

# MyLab™ X90

**Premium Ultrasound  
with Augmented Insight™**



NEVER STOP SEEING THE UNSEEN.



When research is oriented towards the evolution of products and solutions for the continuous improvement of diagnosis in terms of imaging and workflow, when research is focused on expanding technological potential and exploring unexplored horizons, the result is pure innovation.



EXPLORING THE INSIDE.



# Experience Intelligent Imaging

A simple image can **make the difference** in treating your patients; Esaote is therefore committed now more than ever to providing you with the **ultimate technologies** in ultrasound imaging. MyLab™X90 is Esaote's premium ultrasound platform, designed to deliver **outstanding image quality** and advanced clinical solutions. Bridging the clinical information and an **A.I.-driven** workflow for the first time, with MyLab™X90, you will experience your first Intelligent Imaging ultrasound device.



ULTIMATE  
DESIGN



XCRYSTAL  
TECHNOLOGY



CLEARWAVE  
ARCHITECTURE



AUGMENTED  
INSIGHT™



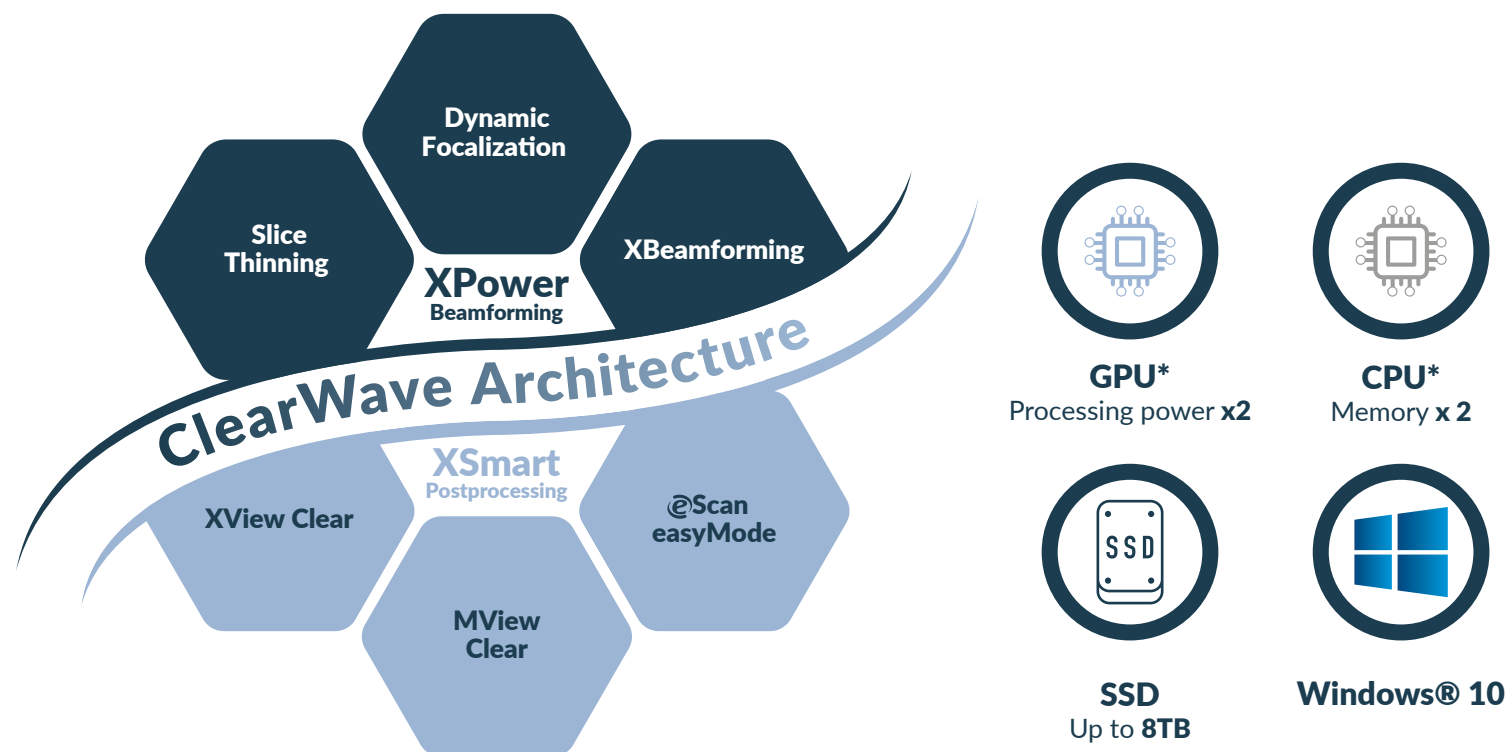
CLINICAL  
EXPERIENCE

# ClearWave Architecture

**ClearWave Architecture** is the aggregation of the two components in image construction – Esaote's ultimate **XPower Beamforming** and **XSmart Postprocessing** technologies – to deliver a new standard in terms of image quality.

Embedding the latest generation of electronics and processors, MyLab™ X90 is designed to face the new challenges of imaging stream management and authorizes connectivity with extreme security.

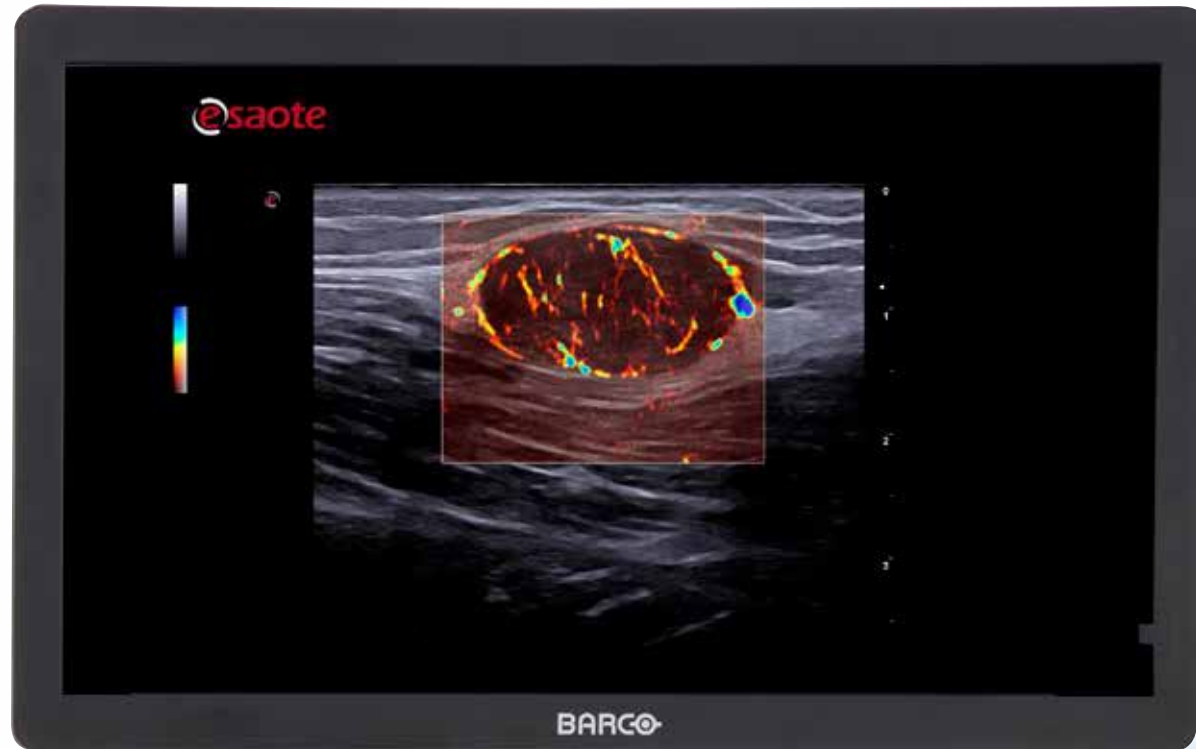
Providing a high level of protection against external threats, **Windows® 10** enables data transfer, offers peace of mind in compliance with the GDPR and ensures the safety of patient data, while the power of the MyLab™ X90 **GPU** speeds up the transfer rate by up to four times, facilitating the multimodality approach and the use of live streaming.



\* Compared to the previous line



# Top-class medical imaging visualization



## @Led monitor

- 23.8" Full HD High Dynamic Range Monitor
- Dual-Layer technology
- Contrast resolution ratio x 40\*
- Higher sensitivity in brightness and color
- Long lifespan and stability

Collaborating with **Barco** to equip its **premium platform**, Esaote demonstrates its product to be of the utmost quality.

MyLab™X90 embeds an exclusive **@Led monitor** developed by Barco and optimised for this platform.

**Dual-Layer LCD technology**, the top-class in terms of picture rendering, offers brilliant colors, infinite contrast, fast response rate and viewing angles with higher stability over time.

\*compared to conventional LCD technology

# High-tech design, maximum comfort



## New workflow gestures

With its extensive touchscreen, MyLab™X90 is setting a new standard for workflow in ultrasound platform management, enabling **intuitive real-time** control of several parameters such as **depth, zoom, sample gate, replay of cineloop** or even certain measurements using only your fingers.



## Optimal working environment

As a premium platform, MyLab™X90 embeds an exclusive **light sensor** for automatic optimization of brightness to the scanning environment, while the **Opti-Light** feature is backlit for real-time lighting, providing invaluable comfort in everyday use, depending on conditions in the scanning room.



## Customizable workstation

MyLab™X90 has been designed for all expectations in terms of ergonomics.

**Different sizes of probe holders** are available to fit the endocavity and convex or linear probes can be placed on two lateral rails.

An **integrated gel warmer** can be added to the rail with the choice of two temperature settings to improve patient comfort.

The **high-quality articulating arm** and its friction mechanism offer the option of lifting the monitor easily, keeping it in the optimum position chosen, and locking it during transportation.



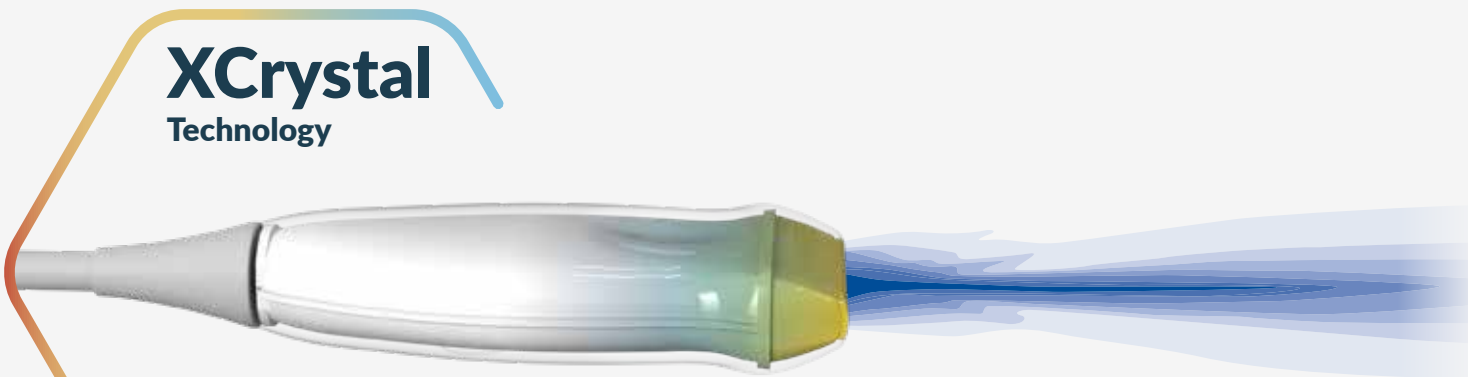
# XCrystal Technology, micro-slice imaging

Esaote-developed **XCrystal technology** dramatically increases **sensitivity** and **penetration**, to provide sharper images and **homogeneity**.

Esaote, indeed a benchmark for high-performance probe manufacturing, has designed a new generation of transducers to channel the **ClearWave Architecture** supported by MyLab™X90, and to deliver top-class resolution imaging. The ergonomic shape designed by Esaote engineering provides **true comfort** in everyday use.



Conventional probe technology



**XCrystal**  
Technology

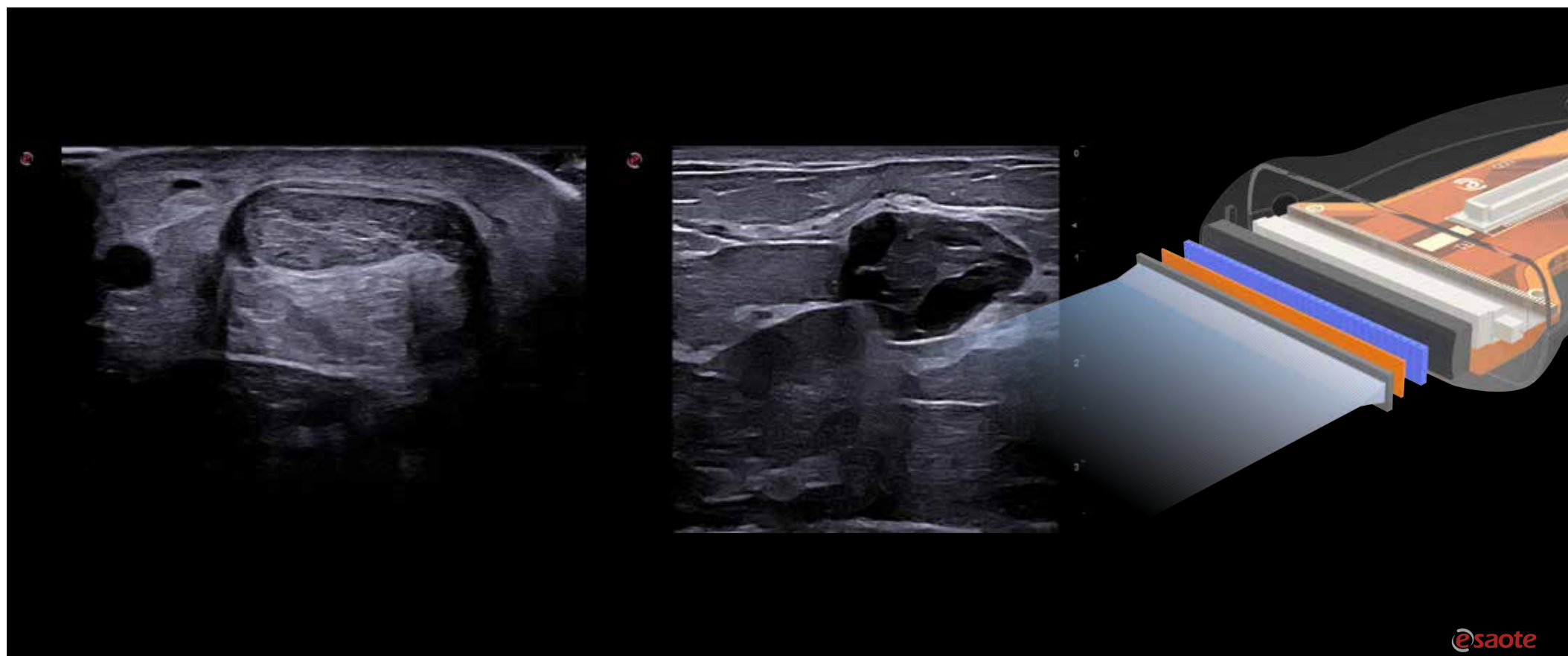
Lens shape  
Thermal drain mechanism  
HD elements/multi-layer matrix structure





# Towards excellence in very superficial imaging

A genuine technological breakthrough in very superficial explorations, the **LMX 4-20**, Esaote's brand-new **HD Single Crystal** probe, combined with ClearWave Architecture, benefits of very wide bandwidth and operating frequencies up to 25MHz. It reveals unprecedented clarity in the smallest details without compromising the deeper areas.





# Augmented Insight™: Esaote intelligent solutions

**Augmented Insight™** embeds all the solutions powered by Artificial Intelligence, developed by the Research & Development department at Esaote according to a multidisciplinary approach, across different modalities such as Ultrasound, MRI and Ebit.

Based on data-driven machine learning, **Augmented Insight™** is designed to simplify the workflow in repetitive gestures, complex procedures, measurements or lesions analysis.

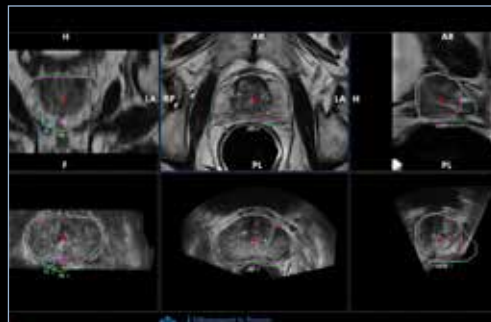


**@ Detect**



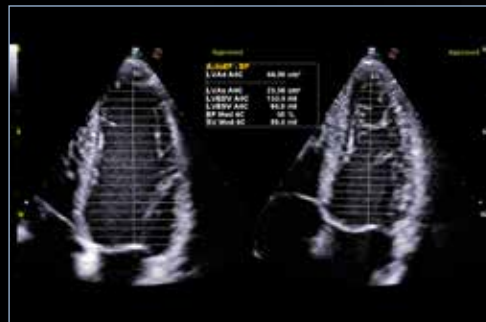
Automatic contouring of thyroid and breast lesions in suspicious areas suggested (ROI) by the physicians

**UroFusion**



Automatic segmentation of the prostate MRI/US, followed by autoregistration of both modalities for targeted biopsies

**AutoEF**



Automatic Ejection fraction assessment of the left ventricle

**AutoOB**



Automatic proposals for fetal biometric measurements

**Breast Mass Analyser**



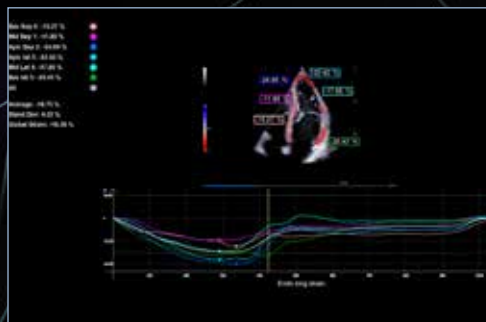
BMA: Automatic proposal of breast lesion classification, inside a region of clinical interest (ROI)

**BreastNav™ MRI**



Automatic segmentation of the breast MRI and real-time fusion based on an adaptive 3D model

**XStrain™ LV**



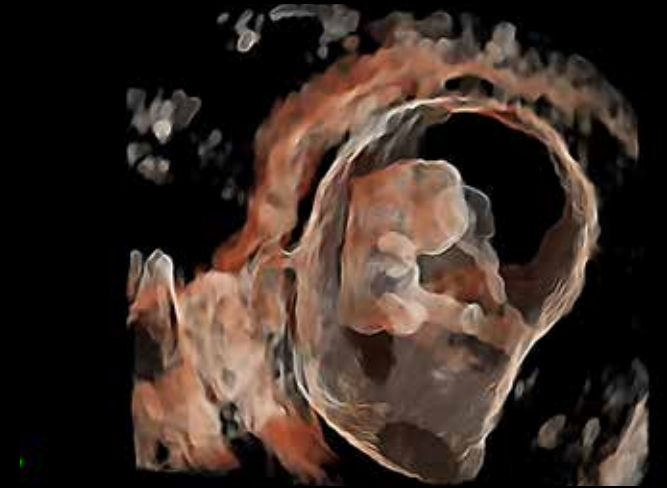
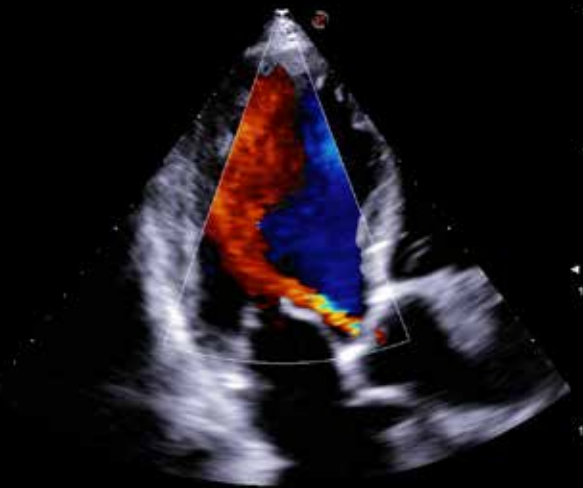
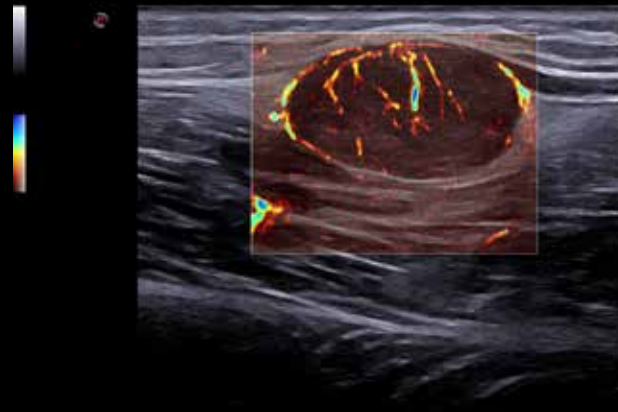
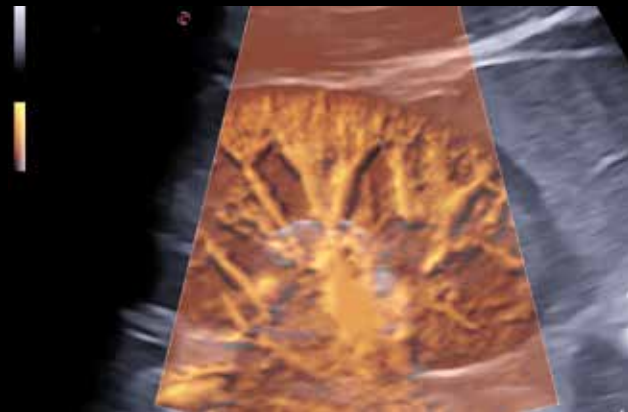
Automatic assessment of global longitudinal strain in the left ventricle

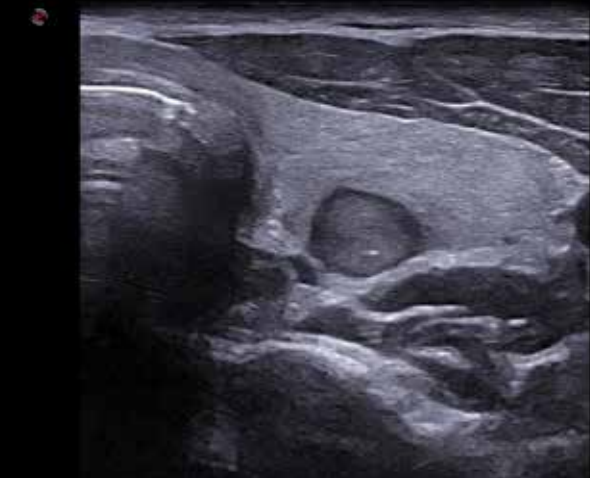
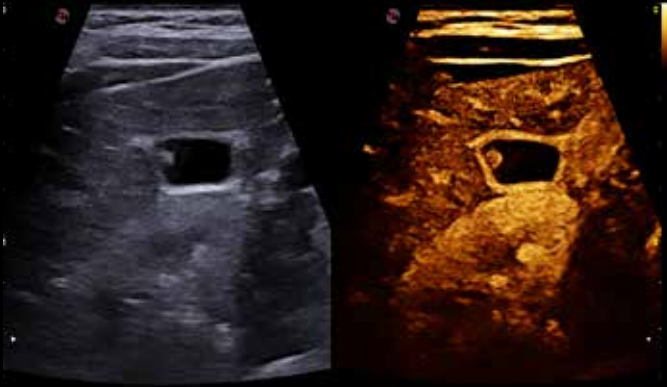
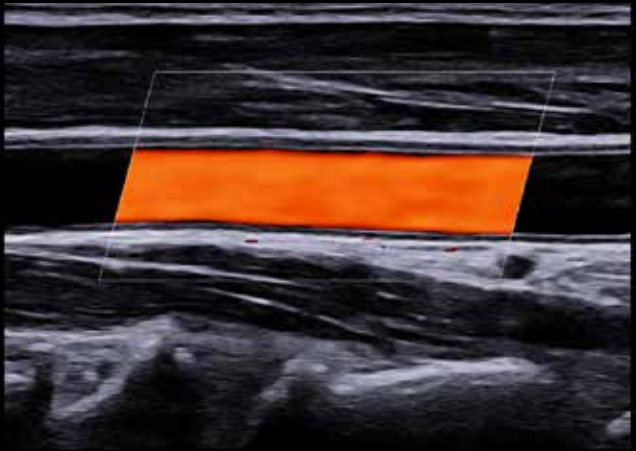
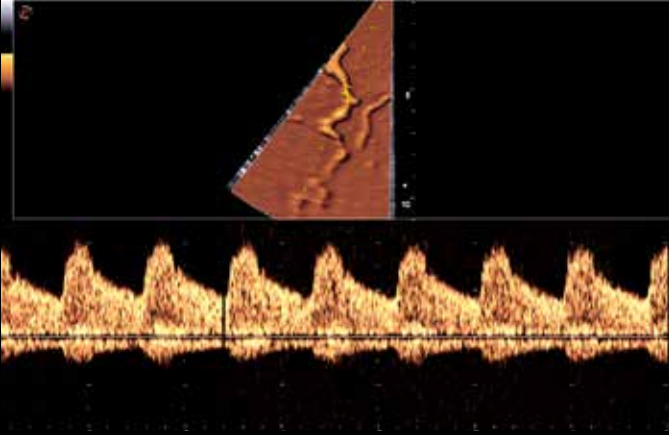
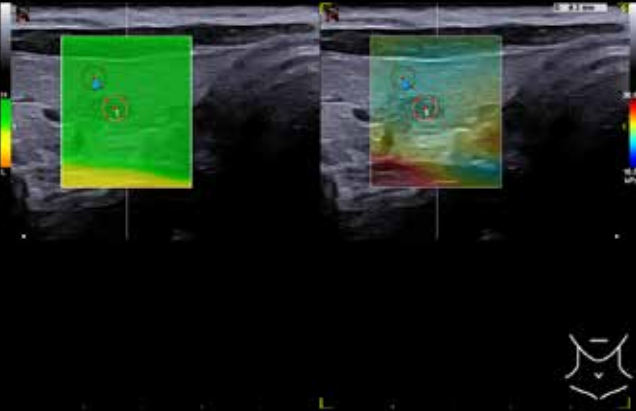
**Automatic Plan recognition**



Automatic biometric plan recognition for fetal measurements









# Diffuse liver disease assessment

MyLab™X90 offers a comprehensive multiparametric package for diffuse liver disease assessment. Esaote's **QAI** (Quantification Attenuation Imaging) technology provides mapping and quantification of the attenuation along the liver depth, to evaluate hepatic steatosis, completing the stiffness evaluation provided by **QElaXto 2D**, sophisticated Esaote shearwave elastosonography software with adjustable rejection tool and dispersion map visualization. Data are automatically summarized in a report, to support diagnosis and easy follow-up.



# Early detection to therapy for liver lesions

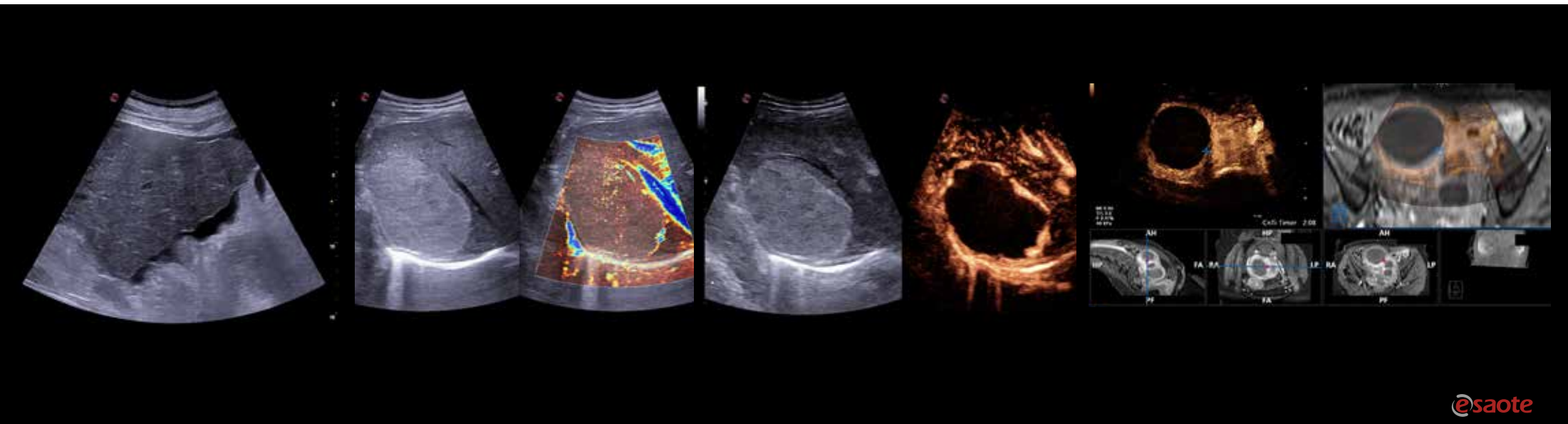
To leverage the detection and characterization of suspect lesions, Esaote's Liver Package supports homogenous first-class-quality images through a wide selection of probes, enhancing details with sharpness and clarity even in challenging patients, while the evolution of **microV** technology takes advantage of its sensitivity with a higher frame rate and provides an outstanding visualization of the lowest flows.

MyLab™X90 offers a panel of advanced tools for deeper examinations, to provide you with further information on complex clinical cases.

**CnTI™ Clear**, the latest implementation of Esaote's Contrast Enhanced Ultrasound technology, increases performance via considerable persistency of contrast media and improves coverage of the deepest areas with information for liver tissue microperfusion.

Supporting interventional procedures, **Virtual Navigator** enables easy fusion imaging via an ultra-simplified workflow that includes all the advanced tools such as automatic registration, breathing and movement compensation and needle tracking.

MyLab™X90



# Detail imaging as a new benchmark in musculoskeletal imaging

As an historic specialist in high-frequency probe manufacturing, Esaote offers a broad portfolio of transducers to cover all clinical needs in superficial examinations.

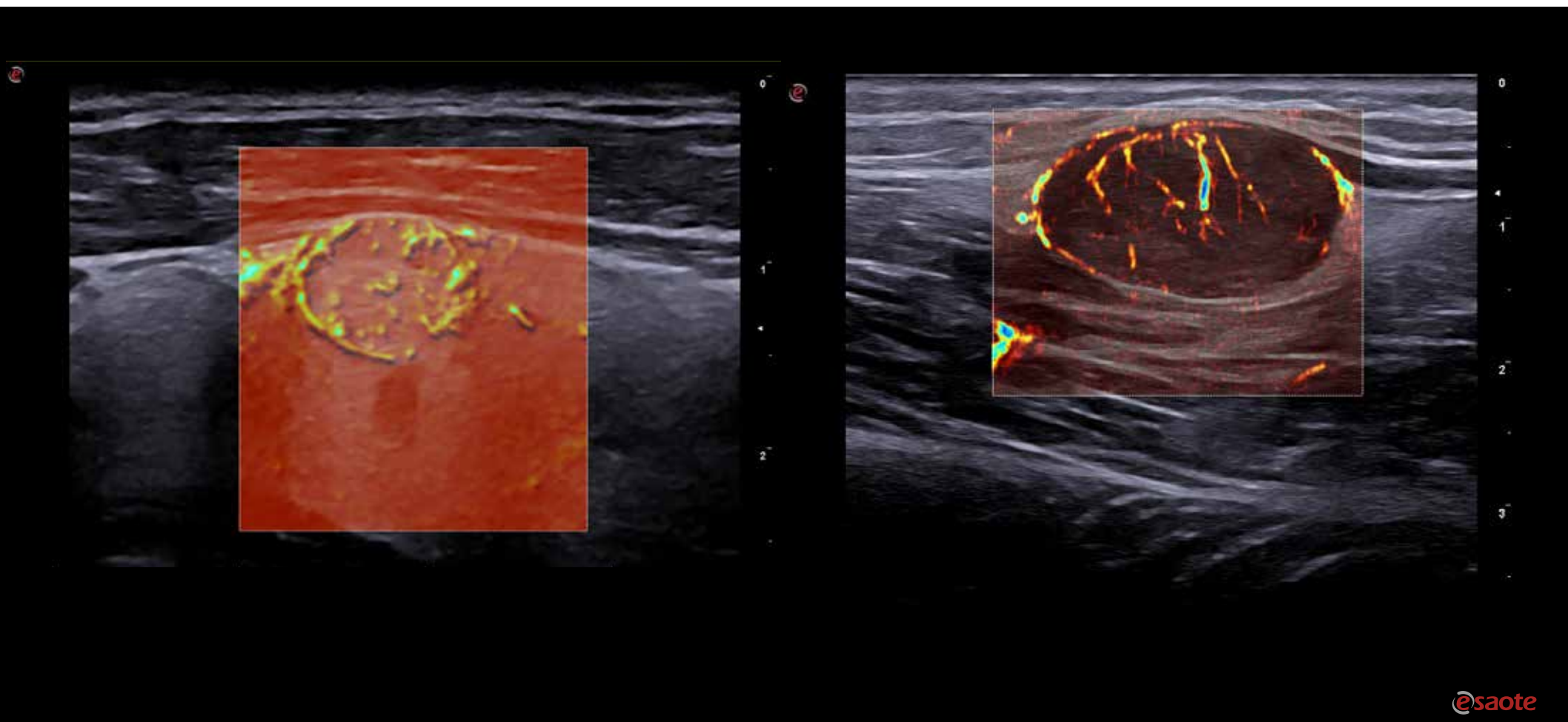
Thanks to **XCystal** array technology, MyLab™X90 provides an **unparalleled level** of detail imaging, from the **ultra-near-field** to **deeper areas**.





# No limits to the visualization of microvascularization

Esaote pushes the limits of **microvascularization imaging** one step further, with the latest implementation of microV technology to detect the **minutest flow**, bringing precious clinical value in the early detection, diagnosis and follow-up of musculoskeletal injuries or lesions characterization.



# Early detection in breast imaging, supported by A.I. solutions

Driven by **Artificial Intelligence**, Esaote's solutions in breast ultrasound imaging open new horizons in early detection and second-look examinations. **Breast Mass Analyser** combined with **@Detect** technologies, both powered by A.I., increase the speed and consistency of lesion segmentation and help to provide reliable evaluation of the suspected areas.

**BreastNav™** & **BreastNav™ MRI** offer the full breast package for a multimodality approach in one of the most mobile and variable organs in the human body, giving real-time feedback on the scanned area, for easy follow-up on a specific target. In particular, BreastNav™ MRI – based on **3D-modeled A.I. technology** – offers fusion imaging between prone MRI and supine US, where A.I. also provides automatic support for MRI breast segmentation.



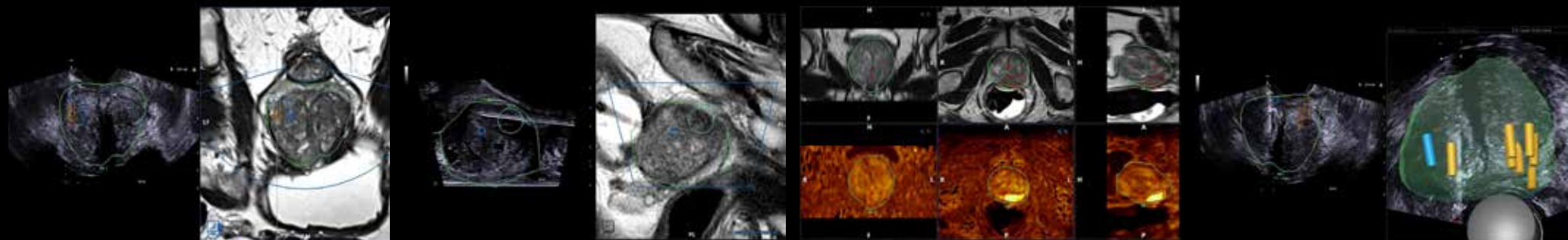


# New standards in urology supported by A.I. workflow

Esaote offers a complete package of dedicated tools to suit all your needs in urology, either in the screening or interventional phases.

MyLab™X90 embeds UroFusion, Esaote's ultimate **A.I.-driven** workflow solution for prostate navigation. Simplifying fusion at a level never reached before, UroFusion enables the automatic segmentation of the US and MRI prostate data to offer automatic registration, facilitating the procedure and increasing your confidence.

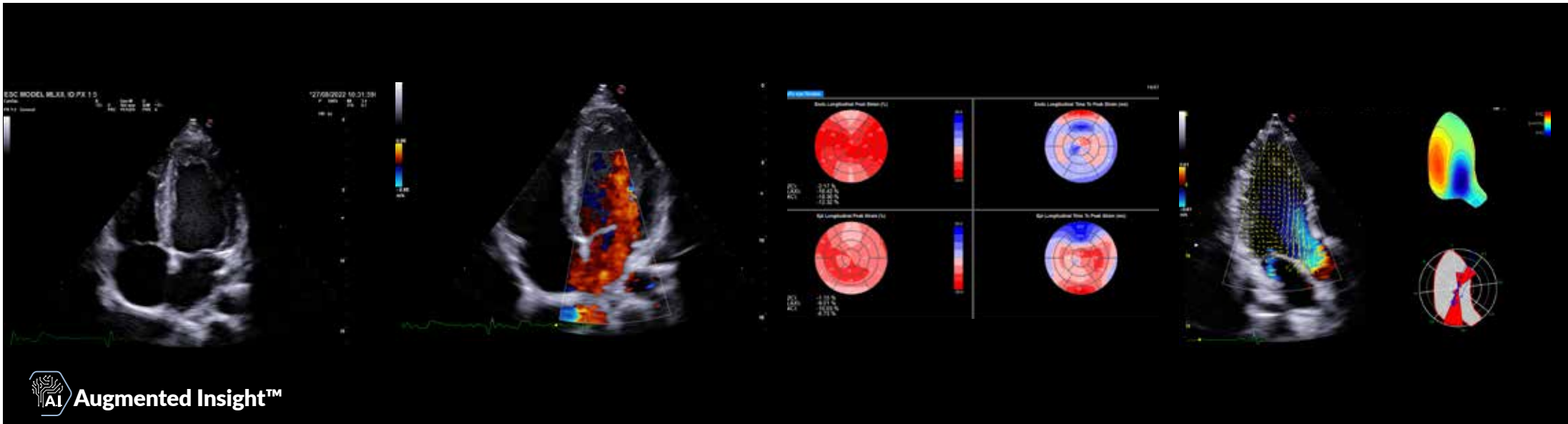
**UroFusion**, available for both transperineal and transrectal approaches, enables the combination of multiple series to easily spot the targets and is compatible with all other advanced modalities, including sample mapping, **microV**, **CnTI™** and **QElaXto 2D**.



# Comprehensive offer in cardiovascular and women's health applications

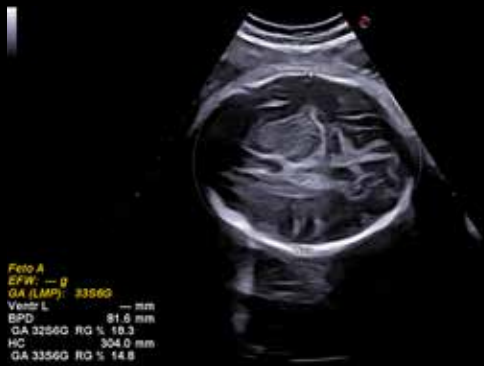
MyLab™X90 covers a 360° shared-service solution, embedding new workflow solutions powered by A.I. in cardiovascular and women's health applications, to increase speed in standard measurements. It includes a full package of zero-click tools to facilitate the quantification of cardiovascular function, such as **AutoEF**, **XStrain™**, **HyperDoppler**, **QIMT** or **QAS**.

AutoEF offers automatic A.I.-driven contouring of the left ventricle in 4 and 2 chambers, to assess ejection fraction, while **XStrain™** enables zero-click detection of endocardial border profiles in the left ventricle and provides strain assessment of the right ventricle.



MyLab™ X90 embeds **3D flow representation**, via **BrightFlow** technology and an A.I.-powered automatic plane recognition algorithm, which is combined with the **AutoOB** package to facilitate the workflow in fetal biometric measurements.

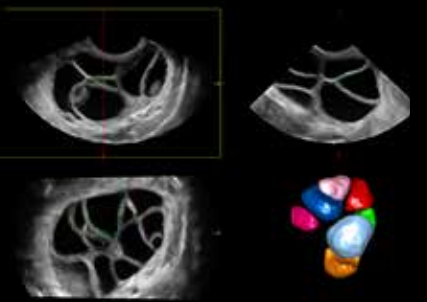
For advanced examinations, MyLab™ X90 offers a complete solution in 3D/4D, both in obstetrics and gynecology, to provide volumetric representations.



Feto A  
EPW: — g  
GA (LMP): 33560  
Ventr L — mm  
BPD 81.6 mm  
GA 32560 RG % 10.3  
HC 304.0 mm  
GA 33560 RG % 14.8



Conteggio  
Volume0a 1.6 ml  
Volume0b 2.2 ml  
Volume0c 2.7 ml  
Volume0d 4.6 ml  
Volume0e 3.4 ml  
Volume0f 0.993 ml  
Volume0g 1.8 ml



# Versatile connectivity

Supported by a powerful architecture and high-tech components, MyLab™X90 embraces the new trends in term of medical data streams with a complete offer of connectivity tools, such as **MyLab™Tablet**, **MyLab™Desk**, **MyLabRemote** and **@Streaming**.

The DICOM multimodality license enables a side-by-side display of any other DICOM dataset with real-time ultrasound scanning, which also opens up the **cross-modality approach** to perform navigation procedures with fluidity and speed courtesy of the high-capacity SSD and RAM.





# @Streaming, for secure sharing of live scans

Either for education purposes such as collaborative and application and training sessions, @Streaming technology offers real-time streaming of ultrasound, together with picture-in-picture camera on your tablet, phone or laptop.



## Customer Care

yrs **3**



**3-year service coverage**



REMOTE  
TECHNICAL  
SUPPORT



PROBE  
COVERAGE

*Conditions for service coverage may vary depending on your country.*





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Windows® is a registered trademark of Microsoft Corporation. CnTI™: The use of Contrast Agents in the USA is limited by FDA to the left ventricle opacification and to characterization of focal liver lesions.  
BreastNav™ and BreastNav™ MRI are powered by Medcom GmbH.  
Technology and features are system/configuration dependent. Specifications subject to change without notice. Information might refer to products or modalities not yet approved in all countries. Product images are for illustrative purposes only.  
For further details, please contact your Esaote sales representative.

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