

# the next level in women's health ultrasound imaging

## Fetal Heart Imaging

Congenital heart disease (CHD) in infants is a challenging issue, with structural cardiac anomalies often missed by prenatal ultrasound. To help improve detection rate, we offer a sophisticated fetal heart imaging package that goes beyond routine screening. It gives you clear visibility and the valuable insights you need to make informed decisions for a better patient outcome.

#### Observe blood flows in greater detail with 3D-like Glossy mode

Our highly sensitive Colour Doppler, Power Doppler, eFLOW or DFI modes deliver crystal-clear visualisations of large and small vessels in the fetal heart. And by adding our new 3D-like Glossy mode, you can further simplify your understanding of both the structural anatomy and the positional relationship of the great vessels inside the heart. In fact, you can capture even the tiniest vessel signals – and detect pathologies like septal defect or stenosis.

#### Visualise, quantify and analyse the complete myocardial function

Get advanced quantitative measurements of the cardiac wall movement with our 2DTT speckle tracking technology. You can assess various parameters for strain, volume and thickness, including: global longitudinal strain (GLS) and strain rate; cardiac size and shape; myocardial contractility; torsion or displacement; and wall thickening.

#### Reconstruct heartbeats in any cross section from any angle to evaluate fetal heart health in 3D

Ease the challenge of fetal heart scanning by studying the data offline – in any arbitrary section, and in multiple slices of the images obtained with STIC. By using 3D and 3D colour to evaluate the position of the arteries, aortic arch, or pattern of the aorta, you're less likely to miss any defects. And if you do detect an abnormality, you can study its structure in detail using the same data.

### Get stable Doppler measurements to assess cardiac function and diagnose fetal arrhythmia

Assess the E/e' index to see if fetal myocardial functionality matures as expected; and compare flows in real time to diagnose fetal arrhythmia. Our Dual Gate Doppler measures in two different locations during the same heartbeat – and can display two vessels in the same image. It's easy to operate and delivers reliable results.







**) women's** + health



#### the next level in women's health ultrasound imaging

#### Assess myocardial velocities and evaluate the cardiac cycle in real time or offline

Employ Doppler measurements to cardiac muscle walls with TDI. You can get a deeper insight into the cardiac cycle with comprehensive information like velocity, displacement or deformation; and you can analyse the data – under the aspect of synchronicity for example – also at an offline workstation.

#### Obtain automated measurements when monitoring fetal heart

Save time, reduce operator dependency and get real-time, reliable information by benefitting from latest technologies. For example, you can monitor the fetal heart rate with one single click on the B-mode image in real time. Or speed up your functional assessment through an automatic measurement of fractional shortening.



women's health



#### Hear from others!



Lecture by Prof. Dr. Julene Carvalho Advanced fetal heart examinations and cardiac function assessment



Live Scan by Prof. Dr. Julene Carvalho Fetal heart examinations and cardiac function assessment