Major Steps Forward in Image-Guided Procedures

Ultrasonix and Ascension Introduce New Ultrasound Guidance Products at SIR 2012

RICHMOND, BC, CANADA AND BURLINGTON, VERMONT, USA; MARCH 19, 2012 – Tight integration of Ascension’s magnetic sensors with Ultrasonix’s SonixTablet and SonixGPS Positioning System is expanding point-of-care procedures to new medical frontiers. At SIR (Booth #501), the companies will demonstrate the capability of ultrasound-sensor guidance to expedite nerve blocks, vascular access, central line placement, core biopsies of small organs, and fine needle aspiration.

In the last year, Ascension has developed a new generation of disposable sensors and integrated them in interventional instruments for use with Ultrasonix’s recently released compact ultrasound platform.

With SonixGPS, a clinician can now position a transducer in the ideal location to find an internal target and select the direction and angle of an interventional instrument that is safest and most comfortable for the patient. Whether in–plane or out-of-plane, the system’s display shows the projected trajectory and true path of the instrument in real-time.

The inclusion of a miniaturized tracking sensor inside the ultrasound transducer and in the tip of the instrument, such as a needle, catheter, or guidewire, along with visualization software, makes it all possible. Tracking data allows the clinician to always see with certainty where the needle will intersect the ultrasound plane.

Importantly these procedures can now be performed without X-rays or fluoroscopy.
At SIR, Ultrasonix and Ascension will demonstrate two of these new image-guided procedures:

- **Small Needle Tracking.** A six degrees-of-freedom magnetic sensor integrated into the tip of a 20-gauge needle. Once integrated with Ultrasonix SonixGPS ultrasound platform, it becomes an ideal interventional tool for nerve blocks, vascular access procedures, core biopsies, fine needle aspirations, as well as other procedures demanding high accuracy and experience.

- **Placement of Central Lines.** A five degrees-of-freedom sensor integrated into the tip of a guidewire with an outer diameter of 0.55 mm (0.021 inch) has been developed to clearly see ultrasound images for PICC and CVC line access. From cannulation to localization in the patient’s superior vena cava, the guidewire tip can be accurately threaded through the internal venous anatomy to its ideal placement location. (Guidewire tracking is a technology demonstrator at SIR 2012; not presently available for general use.)

According to Ascension vice president, Jack Scully, “Our company is committed to developing enabling sensor technology for the next great progression in medicine: image-guided procedures. We are pleased to support Ultrasonix’s vision of high quality, affordable ultrasound-guided procedures, starting with long needle and guidewire procedures.”

**About Ultrasonix**

Ultrasonix ([www.ultrasonix.com](http://www.ultrasonix.com)) develops and manufactures diagnostic ultrasound systems designed to make ultrasound easy to use in more areas of patient care. With large monitors and premium image quality, its systems are ideal for guiding interventional procedures. Founded in 2000, Ultrasonix is based in British Columbia, Canada.

**About Ascension**

Ascension Technology ([www.ascension-tech.com](http://www.ascension-tech.com)) makes magnetic and optical trackers, for image-guided procedures. Its micro-miniaturized magnetic sensors are key enabling technology for ultrasound–guided interventions ranging from fusion and volumetric measurement to biopsy and ablation. Founded in 1986, Ascension is located in Burlington, VT, USA.