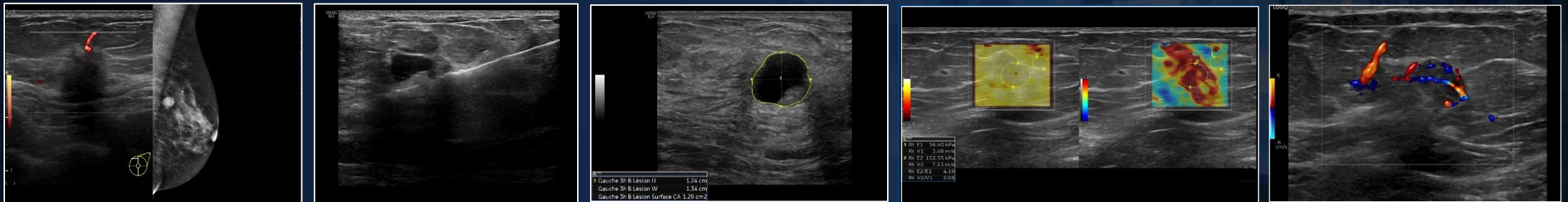


# Breast Solutions

## with LOGIQ™ E10 Series



# LOGIQ™ E10 Series along the care pathway



## Screening

**Auto-optimized images** cSound Imageformer delivers a focus by pixel combined to Speed of Sound

**Choice of high-performance probes** Select from E-Series and XDclear™ probes, including high-frequency and matrix probes designed for breast applications.

- ML6-15-D (matrix probe)
- L2-9-D (XDclear™ probe)
- L8-18i-D (high frequency probe)

**DICOM SR/linked image** Structured reporting formats feature embedded measurements and link directly to ultrasound images to add efficiency and precision to workflow.

**Auto Lesion Segmentation** This AI-based productivity tool automatically traces lesion boundaries and generates two-dimensional measurements with just a few keystrokes.

**Raw Data** Expanded capabilities enable users to apply a wide variety of image processing and quantification after the exam and while using Compare Assistant. This allows the operator to extract and reanalyze information without extending exam time



## Diagnosis

**Microvascular Imaging (MVI)** High-definition flow mode helps clinicians identify tiny vessels in lesions and lymph nodes.

**2D Shear Wave Elastography** Enables non-invasive assessment of lesion stiffness in breast with a Shear Wave Elastography Quality Indicator to support confident measurements. Strain elastography is also available for semiquantitative tissue assessment.

**B-Steer+** enables enhanced visualization of the needles structure during interventional procedures, helping improve user confidence. (biopsy procedure)

**Breast Productivity Package** Enhances speed and standardization in lesion reporting by automating the labeling, measuring, and description of breast lesions, integrating the BI-RADS® lexicon to enhance structured reporting, auto-populating exam findings to organize data in a standardized format and Creating a summary report

**Contrast-Enhanced Ultrasound** Get a clear picture of tissue structure and suspicious mass vascularity by optimizing the balance between penetration and resolution for improved contrast sensitivity.



## Treatment & Follow-up

**Volume Navigation with Fusion Imaging** Merge real-time ultrasound with a volume DICOM® MR dataset to facilitate second-look examinations and fusion guidance of biopsies of masses seen on MRI but not on ultrasound.

**One click Query/Retrieve** Query Retrieve puts an end to running back and forth to view previously acquired PET, MR, CT, mammography or ultrasound images.

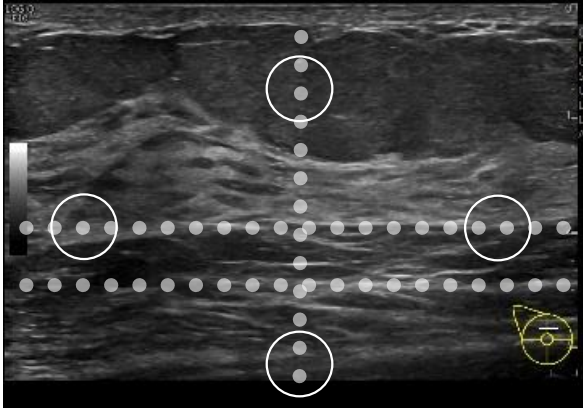
**Compare Assistant** Enables clinicians to easily view a prior study – ultrasound, mammography, CT or MR – and compare with current images in real time via a split screen on the monitor, helping to improve confidence and exam efficiency.



# LOGIQ™ E10 Series – 2D Imaging Quality

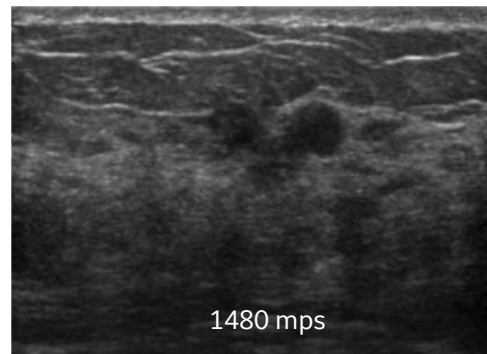
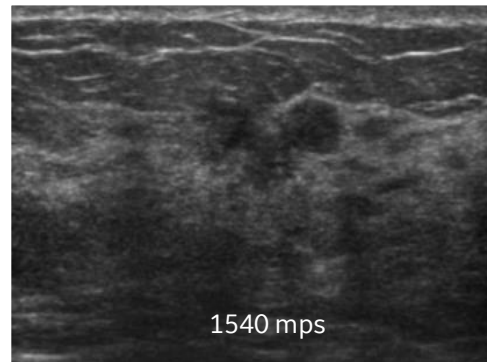
## cSound™ Imageformer

Each pixel is focused  
High spatial resolution along the image  
Better temporal resolution during live scanning



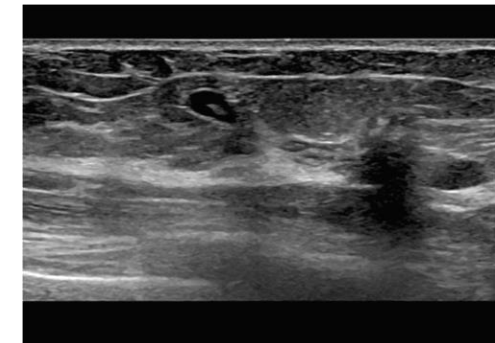
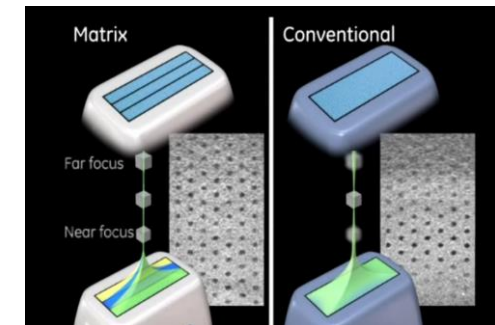
## Speed of Sound

The system can adjust speed of sound with the goal to improve resolution through more precise focusing



## Matrix Technology

Higher resolution into the elevation plan  
Better Homogeneity for dense breast



Screening

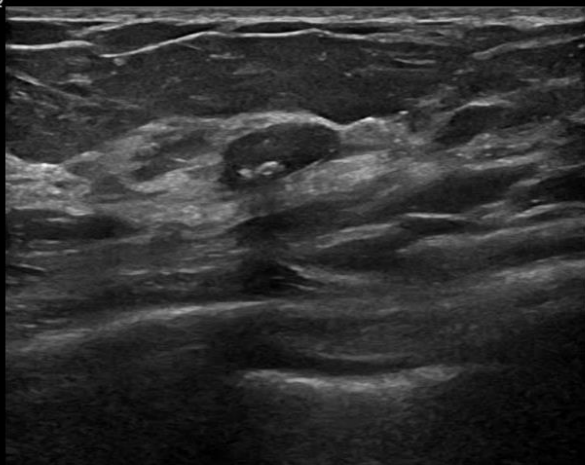


# LOGIQ™ E10 Series – 2D Imaging Quality



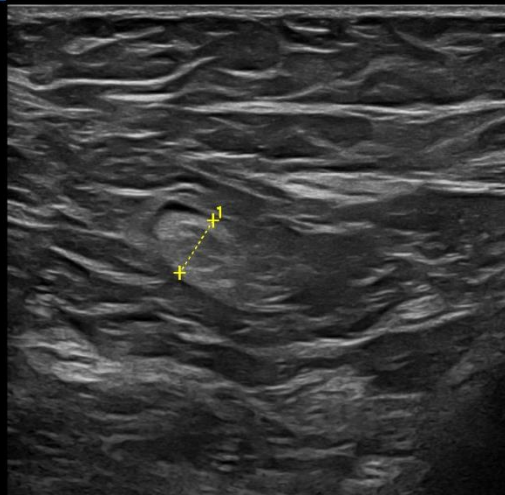
Screening

LOGIQ

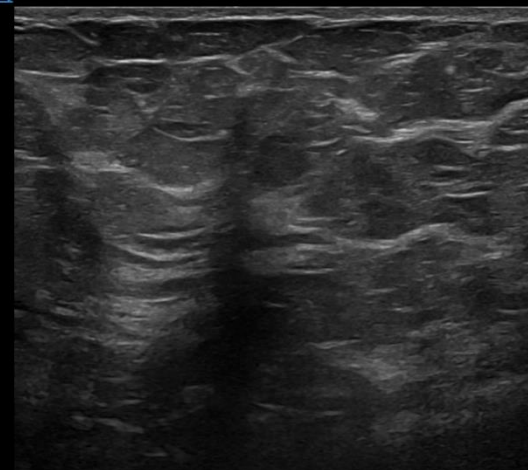


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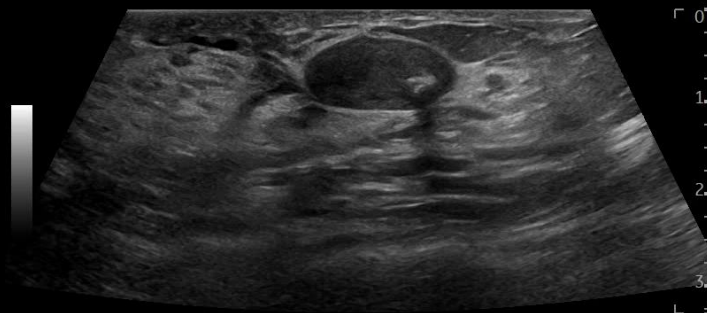
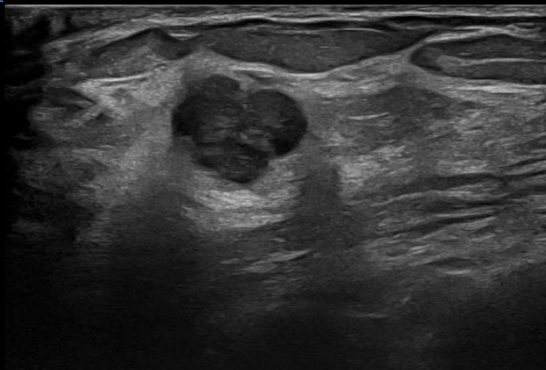
LOGIQ



LOGIQ

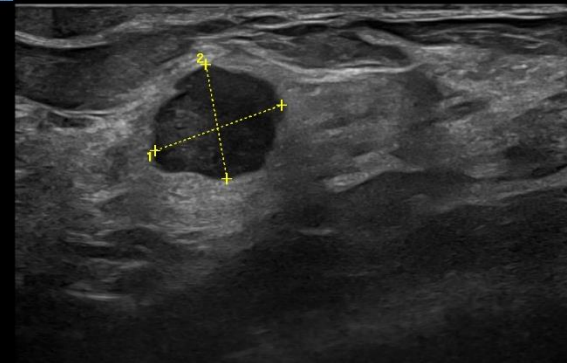


LOGIQ



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LOGIQ





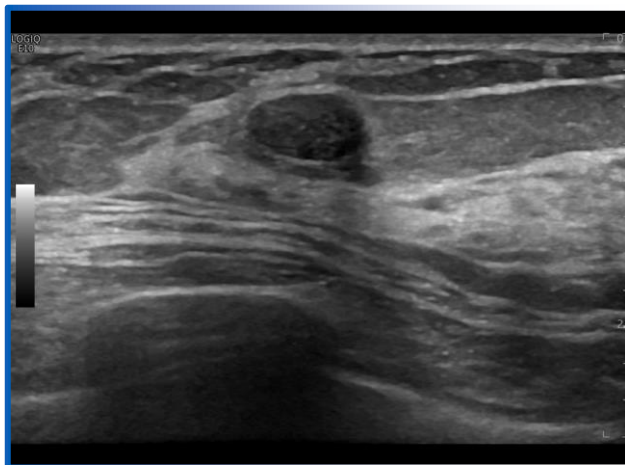
# Auto Lesion Segmentation

Harnessing the power of AI



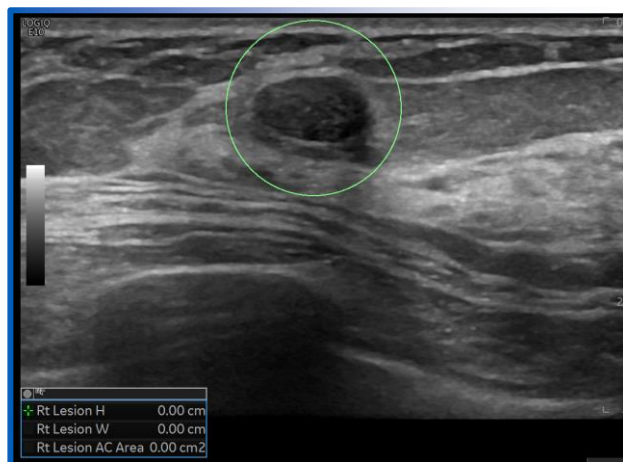
Screening

User identifies a breast, thyroid or liver lesion



**Benefit:** Users scan as they normally would

User clicks on the lesion and simply expands a graphical circle to encompass it



**Benefit:** User identifies a lesion with a single click

The algorithm segments the lesion, providing a trace and extents of the lesion



**Benefit:** Calipers are automatically placed to measure the lesion, saving keystrokes and providing consistency

Manual view  
classification

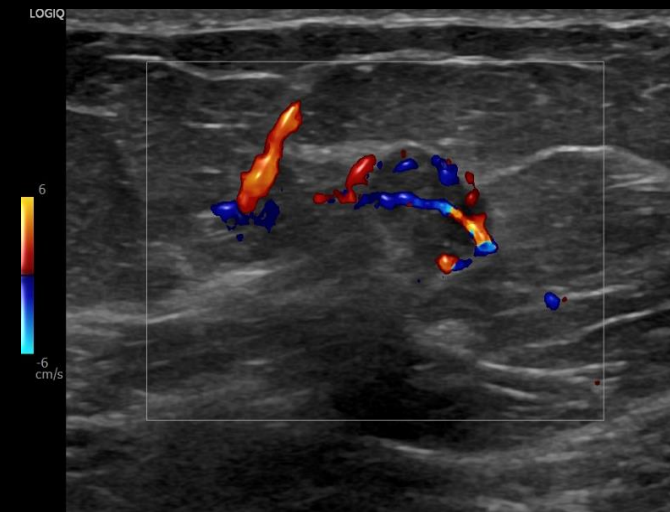
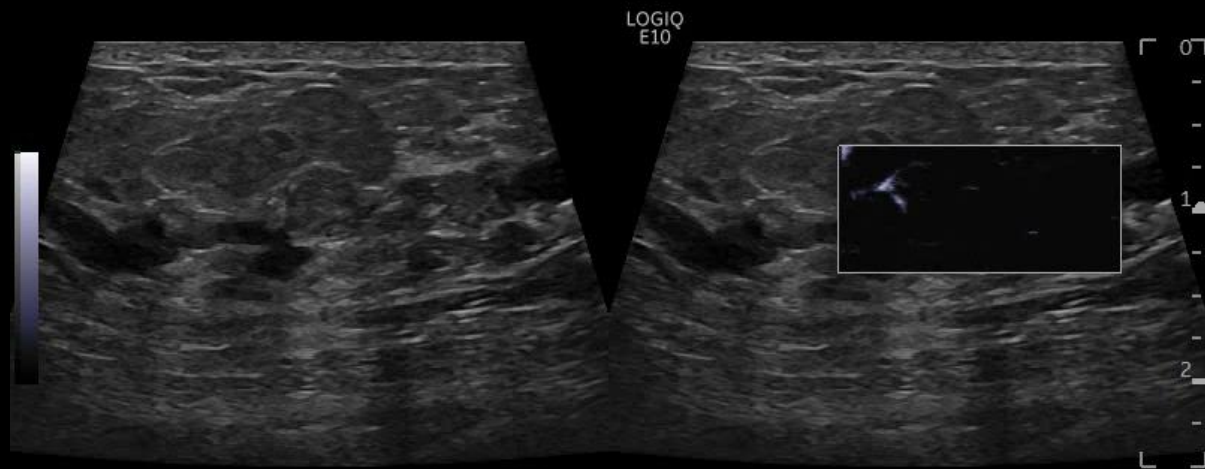
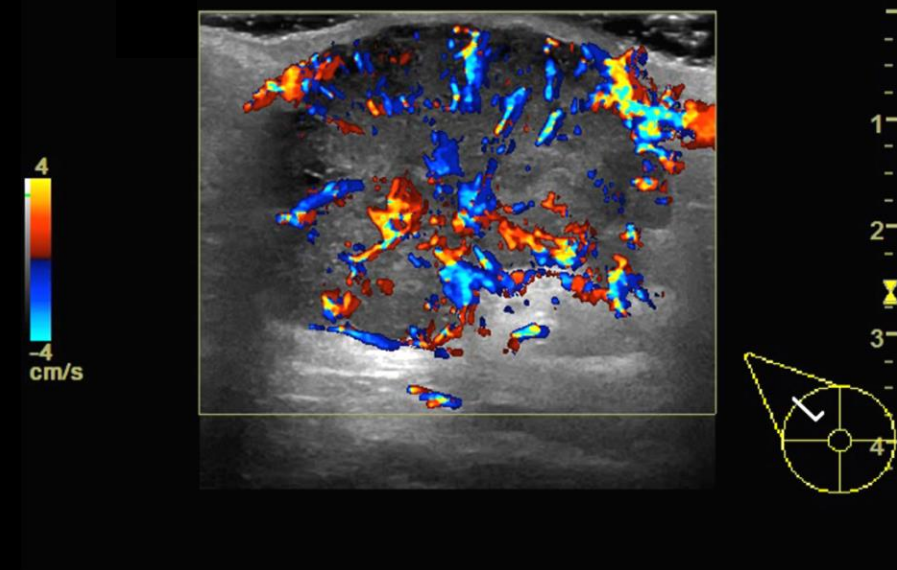
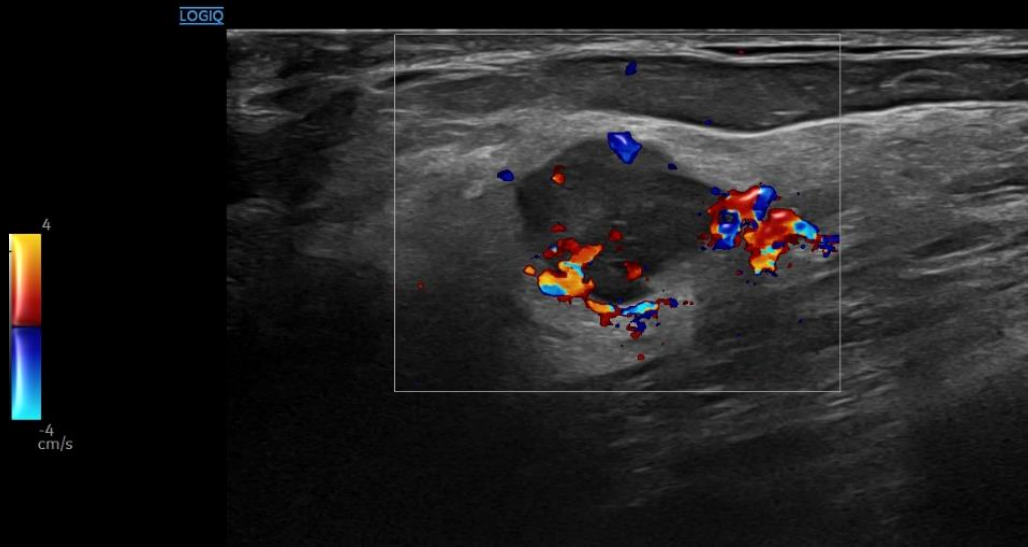
Semi-automated  
structure detection



# LOGIQ™ E10 Series – Flow Modes Quality



Diagnosis



# Elastography

Assess the tissue stiffness

## 2D Shear Wave elastography technique (visual and quantitative information in a color coded box)

- User selectable color maps
- Now with **Quality Indicator**
- **Adjustable Color Box** and **ROI depth** and **size**
- Multiple measurements within a single shear wave image
- **Auto sequencing feature** for an automatic placement of measurement ROI within image
- Dual or Single display option
- Measurements in kPa or m/s or both
- Mean, Median, IQR and STD display for multiple measurements
- Fast acquisition time to reduce motion artifacts
- **Penetration mode** for technically challenging cases
- Summary worksheet
- Supporting GE Raw Data
  - Measurements can be done on acquired clips after the exam is ended
- Working in combination with Volume Navigation and Needle Tracking
  - Comprehensive tool for liver disease management



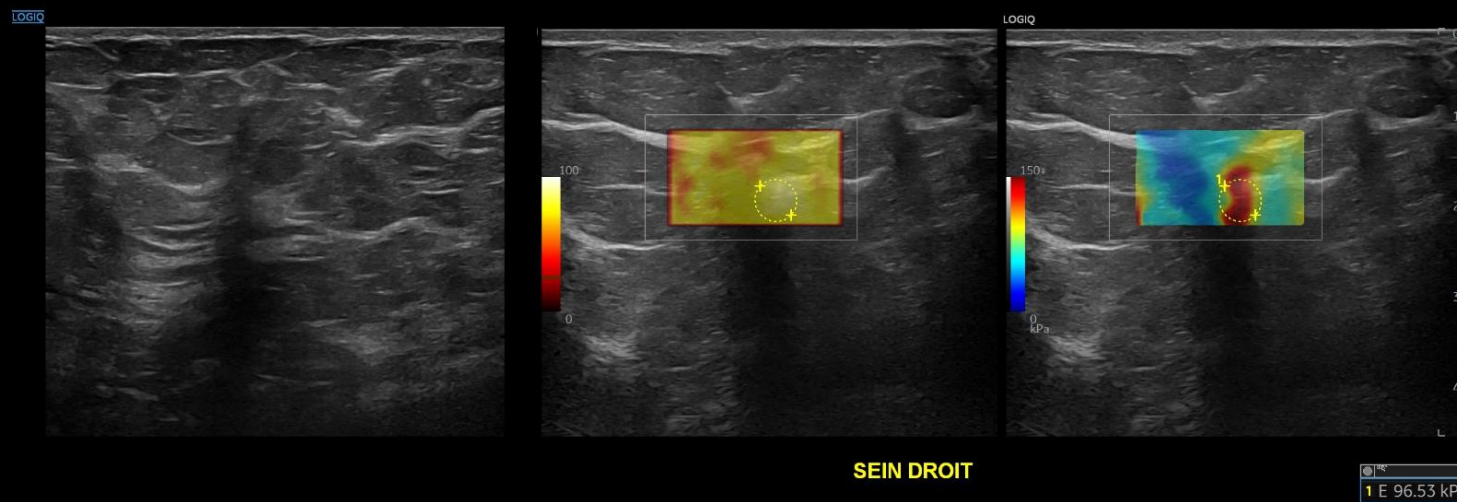
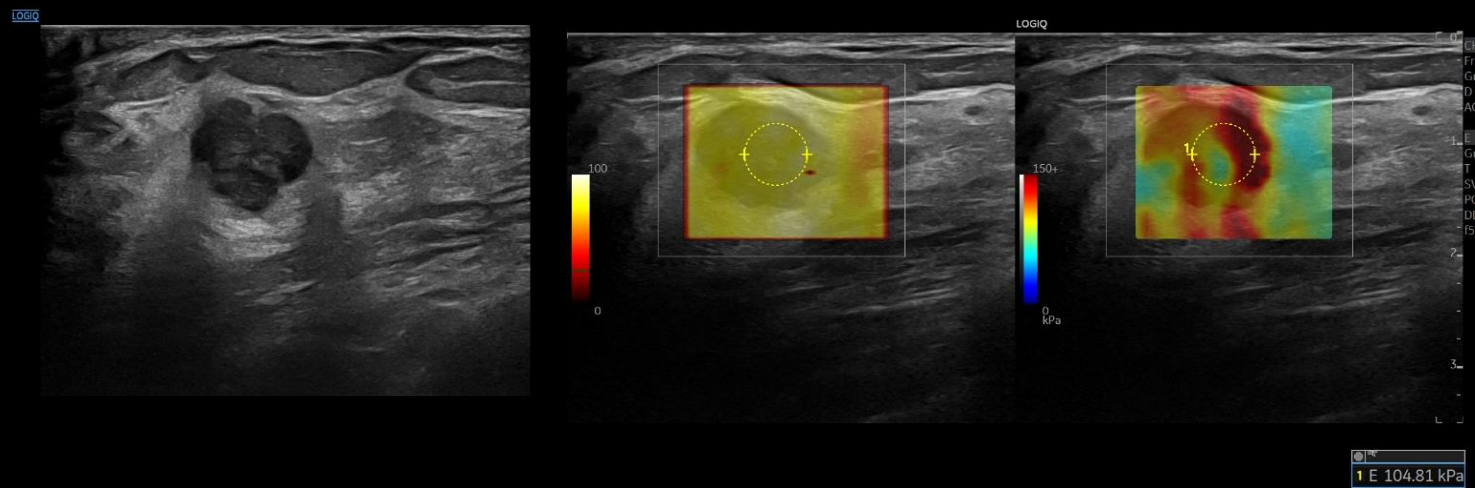
Diagnosis



# LOGIQ™ E10 Series – 2D Shear Wave Elastography



Diagnosis





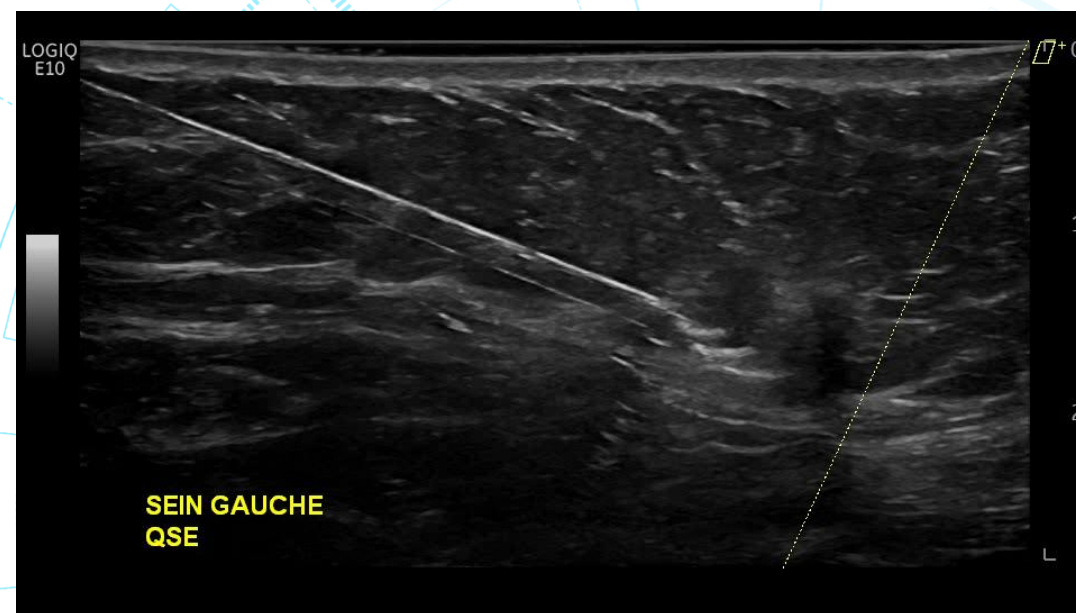
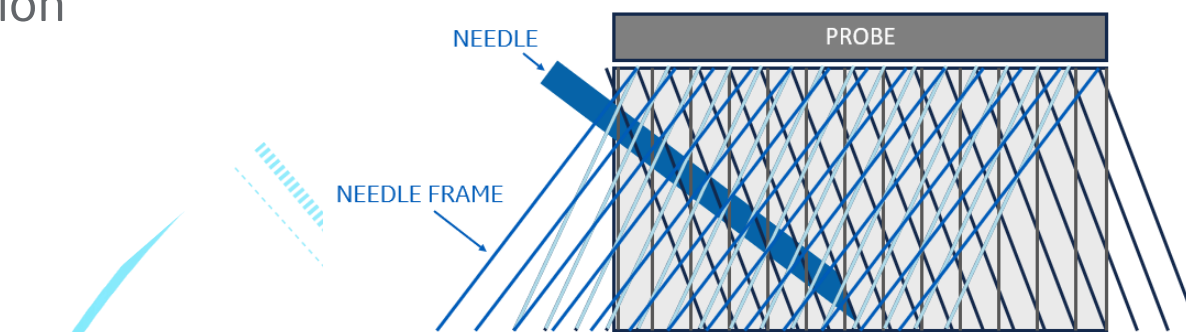
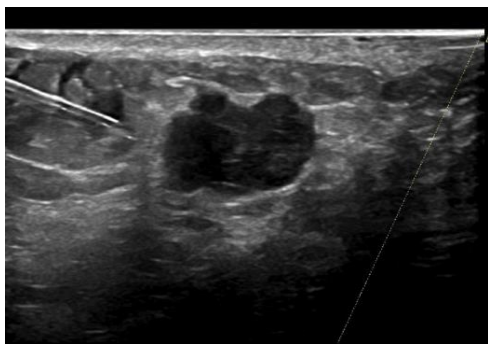
# B-Steer+

Enhance your needle visualization during biopsy

B-Steer+ feature enables enhanced visualization of the needles structure during interventional procedures, helping improve user confidence.

## Highlights

- Up to 12 selectable steering angles available (six each direction)
- Separate gain control for needle reflection
- Available on all linear transducers
- Quick one-button operation

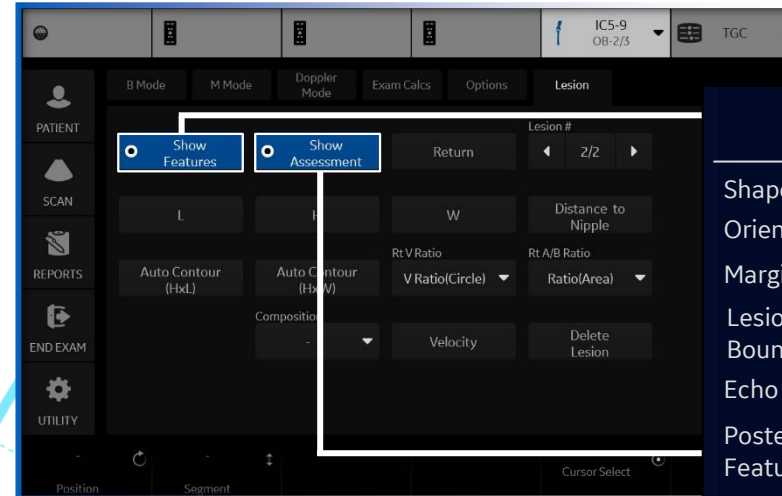


# Breast Productivity

Help to describe your lesion

**A dedicated breast-specific measurement package that allows users to:**

- Make labeling, measuring and describing lesion easy
- Leverage the BI-RADS® lexicon criteria/assessment
- Organizes multiple measurements into a convenient worksheet
- Send results via DICOM® SR



Straight from BI-RADS lexicon

Rt 11:00 A Lesion 1	
Shape	Oval
Orientation	Not Parallel
Margin	Spiculated
Lesion Boundary	Echogenic halo
Echo Pattern	Hyperechoic
Posterior Features	Enhancement
Surrounding Tissue*	-
Calcifications*	Macrocalcifications Microcalcifications Out of Mass
Special Cases*	-
Vascularity	Diffusely Increased
BI-RADS Assessment	

BI-RADS



Diagnosis

# Volume Navigation

## Fusion-navigation US/MR

### Match Real Time Ultrasound with a Volume DICOM® Dataset from MR modality

- Advantages of US Real Time Imaging associated with High spatial/contrast of MRI
- Help increase precision and accuracy of imaging-guided interventional procedures like biopsy
- Help identify lesions poorly visualized with US thanks to GPS
- Adequate visible lesions with US, but coexisting with difficult targets
- Active Tracker for Quick US/MR Auto-Registration and breath compensation



2018



Treatment and Follow-up



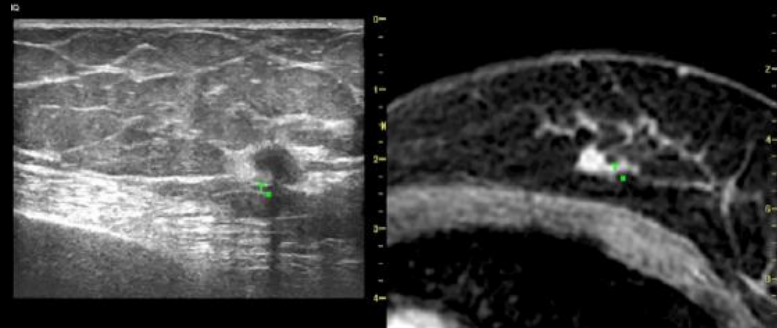
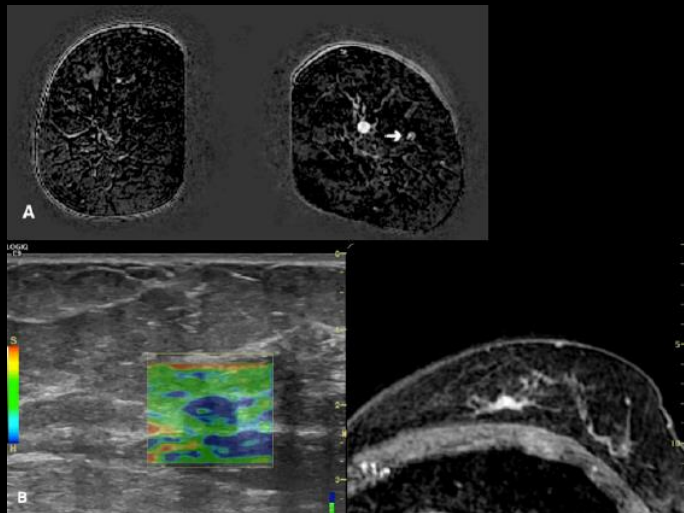
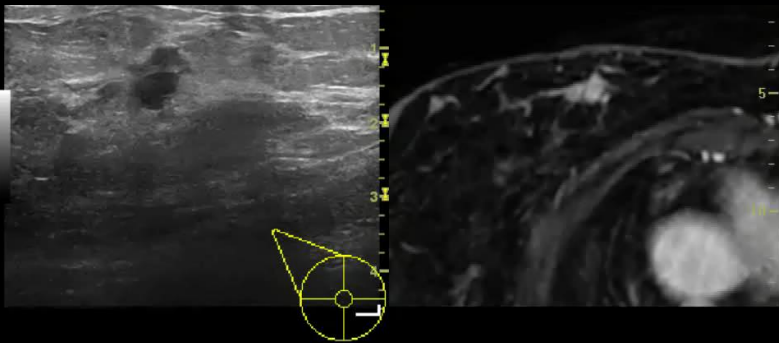
# LOGIQ™ E10 Series – Fusion/Navigation US/MR



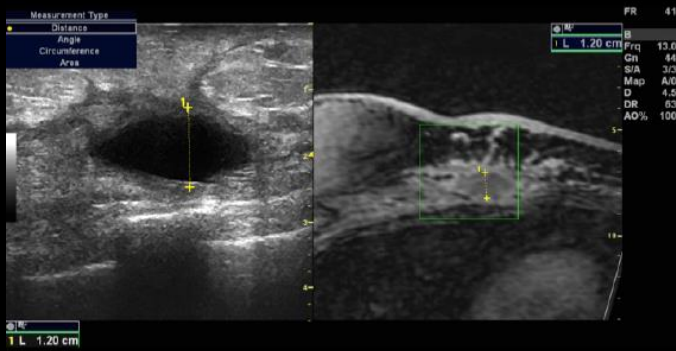
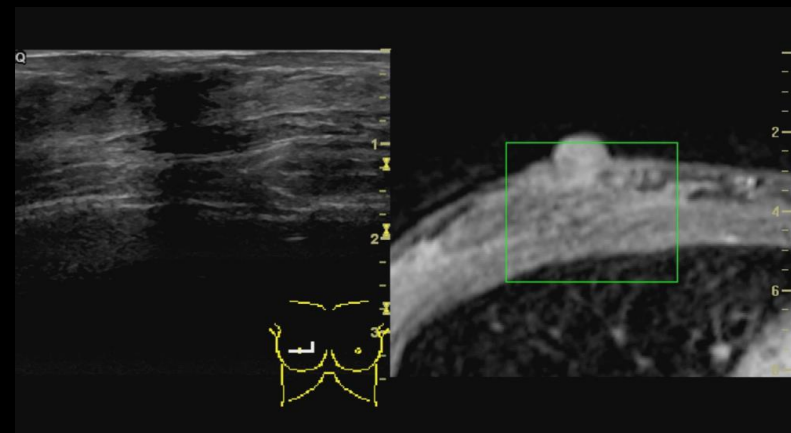
2018



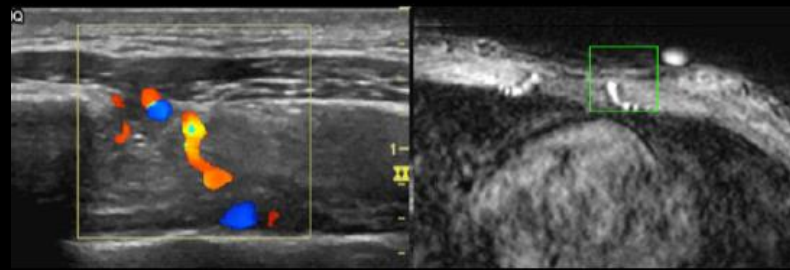
Treatment and Follow-up



US Elastography/MRI Fusion – Hard lesion difficult to diagnose in MRI



US/MRI Fusion – Inflammatory Fluid Collection measurements



US/MRI Fusion – Internal Mammary artery depiction

# One click Query/Retrieve

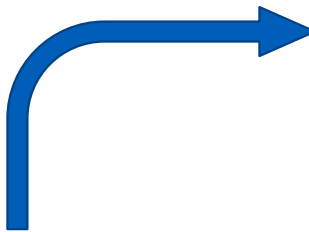
View side-by-side with a real-time ultrasound image



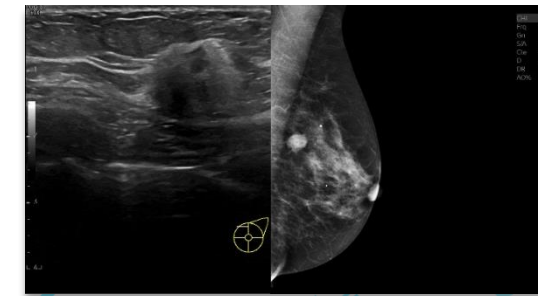
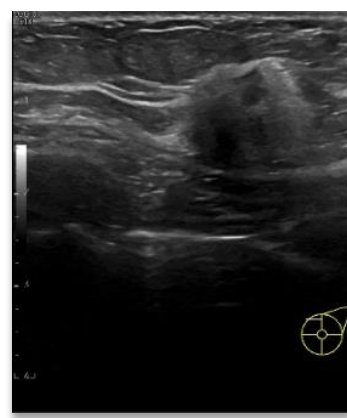
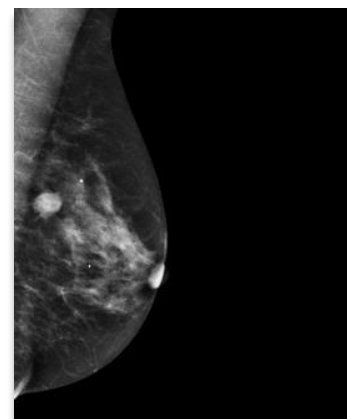
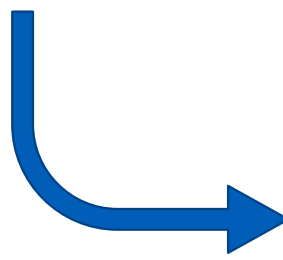
2018



Treatment and Follow-up



The feature allows to retrieve any MR or Mammo dataset from PACS onto LOGIQ E10 that can help to find the most relevant view of the anatomical area in exam



Quickly get to an area of interest during Ultrasound exam



# Compare Assistant

Help for an effective monitoring of progressive pathologies



2018



Treatment and Follow-up

1

## Effective temporal tracking

The tool offers the ability to compare the US examination of the day to a previous one, ideal for monitoring the evolution of lesions over time

2

## Saving Time during exam

When opening the previous exam, comparison is strict, since the imaging parameters are also included

3

## Facilitates patient explanations

The comparison helps the radiologist in explaining the course of the pathology directly during US exam





