

AIXPLORER  
mach<sup>30</sup>  
ULTRAFAST™ INTELLIGENCE

SUPERSONIC  
imagine



# THE NEW ULTRAFAST™ INTELLIGENCE



**Introducing Aixplorer MACH 30** - The new SuperSonic Imagine Ultrasound platform, powered by the next generation of UltraFast™ Imaging combined with the intuitive SonicPad® for a unique clinical and user experience.

## INTELLIGENCE IN INNOVATION

The Aixplorer MACH 30 platform leverages 10 years of clinical expertise, analysis of your exam patterns and workflow, bringing you

- UltraFast™ Platform - Next generation ultrasound Technology
- Unique ergonomics and improved workflow
- Innovative and intelligent imaging modes

## INTELLIGENCE IN EVOLUTION

Aixplorer MACH 30 is the first premium ultrasound system based on this next generation platform. It delivers a **new set of transducers** compatible with the next generation engine which enhances overall diagnostic capabilities. All the clinical solutions you will need are embedded within the system to enhance your daily workflow, support your practice and meet your evolving requirements.

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With the Aixplorer MACH 30 premium ultrasound system you can leverage SuperSonic Imagine's expertise and push the limits of ultrasound imaging.



# DESIGNED TO BE THE NEW STANDARD



Developed in collaboration with an internationally recognized industrial design agency, the Aixplorer MACH platform offers major innovations designed to provide the user with breakthrough solutions and create intuitive and innovative workflows for greater diagnostic confidence.



Enhanced  
productivity and  
visual comfort...

- Larger image size (1)
- Larger monitors (2)
- Tilttable touch panel (3)
- Motorized height adjustable (4)
- 4 pinless connector ports (5)
- Three-position central brake (6)
- Flexibility of control panel movement

...for optimal diagnostic  
performance and workflow.



# SONICPAD®

## FOCUS ON WHAT YOU SEE, NOT ON WHAT YOU DO

SuperSonic Imagine introduces the intuitive SonicPad® embedded into a brand-new user interface, disrupting conventional imaging, enhancing workflow and improving ease of use.

### DESIGNED AROUND PRINCIPLES THAT MATTER TO YOU

**UP TO 70% USER MOVEMENT REDUCTION\*** & **20% EXAM TIME REDUCTION\***



#### INTUITIVENESS

- Simplified user interface
- Improved user experience
- Cultivate gesture memory

#### USER COMFORT

- Reduce muscle fatigue
- Customizable control panel
- Real-time on-screen help

#### PATIENT FOCUS

- Focus on imaging not optimization
- Decrease exam time
- Application specific user interactions

The Aixplorer MACH 30 platform and its unique SonicPad® set a new standard in the ultrasound user experience with unprecedented benefits for your daily practice.

# NEXT GENERATION

# ULTRAFAST™ IMAGING



## INNOVATION WITHOUT COMPROMISE

Leveraging the unique capabilities of SuperSonic Imagine **proprietary software architecture**, Aixplorer MACH 30 introduces the next generation of UltraFast™ Imaging

- Enabling the next generation of image quality and all innovative imaging modes.
- Supports SuperSonic Imagine proprietary ShearWave® PLUS, the next generation of ShearWave® Elastography performance setting new standards in Ultrasound.

## B-MODE

Pushing the limits of conventional imaging

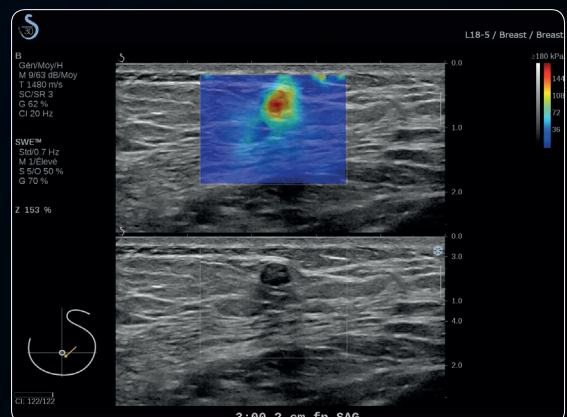
- Next generation B-Mode penetration
- Next generation tissue contrast and spatial resolution
- Next generation Color sensitivity and frame rates

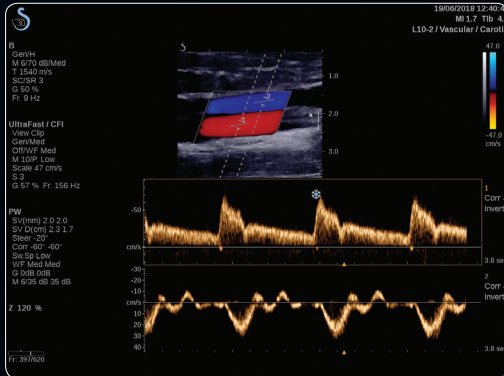


## SHEARWAVE® PLUS

Staying one step ahead with unique SuperSonic Imagine ShearWave® PLUS

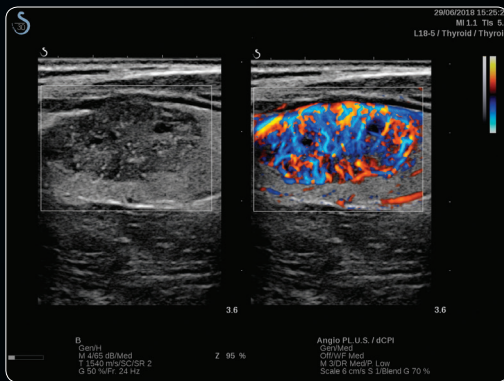
- Larger ShearWave® PLUS box
- Increased SWE PLUS frame rates
- Accelerated ShearWave® PLUS box filling
- No imaging compromise while using ShearWave® PLUS Elastography





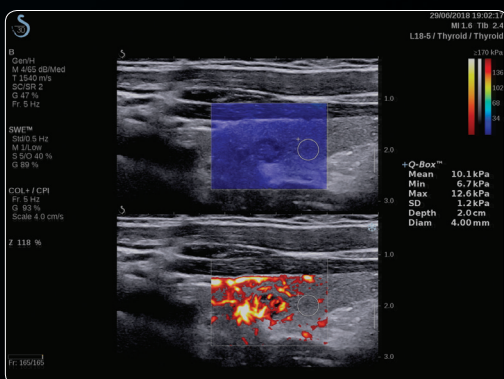
## ULTRAFast™ DOPPLER

Unique SuperSonic Imagine innovation that significantly improves patient throughput. UltraFast™ Doppler offers higher frame rates on Aixplorer MACH 30 and is now expanded to include the high frequency L18-5 transducer.



## ANGIO PL.U.S.

Aixplorer MACH 30 Angio PL.U.S mode allows you to assess microvasculature without the need for contrast agents.



## TRIVU

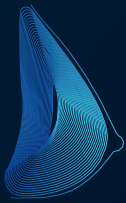
The latest addition to SuperSonic Imagine innovative imaging modes. TriVu combines real-time simultaneous imaging of B-mode, ShearWave® PLUS and Angio PL.U.S. Enabling you to visualize the anatomy, the function (tissue stiffness) and blood flow on the same image, simultaneously.

# INNOVATION FOR CLINICAL VALUE



Over the last 10 years, SuperSonic Imagine has continued to deliver and expand the clinical value of ultrasound imaging and has turned **technological innovation into clinical value.**

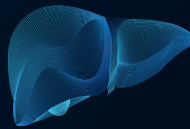
Aixplorer MACH 30 architecture will sustain tomorrow's technical innovations and clinical research to continue to **add clinical value in existing and new areas.** SuperSonic Imagine has partnered with multiple sites across the world to demonstrate the strong clinical benefits of its unique ShearWave® PLUS Elastography. See below how Aixplorer MACH 30 offers robust clinical evidence on selected organs.



## BREAST

The breast expert's system with unique and exclusive features that facilitate everyday work and improve patient management and outcomes.

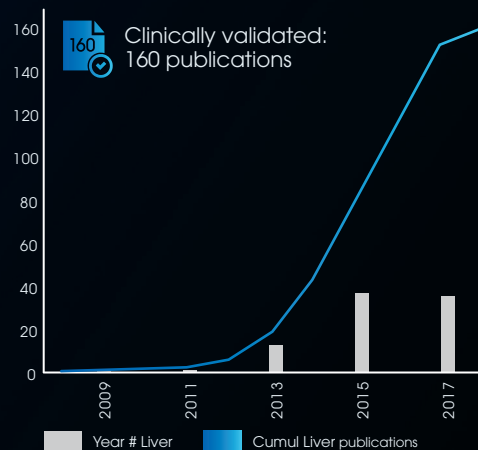
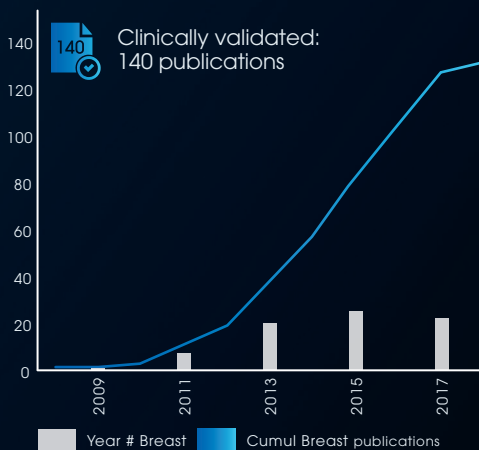
- Breast lesion diagnosis and characterization
- Improve clinical decision making for biopsy and treatment
- Access prognostic information

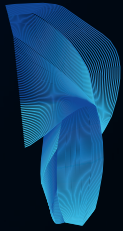


## LIVER

Meeting the needs of liver experts focused on patients with chronic and focal liver disease. Allowing the user to follow patients throughout the continuum of care.

- Quickly and reliably assess liver fibrosis and liver steatosis
- Follow-up and monitor patients over time
- Screen and characterize focal liver lesion

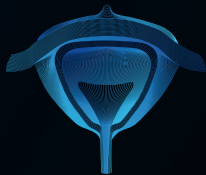




## MUSCLES & TENDONS

The only option for dynamic evaluation of musculotendinous unit integrity.

- Screen and assess both inflammatory and mechanical tendinopathies
- Turn subjective muscular examination into quantifiable objective assessment
- Monitor Treatment



## PROSTATE

Multiparametric Ultrasound imaging (mpUS)

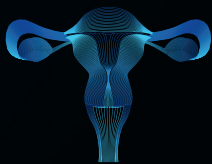
- Detect and localize lesions
- Characterize stiffness of lesions
- Targeted prostate biopsies



## VASCULAR

Expanded capabilities with unique SuperSonic Imagine technology

- Detect transient hemodynamic flow with UltraFast™ Doppler
- Display microvascularization without compromise
- Evaluate overall cardiovascular risk



## OB & GYN

Designed with a focus on diagnostic imaging

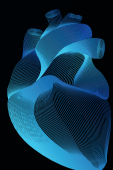
- Detect and characterize gynecological pathologies
- Comprehensive fetal imaging and reporting option
- Add real-time elasticity mapping and SWE stiffness measurements as additional diagnostic information in gynecology to define the most appropriate patient management



## PEDIATRICS

Dedicated optimized presets to meet all imaging needs

- Using our unique UltraFast imaging platform allows for quick acquisition of clinical information to improve patient workflow
- Family of pediatric transducers and application specific presets for optimal imaging



## CARDIAC

New echocardiography applications

- Optimized B-mode, M-mode, Color, PW, CW and expanded Imaging modes: PW Tissue Doppler Imaging, UltraFast™ Doppler
- Cardiac calculation package, customized annotations and expanded bodymarkers package (ECG and Physio Module)



# POWER AT YOUR FINGERTIPS - NEW EXPANDED TRANSDUCERS FAMILY



Aixplorer MACH 30 introduces a **NEW transducer family** and **expands its portfolio with a high frequency single crystal curved transducer C9-2X**. Leveraging and combining, unique SuperSonic Imagine software beamforming, UltraFast™ and single crystal technologies, the new transducers take imaging to a new level.

The next generation pinless connector facilitates easy handling in your daily routine. The re-designed housing allows for one hand manipulation.



## C9-2X SINGLE CRYSTAL CURVILINEAR

The perfect solution for narrow intercostal spaces without compromise on penetration.

Single crystal element	Bandwidth
<b>192</b>	<b>2-9 MHz</b>

### Clinical Applications

- Abdominal
- OB-GYN
- Pediatric
- Thyroid



### C6-1X SINGLE CRYSTAL CURVILINEAR

Single crystal element  
**192** Bandwidth  
**1-6 MHz**

#### Clinical Applications

- Abdominal
- Pediatric
- Pelvis
- Thyroid
- OB-GYN
- Vascular



### L18-5 LINEAR

Composite elements  
**256** Bandwidth  
**5-18 MHz**

#### Clinical Applications

- Abdominal
- Pediatric
- Breast
- Thyroid
- Musculo-skeletal
- Vascular
- Small parts



### L10-2 LINEAR

Composite elements  
**192** Bandwidth  
**2-10 MHz**

#### Clinical Applications

- Abdominal
- Pediatric
- Breast
- Thyroid
- Musculo-skeletal
- Vascular
- Small parts



### E12-3 ENDOCAVITARY

Composite elements  
**192** Bandwidth  
**3-12 MHz**

#### Clinical Applications

- OB-GYN
- Prostate



### P5-1X SINGLE CRYSTAL PHASED ARRAY

Single crystal element  
**96** Bandwidth  
**1-5 MHz**

#### Clinical Applications

- Vascular abdominal
- TCD
- Cardiac



### MC12-3 MICRO-CONVEX

Composite elements  
**192** Bandwidth  
**3-12 MHz**

#### Clinical Applications

- Pediatric
- Vascular



### LV16-5 LINEAR VOLUMETRIC (3D)

Composite elements  
**192** Bandwidth  
**5-16 MHz**

#### Clinical Applications

- Breast



### LH20-6 LINEAR

Composite elements  
**192** Bandwidth  
**6-20 MHz**

#### Clinical Applications

- Musculo-skeletal
- Breast
- Vascular
- Pediatric
- Small parts

# INNOVATIVE EVOLUTION AND PARTNERSHIP

## 2009



First introduction of ShearWave® Elastography (SWE) in a commercial product: Aixplorer. Real-time anatomic image visualization with superimposed quantitative colored map of tissue stiffness.

## 2013



Launch of Aixplorer 4-conector system

**2009:**  
SWE 1.0 for  
Breast and  
Small parts

**2010:**  
SWE 1.0 for  
Liver and  
Prostate

**2011:**  
SWE 3D  
for Breast

**2013:**  
FDA clearance  
of SWE full  
quantification

**2014:**  
SWE 2.0  
for MSK

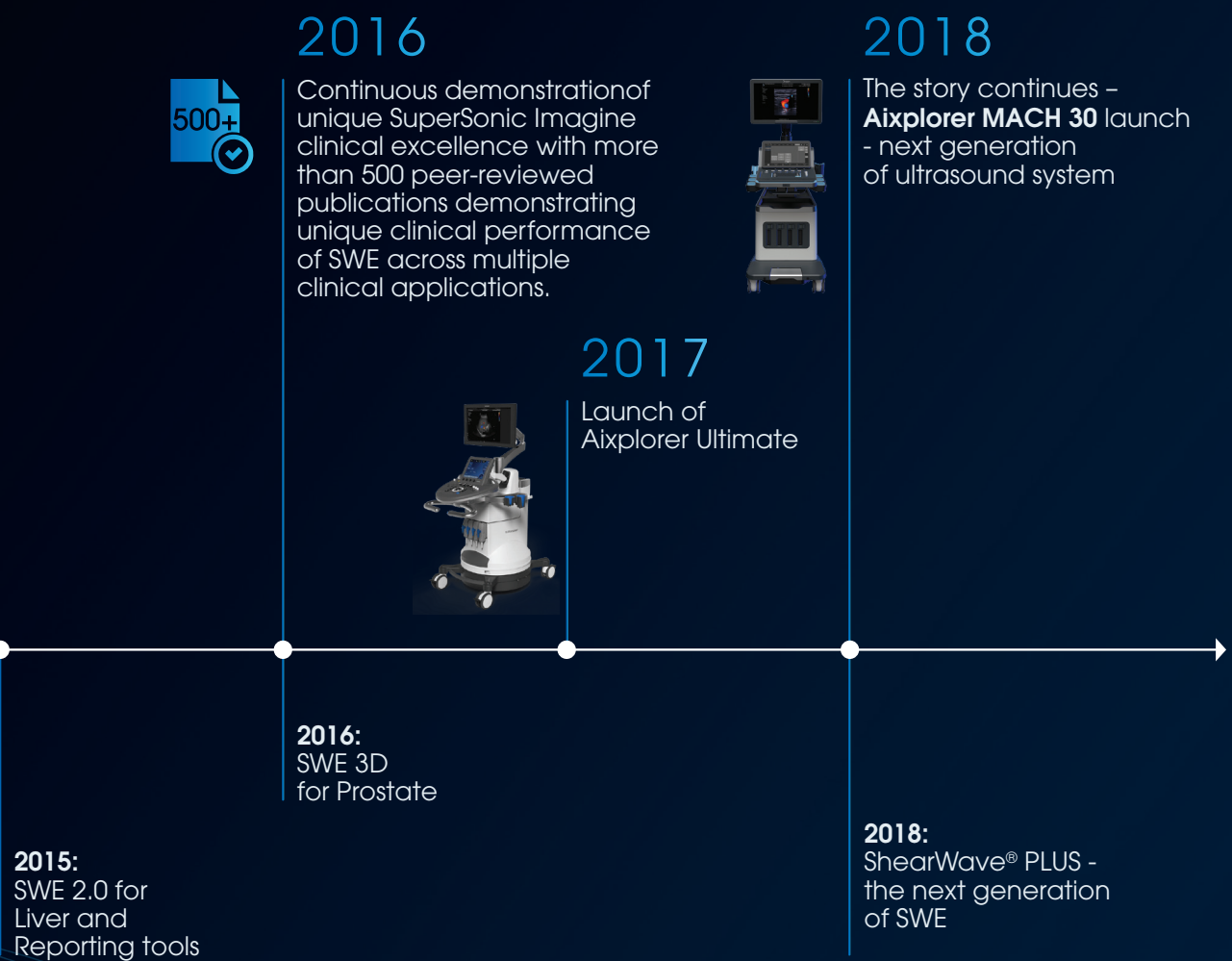


Created in 2005 in Aix en Provence, SuperSonic Imagine was born from a collaboration with the Ondes et Acoustique laboratory at ESPCI Paris and the CNRS (Head of French National Scientific Research Organization).

This collaboration led to the introduction of an innovative technology – **Real-time ShearWave® Elastography**.

SuperSonic Imagine developed the Aixplorer product that marked a technological and clinical breakthrough in the field of ultrasound imaging changing the landscape of ultrasound and setting new standards for imaging across multiple clinical applications. These clinically-validated innovations continue to be unrivaled.

SuperSonic Imagine is committed to develop innovations that revolutionize the ultrasound user experience by transferring all of the intelligence of ultrasound into software. Offering unique flexibility and scalability in the marketplace, the Aixplorer product is also the only system capable of imaging the body at ultra-fast speeds of up to 20,000 frames per second (or 200 times faster than any standard ultrasound system).



## 2016



Continuous demonstration of unique SuperSonic Imagine clinical excellence with more than 500 peer-reviewed publications demonstrating unique clinical performance of SWE across multiple clinical applications.

## 2018

The story continues – **Aixplorer MACH 30** launch - next generation of ultrasound system



## 2017

Launch of Aixplorer Ultimate



**2016:**  
SWE 3D  
for Prostate

**2015:**  
SWE 2.0 for  
Liver and  
Reporting tools

**2018:**  
ShearWave® PLUS -  
the next generation  
of SWE

# YOUR ULTRASOUND

# EXPERIENCE

# CONNECTED



Aixplorer MACH 30 is designed to offer you the best of today's innovations and user experience while being ready for tomorrow and for the development of future Artificial Intelligence and machine learning solutions.

## TODAY

Connected serviceability

- Online System monitoring, maintenance and diagnosis
- Online software updates
- Options activation
- Activate and evaluate new features and options online at your convenience, in your practice

## TOMORROW

- Be ready for next Interactive management of patient and data flow
- Ready to implement innovations in imaging and analytics





THERE ARE THOUSANDS  
OF SUPERSONIC IMAGINE SYSTEMS  
WORLDWIDE AND WE ARE REPRESENTED  
IN 83 COUNTRIES

A GROWING COMMUNITY OF PHYSICIANS,  
CLINICIANS AND ACTIVE USERS.



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Indications for Use: The SuperSonic Imagine Aixplorer MACH 30 ® ultrasound diagnostic system and transducers are intended for general purpose pulse echo ultrasound imaging, Doppler fluid flow analysis of the human body, and soft tissue elasticity imaging. The Aixplorer MACH 30 ® ultrasound diagnostic system is indicated for use in the following applications, for imaging and measurement of anatomical structures: Abdominal, Small Organs, Musculoskeletal, Superficial Musculoskeletal, Vascular, Peripheral Vascular, OB-GYN, Pelvic, Pediatric, Trans-rectal, Trans-vaginal, Urology, Neonatal/Adult Cephalic and Non-invasive Cardiac. In addition, the SuperSonic Imagine Aixplorer MACH 30 ® ultrasound diagnostic system and associated transducers are intended for: measurements of abdominal anatomical structures; measurements of broadband shear wave speed, and tissue stiffness in internal structures of the liver and the spleen; measurements of brightness ratio between liver and kidney; visualization of abdominal vascularization, microvascularization and perfusion; quantification of abdominal vascularization and perfusion. The shear wave speed and stiffness measurements, the brightness ratio, the visualization of vascularization, microvascularization and perfusion, the quantification of vascularization and perfusion may be used as an aid to clinical management of adult and pediatric patients with liver disease. It is intended for use by a licensed personnel qualified to direct the use of the medical ultrasound devices. CE certificate no. 26415, FDA cleared - K180572.

