**TRENDS & TECHNOLOGY**

**Continuous NIBP Monitoring**

The NIBP100D noninvasive blood pressure system provides continuous, beat-to-beat, blood pressure signal and values (Sys, Dia, MAP) and Pulse Rate (PR). The system outputs a continuous blood pressure waveform that is similar to a direct arterial pressure waveform. The monitor displays values for systolic, diastolic, mean blood pressure, and heart rate.

[Image: Continuous NIBP Monitoring]

https://www.biopac.com/product/noninvasive-blood-pressure-amplifier/

**Echo Nous Vein Finder**

EchoNous Vein ultrasound for peripheral IV catheterization can visualize veins up to five cm deep and can be used on both children and adults.

The transducer probe connects to a Samsung tablet, which serves as the display and control device with only two on-screen buttons (depth/gain) to manipulate during a scan.

[Image: Echo Nous Vein Finder]

www.echonous.com

**Ultrasound with ShearWave PLUS Elastography**

SuperSonic Imagine, a French firm, has announced that its Aixplorer MACH 30 ultrasound has been cleared in the U.S. and Europe. The system works as a traditional high power ultrasound, but also features the company’s elastography technology called ShearWave PLUS that measures tissue elasticity, or stiffness, in 3D. Elastography is now commonly used for identifying mammary and hepatic lesions and helping to grade breast and liver cancers.

https://www.supersonnicimagine.com/Aixplorer-R/Aixplorer-Mach-30

**Wireless, App-Based Ultrasound**

Healcerion, based in South Korea, was the first company to receive FDA clearance for a wireless, app-based ultrasound system back in 2015. Their latest, the SONON 300L linear transducer, weighs only 13 ounces (370 grams) including the battery, and features color Doppler mode for easier musculoskeletal (MSK), vascular, small parts (breast, thyroid), lung, and other types of imaging.

[Image: Wireless, App-Based Ultrasound]

www.echonous.com

**Neuromuscular Blockade Monitor**

Blink Device Company, of Seattle, Washington, has introduced its TwitchView neuromuscular blockade monitor. The system quantifies the depth of a neuromuscular blockade under anesthesia using electromyography (EMG). It includes a monitor, charging dock, and single use electrode arrays. The arrays can be placed on either hand and a button begins “train-of-four” monitoring. The data collected and produced by the device is easily transferred directly into the hospital’s electronic medical record.

https://www.blinkdc.com/twitchview

**4Dx for Lung Function Testing**

Using principles of air flow dynamics and applying them to data from a simple X-ray, the company’s algorithms can calculate the amount of air that each area of the lung is receiving. This generates a moving, color-coded visual of a patient’s breathing lung.

https://4dx.com/

**Defibrillator Pads with Needles**

The skin is a major barrier to the flow of electric current, with an impedance of about 500 kilo ohms /cm², necessitating the use of high power devices. Rice University students made an add-on device to improve the delivery of current toward the heart.

The Zfib device is a 3D printed pad with 180 microneedles on its bottom side. It interfaces with existing defibrillator electrode pads, transmitting their current through the needles.

http://oedk.rice.edu/Sys/PublicProfile/41415896/4330110