Burlington, VT (February 22, 2012) – Seattle-Washington based VentriPoint is using Ascension’s trackers to create detailed 3D images of the heart’s chambers – helping improve speed and accuracy in monitoring patients with congenital heart disease.

Examining the volume, shape and function of the heart’s ventricles is critical in monitoring of congenital heart disease, including heart defects in newborns. Children and adults need to be carefully followed throughout their lives to determine how and when to operate, and what types of treatments will be most effective. The use of ultrasound greatly improves the speed and convenience of the examination compared to the standard-of care, which is cardiac magnetic resonance imaging (MRI).

VentriPoint has created an ultrasound diagnostic system – the VentriPoint Medical System (VMS) – that aims to improve care for children and other patients with congenital heart disease, at a lower cost and faster pace than MRI. The system has been approved for use in Canada and Europe; VentriPoint is pursuing U.S. FDA approval.

The system takes 2D ultrasound images of the heart, and uses an Ascension magnetic sensor, located on the ultrasound probe, to provide the 3D spatial coordinates of each 2D image. The user then utilizes the VMS system to identify key anatomical landmarks on the 2D images, marking those landmarks with dots. The dots, along with the 3D spatial coordinates, are then sent to the VentriPoint Server, where a precise 3D model of the heart is created through a process known as knowledge-based reconstruction.

VentriPoint chose Ascension Technology for this application due to the high accuracy of its 3D measurements and the fact that Ascension sensors are immune to the small amounts of metal found in the ultrasound transducers. “When we compared different tracking systems, we found the Ascension system was the only one that provided the accuracy required in a medical environment,” said Scott Ashley, VentriPoint Vice President of Research and Development. “Of the systems we tested, the Ascension tracking technology had the smallest error in positional and angular location. It allows us to create 3D volumes from 2D cardiac images that are the most accurate in the field.”
While the VentriPoint system’s initial application is for congenital heart disease, the company plans to expand its use for other pervasive heart conditions, including pulmonary hypertension, heart failure, and coronary artery disease.

**About Ascension**
Ascension makes 3D guidance devices for instrument navigation in image-guided surgery, ultrasound fusion, biopsy, ablation, and other minimally invasive procedures. Its magnetic and optical trackers close the loop between graphical displays and real-time movement in biomechanics, simulation and training, control systems, real-time visualization and computer animation. Its newest generation of 3D tracking products include: driveBAY, trakSTAR, medSAFE, trakBAR, and spotLIGHT.

**About VentriPoint**
VentriPoint is a medical device company focusing on cardiology. It has created a diagnostic ultrasound tool to monitor patients with heart disease, a leading cause of death in developed countries. The VentriPoint Medical System -- VMS™ -- is a cost-effective and accurate diagnostic tool for measuring right ventricle heart function. Canada and Europe (CE Mark) have granted approval for the sale of its VMS™ diagnostic tool and the company is pursuing the US-FDA approval through the 510(k) process.