



PRESS RELEASE

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OPSENS UNVEILS MEDICAL DEVICE FOR THE FFR MARKET

Development of Easywire Supported by Board of Leading Experts

Quebec City, Quebec, December 20, 2010 – Opsens Inc. (TSX VENTURE EXCHANGE: OPS) (“Opsens”) today unveiled the EasyWire, developed by its medical division for the growth market of Fractional Flow Reserve for coronary lesion assessment.

Fractional Flow Reserve (FFR) is an index of the functional severity of a coronary stenosis that is calculated from pressure measurements taken before and after a narrowing of the arteries during coronary arteriography. This increasingly used approach enables an “on the spot” diagnosis for a better assessment as to whether a stent is an appropriate intervention to improve blood circulation in the cardiovascular system.

A 2009 study, “Fractional Flow Reserve vs. Angiography for Multivessel Evaluation”, published in the New England Journal of Medicine, found that a stent was not always an appropriate intervention, and its overuse was actually doing patients more harm than good in some cases. Patients of doctors using FFR had fewer stents used and better outcomes overall, the study found.

“The FAME study has been influential in the adoption of FFR as a technique for assessing patients,” said Claude Belleville, VP Medical of Opsens. “The FFR market, while in its early stages, has been growing exponentially as doctors understand the potential for improved patient outcomes.”

“The FFR market represents a real and significant opportunity for Opsens and its shareholders,” said Pierre Carrier, Opsens President and CEO. “We intend to fully exploit this opportunity through the aggressive development of EasyWire through the stages of animal and human testing, and then commercialization.”

Scientific Advisory Board

To support the development and refinement of Easywire, Opsens is supported by a team of experts in the field of FFR and clinical research to form a scientific advisory board, composed of Drs. Morton Kern, Olivier F. Bertrand and Michael J. Lim. These leading cardiologists are advising the Company on the development, clinical studies and commercialization of EasyWire.

Dr. Kern, of Orange, California, is an interventional cardiology and internal medicine specialist focused more precisely on heart and cardiovascular diseases, and is respected as one of the most foremost experts on FFR in the world. His clinical interests lean towards coronary angioplasties and stenting, physiology and intravascular sonograms, and cardiovascular hemodynamic. He has authored several major textbooks, one of which is the leading book on cardiac catheterization, entitled “The Cardiac Catheterization Handbook”, which is used internationally to train physicians.

Dr. Bertrand, of Quebec City, Quebec, is an interventional cardiologist and researcher with the Quebec Heart-Lung Institute, affiliated to Laval University. He is active in clinical research, particularly in the field of intervention and treatment of coronary cardiac diseases. He acts as principal investigator of clinical trials and is also the initiator of several original projects of clinical research (investigator-initiated trials) on a worldwide scale. He has a PhD in experimental medicine from McGill University in Montreal, among his educational achievements. Dr. Bertrand is widely published, counting 125 articles and 13 book chapters to his credit.

Dr. Lim, of St. Louis, Missouri, is the acting director of the Cardiology Division at Saint Louis University, where he also serves as the director of the Cardiac Catheterization Laboratory. He is also the co-chairman of the acute myocardial infarction treatment improvement team, and the Saint Louis University Hospital EMS advisory board. He currently performs diagnostic and percutaneous coronary and vascular interventions in the J. Gerard Mudd Cardiac Catheterization Laboratory at Saint Louis University Hospital. His research interests include acute coronary syndromes and interventional physiologic coronary assessment.

Opsens director **Steven Arless** will work together with the advisory board. Mr. Arless has over 35 years of international marketing and sales experience in the medical devices and pharmaceutical industries, including 17 years at Smith & Nephew Inc., and 10 years as President and CEO of CryoCath Technologies Inc. He is currently CEO of CardiInsight Technologies Inc., a Cleveland-based company developing and commercializing cardiovascular technology.

EasyWire for the Measurement of Fractional Flow Reserve

Opsens' product, EasyWire, is a miniature catheter that slides over a vast variety of guide wires. EasyWire provides a no-drift, highly accurate and reliable measurement of blood pressure in coronary arteries and gives cardiologists the freedom to use their favourite guide wire. With EasyWire the cardiologist can reach the area under investigation faster and easier than with other products on the market, simplifying the procedure.

"In the same way that an artist has preferred brushes, cardiologists have guide wires that have the right feel for them. Unlike other FFR devices on the market, EasyWire concept allows doctors to use their preferred guide wire, at the same time giving them the benefit of having optical pressure sensing," said Dr. Bertrand.

Opsens has filed a patent application for the EasyWire, "Eccentric Pressure Catheter with Guidewire Capability". A US patent for the fiber optic pressure sensor used within the EasyWire was also recently granted to Opsens. The monitoring technology used in the EasyWire is based on the same patented White-Light Polarization Interferometry technology used in Opsens' oil and gas OPP-W systems. The company is developing both arms of the business in parallel, exploiting potential in both markets for its unique fiber optic sensing technology.

About Opsens (www.opsens.com)

Opsens is a leading developer, manufacturer and supplier of a wide range of fiber optic sensors and associated signal conditioners based on proprietary patented and patent pending technologies. Opsens' sensors provide long-term accuracy and reliability in the harshest environments. Opsens provides sensors to measure pressure, temperature, strain and displacement to original equipment manufacturers (OEM) and end-users in the oil and gas, medical and laboratory fields. Opsens provides complete technical support, including installation, training, after-sales service, for its fiber optics systems that are regulated by the ISO 9001-2008 norm.

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For further information, please contact:

Pierre Carrier

President and Chief Executive Officer

Tel: 418.682.9996

Louis Laflamme, CA

Chief Financial Officer

Tel: 418.682.9996