

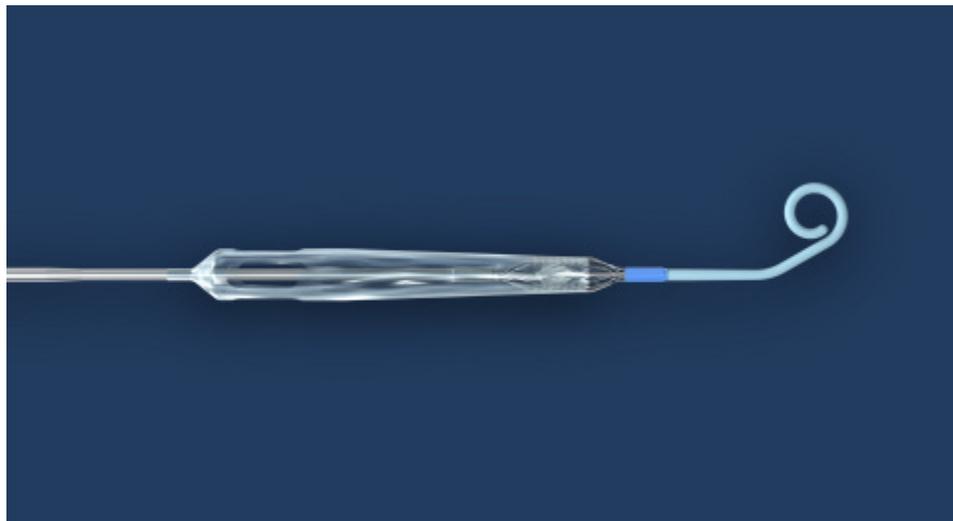


First Patients Treated with the World's Smallest Heart Pump, the 9Fr Impella ECP

October 28, 2020

DANVERS, Mass.--(BUSINESS WIRE)--Oct. 28, 2020-- [Abiomed](#) (NASDAQ: ABMD) announces the first two patients have been treated with the Impella ECP expandable percutaneous heart pump. Impella ECP is the smallest heart pump in the world. It measures 9 French (Fr) (3 millimeters) in diameter upon insertion and removal from the body. While in the heart, it expands while supporting the heart's pumping function, providing peak flows greater than 3.5 L/min.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20201028005398/en/>



The first Impella ECP patient was treated by Amir Kaki, MD, an interventional cardiologist and director of mechanical circulatory support at Ascension St. John Hospital in Detroit, part of Ascension Michigan. The patient had severe narrowing of his coronary arteries. Dr. Kaki successfully opened the patient's arteries by performing several percutaneous interventions with support from Impella ECP including atherectomy and two one-minute long balloon inflations.

The second patient was treated at The Christ Hospital in Cincinnati by Timothy Smith, MD, an interventional cardiologist and director of cardiovascular intensive care unit, cardiogenic shock and ECMO programs. The patient had severe narrowing of the coronary arteries, including complex left main bifurcation disease and low ejection fraction. Percutaneous coronary intervention was

Impella ECP is the world's smallest heart pump. (Graphic: Business Wire)

successfully performed with support from Impella ECP.

"Ascension St. John Hospital is pleased to be the heart center leading this patient milestone as part of the early feasibility study of the smallest heart pump in the world," said Dr. Kaki. "This new technology allows for a less invasive approach which may ultimately lead to better healing and recovery."

"This groundbreaking technology will help more physicians provide critical hemodynamic support to patients who need it," said Dr. Smith. "In the patient we treated, Impella ECP enabled the procedure by providing hemodynamic stability while we treated complex disease in a patient with low ejection fraction."

Impella ECP is being studied under a U.S. Food and Drug Administration (FDA) early feasibility study. It is designed to provide temporary circulatory support and left ventricular unloading in patients undergoing a high-risk PCI. Impella ECP is delivered through a slender profile 9Fr sheath. It is un-sheathed in the descending aorta and expands. Then, using a specially designed pigtail, it crosses the aortic valve without a wire, and pumps from inside the left ventricle. When the procedure is complete, the pump is re-sheathed back down to 9Fr and removed.

"Impella ECP is part of Abiomed's commitment to continually innovate, patent new breakthroughs, and improve patient outcomes by developing smaller, smarter, and more connected technology," said Michael R. Minogue, Abiomed's Chairman, President and Chief Executive Officer.

The primary endpoint of the FDA early feasibility study is successful delivery, initiation and maintenance of adequate hemodynamic support and a composite rate of major device-related adverse events during high-risk PCI. The study protocol will enroll and treat up to five U.S. patients who require revascularization. If successful, enrollment will be expanded to additional patients, pending FDA approval.

Impella ECP is an investigational device, limited by federal law to investigational use only.

ABOUT ABIOMED

Based in Danvers, Massachusetts, USA, Abiomed, Inc. is a leading provider of medical devices that provide circulatory support. Our products are designed to enable the heart to rest by improving blood flow and/or performing the pumping of the heart. For additional information, please visit: www.abiomed.com.

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FORWARD-LOOKING STATEMENTS

Any forward-looking statements are subject to risks and uncertainties such as those described in Abiomed's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

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