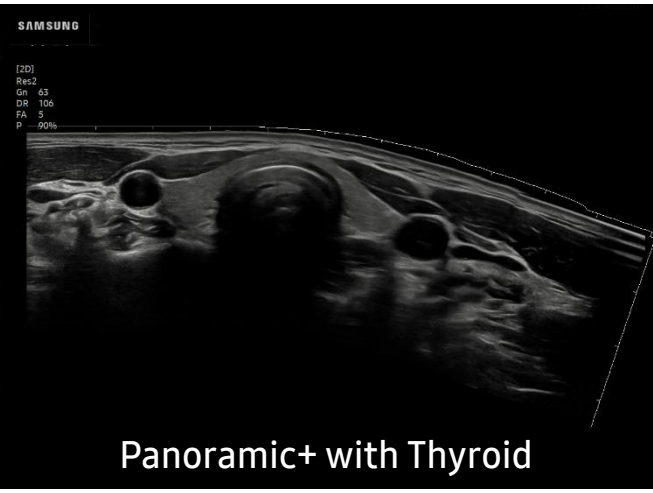
ROI Type



Segmentation Type



Panoramic+ with Breast



Panoramic+ with Thyroid

Feature

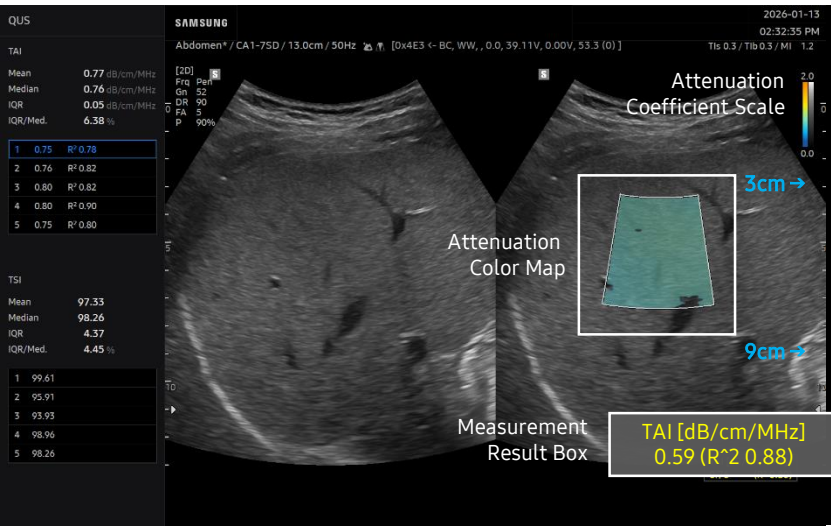
- Extend the field of view of ultrasound images for clinical diagnosis especially when the region of interest is bigger than scan area.
- Common clinical use case is the superficial application like Thyroid, Breast and MSK with linear transducer.

Clinical Benefit

- Able to visualize a huge lesion or organ in a single view due to pathologies in superficial application like thyroid goiter or huge breast mass.
- Helpful to understand the anatomical relationship between huge lesion and adjacent tissues without view restriction.

Tips

- Measurement, Caliper, Annotation on Panoramic+ image is available.
- Image processing parameters such as ClearVision™ and MultiVision™ can be applied so it maintain a good image quality even on a extended view.
- Recommend to do a one-way Longitudinal direction Scanning.



QUS™

Mean: average

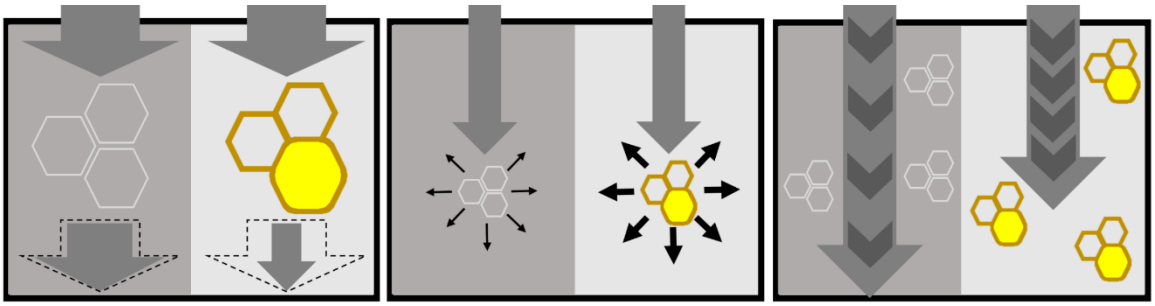
Median: locating the center number

IQR: A measure of spread that shows the difference between the first and third quartiles of a data set

IQR/Median: A value that can be used to distinguish between groups of data

Feature

- TAI™ (Tissue Attenuation Imaging) is a tool that quantitatively measures the attenuation of ultrasound signals received from the liver. TAI™ Quantifies attenuation based on changes in the center frequency under the optimal transmission and reception conditions.
- TSI™ (Tissue Scatter Imaging) is a tool that quantifies the scattered signal distribution based on backscattered signals. Scattering, the reflection of ultrasound waves in multiple directions not affected by their entry angle, produces speckles patterns in ultrasound images and this changes the distribution of backscattered ultrasound signals based on the scattering intensity.



Attenuation Backscatter Speed of Sound

Physical meaning	Energy loss of ultrasound wave	Scattering by the microstructural properties in tissue	Speed of ultrasound wave
US image appearance	Hypoechoic appearance at distant field	Echogenic appearance in US image	Reliable estimation of the sound speed could improve image quality
Relationship with Fatty liver	Increasing with fat content	Increasing with fat content	Decreasing with fat content

Benefit

- Improve workflow efficiency with automation features that reduce the number of steps required to enter measurements and annotations for each item each time.
- It is a noninvasive, cost effective and accurate screening for nonalcoholic fatty liver disease (NAFLD).

Tips

- How to use the QUS

1) Patient's preparation/Position

- Fast overnight (at least 6 hours) before the examination.
- Supine or left lateral oblique decubitus position with the right arm in maximal extension.

2) Obtaining B-mode

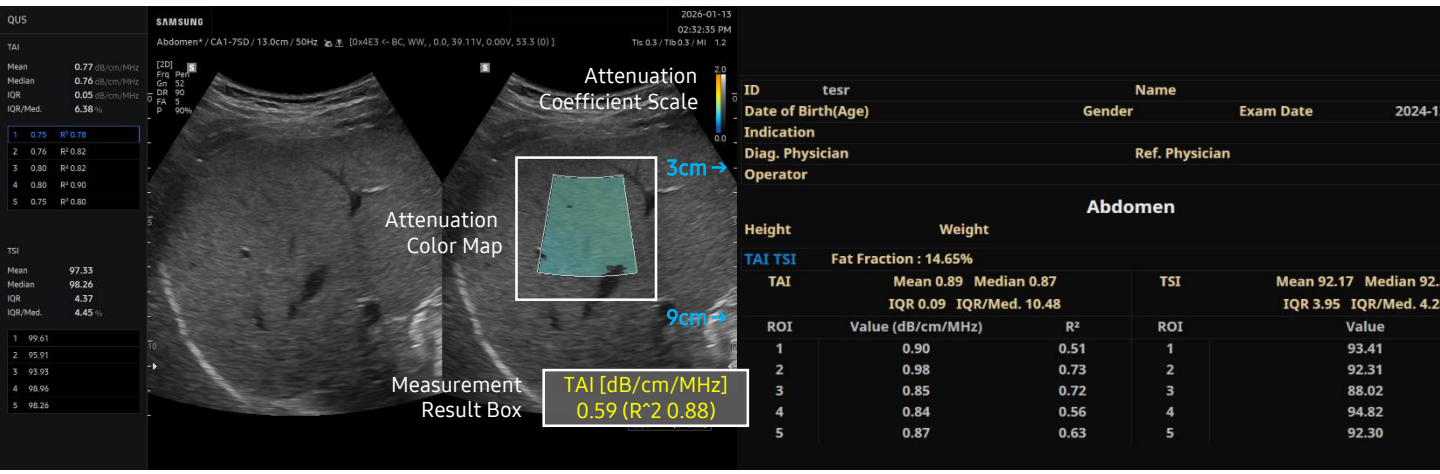
- Ensure good contact with adequate gel.
- Acquire plane perpendicular to the right lobe.
- Scan the right intercostal space, image liver segments 5 - 8 keeping the liver capsule parallel to the probe surface.

3) Measurement

- Take a result values with R^2 of 0.6 or higher, which meet the minimum reliability.

(The reliability of the ultrasound feature is connoted to the extent to which it can explain a significant portion of the data, indicating that this feature is likely to be clinically useful and a trustworthy diagnostic tool)

- Obtain 5 results for each image is recommended.
- Quick transition between TSI™ and TAI™ is available with user keys.



** Mean : average.*
** Median : locating the center number.*
** IQR : A measure of spread that shows the difference between the first and third quartiles of a data set.*
** IQR/Median : A value that can be used to distinguish between groups of data.*

Feature

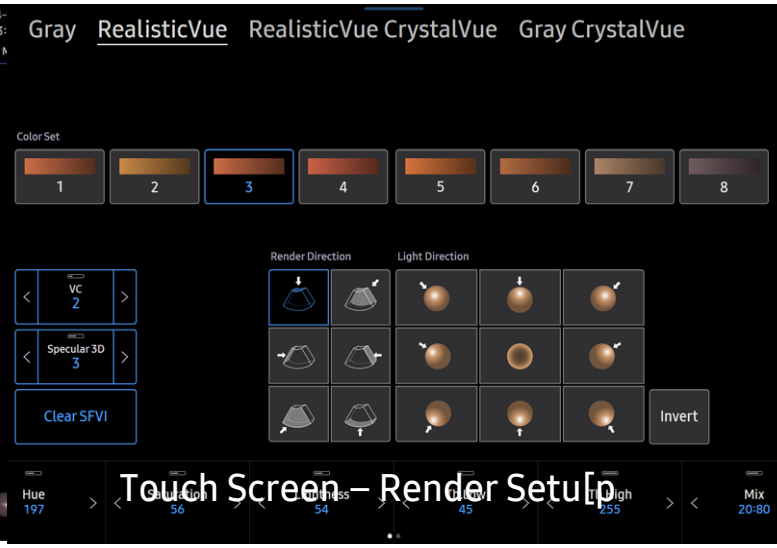
- Q-Scan™ provides intuitive optimization of B/C/D parameters.

Benefit

- Time saving : By semi-automatically optimizing image quality, users do not need to manually adjust various settings, saving significant time, especially in busy clinical environments.
- Convenience : Users can obtain optimized images without complex adjustments, making it easier for those who are less experienced with ultrasound to achieve high-quality results.
- Reduced Fatigue : Reducing the effort required to manually adjust settings decreases user fatigue, which is important during long sessions with multiple examinations.

Tips

- 2D Mode: Automatically adjusts Gain, DR, and TGC.
- PW Spectral Doppler Mode: Automatically adjusts Scale, Baseline, and other parameters.
- Color Doppler Mode: Automatically adjusts Box position and other parameters.
  (Available only when the Carotid and Arterial presets for the Linear Array probe are selected.)
- If probe position or angel changes, altering the view, press the Q-Scan™ button again to update the image accordingly.



Feature

- Create a vivid and realistic fetus 3D/4D volume images on all stage of gestation.
- High resolution and natural skin expression with optimized volume filter.

Clinical Benefit

- Enhancing stereoscopic depth and volumetric effect with local shading compare to the conventional 3D.
- User selectable light source direction creates intricately graduated shadows for better defined anatomical structures.
- Helpful to demonstrate detailed malformation criterions and may give a precise view such as palpebral fissures for down syndrome, cleft lip and early anomalies like gastroschisis with a light source adjustment.

Tips

- Click the Contextual key to assign the Trackball action as a Light Direction and manually change the light direction with trackball movement.
- 8 different default color for RealisticVue™ are provided and Color fine tuning is available with Hue, Saturation, Brightness adjustment in RenderSetup page.
- For more glossiness, increase the Specular index in RenderSetup page, the other way makes RealisticVue™ more natural.

RFA Viewer

SAMSUNG

(Total)
Total ablation time : Indicates the time at which radiofrequency ablation was performed.
Total energy : Total amount of energy delivered to the tissue during the ablation process.

(Channel)
Time : Time of operation
Ω : Impedance (Ohms)
: Power
: Temperature (Degrees Celsius)

■ Time : Indicates the lap time for a RF ablation.
■ Impedance : Indicates the resistance value of the targeted tissue at the time of RF output.
■ Power : Indicates the actual amount of radiofrequency power that is supplied to the electrode and targeted tissue.
■ Temperature : Measures the temperature of targeted tissue from the active tip.

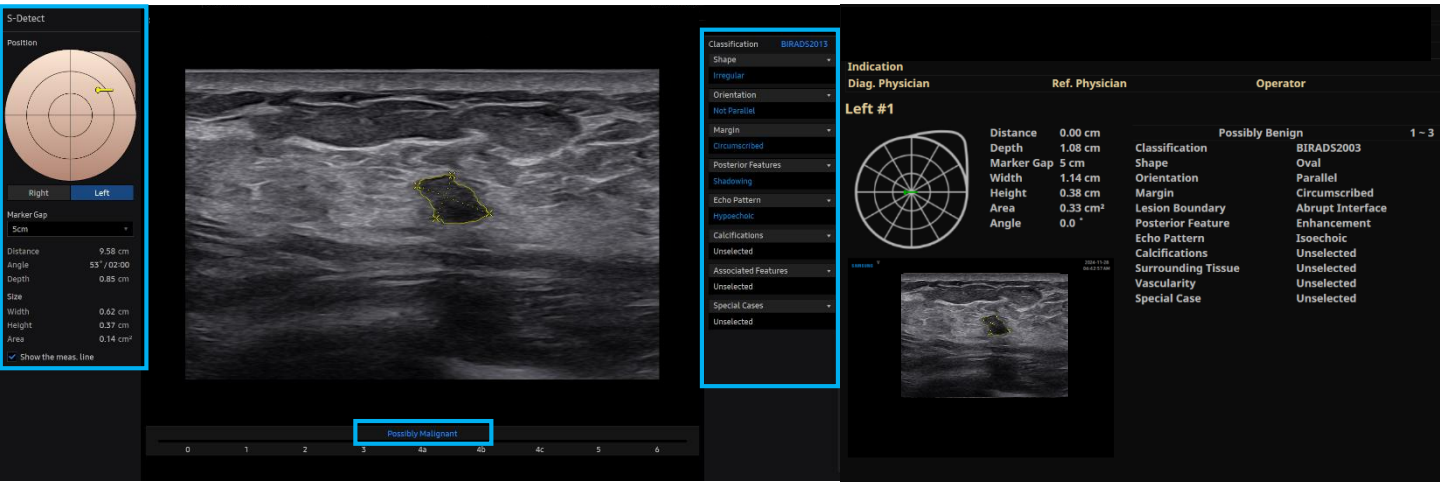
Feature

- RFA viewer displays information in real-time, such as total ablation tine and total energy, generated by the RFA Generator.
- RFA viewer is a feature that provide information from the RFA generator or logger, allowing the same information to be viewed on the ultrasound monitor.

Benefit

- Helps the user focus solely on the ultrasound monitor screen during the procedure.
- Improve workflow efficiency with automation features that reduce the number of steps required to enter measurements and annotations for each item each time.
- Depending on the hospital environment and the size of the procedure room, the generator may not be placed close to the ultrasound. In such cases, additional personnel might need to assist with the procedure, but with the RFA viewer, this is unnecessary, allowing more focus on patient care.

** Compatible StarMed RFA Viewer Model : VIVA RF Generator, VIVA multi RF Generator, VIVA combo RF Generator, VVR Generator .*



Feature

- Semi-Automated Imaging Reporting System, decision making support tool for Breast Assessment.
- Analyzes selected lesions in the breast ultrasound study and shows BI-RADS ATLAS (Breast Imaging-Reporting and Data System, Atlas) to provide standardized reporting with recommendation.
- BIRADS 2003, BIRADS 2013 are provided.

Clinical Benefit

- Decision making tool for classify the Breast lesion semi-automatically.
- Assist beginners by providing BI-RADS Assessment Category Score recommendation and they may regards it as a second opinion.
- Distance, Angle, Depth, Width, Height, Area is automatically calculated and shown on left side.

Tips

- Set the proper guideline before on Setup page depends on user preference.

  Utility > Setup > Imaging > Features > S-Detect for Breast
- Able to change the classification result manually depends on user's opinion.
- Assign the BIRADS Score is available as a final decision.

S-Detect™ for Thyroid

Feature

- Semi-Automated Imaging Reporting System for Thyroid Assessment.
- Analyzes selected lesions in the thyroid ultrasound study and shows the analysis data, provides standardized reporting based on the following guidelines, and helps diagnosis with the streamlined workflow.

  - ATA: American Thyroid Association
  - BTA: British Thyroid Association
  - EU-TIRADS: European Thyroid Imaging Reporting and Data System
  - K-TIRADS: Korean Thyroid Imaging Reporting and Data System
  - ACR-TIRADS: American College of Radiology TIRADS

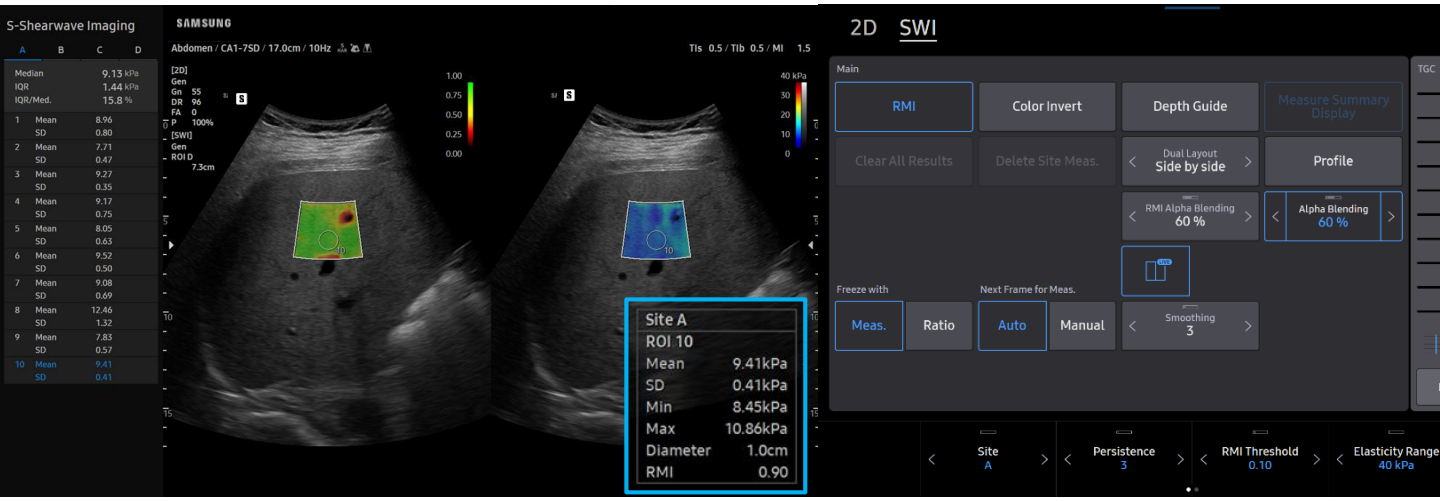
Clinical Benefit

- Improves analysis efficiency with semi-automated workflow by providing related lexicon automatically with lesion's size and area information together.
- Reduces unnecessary thyroid biopsies by suggesting an accurate and consistent category score recommendation.

Tips

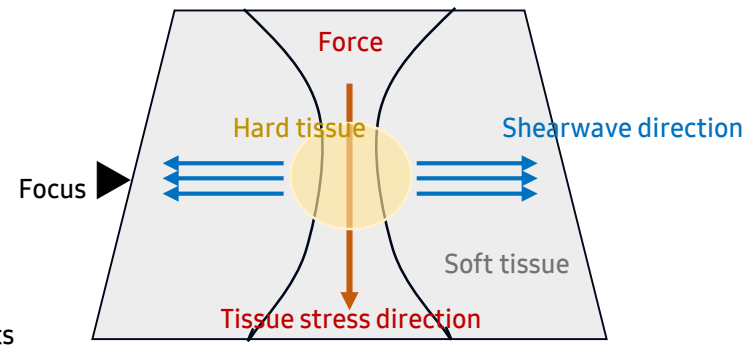
- Set the preferred reference guideline before on Setup page depends on user preference.

  Utility › Setup › Imaging › Features › S-Detect for Thyroid
- Able to change the lexicon result manually depends on user's decision.
- Assign to Report to deliver all result to the Report page.



Feature

- Non-invasive assessment for a stiffness of tissue/lesions in various applications such as breast, liver and MSK. It provides color-coded stiffness map with quantitative measurements data as well as RMI (Reliable measurement index) map together.
- It uses an acoustic radiation force pulse sequence which propagate perpendicular to the tissue, causing transient displacement and generates shearwave to the transverse direction.

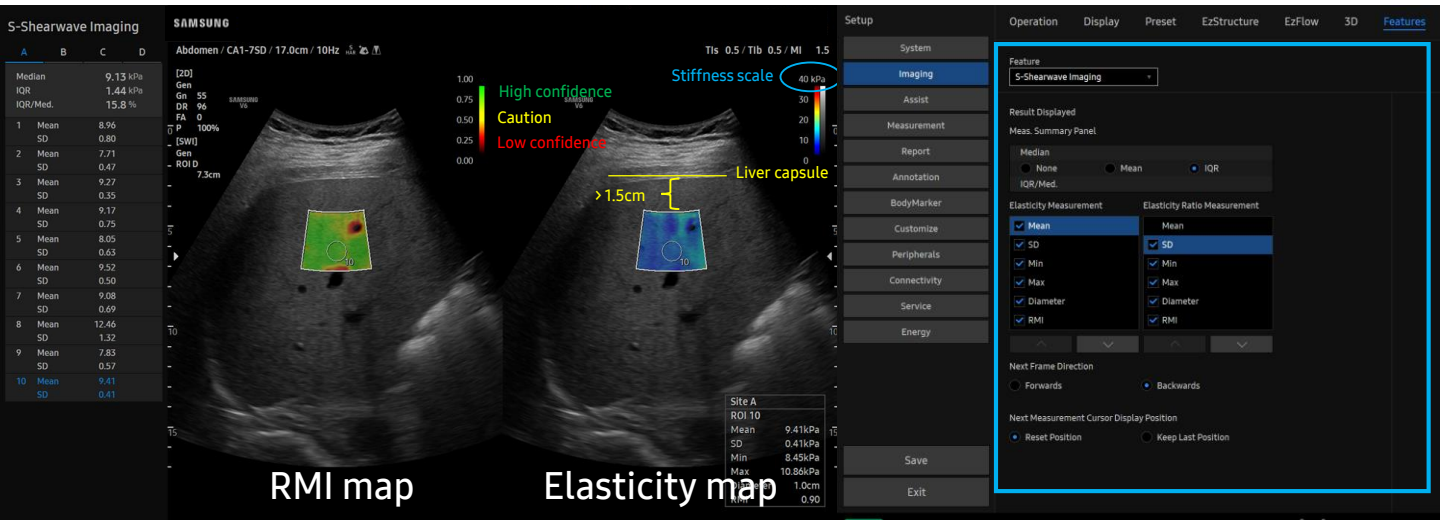


Clinical Application Benefits

- Liver : Monitor disease progression. It can help diagnosis and stage liver cirrhosis and differentiate between more subtle forms of liver dysfunction.
- Breast : It can help identify malignant versus benign breast lesions and can reduce the number or biopsy needed.
- MSK : It can evaluate tendon, muscle, nerve, ligament and joint. It can help assess the stiffness and elasticity of tendon after healing.

Beneficial workflow

- Shearwave measurement ROI can be sequentially addressed on the acquired individual frame in following condition: Freeze with “Meas.” + Next Frame for Measurement “Auto”.
- More detailed option could be find in Utility > Setup > Imaging > Features > S-Shearwave Imaging
  - Next Frame Direction (Forwards/Backwards)
  - Next Measurement Cursor Display position (Reset / Keep Last position)



Tips

[Scan Recommendations]

1. Fast at least 4 hours before the examination.

2. Scan on intercostal area in the supine or slight left lateral position with the right arm in maximal extension.

3. Image liver segments 5, 6, 7, or 8, keeping the liver capsule parallel to the transducer surface.

4. Position the ROI at least 15~20 mm away from the liver capsule and locate it in the center of the image.

5. Ask patient to breath normally and hold the breath, avoiding deep inspiration prior to the breath hold.

6. At least 5 measurements should be obtained in different image frames to increase reproducibility.

** Measurement reliability criteria are values less than or equal to IQR/Med (kPa-30%, m/s-15%)*

[Reliability Indications]

1. RMI(Reliable Measurement Index) Value must be higher than 0.4.

2. Recommend to referring the RMI map color, set the measurement ROI in the greenery region.

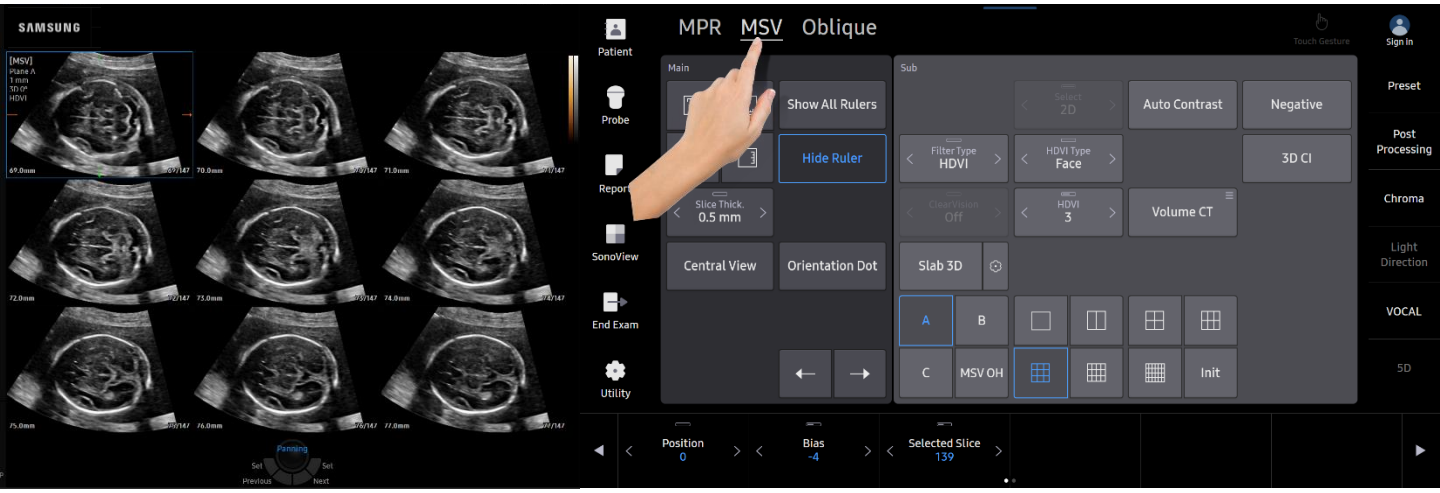
3. IQR/Med Ratio (kPa) should be lower than 30%. *(IQR/M should be lower than 15% for m/s)*

4. Median value should be taken as the representative value of the Shearwave Study.

[Result display options]

Measurement Summary item, Order of Elasticity Measurement and Elasticity Ratio can be arranged.

Utility > Setup > Imaging > Features > S-Shearwave Imaging



Feature

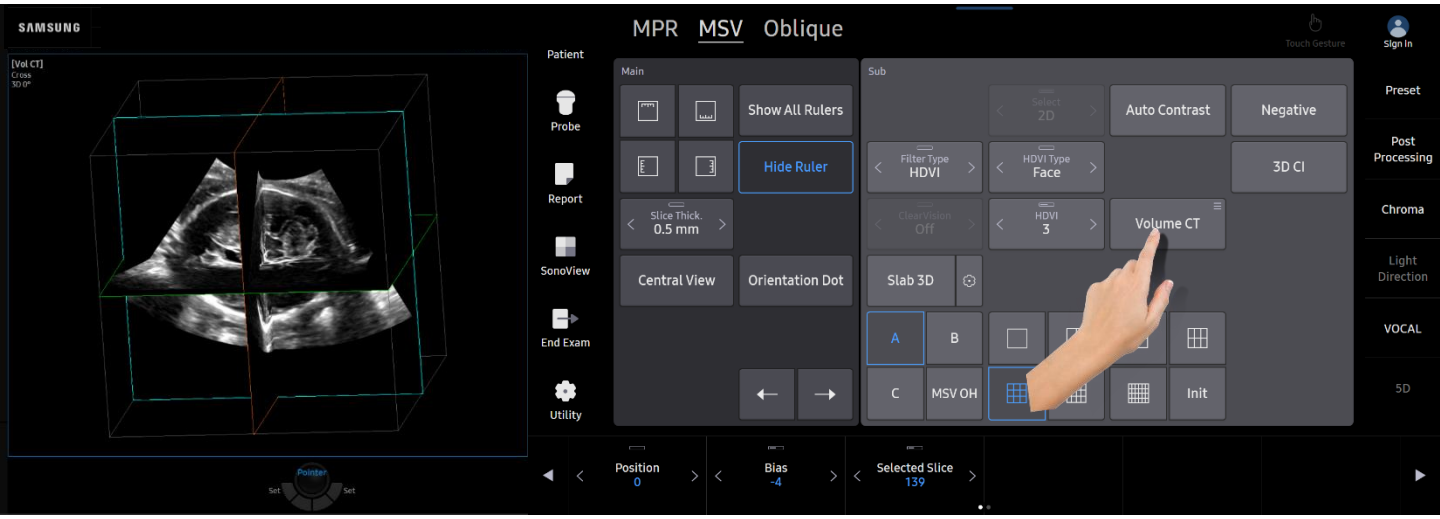
- 3D XI (eXtended Imaging) is the 3D data manipulation tool to improve diagnostic accuracy.
  It supports MSV, Oblique View, VOCAL, XI VOCAL and Volume CT modes.
- MSV (Multi Slice View) is a feature that allows you to view an image in multiple sequential slices.

Benefit

- Based on each section (sagittal, axial, and coronal planes), you can sequentially see each image cut into slices in various display format like CT or MRI.

Tips

- In the case of 2D, simultaneous comparison of multiple images with one acquired image is not possible.
- In the case of MPR (Multi Planar Rendering), each of the sagittal, axial, and coronal planes can be confirmed in only one image area.
- In the case of MSV (Multi Slice View), you can set the desired layout and view multiple frames of sequential images at once.
- MSV's individual image's interval can be changed by Slice Thick. If more detailed observation between the structure is required, please change the interval thickness to be more thinner.



Feature

- Volume CT is a feature that reconstructs 3D volume data into multiple cross-sections of external and internal slices to check the structure of the fetus from different angles.

Benefit

- By showing sagittal, transverse, and coronal planes together, you can check the connectivity of anatomical structures as well as relationship in three dimensions.

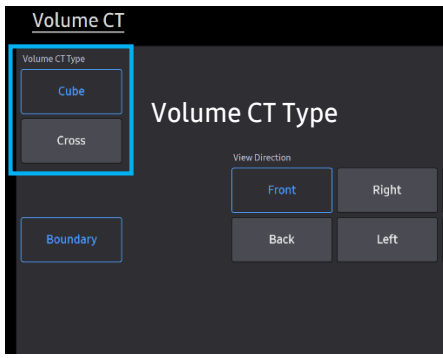
Tips

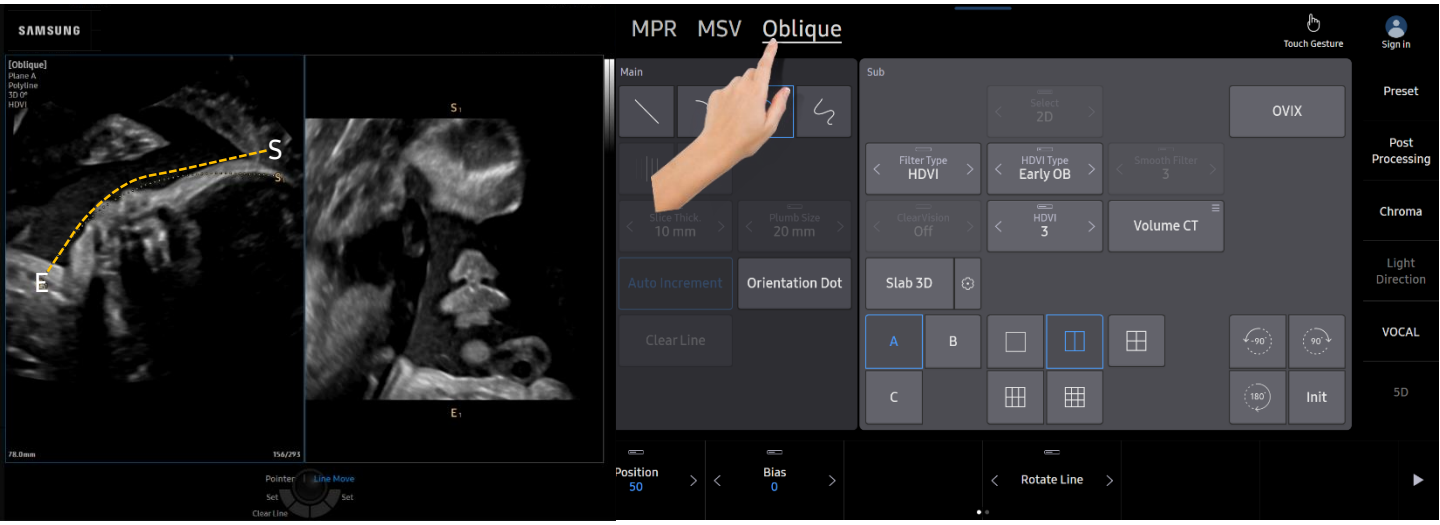
- Only available in MSV and Oblique page.
- Cube Volume CT: Shows the external slice image of a cube.
- Cross Volume CT: The internal cross-sectional images where the sagittal, transverse, and coronal planes intersect are shown.

A Plane Offset	Adjust the position of the Front Surface.
B Plane Offset	Adjust the position of the Up Surface.
C Plane Offset	Adjust the position of the Left Surface.

- If ‘Boundary’ is turned 'On', the boundary lines of a cube will be shown.

  Boundary lines indicate the external boundary for the entire volume data.





Feature

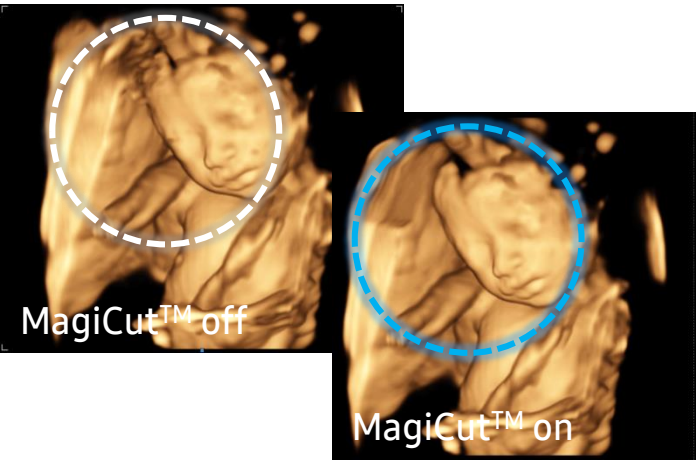
- Oblique View is a feature that freely cuts the desired cross section from volume data using the cutting method selected by the user and visualizes it as a plane.
- OVIX (Oblique View eXtended) is a feature that displays the image with volume by setting the cross-sectional thickness of the oblique image.

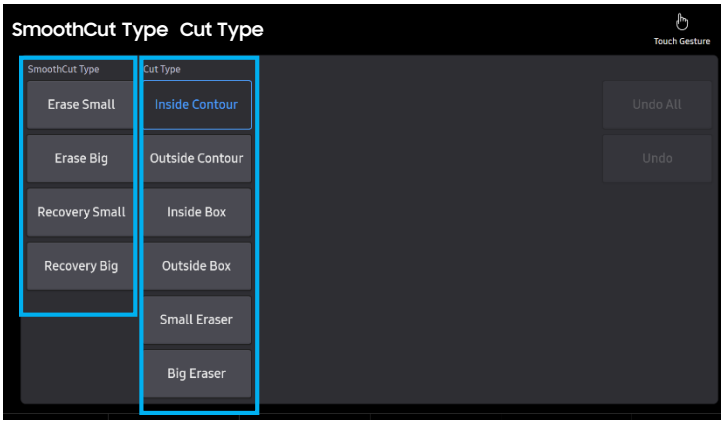
Benefit

- Parts that are not easily visible in traditional 2D images can be observed from various angles, allowing for detailed evaluation of specific organs or structures of the fetus.

Tips

- After drawing a straight or a curved line on the selected image in MSV Mode, you can observe the related oblique image.
- An oblique image will appear with the start (S) and end (E) points shown.
- If Cut Type is set to Line and the trackball is in Move state, you can reposition the line.
- In curved structures such as the spine or the face of a fetus, using the curved type helps obtain more accurate images and shows you the coronal view.





Feature

- Feature to cut out or carve specific area from 3D images.

Benefit

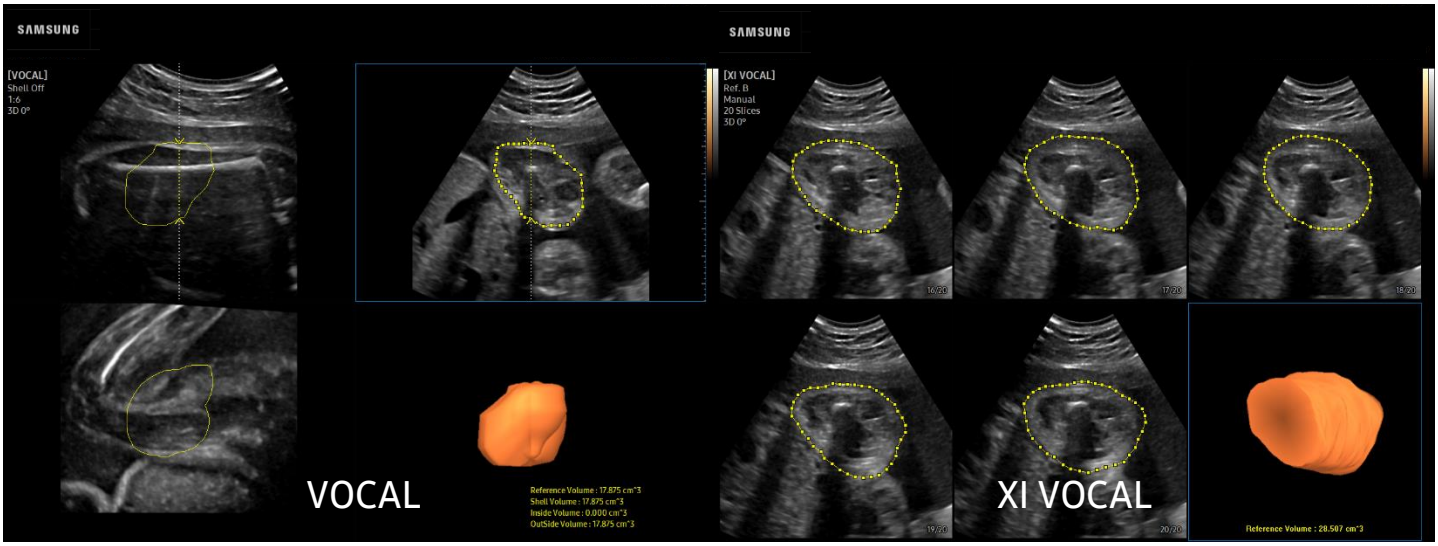
- MagiCut™ allows you to digitally erase or carve any structures in front of the image, creating a structurally unobscured 3D image.

Tips

- This simple, user-controlled feature quickly eliminates a specific target within the volume and can also easily recover the erased information by reversing the action.
- It is suitable for removing structures in the amniotic fluid in front of the fetal face.
- Available in MPR Mode only.
  If MagiCut™ is enabled, 'Accept ROI' is turned on automatically.
- Cut type can be easily used as box, eraser type, and contour.
- Press 'Undo All' to cancel all tasks that have been done so far.
  Press 'Undo' to cancel the latest task.

* SmoothCut

- One of the MagiCut™ functions is to create smooth skin when the fetus's facial surface is expressed as being uneven.



Feature

- VOCAL (Virtual Organ Computer Aided Analysis) is a feature that traces and recognizes the outlines of structures of various anatomical or eccentric shapes, and then calculates 3D volumes. In 3D with PD, vascularity histogram is supported for vascularity quantification.

Benefit

- Measuring specific ROI's volume from 3D data for quantification, provide more accurate values than measuring volume from 2D images.

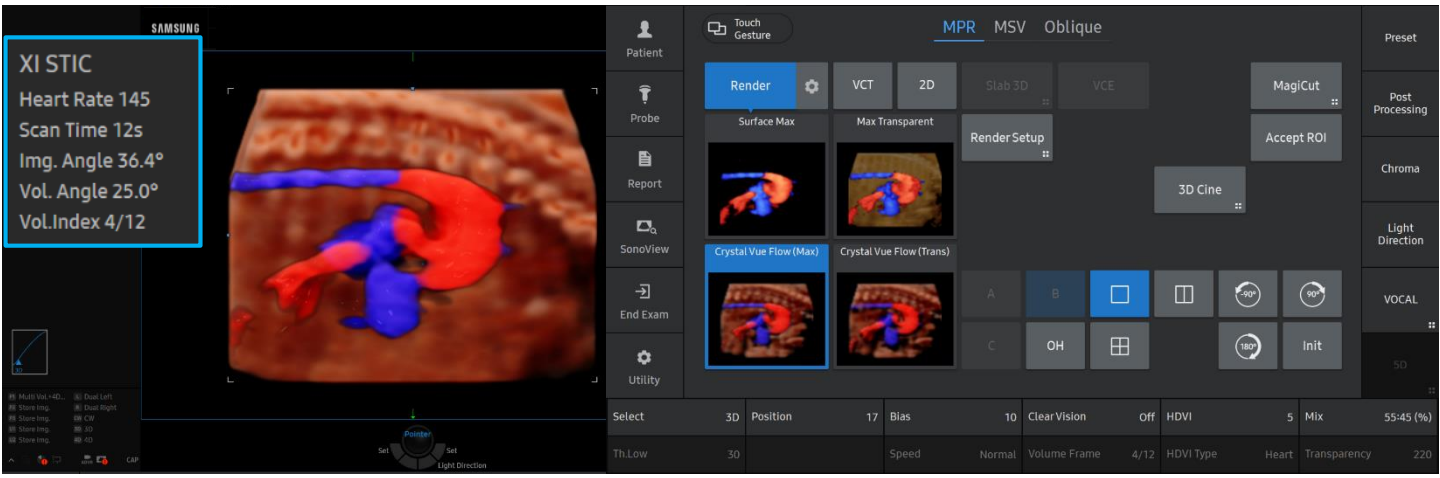
Tips

- VOCAL vs. XI VOCAL

VOCAL	Measures the volume of an object in a general 3D image Uses rotating slices
XI VOCAL	Measures the volume of an object in the selected reference image in MSV Mode Uses parallel slices Calculates the volume of an object by cutting it into multiple slices

- Contour Type

Solid	For hyperechoic object data
General	Draw a contour line based on a typical object
Prostate	For prostate data
Cystic	For hypoechoic object data
Sphere	After creating a sphere object, edit its contour 2 to create the desired shape
Manual	Manually create the desired object shape



** This image is of our other equipment, for illustrative purposes.*

Feature

- XI STIC is a mode to acquire the heartbeat period of the fetus and the STIC (Spatio-Temporal Image Correlation) volume data using a 3D transducer.

Benefit

- Useful for diagnosing arch abnormalities.
  (e.g. DORV; double-outlet right ventricle, neck vessels, coarctation of aorta, etc.)

Tips

① Press the [4D] button and then select 'XI STIC' tab.

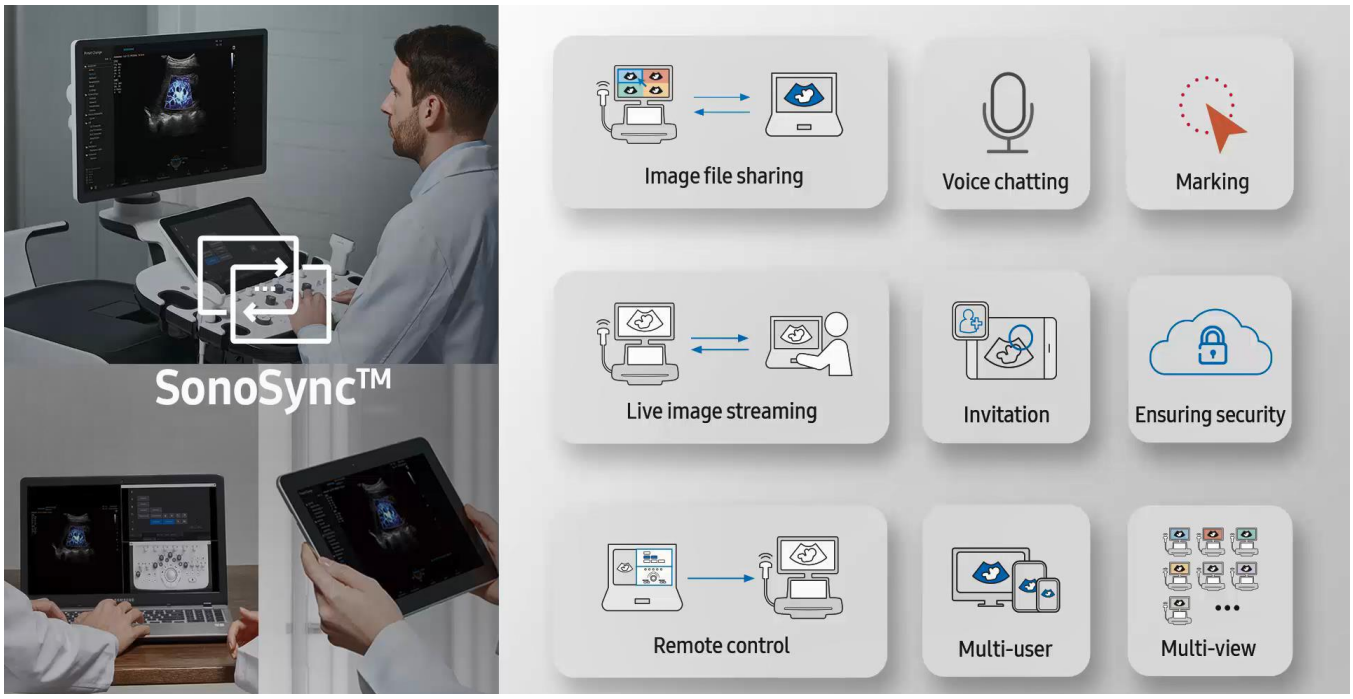
② Press [Freeze] or [Set] to start acquisition of 3D images.

③ Check the fetal cardiac cycle calculated on the screen.

* If the motion artifacts are severe, the data does not contain the cardiac cycles, or the heart rate cannot be calculated for any other reason, you will be returned to the XI STIC initial screen.

- How to Improve STIC Volume Data

Angle	Specify a small angle for small fetal hearts.
	Transverse plane : same as the gestational age in weeks. Sagittal plane : same as the gestational age in weeks plus 5°.
Scan Position	Adjust the scan position so that the center of the angle and the fetal heart are aligned properly. In order to avoid shadowing from the fetal spine and ribs.
ROI Box	Adjust the size of the volume box so that it nearly fits the size of the fetal heart.



Feature

- Real time image sharing solution that allows live streaming, communication and remote control of ultrasound system for collaboration between physicians and sonographers at different locations.
- Remotely control the counterpart's US system by personal computer with virtual TouchScreen and Control panel to perform B/C/D Mode adjustment, measurement, annotation and so on.
- Voice chatting with marking tool, Text chatting and video conference function are supported for smooth discussion.
- Encrypts data as per HIPAA guidelines and CE-marked to ensuring security.

Clinical Benefit

- E-Consultation : Connecting sonographers at a satellite imaging center with an expert physician in a hospital for remote consultancy.
- E-Collaboration : Multi-department discussion within the hospital or a complicated case, multiple us system can be connected to one smart device.
- E-Training : Supporting online education or webinars to medical and Sono-school students with live ultrasound scanning, multiple users from different smart devices to an us system is available.
- E-Demo : Present a new feature and research outcomes for knowledge transfer.

Recommended Requirements

Server
- CPU : Intel Xeon 4 Core, 3.00 GHz or better
- RAM : 32GB or more
- Disk : 50GB or more
- NIC : 1 Gbps Ethernet or faster
- OS : Windows Server 2022 or later

Mobile Device Recommendations
- Phone : Samsung Galaxy S21 or later
- Tablet : Samsung Galaxy Tab S7 or later

Viewer – PC/MAC
- CPU : Core i3 or above
- RAM : 4GB or more
- Resolution : 1920 x 1080 pixel resolution or higher
- OS : Windows 10 64bit or later, macOS11 or later
- Web Browser : Chrome v91 or above (exclude incognito mode)

Viewer – Mobile
- OS : Android 11 or later
- Web Browser : Mobile Chrome v91 or above

Network Requirements

Ports
- TCP443 : htts (Web/WebSocket)
- TCP1935 : WebRTC

Bandwidth
- Server : 1 Gbps or more
- Ultrasound System : 6 Mbps or more per each
- Viewer : 6 Mbps or more per each

Other Requirements

SMTP
- Account registration/Password recovery

Clinical overview & summary: What is Strain ?

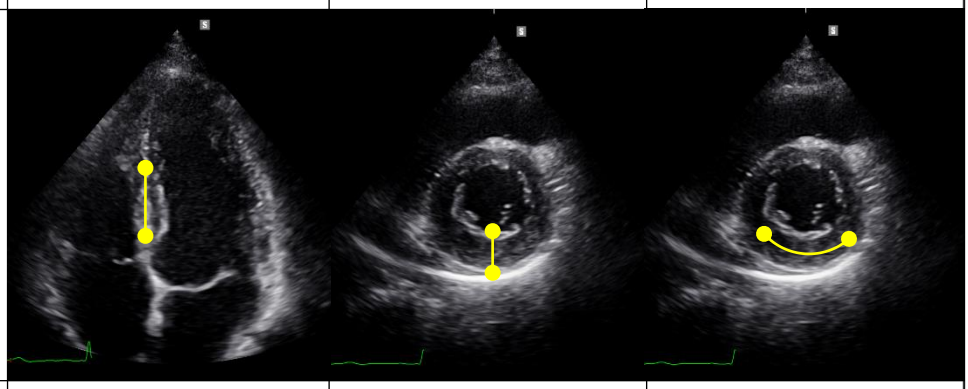
SAMSUNG

- Strain measures myocardial deformation.

  Strain = L1-L0/L0 *100

  L1 : Length at a given point in time, L0: Baseline length

- Strain rate is the addition of the concept of time to Strain.
- Most common clinical application is LV GLS.

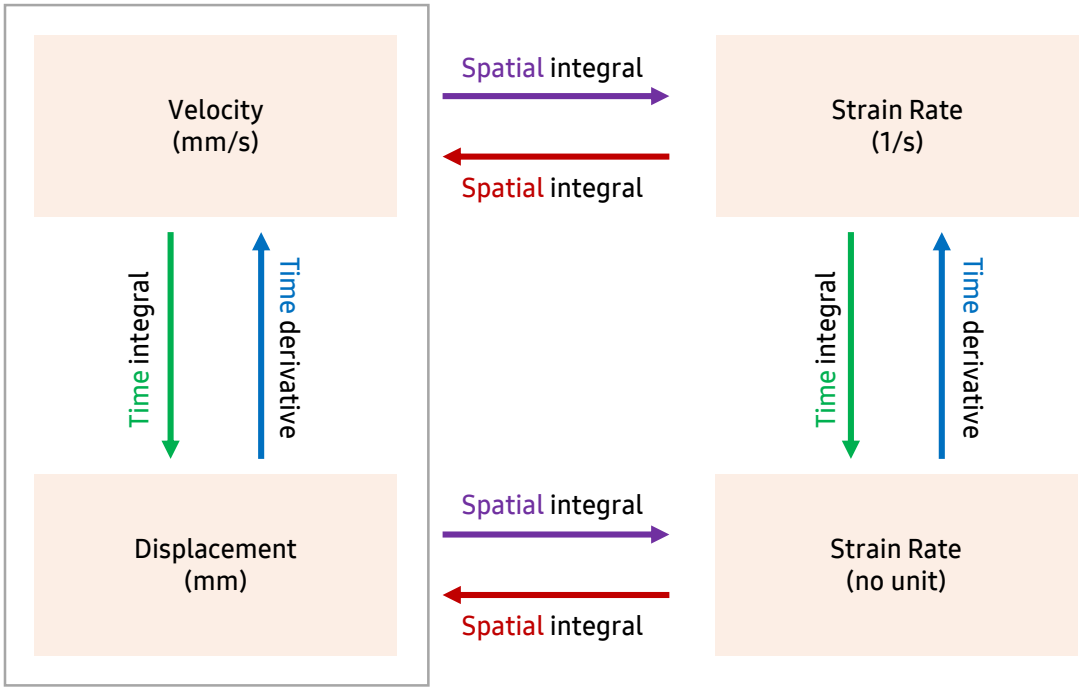
Direction	Longitudinal strain	Radial strain	Circumferential strain
			
Systole (Diastole)	Shortening = -ve (Lengthening = +ve)	Thickening = +ve (Thinning = -ve)	Shortening = -ve (Lengthening = +ve)

** Adapted from Anderon B, Echo Hawaii 2018. ase.org*

- Differences and Pros & Cons of GLS/GCS

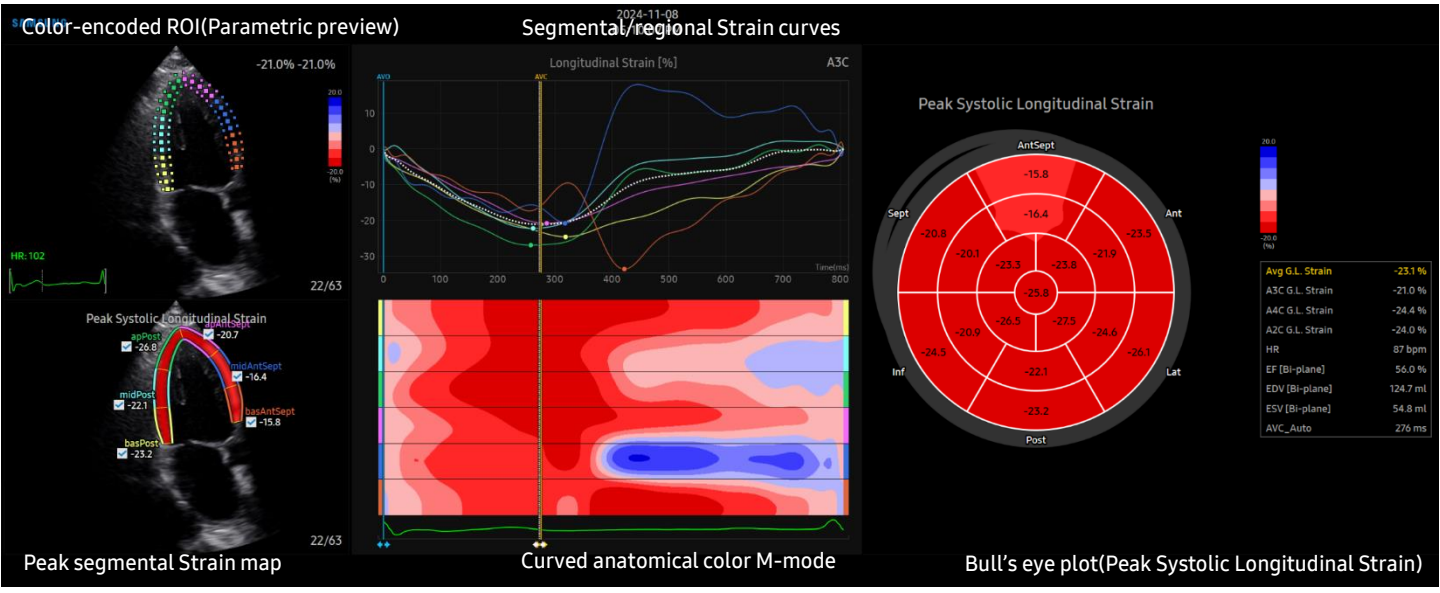
There are research results that GCS is more closely related to EF.

Pre-clinical dysfunction › Rapidly reflects LV function decline, allowing early prediction of dysfunction.



- Global Longitudinal Strain (GLS)

Lagrangian strain is defined as the change in length of an object within a certain direction relative to its baseline length. Where ML is myocardial length at end-systole (MLs) and end-diastole (MLd).
Because MLs is smaller than MLd, peak GLS is a negative number.



- Left Ventricle Strain

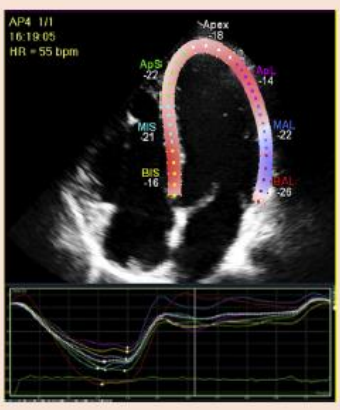
LV systolic function should be routinely assessed using 2DE or 3DE by calculating EF from EDV and ESV.

LV EFs of <52% for men and <54% for women are suggestive of abnormal LV systolic function.

Two-dimensional STE-derived GLS appears to be reproducible and feasible for clinical use and offers incremental prognostic data over LV EF in a variety of cardiac conditions, although measurements vary among vendors and software versions.

To provide some guidance, a peak GLS in the range of -20% can be expected in a healthy person, and the lower the absolute value of strain is below this value, the more likely it is to be abnormal.

Global Longitudinal Strain.
Peak value of 2D longitudinal speckle tracking derived strain (%).

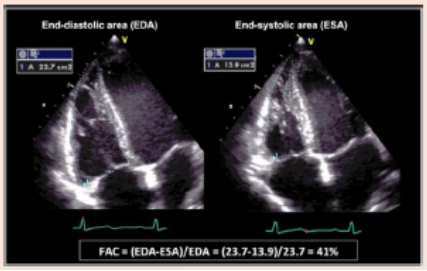


- Angle independent
- Established prognostic value
- Vendor dependent

2D, two-dimensional; *3D*, three-dimensional; *A2C*, apical 2-chamber view; *A4C*, apical 4-chamber view; *EDV*, end-diastolic volume; *ESV*, end-systolic volume; *LV*, left ventricular.

FAC

FAC provides an estimate of global RV systolic function. It is important to ensure that the entire right ventricle be contained in the imaging sector, including the apex and the free wall, during both systole and diastole. While tracing the RV area, care must be taken to include the trabeculae in the RV cavity.
RV FAC < 35% indicates RV systolic dysfunction.

Echocardiographic imaging	Recommended methods	Advantages	Limitations
RV global systolic function FAC 	RV FAC in RV-focused apical four-chamber view: RV FAC (%) = 100 × (EDA − ESA)/EDA	• Established prognostic value • Reflects both longitudinal and radial components of RV contraction • Correlates with RV EF by CMR	• Neglects the contribution of RV outflow tract to overall systolic function • Only fair inter-observer reproducibility

TAPSE

TAPSE is easily obtainable and represents a measure of RV longitudinal function. It is measured by M-mode echocardiography with the cursor optimally aligned along the direction of the tricuspid lateral annulus in the apical four-chamber view. Although this index predominantly reflects RV longitudinal function, it has shown good correlations with parameters estimating RV global systolic function, such as radionuclide-derived RV EF, 2D echocardiographic RV FAC, and 2D echocardiographic EF. As a one-dimensional measurement relative to the transducer position, TAPSE may over or underestimate RV function because of cardiac translation.

Although there may be minor variations in TAPSE values according to gender and BSA, generally, TAPSE < 17 mm is highly suggestive of RV systolic dysfunction.

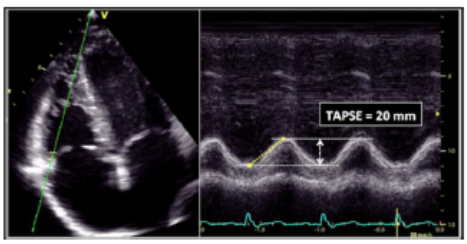
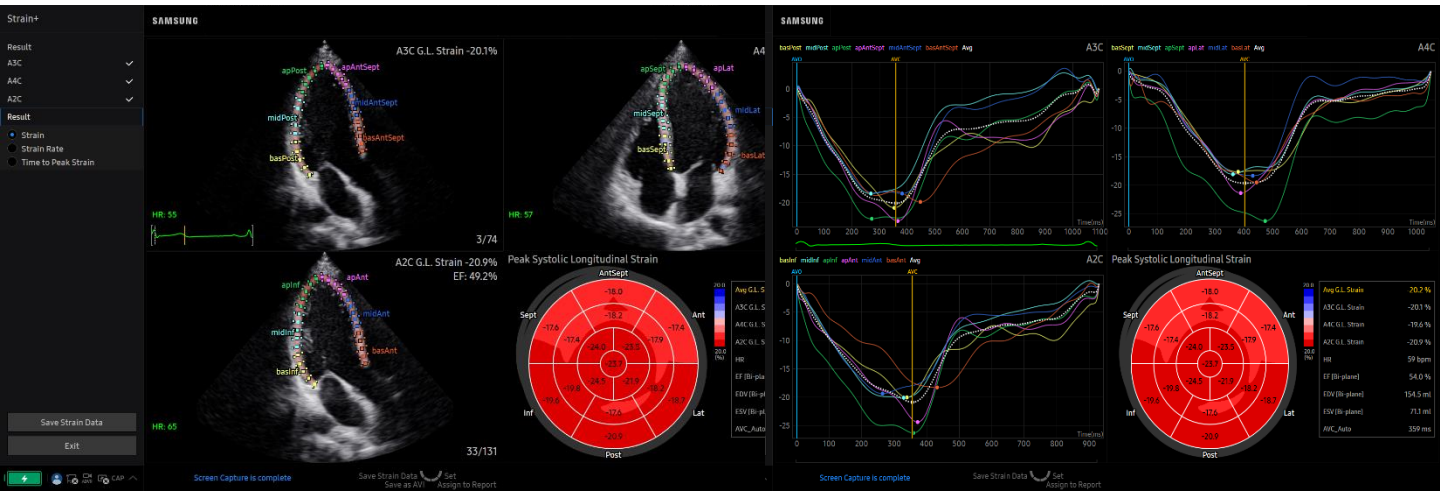
Echocardiographic imaging	Recommended methods	Advantages	Limitations
RV longitudinal systolic function TAPSE 	• Tricuspid annular longitudinal excursion by M-mode (mm), measured between end-diastole and peak systole • Proper alignment of M-mode cursor with the direction of RV longitudinal excursion should be achieved from the apical approach.	• Established prognostic value • Validated against radionuclide EF	• Angle dependency • Partially representative of RV global function*

Table 10 Normal values for parameters of RV function

Parameter	Mean ± SD	Abnormality threshold
TAPSE (mm)	24 ± 3.5	<17
Pulsed Doppler S wave (cm/sec)	14.1 ± 2.3	<9.5
Color Doppler S wave (cm/sec)	9.7 ± 1.85	<6.0
RV fractional area change (%)	49 ± 7	<35
RV free wall 2D strain* (%)	−29 ± 4.5	>−20 (<20 in magnitude with the negative sign)
RV 3D EF (%)	58 ± 6.5	<45
Pulsed Doppler MPI	0.26 ± 0.085	>0.43
Tissue Doppler MPI	0.38 ± 0.08	>0.54
E wave deceleration time (msec)	180 ± 31	<119 or >242
E/A	1.4 ± 0.3	<0.8 or >2.0
e′/a′	1.18 ± 0.33	<0.52
e′	14.0 ± 3.1	<7.8
E/e′	4.0 ± 1.0	>6.0

MPI, Myocardial performance index.
*Limited data; values may vary depending on vendor and software version.

Strain+ (LV Strain)



Feature

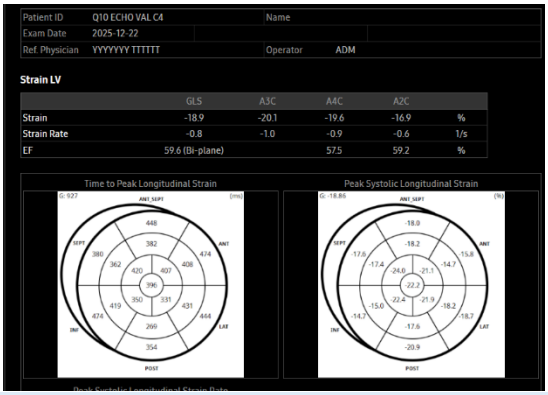
- LV Global longitudinal strain (GLS) is the optimal parameter of deformation for the early detection of subclinical left ventricle dysfunction.
- Quantitative tool for wall motion of the left ventricle using advanced speckle tracking technology. Samsung System automatically contours myocardium for the Strain+, supports quick and simple procedure.

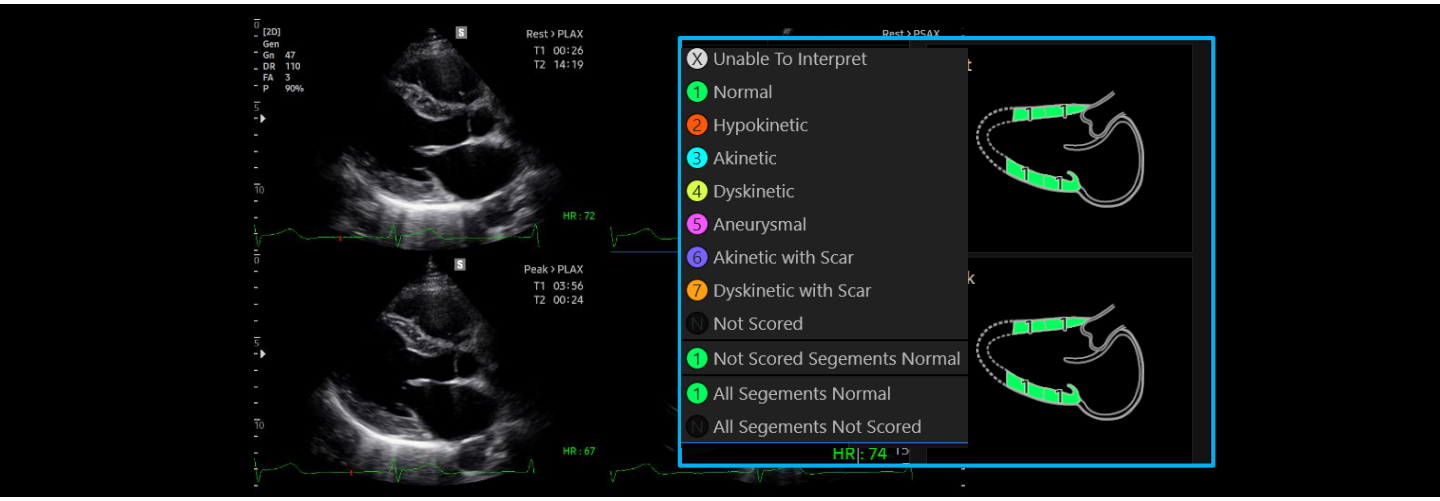
Clinical Benefit

- Measure of deformation along the longitudinal axis of the heart, providing a quantitative assessment of global left ventricular systolic function.
- By detecting subtle changes in Left ventricular function, assess regional wall motion abnormalities.
- GLS, Global longitudinal strain value is helpful to predict Left ventricle function. With fast and reproducible study, Strain+ can be apply to a daily practice.
- Able to revise and edit the myocardium contour.
- 17 or 18 segment of bulls eye view is provided. (*Based on the ASE Guideline, apply 17 segments as Default.)*

Tips

- It is recommended to do the LV Strain+ with cine data that left sided direction marker for higher accuracy.



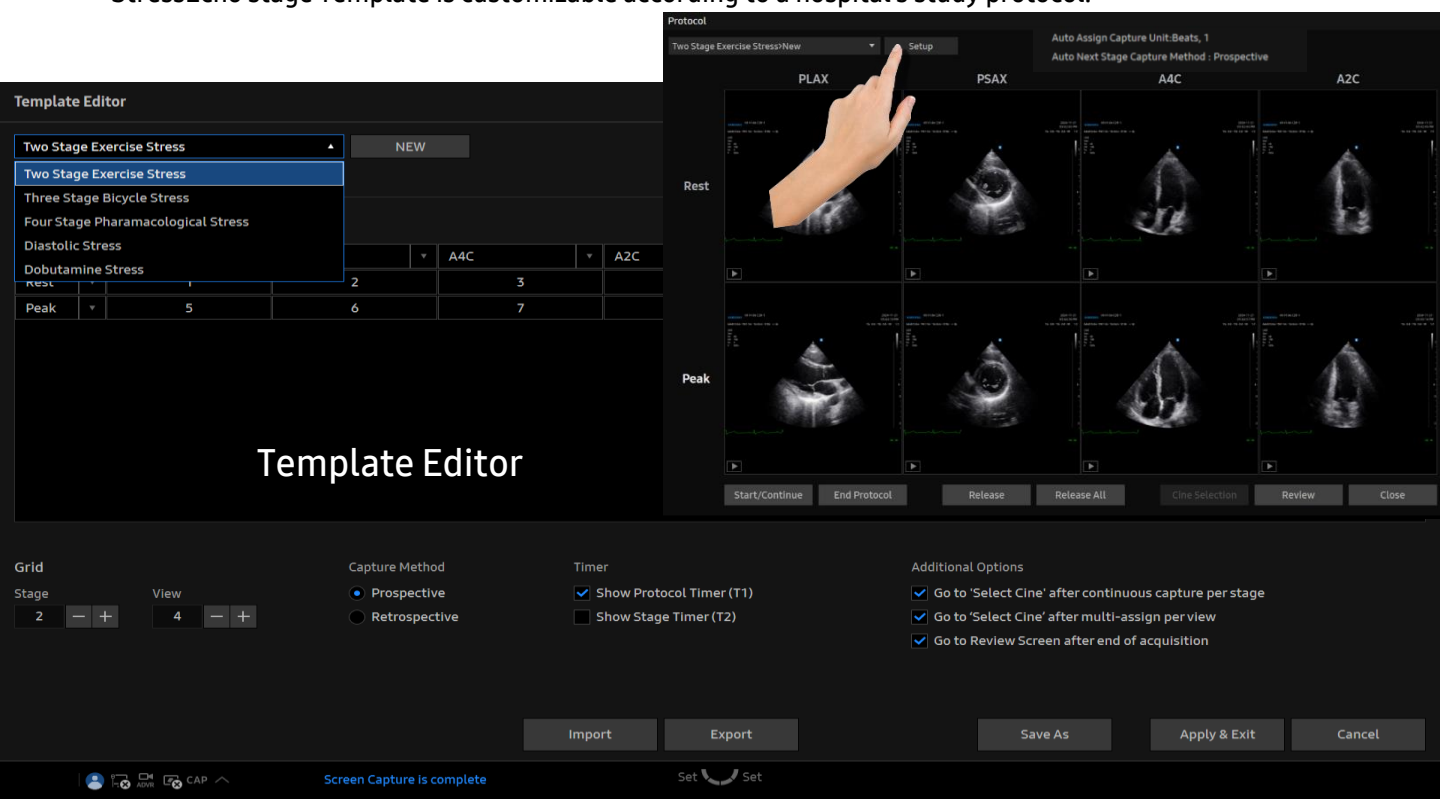


Feature

- Stress echocardiography (SE) is most commonly used to evaluate ischemic heart disease.
- The stress can be triggered by either exercise on a treadmill(bicycle) or a medicine called dobutamine.

Benefit

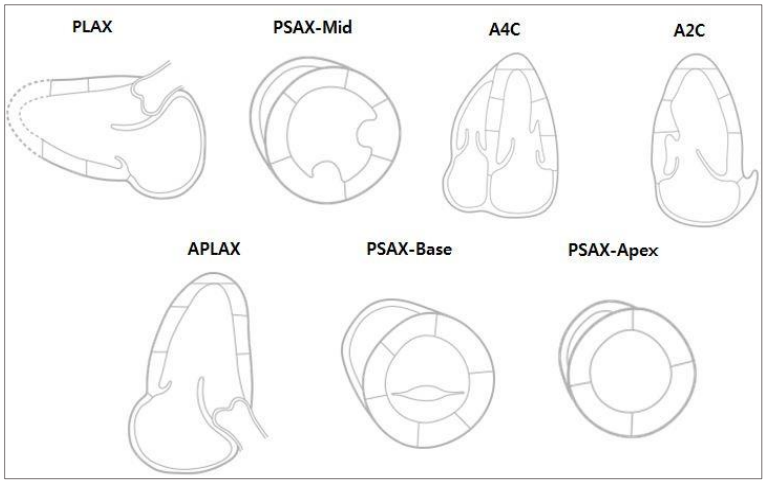
- Indication of SE : Diagnosing coronary artery disease, Assessing valve disease, Identifying ischemia.
- It can help detect early signs of coronary artery disease, arrhythmias and other cardiac conditions.
- StressEcho stage Template is customizable according to a hospital's study protocol.



WMS (Wall Motion Scoring)

- Wall Motion Scoring index is a unitless number that measures the wall motion response during stress.
- WMS index is directly proportion to the severity and extent of wall motion abnormalities.
  To calculate the WMS index, each Left ventricular segment is given a score based on its systolic function:

  - Normal : 1
  - Hypokinesis : 2
  - Akinesis : 3
  - Dyskinesis: 4



Left Ventricular Segment	Area number
Basal Anterior Septum	1
Basal Anterior	2
Basal Lateral	3
Basal Posterior	4
Basal Inferior	5
Basal Septum	6
Mid Anterior Septum	7
Mid Anterior	8
Mid Lateral	9
Mid Posterior	10
Mid Inferior	11
Mid Septum	12
Apical Septum	13
Apical Anterior	14
Apical Lateral	15
Apical Inferior	16

** All stress echo responses follow four basic patterns :*

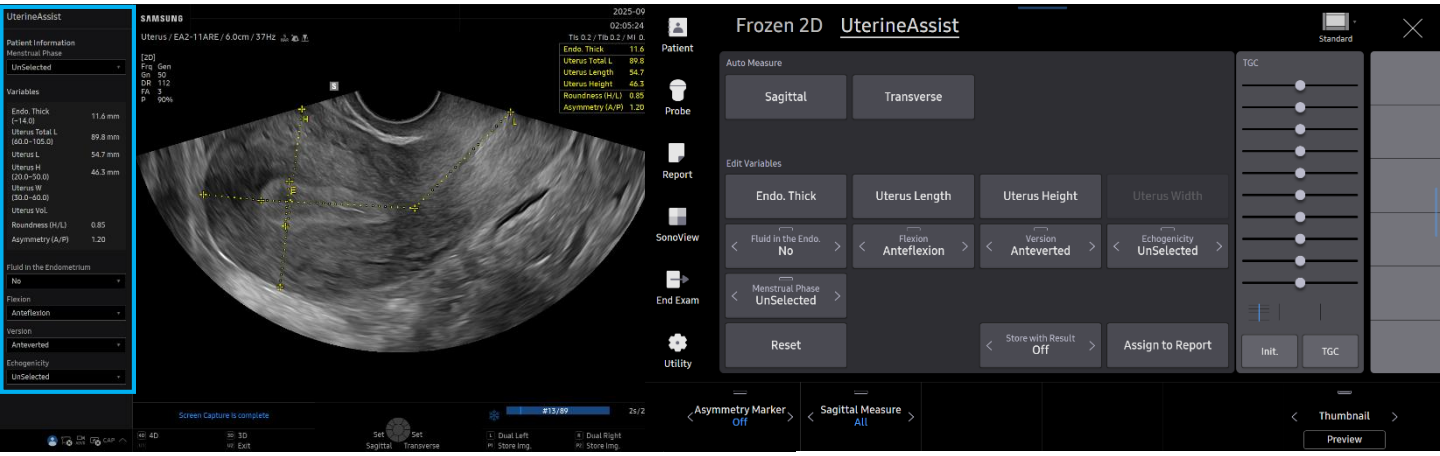
- *Normal (Rest = Stress = Normal function)*
- *Ischemia (Rest = Normal, Stress = Abnormal)*
- *Necrotic (Rest = Stress = Abnormal)*
- *Viability (Rest = Abnormal, Stress = Normal or Biphasic)*

Table 2 Stress echocardiography in four equations

Rest + Stress = Diagnosis
Normokinesis + Normo-Hyperkinesis = Normal
Normokinesis + Hypo, A, Dyskinesis = Ischaemia
Akinesis + Hypo, Normokinesis = Viable
A-, Dyskinesis + A-, Dyskinesis = Necrosis

** Clear endocardial definition is crucial for optimal interpretation and it is recommended that harmonic imaging, when available, be routinely used for optimal endocardial border detection. Contrast-enhanced endocardial border detection could be used when suboptimal imagining is present.*

EAE Guidelines (European Journal of Echocardiography(2008) 9, 415-437)



Feature

- Based on Deep learning technology, UterineAssist™ semi-automatically measures the size and shape of the uterus.
- Morphological measurement like Endometrium thickness, uterus Length, Height, Width and shape information like Roundness, Asymmetry are provided with highly simplified workflow.

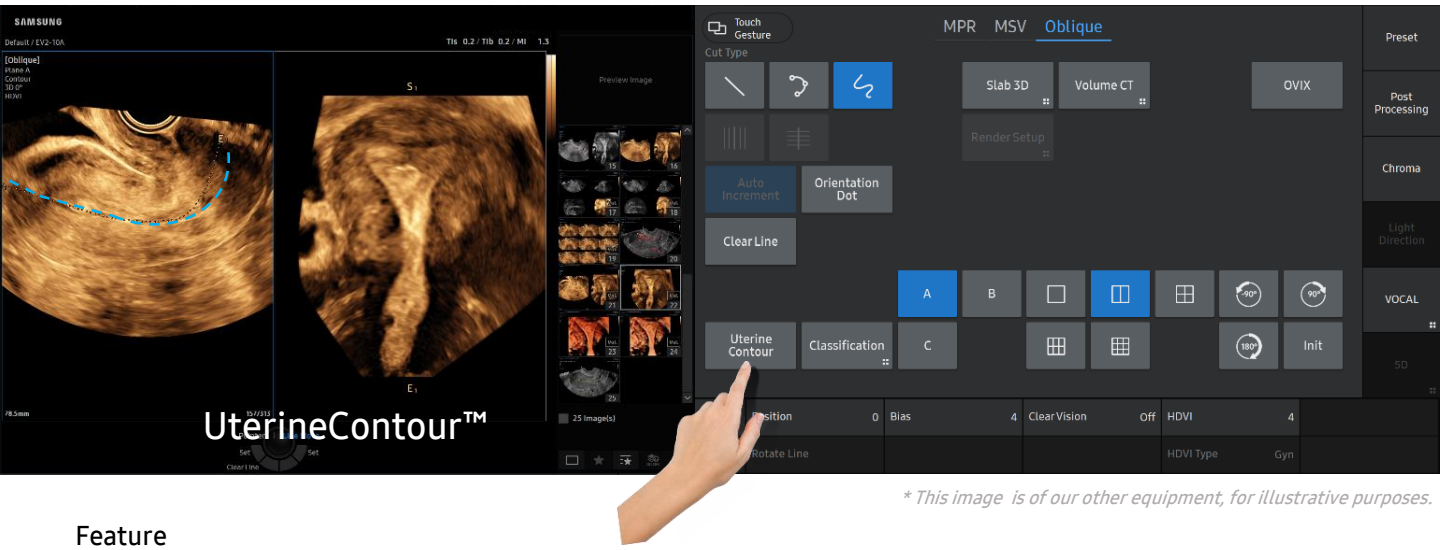
Clinical Benefit

- Uterine measurement is routine check up in Gynecology study to figure out any abnormal status, highly decreases patient throughput.
- Supports to reduce a time consuming with a single keystroke by providing multiple measurement items, which are required to do manually.
- Detailed reporting is available by Providing more manual features like Fluid in the Endometrium, Flexion, Version and Echogenicity additionally.

Tips

- Select the specific item on the TouchScreen to revise and update the result.
- UterineAssist™ is workable Up/Down Image Mode as well.
- Change and set a normal standard value range of individual item is available.

  Utility > Setup > Measurement > Application Options > GYN > Uterus



** This image is of our other equipment, for illustrative purposes.*

Feature

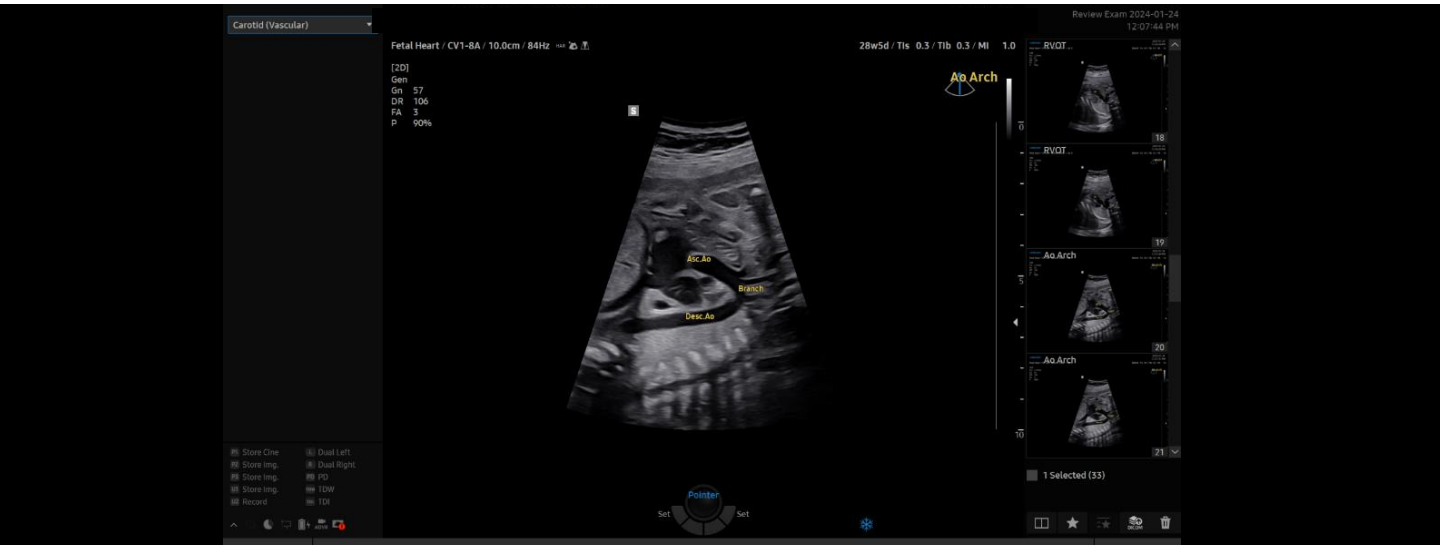
- A feature based on Deep Learning technology.
- It automatically extracts the centerline and thickness of the curved endometrium and provides a coronal view in 3D, flattened by the centerline.

Benefit

- Reduces the time required to manually find the endometrium.
- It is to help in identifying uterine malformation and IUD location.
- Uterine malformation classification are reported according to the ESHRE/ESGE or ASRM guideline selection.
  - ESHRE/ESGE: The European Society of Human Reproduction and Embryology
    The European Society for Gynecological Endoscopy
  - ASRM: The American Society for Reproductive Medicine

Tips

- It is enabled under the Gynecology Application.
- You can configure the Classification settings in Utility› Setup › Measurement › Gynecology.
- Able to directly run the Uterine Contour on the TouchScreen in B-Mode by tapping the UterineContour™ Button with 3D endo-transducer.
- Acquire 3D Volume → Touch 'Uterine Contour'
  - Automatically provides the coronal plane of the uterus.
  - Select the item that matches the uterine shape of the examined coronal plane.



Feature

- A feature based on deep learning technology.
- Automatically classifies ultrasound images with view recognition technology, the feature is automatically performed and show proper annotation or measurement when the user selects ‘Auto Annotation’ or ‘Auto Measure’ without giving any specific indication to the system.

Benefit

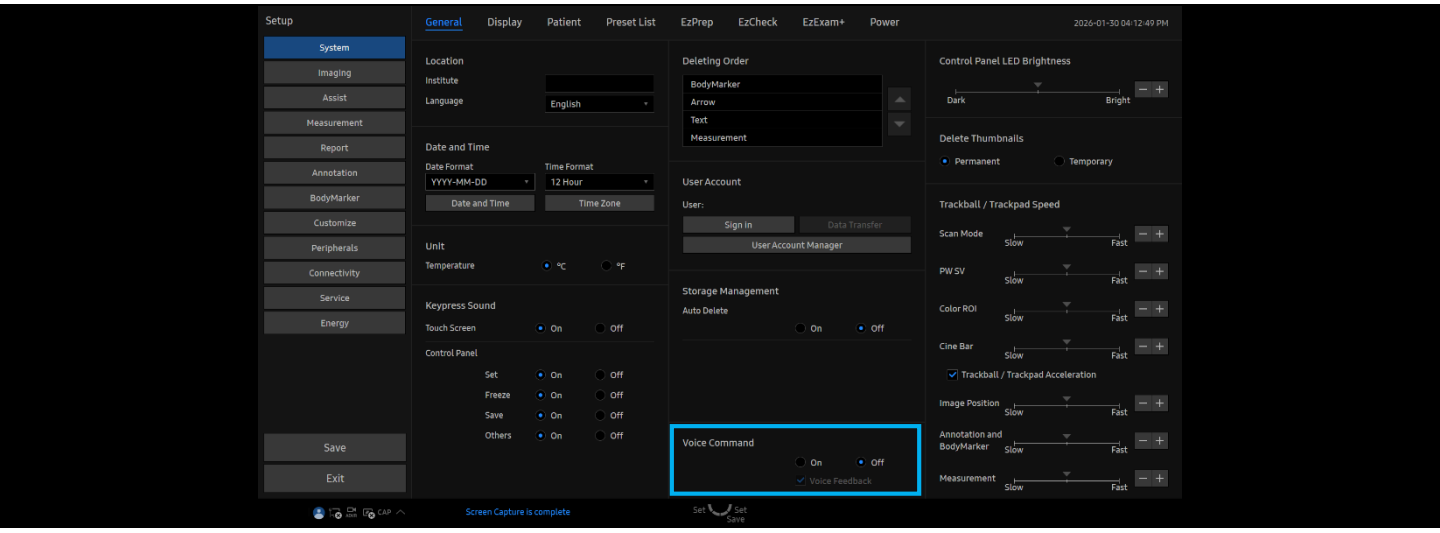
- Improve workflow efficiency with automation features that reduce the number of steps required to enter measurements and annotations for each item each time.

Tips

- Activated under Frozen 2D mode condition in OB Application.
- Activate ‘Auto Annotation’ by touching it on the touch-screen.
  - Automatically displays the proposed view names and corresponding anatomic annotation.
  If the user wishes to modify it, press [Text] to edit the text.
- Activate 'Auto Measure' by touching it on the touchscreen.
  Alternatively, you can do this by pressing the '  ' button in the control panel after pre-setting in Settings.

  Utility › Setup › Assist › OB (Application)

  ☑ Start AutoMeasure by Pressing Measure Key



Feature

- Experience seamless, hands-free scanning with Voice Command, enabling an efficient workflow and sterile operation control through simple spoken instructions.

Benefit

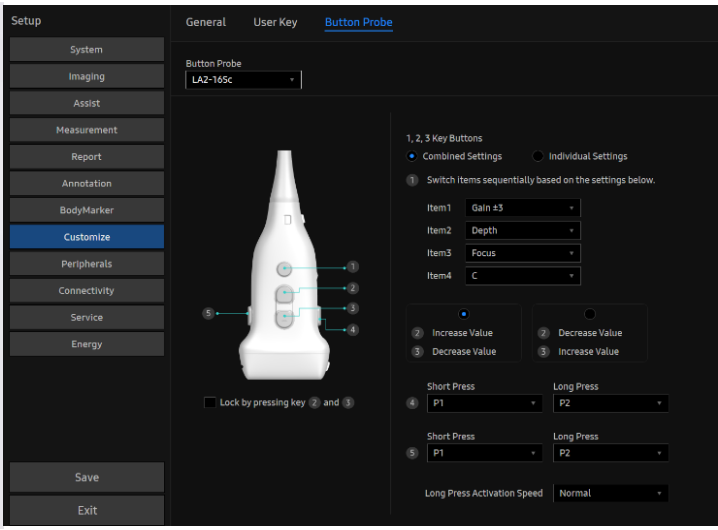
- Voice Command enhances the clinical workflow by allowing hands-free operation, reducing the need for physical contact with the system during procedures.
- This is particularly valuable in sterile environments, helping to maintain infection control while improving efficiency and focus during examinations.

Tips

- Activate via the microphone icon or a custom "Wake Word" (e.g., "Hey Assist") for hands-free control.
- Customize your experience by setting the Listening Mode (Single/Multiple), Voice Feedback, and your personalized Wake Word.
- Operate the system with simple commands such as “B Gain Up”, “Freeze”, and “Image Save”. See the list below for more.

▶ Patient	▶ B Mode, B Gain Up/Down	▶ Measurement	▶ Dual Live, Single
▶ Depth Up/Down	▶ M Mode, M Gain Up/Down	▶ Caliper	▶ Exit
▶ Focus Up/Down	▶ C Mode, C Gain Up/Down	▶ Annotation	▶ Freeze
▶ Zoom Up/Down	▶ PD Mode, PD Gain Up/Down	▶ BodyMarker	▶ Image Save
	▶ PW Mode, PW Gain Up/Down	▶ Context Left/Right	▶ Cine Save

Button Probe

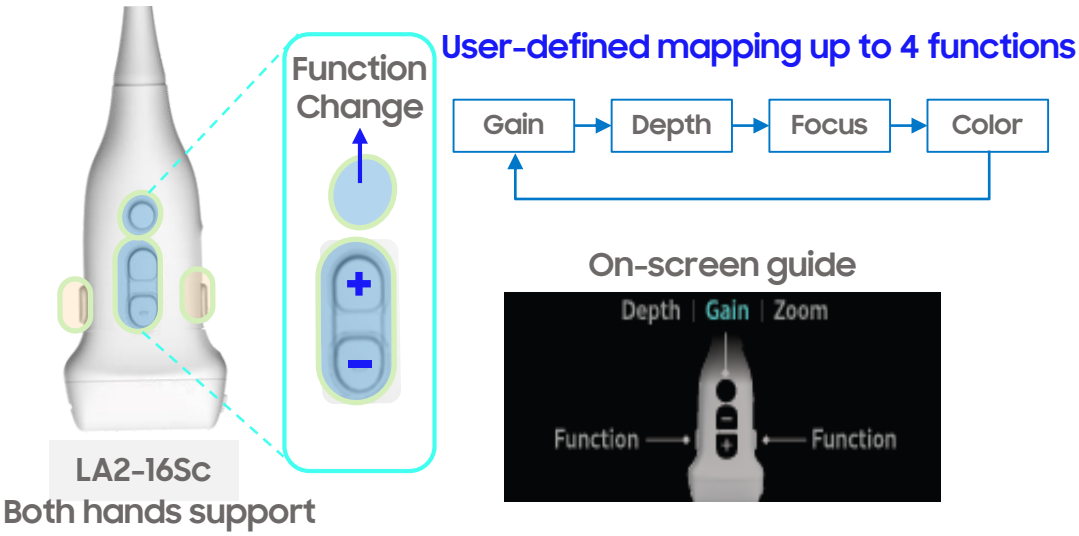


Feature

- Enable truly sterile operation—without direct touch or additional assistance, supports broader functionality.

Clinical Benefit & Tips

- Button Probe & Voice command : No need to touch ultrasound device during the US-Guided Procedure (Support Built-in Camera and Microphone).
- Dual side buttons provide identical functionality for both hands Frequently used functions can be assigned.
- The settings for the Button Probe are configurable in the Utility > Setup > Customize > Button Probe.



EVO Q10 Transducer Line-up

SAMSUNG

Convex

CA1-7SD S-Vue

OB, Abdomen, GYN, MSK, Pediatric, Thoracic, Vascular, Urology, Emergency

CA2-8AD

OB, Abdomen, GYN, MSK, Pediatric, Vascular, Urology, Emergency

Linear

LA2-16Sc Button S-Vue

Abdomen, MSK, Small Parts, Vascular, Pediatric, Emergency

LA3-16ADc Button

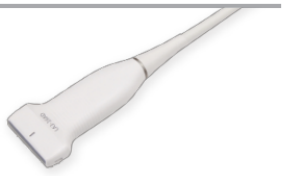
Abdomen, MSK, Small Parts, Vascular, Pediatric, Emergency

LA2 -16S S-Vue

Abdomen, MSK, Small Parts, Vascular, Pediatric, Emergency

LA3-16AD

Abdomen, MSK, Small Parts, Vascular, Pediatric, Emergency



LA3-22AI

MSK, Intraoperative, Dermatology

L3-22

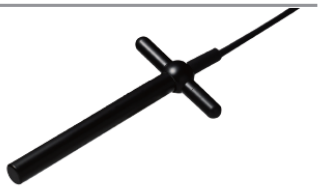
MSK, Small Parts, Vascular, Pediatric, Dermatology

LA2-9SD S-Vue

Abdomen, MSK, Small Parts, Thoracic, Vascular, Pediatric, Emergency

EVO Q10 Transducer Line-up

SAMSUNG

Phased Array	**PA1-5AED** Abdomen, Cardiac, TCD, Pediatric, Vascular, Thoracic, Emergency	
	PA2-9S S-Vue Abdomen, Cardiac, TCD, Pediatric, Vascular	
	PA3-15S S-Vue Abdomen, Cardiac, TCD, Pediatric, Vascular	
TEE	**MMPT3-7** Cardiac	
	TA2-9 Cardiac	
CW	**CW6.0** Cardiac, Vascular, TCD	
	DP2B Cardiac, Vascular, TCD	

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