
mindray

healthcare within reach

# DC-8 Exp

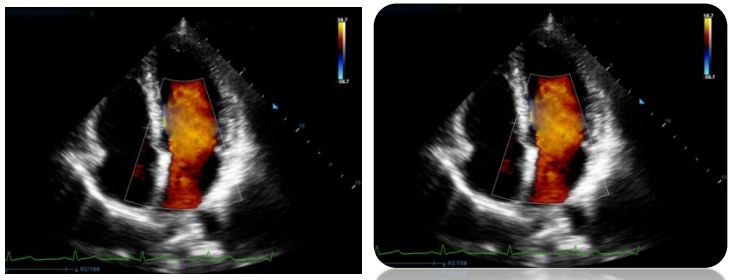
## Product introduction


DC-8 Exp
An Expert You Can Rely On
Difficult patients are big challenges, we need the power to easily image patients of various sizes and ages with more confidence.

# Amazing imaging performance

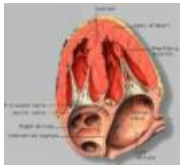
| | |
|---|---|
| Powerful processing capability | mQuadro |
| Innovative Mindray patent technology | ART Flow™<br>Advanced Echo Boost™ |
| Advanced transducer family for difficult patients | Single Crystal technology<br>Wide band transducer |

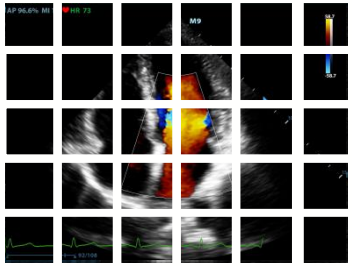
# mQuadro

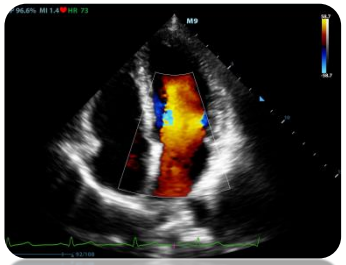


Traditional
Post optimization

Based on image analysis (gray scale and color)







## Intelligent algorithm
(powered by mQuadro)

Based on Image segmentation  analysis and anatomical structure database

# ART Flow ™(Automatic Recognition Transcient Flow)


Mindray exclusive technology for deep vascular scanning, acquiring hard-to-detect blood flow with superb color sensitivity

- Specific designed TX / RX algorithm to improve visualization of deep vessel flow
- Greatly improve the diagnostic confidence for vascular exam

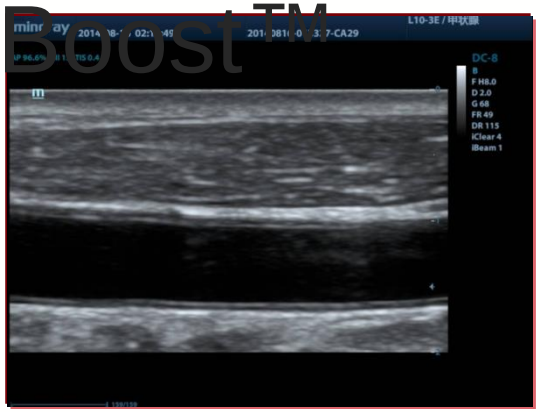
*Available on L10-3E and L12-3E

# ART Flow™

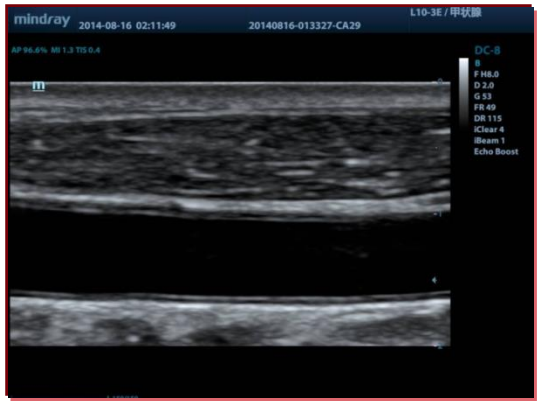

Clinical Benefits:

- Greatly improve penetration and sensitivity for deep vessels exam
- Accurate differentiation of vessel lumen and tissue echo
- Provide more diagnostic information for difficult DVT , artery  stenosis and occlusion

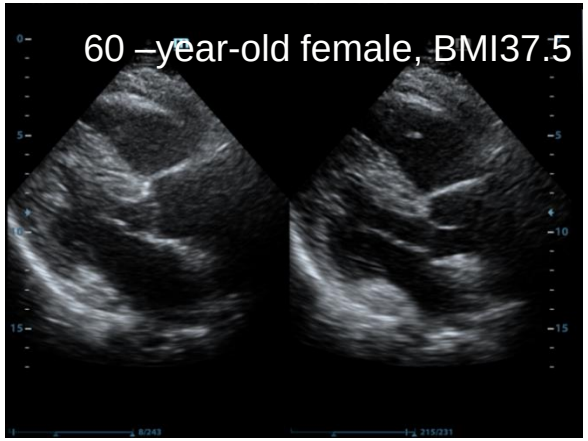
# Advanced Echo Boost™




Echo Boost OFF




Echo Boost ON




Echo Boost OFF Echo Boost ON

Clinical Benefits:

- Improve homogeneity of image throughout the entire field of view
- Better contrast resolution for near field tissue layers on linear transducers
- Better signal to noise control in cardiac chambers and myocardium tissue

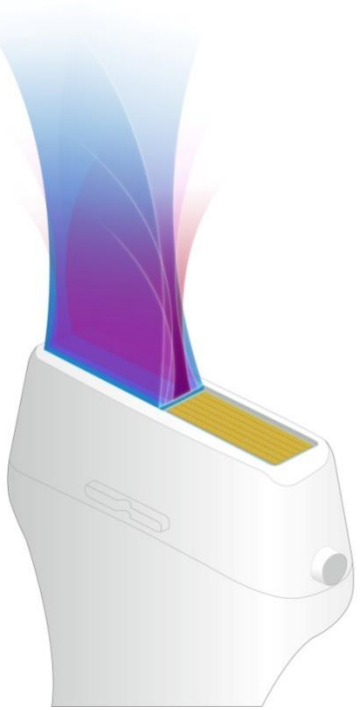
# Advanced transducer technology

New single crystal technology combined with 3T technology for better penetration

Matrix technology for high resolution and excellent image uniformity

New broadband linear transducer for a wider coverage of applications

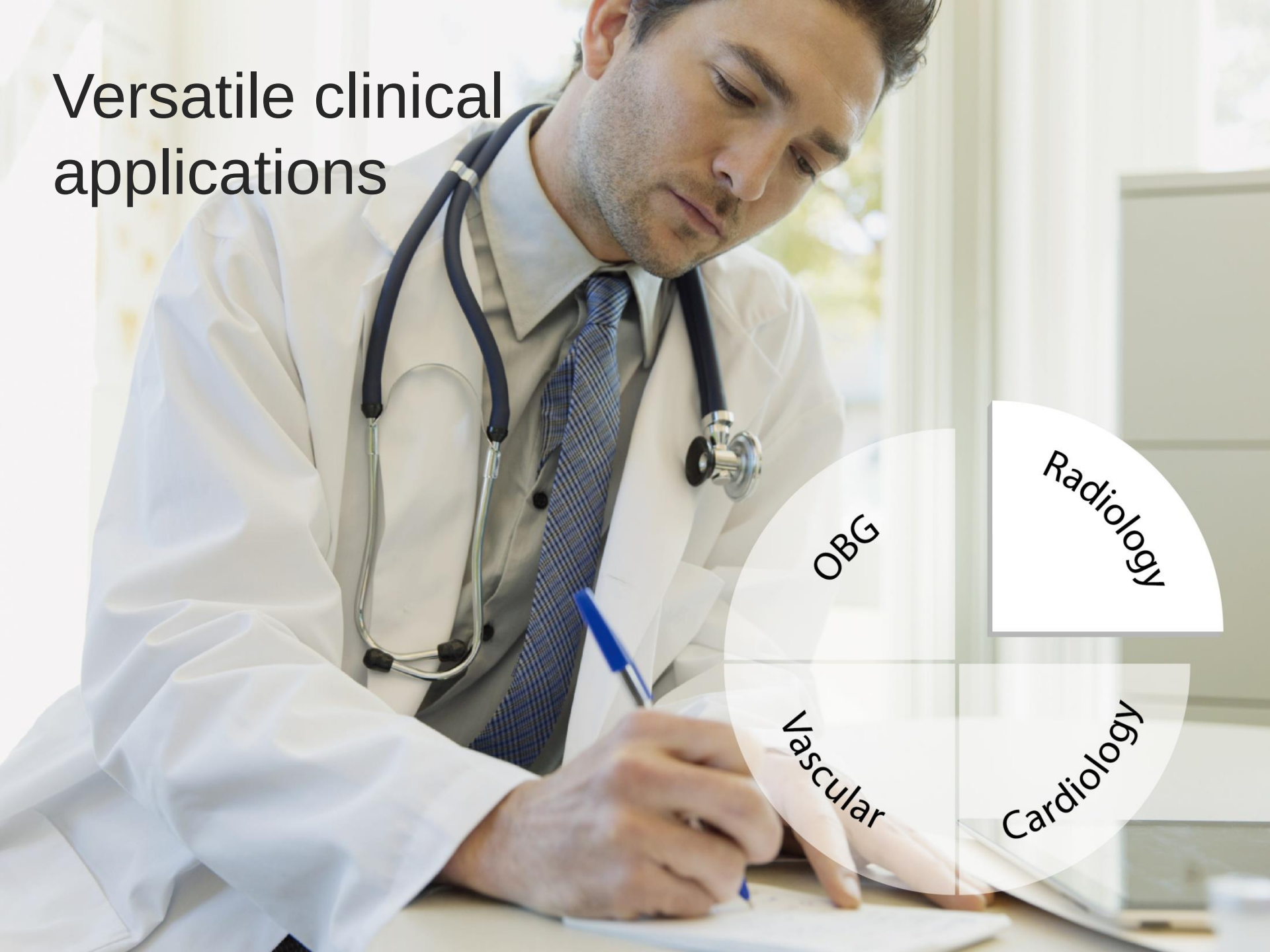
# Matrix technology for linear probe



New 1.5D matrix array transducer ( LM14-6E)

- Use multiple rows of crystal to achieve uniform resolution throughout the entire ultrasound beam
- Better resolution from near to far field

# Versatile clinical applications



# Radiology

## High performance transducers for difficult patients

- SC5-1E single crystal convex transducer for good penetration and resolution
- Matrix transducer for uniform and high resolution images
- Dedicated transducer solutions for special applications

## Superb image technology

- ART Flow for enhanced color sensitivity and penetration
- Echo Boost for better contrast resolution and image homogeneity

## Advanced Imaging Options

- UWN$^{+}$ contrast imaging for more confident diagnosis
- Natural touch elastography for higher stiffness sensitivity and good stability

# Transducer solution

**Convex**
SC5-1E for big patients
C11-3E provides high resolution image for neonatal and pediatric

**Linear**
One-probe solution L10-3E covers superficial and deep structures

Matrix LM14-6E for superb resolution for MSK and superficial

**Hockey stick**
High frequency probe L16-4HE for both intra-operative and MSK

**Bi-plane**
CB10-4E for professional urology application

# UWN+ (Ultra-Wideband Non-linear) Contrast Imaging


Liver Tumor

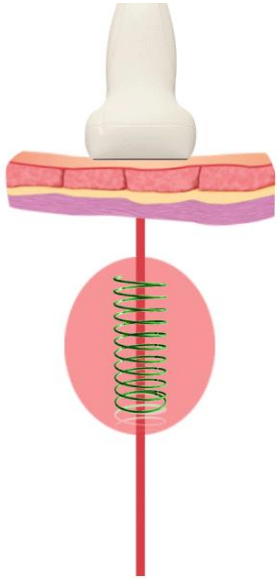
Clinical Benefits:

- Excellent contrast agent sensitivity
- Improved contrast imaging penetration with HPen mode
- Longer CEUS perfusion time with lower MI setting
- MFE ( Micro Flow Enhancement ) for better visualization of tiny vessel perfusion

# Natural touch elastography

**Traditional**

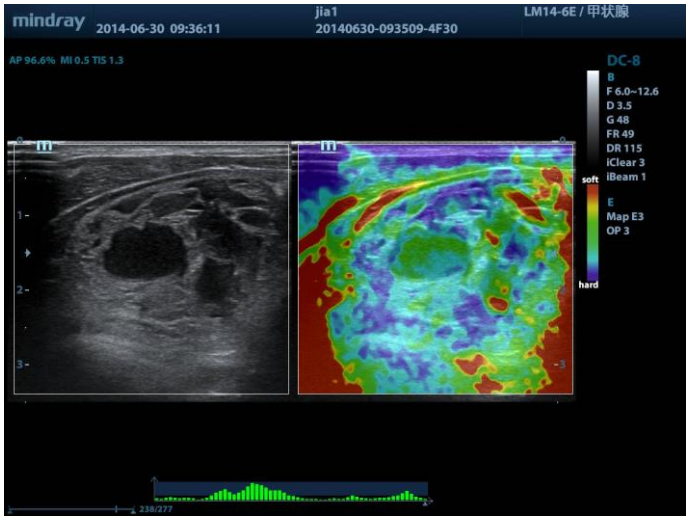
- Processing speed: low
- Stiffness sensitivity: Normal, manual pressing
- Operation: user dependent, long learning time



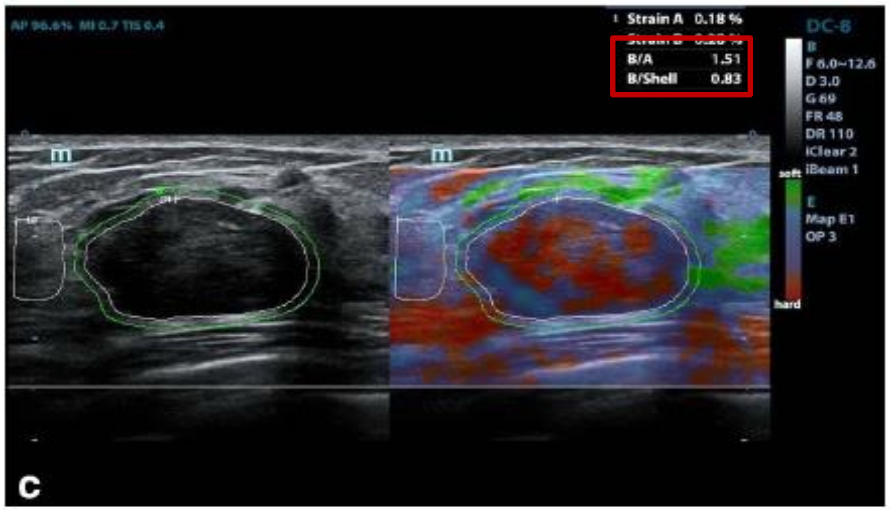
**Natural touch**

- Processing speed: fast
- Stiffness sensitive: High, sensitive to Breathing, Heart beating
- Operation: easy to learn and master

# Natural touch elastography



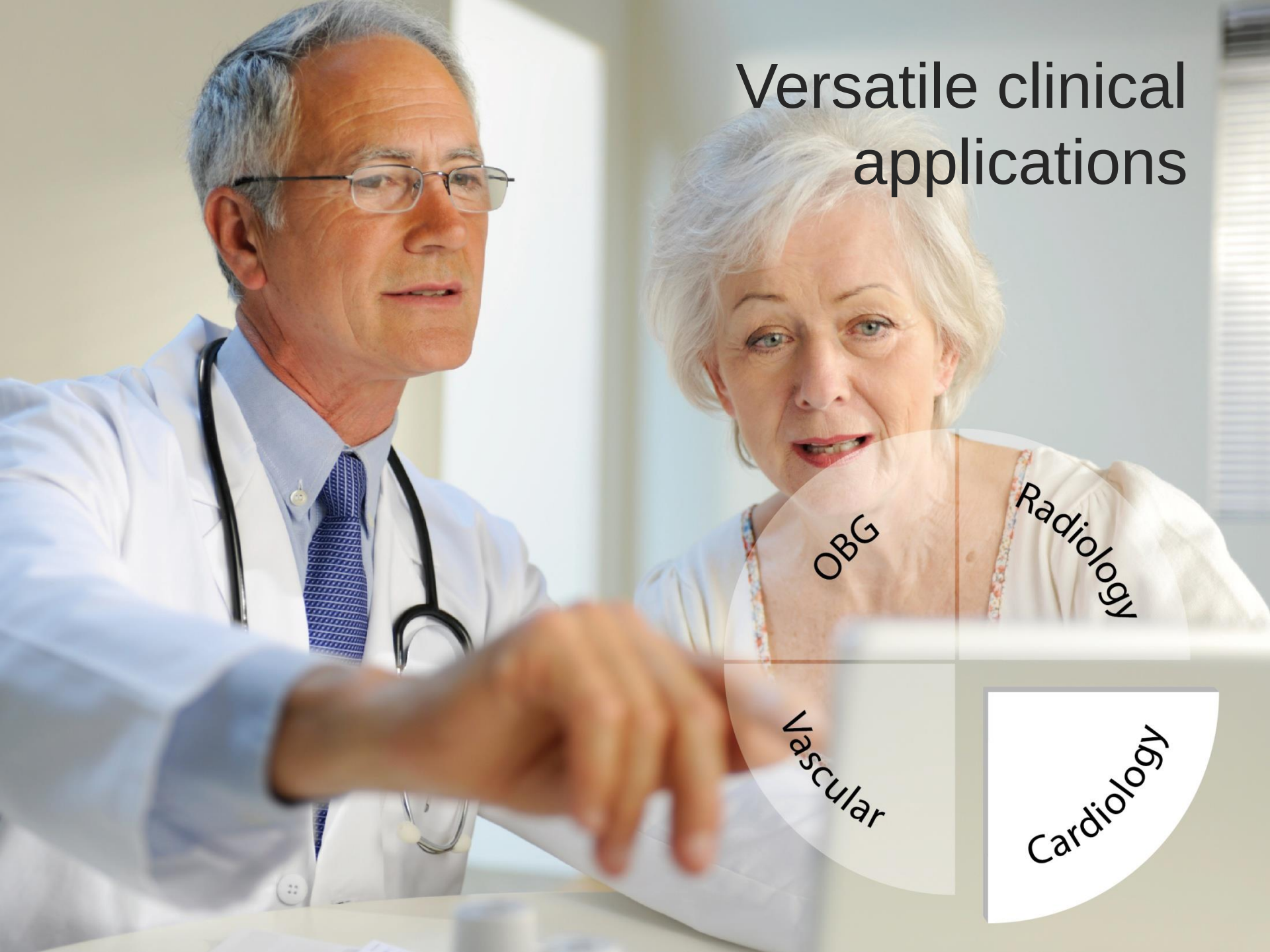

Thyroid Tumor




Shell Analysis for fibroadenoma

- Stable and good reproducibility
- Unique shell function to analyze infiltration status
- Multiple parameters quantification analysis
- Available for breast/thyroid/nerve/prostate

# Versatile clinical applications



# Cardiology

## High performance transducer

- Single Crystal SP5-1E for difficult cardiac patients

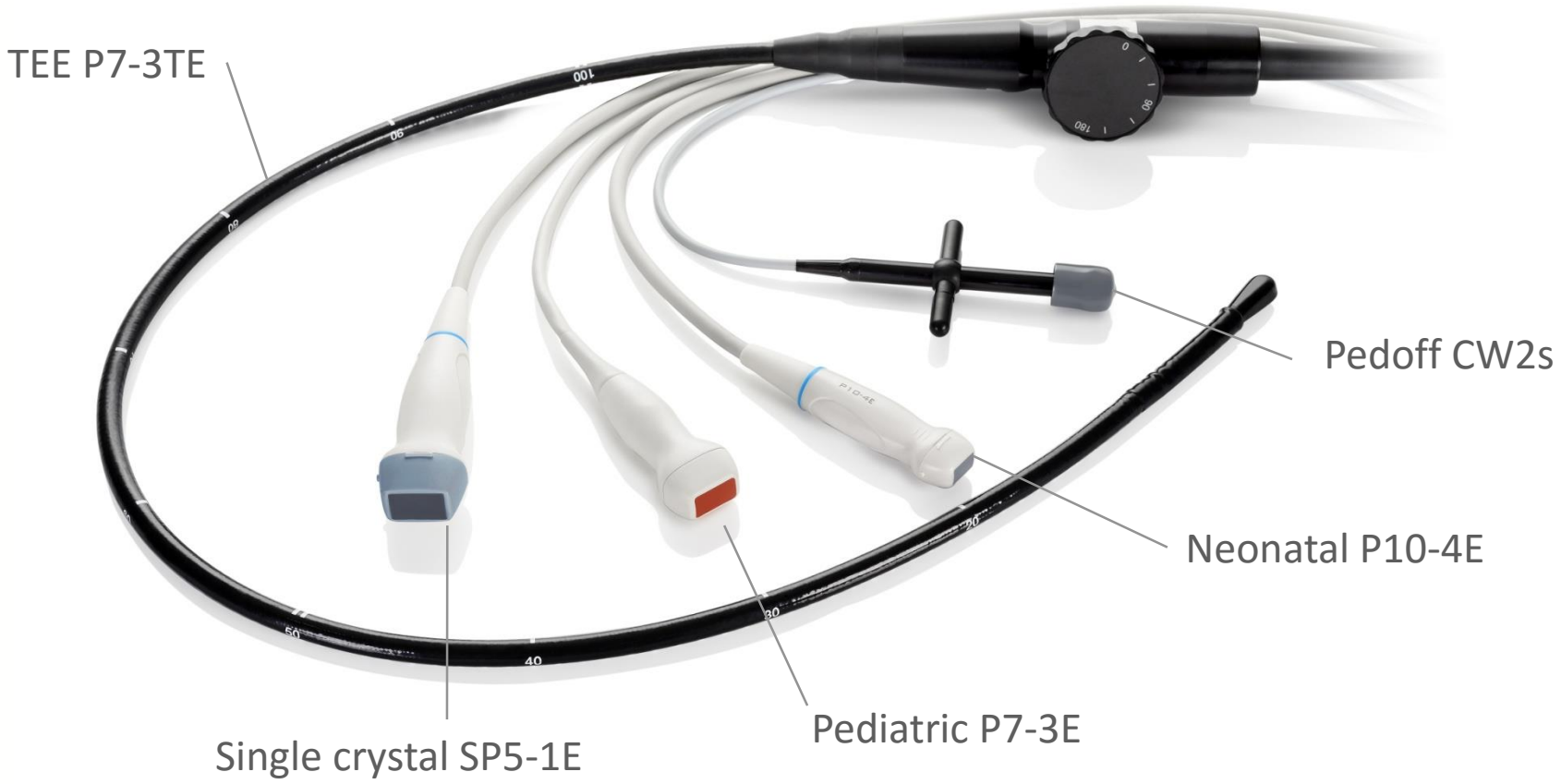
## Full range of cardiac transducers

- Dedicated transducers for adult, pediatric and neonatal study
- TEE transducer for advanced cardiac monitoring

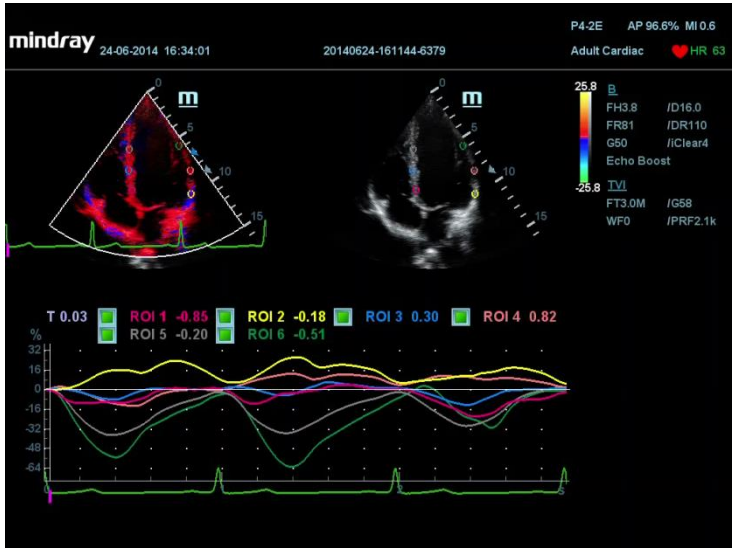
## Professional research package

- TT QA and Strain/Strain Rate offer quantification data
- Stress Echo and LVO(Left Ventricular Opacification) for advanced myocardial function analysis and evaluation

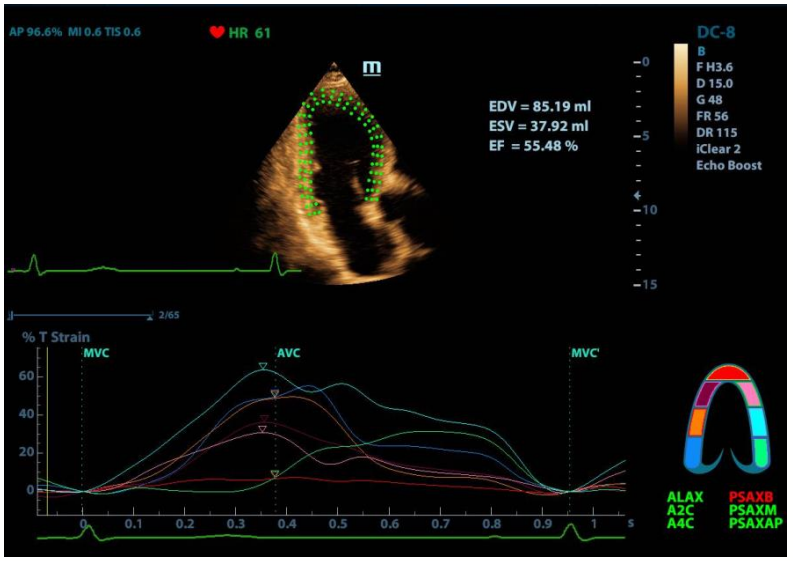
# Transducer family



# Strain/Strain rate




Strain - TDI

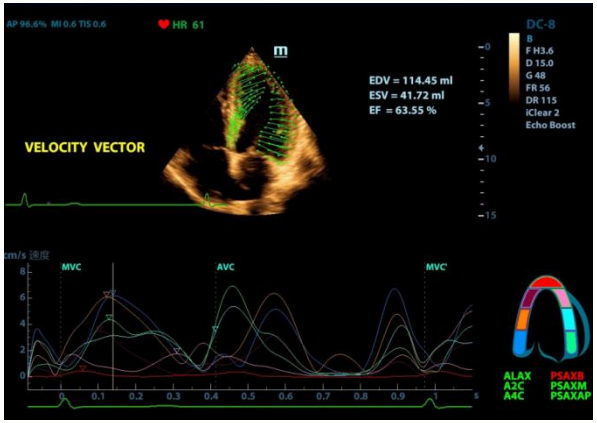



Strain - Tissue Tracking

Reproducible and quantitative assessment of the left ventricle function

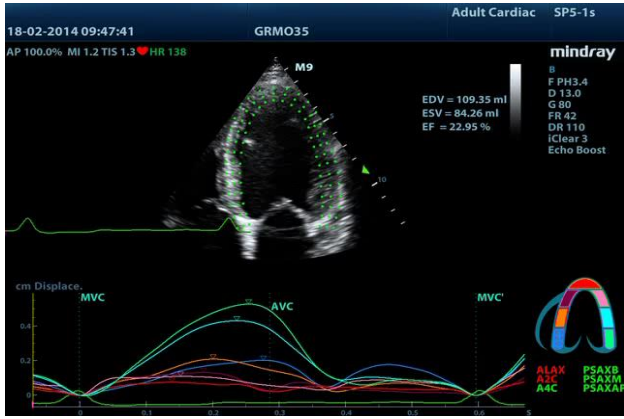
- Provide analysis of the myocardium with ROI up to 8 selections
- Available on 2D tissue tracking QA and TDI QA

# TT QA




Vector Image


Bull's Eye Scoring

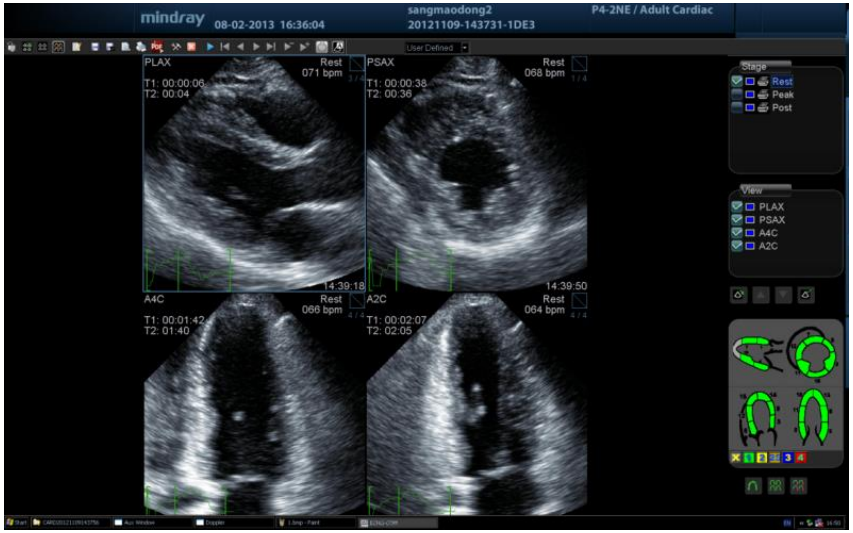



Displacement Analysis

Track myocardial motion by detection of the 2D speckle patterns, provide LV regional abnormalities diagnostic information

- Accurate tracking results even for difficult patients
- Fast multiple quantification parameters such as Bull's eye scoring
- Velocity display method selectable including vector and point

# Stress echo

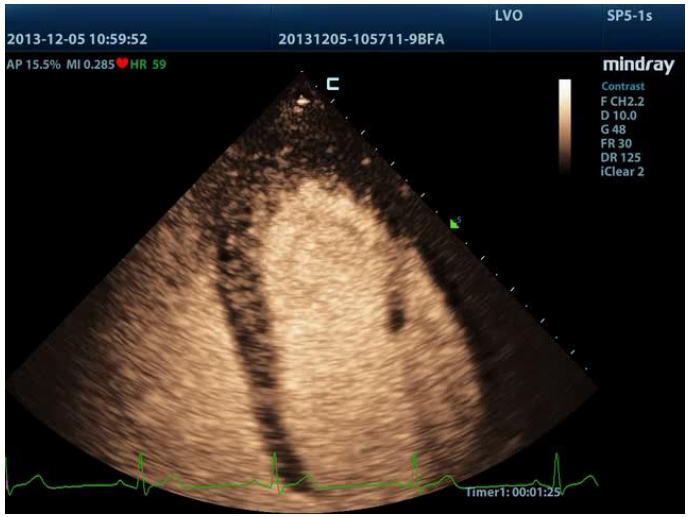



Wall Motion Scoring


Stress Protocols

- Versatile exercise and pharmacologic protocols
- User configurable protocol for different clinical preference
- Wall motion scoring reporting
- Multi loops selectable with one section

# LVO (Left Ventricular Opacification)

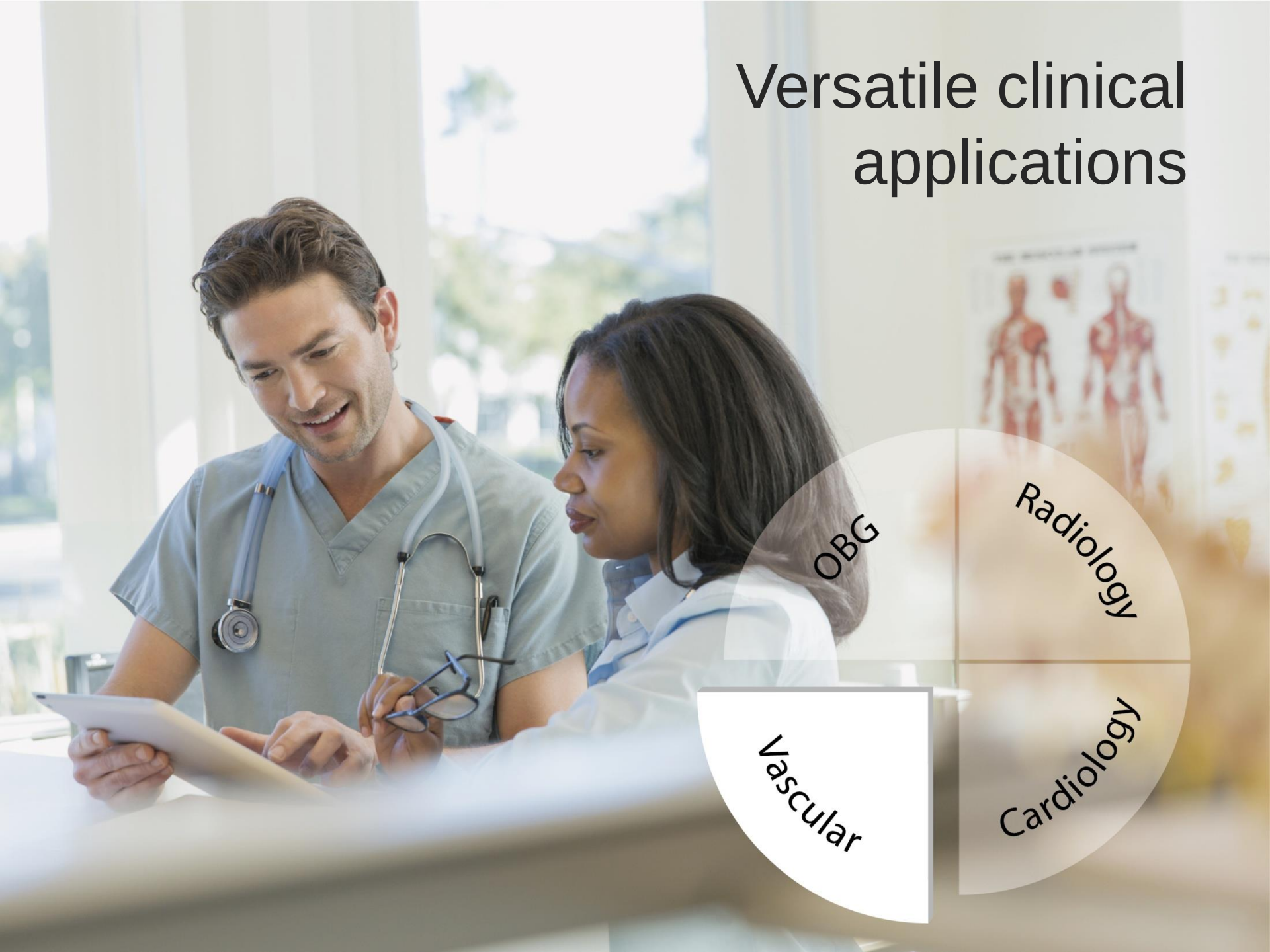



LVO with SP5-1E

Reveal structural and functional change of left ventricle with contrast imaging

- Longer bubble duration and higher sensitivity with UWN+ technology
- Improved contrast resolution of myocardium empowered by single crystal transducer

# Versatile clinical applications



# Vascular

## Comprehensive imaging capability

Full range of vascular transducers
Wide bandwidth linear transducer L10-3E
Comprehensive exam settings for dedicated studies

## Unique technology for premium image quality

- ART Flow improves visualization of deep vessels flow
- Echo boost provides excellent lumen contrast resolution

## Outstanding vascular analysis tools

- Auto IMT for easier vascular evaluation and studies
- V-Mapping for more informative vascular report
- Powerful iScape for extended view of vessels

# Transducer solution

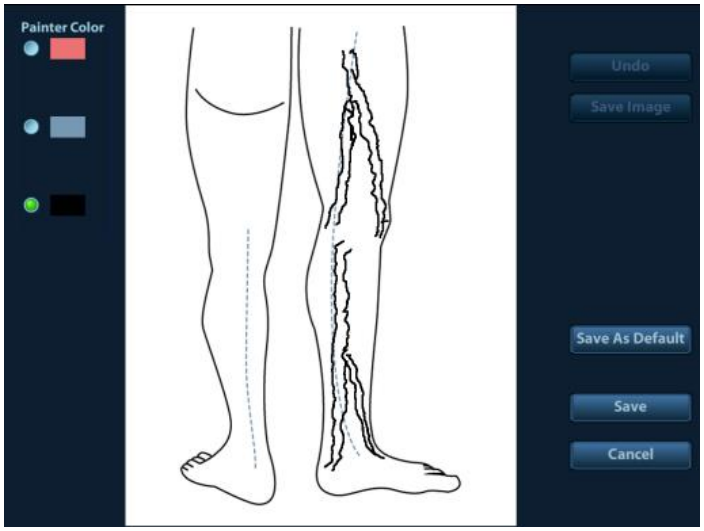
L10-3E provides one probe solution for deep and superficial vascular exams

SP5-1E for renal artery with high penetration and good color sensitivity

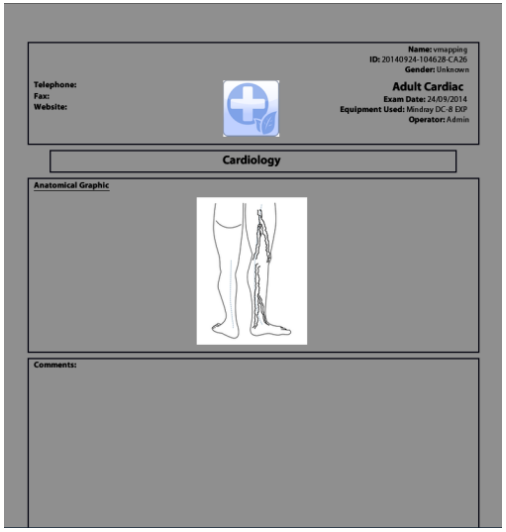
L16-4HE for both carotid and extremity vascular with extraordinary detail resolution and professional design

Micro-convex C11-3E with wide angle of view and high definition image

# V-Mapping




Touch Screen Drawing

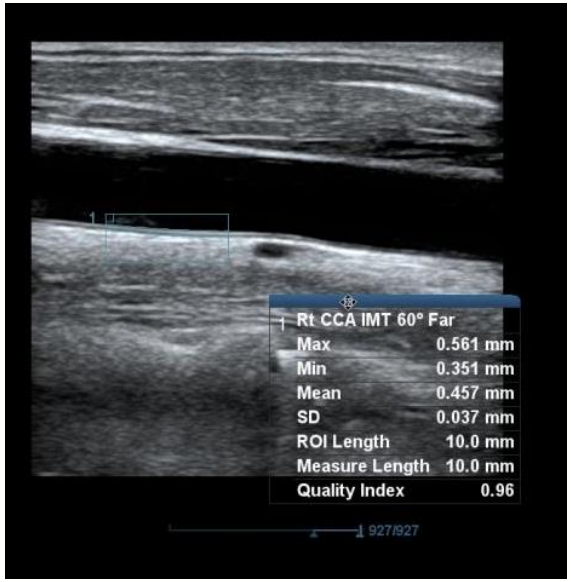



Report

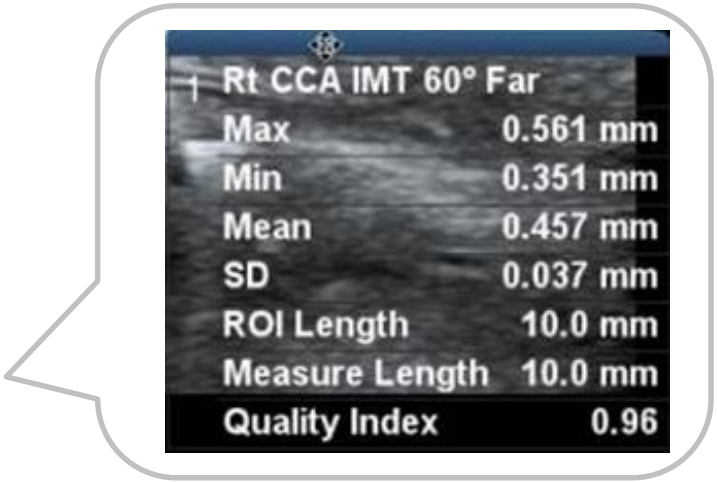
**Allow users to highlight pathology on vascular anatomy map**

- **Draw pathology location and shape intuitively on touch screen**
- **Provide more anatomical information on report**

# Auto IMT




IMT Result




Automatically detect and calculate IMT for cardiovascular risk assessment

- Easy operation and less  user dependence
- Provide comprehensive vascular parameters for evaluation

# Versatile clinical applications

# OBG

## Comprehensive transducers

- Abdominal and endocavity volume transducers
- Wide angle TV transducer for easy and confident examination

## Powerful 3D/4D solution

- Mindray patent Smart MSP for 3D fetal brain structures
- SCV+ for better 3D slice image contrast resolution
- iLive for realistic view of fetus

## Superior gynecology solution

Endocavity elastography enhance diagnostic information
Smart FLC for automatic follicle detection and calculation
Dedicated package for IVF application

# Transducer solution

SC5-1E offers complete solution for whole pregnancy cycle

C7-3E for extraordinary fetal heart imaging

Volume probe D6-2E for effective and efficient 3D/4D imaging

V11-3WE with superb spatial resolution and wide angle of view for dedicated GYN scanning

# Smart MSP (Middle Sagital Plane)

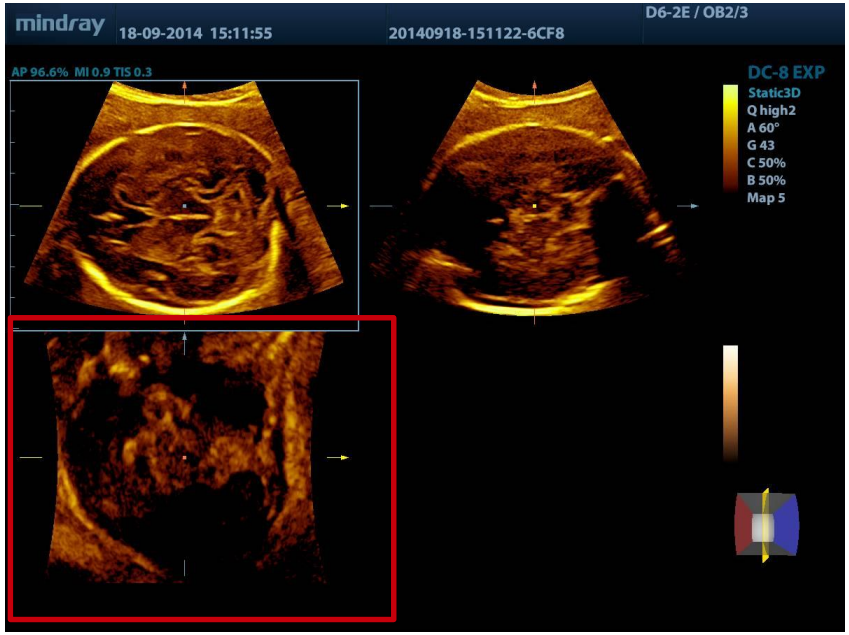
| | 2D(trans-abdominal) | 2D(trans-vaginal) | 3D(trans-abdominal) | Data Source |
|---|---|---|---|---|
| **MSP Acquisition successful rate** | 35.5% | 26% | 98.5% | Chinese Journal of Ultrasound in Medicine 2006 |

Mindray exclusive algorithm that automatically displays accurate fetal brain anatomy at the middle saggital plane in 3D

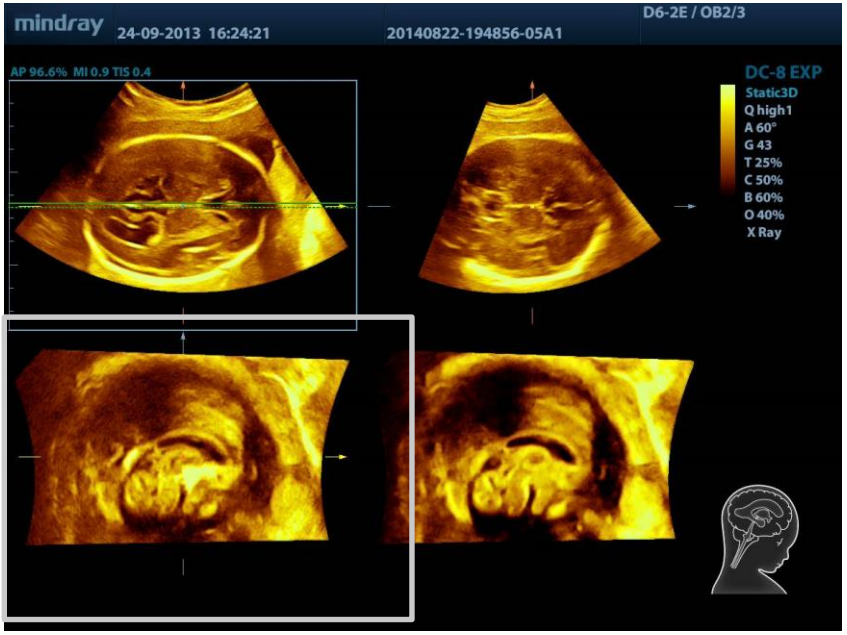
- Quick and easy viewing of corpus callosum and cerebellum vermis
- Improved diagnosis confidence and accuracy

# Smart MSP

One button

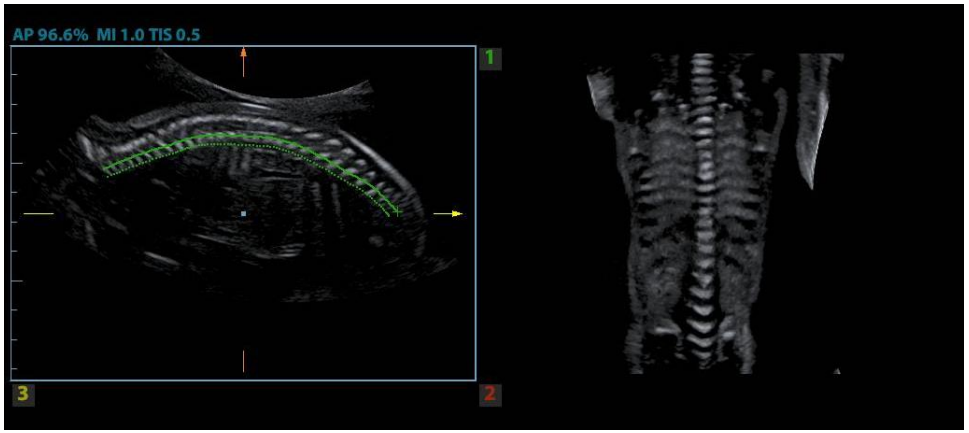



Section without MSP




Sagital section

# SCV+(Slice Contrast View Plus)

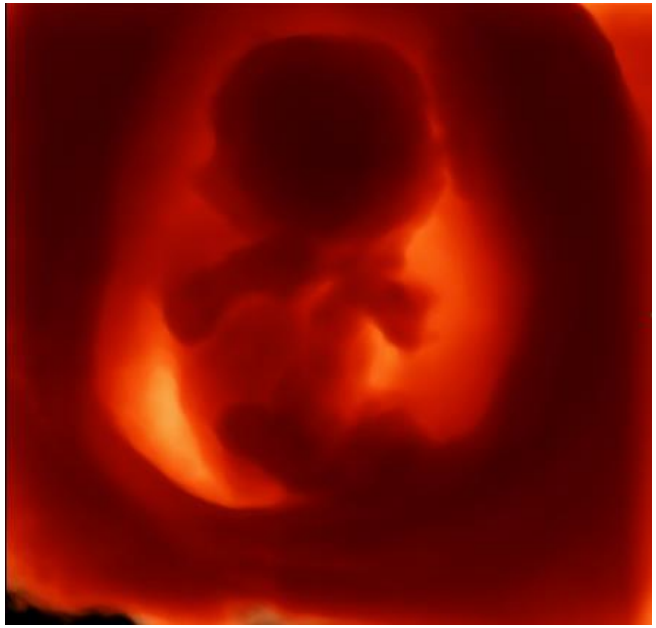



Fetal Spine

Virtual ‘unfolding’ and ‘stretching’ of complex anatomical structures by a curvilinear section

- Enhanced contrast resolution for planes defined by an arbitrary curve
- Allow more complete structural information in one single image
- Provide important anatomic information in particular with regard to anomalies of fetal face, brain, spine and endometrium.

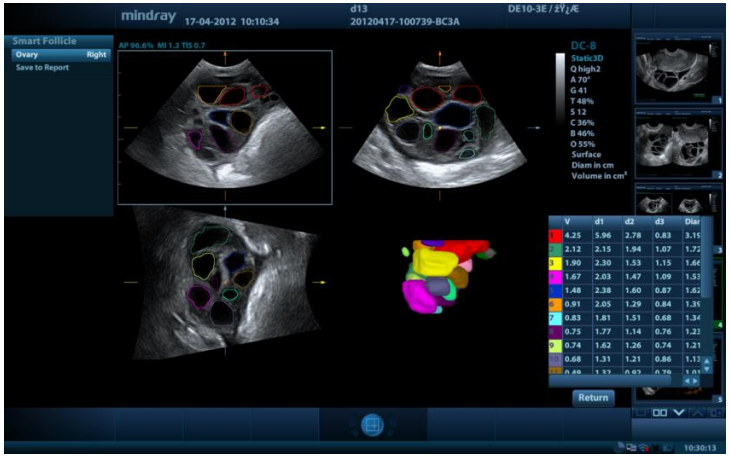
# iLive



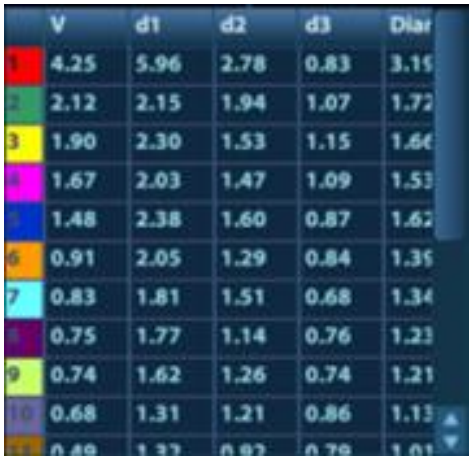
A revolutionary way to obtain the amazingly realistic view of fetus with human skin like color

- New virtual and movable light source integrated
- Light source adjustment

# Smart FLC(Smart Follicle )




Follicle Rendering

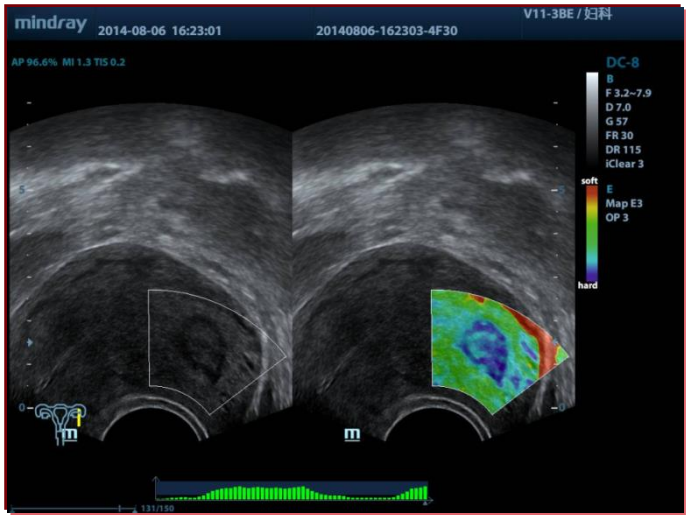



Smart Follicles Table

Automatically detect the number and calculate the volume of follicles from a 3D volume image

- Accurate assessment of the size of follicles
- Follicles are automatically sorted by sizes with color code
- Easy reporting with colorful graphic designed for follicle  study

# Natural Touch Elastography on Trans-Vaginal Probe




Endometrium mass

Provide multiple relative strain and stiffness parameters of cervix, uterus and ovary lesion for diagnosis

- More sensitive, and less user dependent
- Excellent reproducibility with consistence

*Available on V11-3E/V11-3BE/V11-3WE

# Extraordinary user experience

## Efficient work flow

- iWorks
- iTouch
- Smart doppler
- Auto measurement
- Raw data

## Easy data management

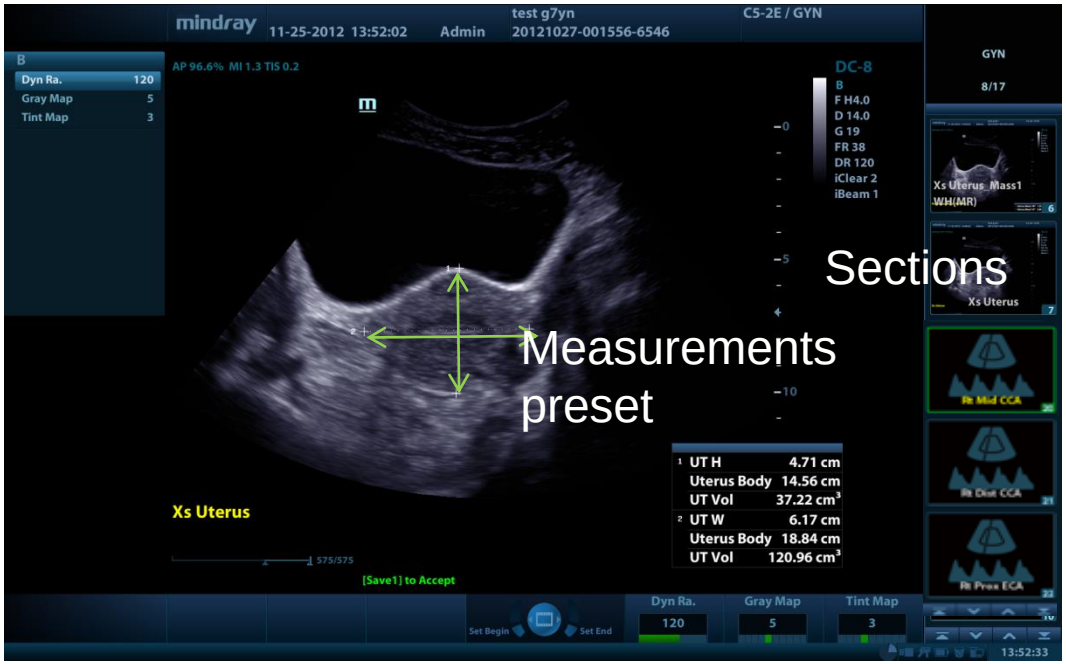
- iStation
- MedSight
- Built-in DVR
- DICOM

## Excellent ergonomic design

- 19” high resolution LCD
- 10.4” touch screen
- Flexible control panel
- Four active sockets
- Gel warmer


mindray

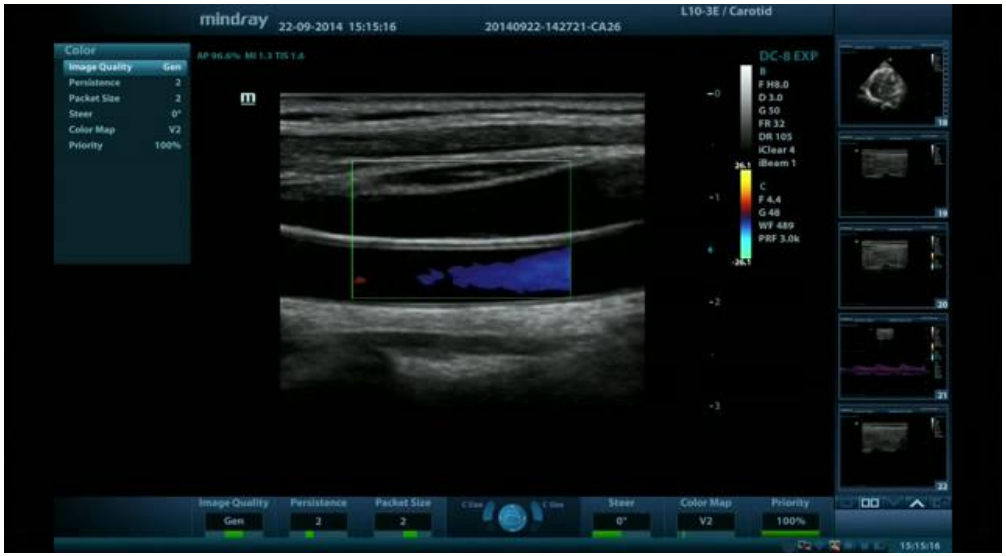
# iWorks




Standardize and simplify the workflow, let you be more focused on the patient and diagnosis

- Complete protocols for abdomen, vascular and other 38 applications
- Reduce up to 50% exam time and 80% keystrokes
- Very flexible with powerful user-define capability

# Smart Doppler




iTouch

Automatically positioning color box and doppler gate placement inside vessel to ensure quick color and spectral doppler imaging

- Automatically detect best optimal Color box position and angle
- Perfect alignment of PW sample volume position and angle

*Available on L10-3E and L12-3E

# MedSight

Interactive App that could transfer clinical images/cines and reports from DC8 Exp to IOS smart devices via WiFi

- Specially designed for patients to transmit images
- Enable maternal mother to easily share the lovely unborn baby images with her family or friends

# User-friendly ergonomic design

19’ high resolution LCD Monitor

Dedicated EC transducer holder

Articulating arm

10.4’ anti-glare touch panel

Gel warmer

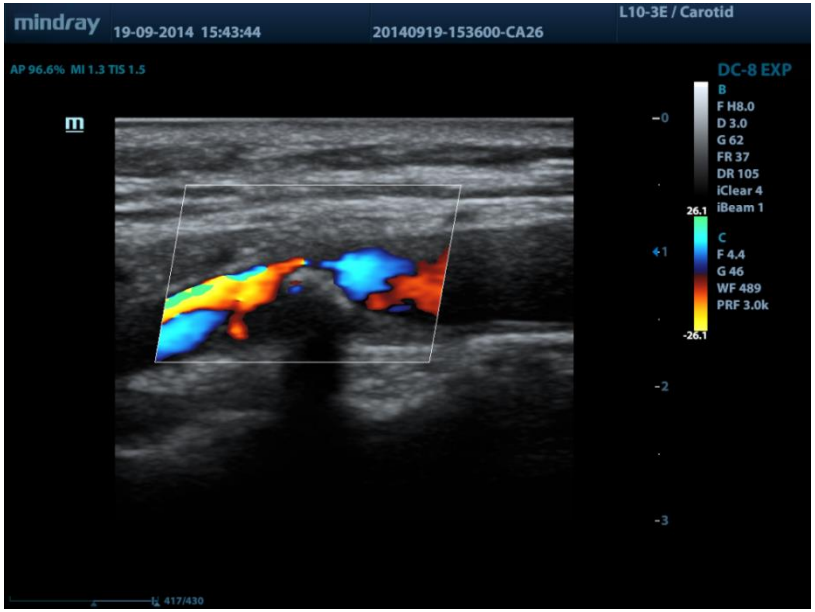
Convinient cable hook

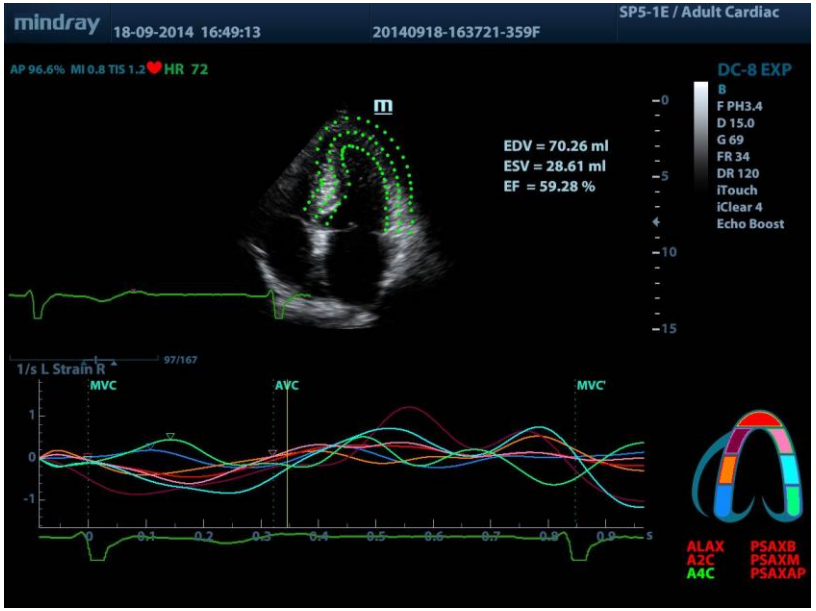
HandyUSB ports

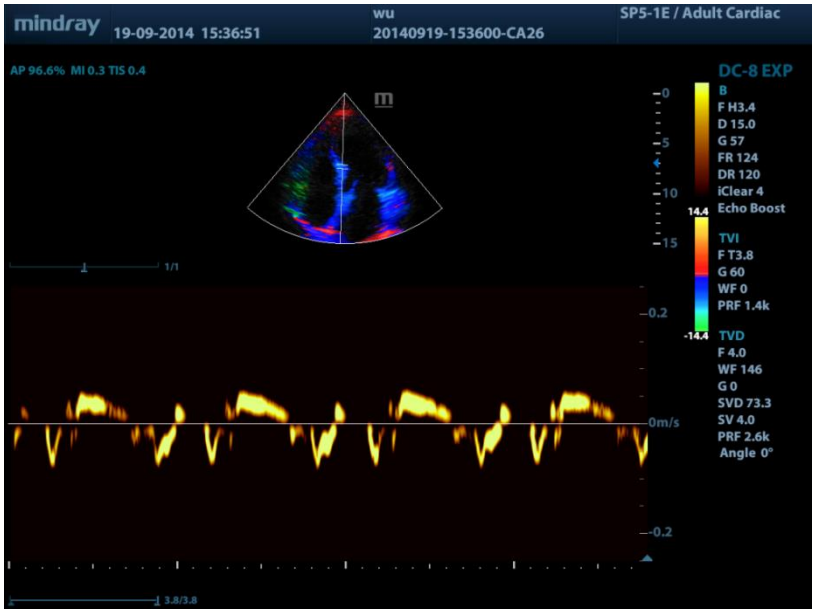
Castor lock

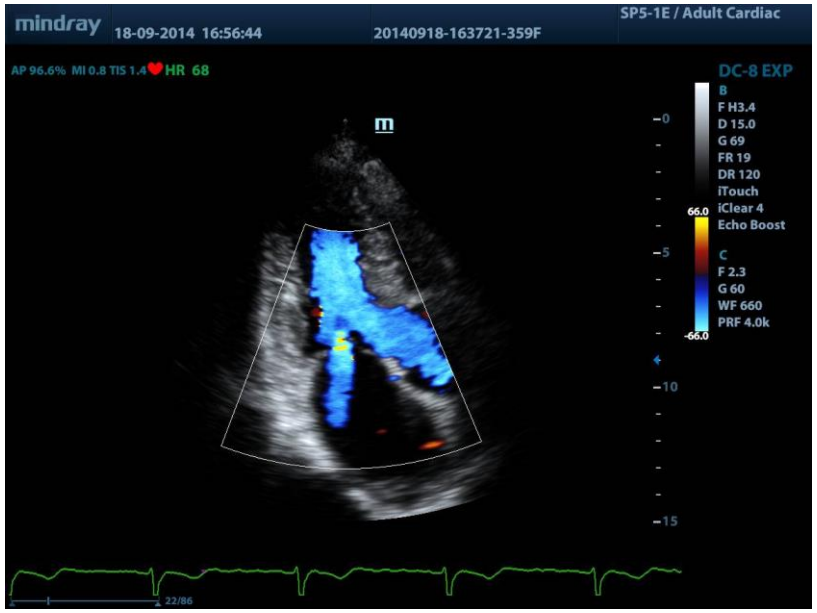
Kidney-shaped control panel

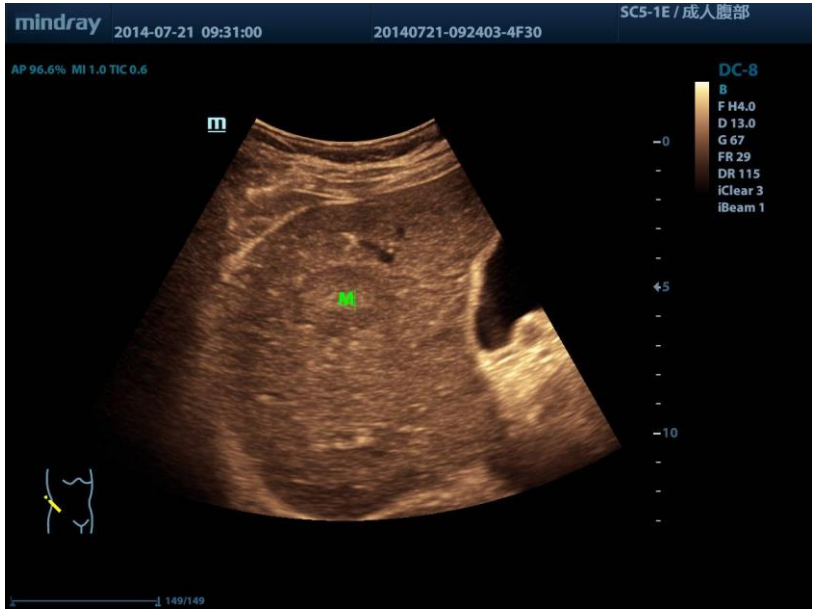
# Image Gallery

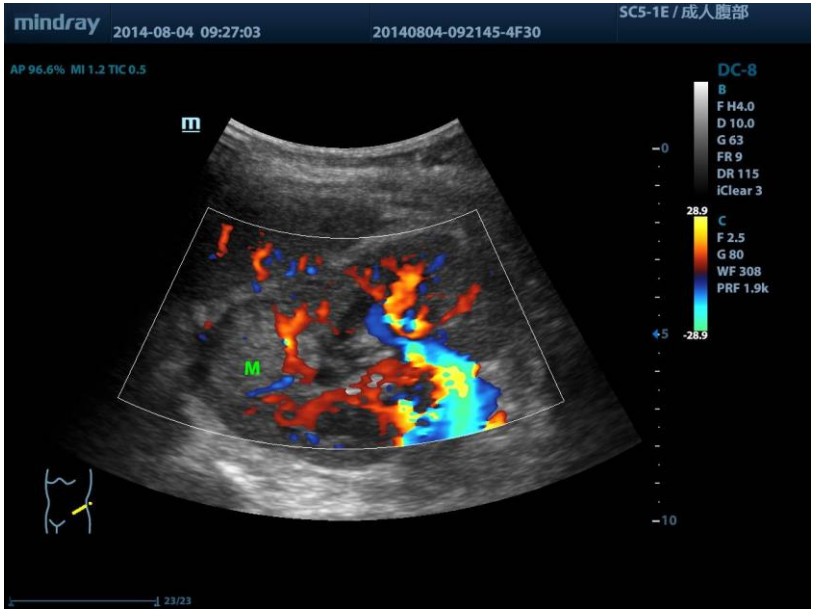

mindray
19-09-2014 15:43:44
20140919-153600-CA26
L10-3E / Carotid
AP 96.6% MI 1.3 TIS 1.5
DC-8 EXP
B
F H8.0
D 3.0
G 62
FR 37
DR 105
iClear 4
iBeam 1
C
F 4.4
G 46
WF 489
PRF 3.0k
26.1
-26.1
417/430

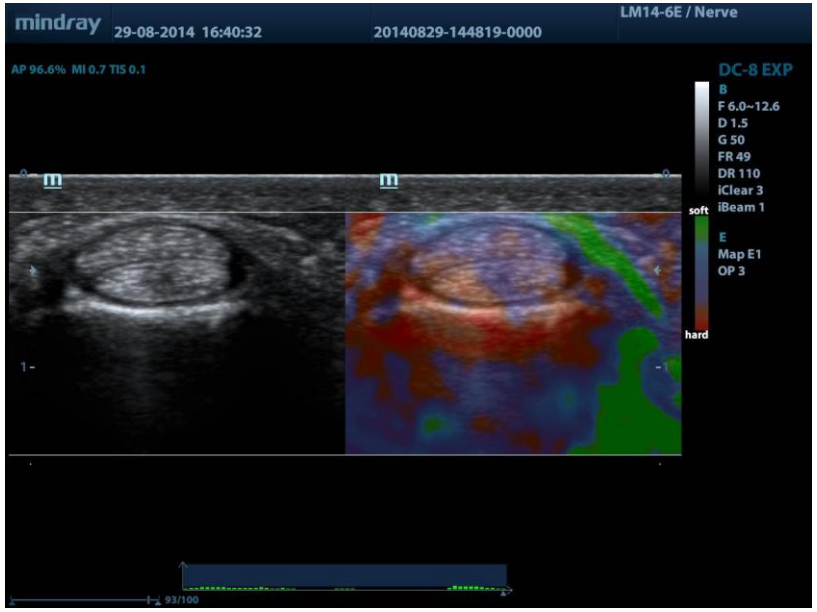

mindray
18-09-2014 16:49:13
20140918-163721-359F
SP5-1E / Adult Cardiac
AP 96.6% MI 0.8 TIS 1.2
HR 72
DC-8 EXP
B
F PH3.4
D 15.0
G 69
FR 34
DR 120
iTouch
iClear 4
Echo Boost
EDV = 70.26 ml
ESV = 28.61 ml
EF = 59.28 %
97/167
1/s L Strain R
MVC
AVC
MVC'
ALAX
A2C
A4C
PSAXB
PSAXM
PSAXAP

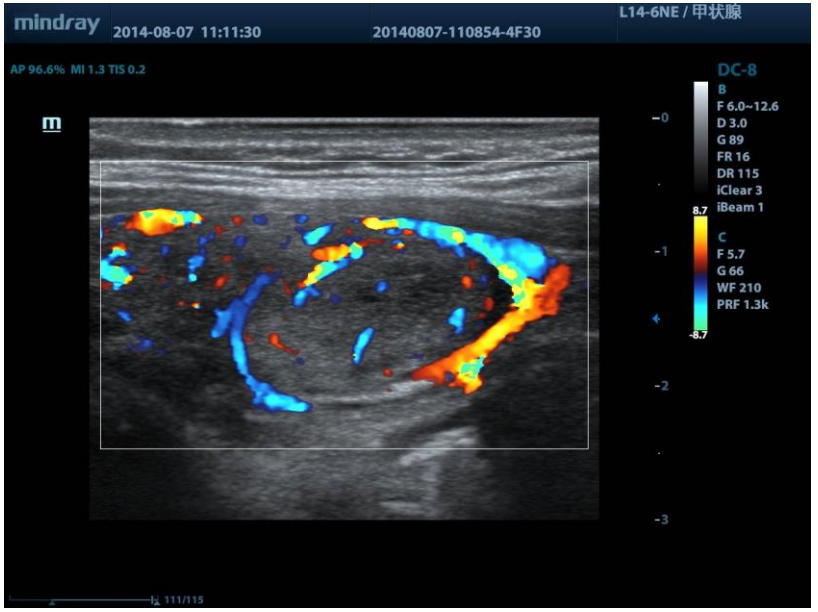

mindray
19-09-2014 15:36:51
wu
20140919-153600-CA26
SP5-1E / Adult Cardiac
AP 96.6% MI 0.3 TIS 0.4
DC-8 EXP
B
F H3.4
D 15.0
G 57
FR 124
DR 120
iClear 4
Echo Boost
TVI
F T3.8
G 60
WF 0
PRF 1.4k
14.4
-14.4
TVD
F 4.0
WF 146
G 0
SVD 73.3
SV 4.0
PRF 2.6k
Angle 0°
0m/s
3.8/3.8


mindray
18-09-2014 16:56:44
20140918-163721-359F
SP5-1E / Adult Cardiac
AP 96.6% MI 0.8 TIS 1.4
HR 68
DC-8 EXP
B
F H3.4
D 15.0
G 69
FR 19
DR 120
iTouch
iClear 4
Echo Boost
C
F 2.3
G 60
WF 660
PRF 4.0k
66.0
-66.0
22/86

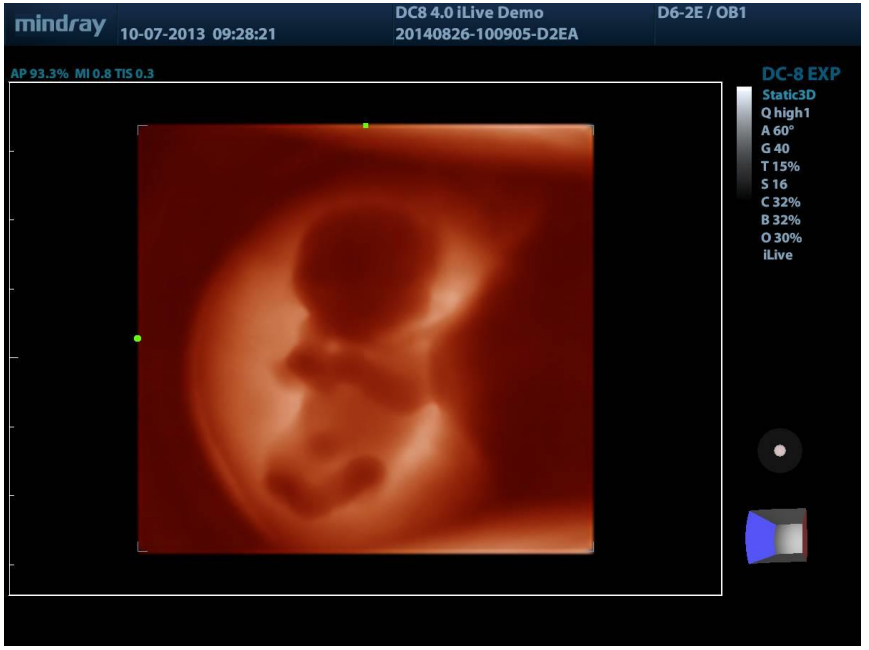

mindray
2014-07-21 09:31:00
20140721-092403-4F30
SC5-1E / 成人腹部
AP 96.6% MI 1.0 TIC 0.6
DC-8
B
F H4.0
D 13.0
G 67
FR 29
DR 115
iClear 3
iBeam 1
M
149/149

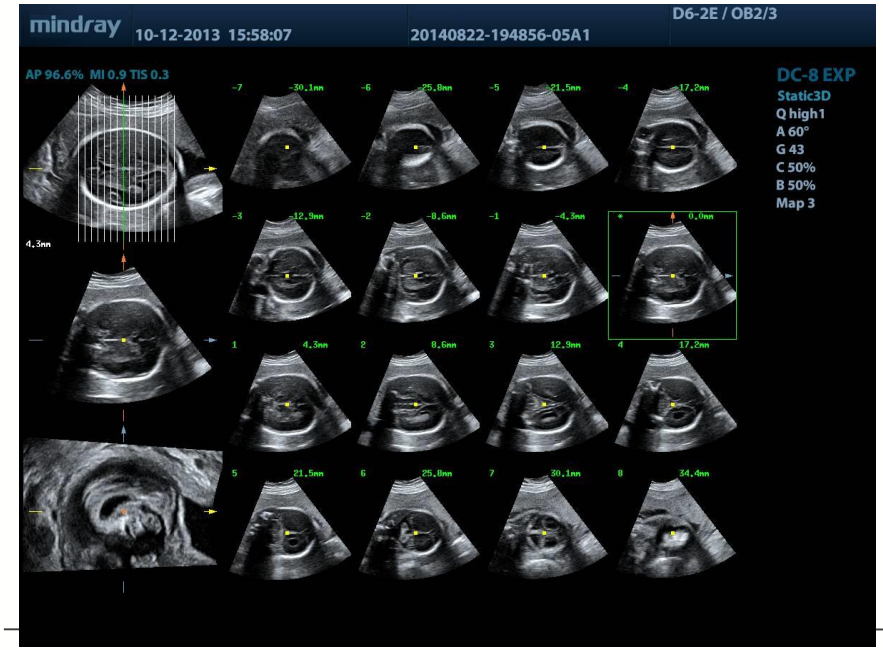

mindray
2014-08-04 09:27:03
20140804-092145-4F30
SC5-1E / 成人腹部
AP 96.6% MI 1.2 TIC 0.5
DC-8
B
F H4.0
D 10.0
G 63
FR 9
DR 115
iClear 3
C
F 2.5
G 80
WF 308
PRF 1.9k
28.9
-28.9
M
23/23

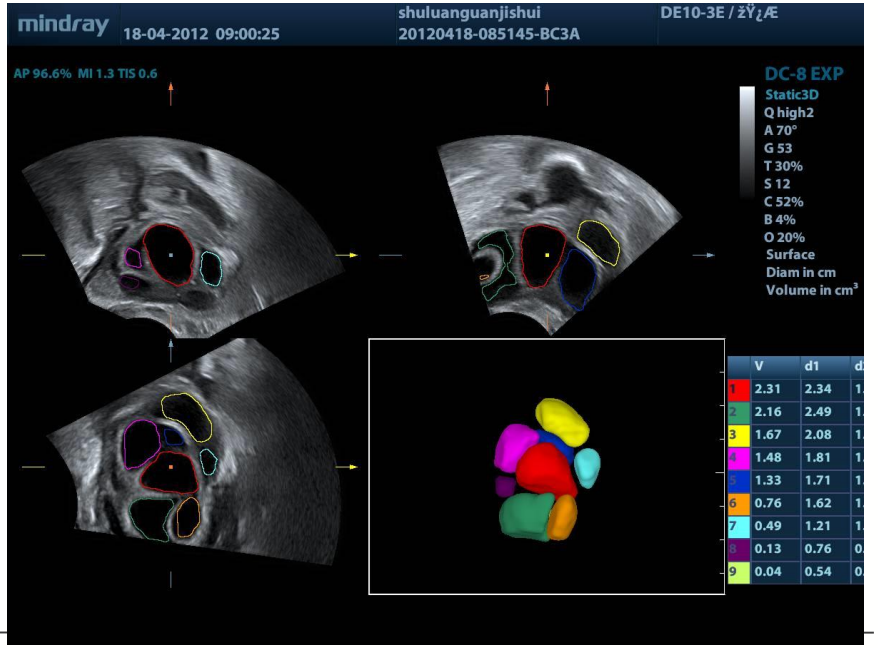

mindray
29-08-2014 16:40:32
20140829-144819-0000
LM14-6E / Nerve
AP 96.6% MI 0.7 TIS 0.1
DC-8 EXP
B
F 6.0~12.6
D 1.5
G 50
FR 49
DR 110
iClear 3
iBeam 1
soft
hard
E
Map E1
OP 3
93/100


mindray
2014-08-07 11:11:30
20140807-110854-4F30
L14-6NE / 甲状腺
AP 96.6% MI 1.3 TIS 0.2
DC-8
B
F 6.0~12.6
D 3.0
G 89
FR 16
DR 115
iClear 3
iBeam 1
C
F 5.7
G 66
WF 210
PRF 1.3k
8.7
-8.7
111/115


mindray
24-09-2013 16:24:21
20140822-194856-05A1
D6-2E / OB2/3
AP 96.6% MI 0.9 TIS 0.4
DC-8 EXP
Static3D
Q high1
A 60°
G 43
T 25%
C 50%
B 60%
O 40%
X Ray


mindray
10-07-2013 09:28:21
DC8 4.0 iLive Demo
20140826-100905-D2EA
D6-2E / OB1
AP 93.3% MI 0.8 TIS 0.3
DC-8 EXP
Static3D
Q high1
A 60°
G 40
T 15%
S 16
C 32%
B 32%
O 30%
iLive


mindray
10-12-2013 15:58:07
20140822-194856-05A1
D6-2E / OB2/3
AP 96.6% MI 0.9 TIS 0.3
DC-8 EXP
Static3D
Q high1
A 60°
G 43
C 50%
B 50%
Map 3


mindray
18-04-2012 09:00:25
shuluanguanjishui
20120418-085145-BC3A
DE10-3E / žŸ¿Æ
AP 96.6% MI 1.3 TIS 0.6
DC-8 EXP
Static3D
Q high2
A 70°
G 53
T 30%
S 12
C 52%
B 4%
O 20%
Surface
Diam in cm
Volume in cm³
V d1
1 2.31 2.34
2 2.16 2.49
3 1.67 2.08
4 1.48 1.81
5 1.33 1.71
6 0.76 1.62
7 0.49 1.21
8 0.13 0.76
9 0.04 0.54

mindray

# Thank you!