Shear Wave Elastography

Tissue stiffness quantification made easy, fast and accurate

What's Shearwave?

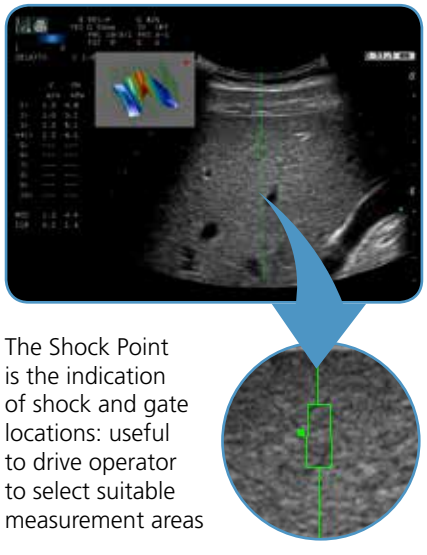
The shear waves are lateral waves, with a motion perpendicular to the direction of the force that has generated them. The propagation velocity of the shear waves it is correlated with the tissues elasticity. The waves get faster with increasing stiffness of the examined tissues.

QElaXto

Esaote QElaXto Shear Wave Elastography technology is characterized by the generation of the shear wave speed originated by an Ultrasound focused beam, which creates a localized perturbation in a single point. This phase is followed by a reading phase, which is made possible by using a Region of Interest (ROI) delivering a quantitative estimation of liver stiffness.

How does it work?

QElaXto delivers a quantitative measure of tissue stiffness, even of a small tissue sample, expressed in Shear Wave propagation velocity or deduced Young Modulus in KPa. The system has a set value of measurement rejection, which skips the values outside the accepted range. The tissue stiffness measurement obtained is based on the detection and 3D evaluation of the Shear Wave. Data are obtained by considering a volumetric portion of the tissue under examination, where the gate (Region of Interest – ROI) is only its bi-dimensional representation.



The Shock Point is the indication of shock and gate locations: useful to drive operator to select suitable measurement areas

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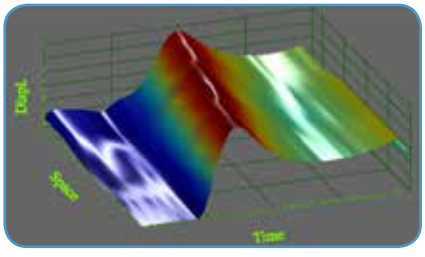
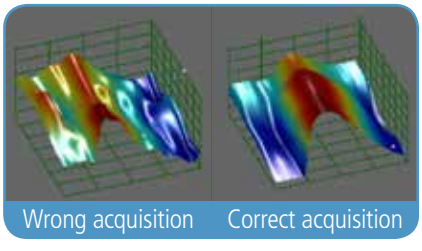
Creativity in Healthcare

3D eWave

3D eWave Shear Wave Quality Graph is an immediate feedback about measurement quality.

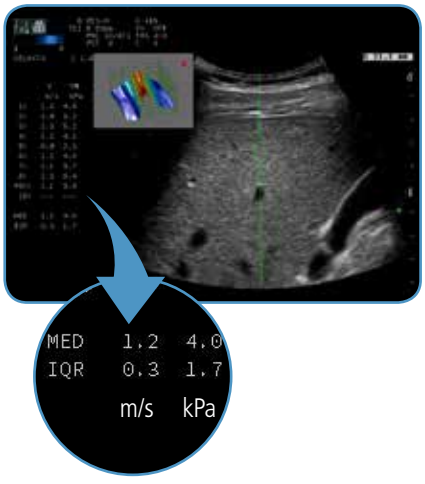


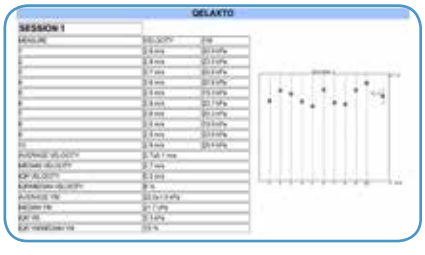


QElaXto Esaote patent pending technology with Advanced Software and Motion Correction Algorithm for a smart selection of good measurements.

User-Centered Design

User-friendly interface fully customizable including Quick Cooling phase with Automated Image Saving and Unfreeze for improved productivity and exam speed up.

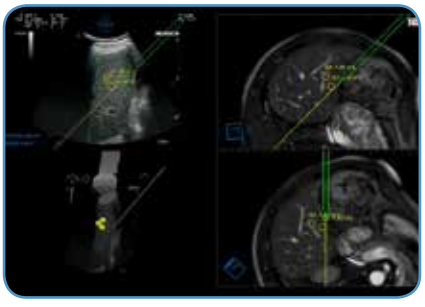




Freedom of measurement's selection and real-time update of related statistics with specific Report and Worksheet.

Virtual Navigator

Esaote QElaXto pSWE is available also with Virtual Navigator Real-time Multimodality Fusion Imaging and Virtual Biopsy with Measurements available in m/s and KPa (selection possible in real-time).



Esaote QElaXto pSWE Advantages

- **Non-invasive solution** to evaluate liver fibrosis
- Stiffness quantification – easy, reliable, accurate, reproducible
- Real-time ultrasound image feedback positioning
- A possible alternative to gold standard such as liver biopsy
- Definitely less expensive than MRI Elastography (MRE)

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Thank you for considering Esaote

We listen to your needs and work every day to provide the most advanced technologies and the most innovative design for you to excel in the care of your patients

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