

OPSENS ANNOUNCES THE POSITIVE CLINICAL RESULTS FROM THE SAFE-TAVI STUDY WITH SAVVYWIRE IN EUROPE

Quebec City, Quebec, October 23, 2023 – OpSens Inc. ("OpSens" or the "Company") (TSX:OPS) (OTCQX:OPSSF), a medical device cardiology-focused company delivering innovative solutions based on its proprietary optical technology, today announced the positive results of the SAFE-TAVI Clinical Study (SavvyWire[®] Efficacy and Safety in Transcatheter Aortic Valve Implantation Procedures), which were published in JACC: Cardiology Interventions. Results will also be presented at the Transcatheter Cardiovascular Therapeutics Conference (TCT) later this week.

SAFE-TAVI demonstrated that pacing with the SavvyWire led to a significant reduction of systolic aortic pressure below 60mmHg in 98.3% of patients, along with successful valve positioning in 99.2% patients. In combination with the OptoMonitor 3, the SavvyWire enabled invasive hemodynamic assessment without any additional catheter exchanges in 99.2% patients. From a safety perspective, 99.2% of patients were also free from major complications related to SavvyWire, with only one case of pacing loss due to movement of the wire during deployment.

The clinical results published today will be presented Wednesday morning by Dr. Ander Regueiro, from Hospital Clinic Barcelona, during an emerging clinical science and research session at the TCT in San Francisco. The TCT is an annual scientific symposium of the Cardiovascular Research Foundation (CRF).

The SAFE-TAVI Study, designed by Dr. Josep Rodes-Cabau from the Quebec Heart and Lung Institute (IUCPQ), as the principal investigator, was a prospective, multicenter study to evaluate left ventricular (LV) rapid pacing using SavvyWire in transcatheter aortic valve implantation procedures, in a real-world patient population. The study enrolled 119 patients with severe aortic valve stenosis requiring a TAVI procedure in which left ventricular rapid pacing was considered appropriate. It was conducted in eight renowned centers across Spain, and utilized an independent data and safety monitoring board. OpSens' SavvyWire was used for left ventricular pacing to evaluate the potential benefits of eliminating the need for venous access, reducing procedure time, and avoiding potential complications associated with right ventricular pacing.

"We successfully used the SavvyWire in a large variety of anatomies, implanting valves from all major companies, including Edwards Lifesciences, Medtronic, Abbott, Boston Scientific, and Meril Life." said Dr. Ander Regueiro. "Left ventricular rapid pacing is beneficial to restrict the range of motion of the heart muscle during TAVI for optimal valve placement. The rapid pacing feature is important in SavvyWire's performance in addition to providing real-time, accurate hemodynamic measurement during the TAVI procedure."

"We are honored to partner with Dr. Regueiro, and all the investigators who participated in the SAFE-TAVI study," said Louis Laflamme, President and CEO of OpSens. "We are excited for these excellent, positive results from this real-world study to strengthen the body of evidence and support the ongoing adoption of SavvyWire as the standard of care in LV-pacing.

Learn more about the SAFE-TAVI study here: <u>https://clinicaltrials.gov/ct2/show/NCT05492383</u>.

Results are available at: https://www.jacc.org/doi/epdf/10.1016/j.jcin.2023.10.035.

About OpSens Inc. (<u>www.OpSens.com</u> or <u>www.OpSensmedical.com</u>)

OpSens focuses mainly on cardiology. The Company offers an advanced optical-based pressure guidewire that aims at improving the clinical outcome of patients with coronary artery disease. Its flagship product, the OptoWire, is a second-generation fiber optic pressure guidewire designed to provide the lowest drift in the industry and excellent

lesions access. The OptoWire has been used in the diagnosis and treatment of more than 250,000 patients in more than 30 countries. It is approved for sale in the U.S., the European Union, the United Kingdom, Japan and Canada.

OpSens has received FDA clearance and Health Canada approval to commercialize the SavvyWire for transcatheter aortic valve replacement procedures (TAVI). This unique guidewire is a 3-in-1 solution for stable aortic valve delivery and positioning, continuous accurate hemodynamic measurement during the procedure, and reliable left ventricular pacing without the need for adjunct devices or venous access.

OpSens' SavvyWire is on trend with a minimalist approach to TAVR and advances the procedure, allowing patients to leave the hospital earlier, sometimes the same day.

The TAVR procedure is growing rapidly globally, driven by the aging population and recent studies that demonstrate its benefits for a broader array of patients. The global TAVR market is expected to reach over 400,000 in 2025 and over 600,000 in 2030.

OpSens is also involved in industrial activities in developing, manufacturing, and installing innovative fiber optic sensing solutions for critical applications.

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