Vevo LAZR Ultrasound Component:

Vevo 2100 high-frequency ultrasound system offers real-time non-invasive imaging with high resolution (down to 30 micrometers) and multiple focal zones in 2D anatomical modes. Imaging in 3D mode allows accurate quantification of 3D volume. Doppler ultrasound is used to determine the velocity of moving fluids (Pulse Wave, Color, and Power modes) or tissue (Tissue Doppler mode). Contrast Imaging Mode in 2D and 3D coupled with Vevo Advanced Contrast Quantification Software and non-targeted and targeted contrast agents (microbubbles) allows blood perfusion and molecular imaging analysis *in vivo*, in real-time.

Applications:

(Image 1)

M-Mode:
Visualization and quantification of left ventricular wall motion and thickness in cardiovascular research

(Image 2)

PW Doppler of Mitral Flow and Tissue Doppler of Myocardial Wall Movement:
Assessment of diastolic function

(Image 3)

Color Doppler and PW Modes:
Accurate identification of blood vessels (pulmonary, coronary, renal, mesenteric, uterine, and umbilical arteries) and blood flow velocities measurements.

(Image 4)

Contrast Mode:
Tissue perfusion assessment (heart, kidneys, placenta, hindlimb).