



The Sensei® X Robotic Catheter System Background Information

The Sensei® X Robotic Catheter System is Hansen Medical's next generation flexible, robotic platform that integrates advanced levels of 3D catheter control with 3D visualization, a synergistic technology combination that provides accuracy and stability to the physician during catheter based electrophysiology (EP) procedures.

The Sensei X system is designed to work with the newest generation Artisan Extend™ Control Catheter, allowing physicians to place mapping catheters in hard-to-reach anatomical locations within the heart easily and with stability during the diagnostic phase of cardiac arrhythmia treatment. The Artisan Extend offers an eight French thru-lumen that accommodates pre-approved percutaneous catheters during EP procedures. In addition, the Artisan Extend increases the accessibility and navigation features of the existing Artisan catheter, offering more than 20 percent improvement in both bend and reach.

The Sensei X platform also supports IntelliSense® Fine Force Technology interface. This capability measures the forces on the proximal end of the catheter, which is an important advance because evidence suggests a link between force and map quality.¹ In addition, IntelliSense technology includes a tactile vibration feature so the user feels a measurement of the force through vibration of the Instinctive Motion™ Controller (IMC). IntelliSense utilizes advanced processing to ignore frictional drag forces and discerns small variations in force in order to provide reliable feedback to the physician, which is delivered in clear, instinctive tactile and visual formats.

The CoHesion™ 3D Visualization Module, which integrates the 3D motion control of the Sensei X system with the 3D visualization of the St. Jude Medical EnSite™ system to provide clinical confidence in catheter placement, is an integral feature of the Sensei X platform. By combining the accuracy of 3D catheter control with the visual guidance of 3D electroanatomical mapping, the physician's hand motion at the workstation is translated to the control catheter inside the patient's heart utilizing the system's proprietary Instinctive Motion™ control technology. Physicians are able to use anatomic data of the 3D on-screen map as a guide for their hand motions because the IMC is moved in the direction of the desired anatomic target and the Artisan Extend catheter replicates that hand motion inside the patient's heart. As a result, fluoroscopy time may be reduced during procedures as well as overall procedure time, as evidenced by certain limited physician data. In addition, the Sensei X platform's advanced navigation features may reduce the physician's learning curve and improve procedure workflow.

By offering physicians a robotic platform with advanced 3D catheter control and 3D visualization, the Sensei X system makes it possible for more physicians to perform catheter-based EP procedures with accuracy and clinical confidence. As a result, numerous patients worldwide could benefit from this sophisticated robotic platform.

¹ Okumura Y, Johnson S, Packer D. An analysis of catheter tip/tissue contact force induced distortion of three-dimensional electroanatomical mapping created using the Sensei Robotic Catheter System. *Heart Rhythm* 2007; 4:S318

The safety and effectiveness of this system for use with cardiac ablation catheters in the treatment of cardiac arrhythmias, including atrial fibrillation, have not been established.

Hansen Medical, Heart Design, Hansen Medical & Heart Design, Sensei, IntelliSense, and Fine Force Technology are registered trademarks, and Artisan, Artisan Extend, Lynx, CoHesion, and Instinctive Motion are trademarks of Hansen Medical, Inc. in the United States and other countries.
EnSite is a trademark of St. Jude Medical.

#

Media Contact:

Amy Cook
925.552.7893
amy_cook@hansenmedical.com

Investor Contacts:

Peter Osborne
650.404.5800
peter_osborne@hansenmedical.com

Lasse Glassen
Financial Relations Board
213.486.6546
lglassen@mww.com