

**THORATEC ANNOUNCES DEVELOPMENT AGREEMENT WITH
WITRICITY FOR PROPRIETARY ENERGY TRANSFER TECHNOLOGY**



(PLEASANTON, CA), May 10, 2011—Thoratec Corporation (NASDAQ: THOR), a world leader in device-based mechanical circulatory support therapies to save, support and restore failing hearts, today announced a technology development agreement with WiTricity Corporation relating to WiTricity's proprietary wireless resonant energy transfer technology for application in the field of mechanical circulatory support.

Through a collaborative effort over the past nine months, Thoratec and WiTricity engineers have demonstrated the ability to transfer power wirelessly to a HeartMate II® LVAD in order to start and run the pump in a setting that replicates the Fully Implantable Ventricular Assist System (FILVAS) application. Under the announced development agreement, Thoratec will provide funding to WiTricity to further optimize its technology for use in a fully implantable HeartMate II system. The agreement provides Thoratec with an option, exercisable at the completion of the development phase, to license the WiTricity technology for incorporation into the company's broader FILVAS program, initially targeted for the HeartMate II platform but with potential future applications in Thoratec's next-generation pump platforms, including HeartMate III and HeartMate X.

"We've been extremely impressed with the WiTricity team and core technology," said Laxmi Peri, Thoratec's vice president of research and development. "In particular, we believe the technology can enable user-friendly transcatheter energy transmission in a FILVAS setting, obviating the need for close coupling and perfect alignment between the system components," he added.

WiTricity's proprietary technology enables safe, high-efficiency wireless energy transfer, through the use of proprietary resonant coils, with potential applications in numerous industries. By precisely matching and controlling the resonant frequencies of the two coils, the system enables energy to be transferred safely, with minimal loss to extraneous or off-resonant objects. In the FILVAS setting, a power source coil would be positioned outside of the body, and a power capture coil would be implanted with the ventricular assist device. Importantly, this technology could enable the placement of the external coil some distance away from the implanted coil, thus overcoming one of the historical obstacles of a FILVAS: the need for a very close and precise coupling of the coils.

"We're excited to partner with WiTricity in order to advance the HeartMate II, representing best-in-class LVAD technology with over 7,000 implants worldwide, into a fully implantable system. This partnership should allow Thoratec to better serve the patient population treated with ventricular assist devices, by reducing adverse events and dramatically improving quality of life for patients with advanced heart failure," said Gary Burbach, president and chief executive officer of Thoratec.

The terms of the agreement were not disclosed.

About WiTricity

WiTricity Corporation designs, develops, manufactures, and markets technology for wireless energy transfer. Founded in 2007, the company is commercializing patented technology invented by a team of world renowned MIT physicists. This technology utilizes magnetism to transfer energy without wires in a way that is safe, efficient, and that works over distance. For more information, visit <http://www.witricity.com>.

About HeartMate II

The Thoratec HeartMate II Left Ventricular Assist Device (LVAD) is a mechanical circulatory support (MCS) device intended for a broad range of advanced-stage heart failure patients. HeartMate II is designed to restore blood flow and to improve survival, functional status, and quality of life. The HeartMate II, implanted alongside a patient's native heart, is designed to take over the pumping ability of the weakened heart's left ventricle, which is responsible for pumping oxygen-rich blood from the lungs throughout the body. HeartMate II is the only continuous flow LVAD that is FDA approved for both bridge-to-transplantation and destination therapy, or long-term, support.

About Thoratec

Thoratec is a world leader in therapies to address advanced-stage heart failure. The company's products include the HeartMate LVAS and Thoratec VAD, with more than 18,000 devices implanted in patients suffering from heart failure. Thoratec is headquartered in Pleasanton, California. For more information, visit the company's web site at <http://www.thoratec.com>.

Thoratec, the Thoratec logo, HeartMate and HeartMate II are registered trademarks of Thoratec Corporation and IVAD is a trademark of Thoratec Corporation.

Many of the preceding paragraphs, particularly but not exclusively those addressing the company's current expected timelines for product development, clinical trials and commercialization, contain forward-looking statements within the meaning of Sections 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements can be identified by the words, "believes," "views," "expects," "plans," "projects," "hopes," "could," "will," and other similar words. Forward-looking statements should not be read as a guarantee of future performance or results, and may not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Investors are cautioned that all such statements involve risks and uncertainties, including risks related to regulatory approvals, customer and physician acceptance of Thoratec products and the effects of healthcare reimbursement and coverage policies. Forward-looking statements contained in this press release should be considered in light of these factors and those factors discussed from time to time in Thoratec's public reports filed with the Securities and Exchange Commission, such as those discussed under the heading, "Risk Factors," in Thoratec's most recent annual report on Form 10-K and in Thoratec's first quarter 2011 quarterly report on Form 10-Q, and as may be updated in subsequent SEC filings. These forward-looking statements speak only as of the date hereof. Thoratec undertakes no obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events.

Media Contact:

Susan Benton Russell
Benton Communications
(310) 697-3488

Investor Contacts:

Taylor Harris
Senior Director, Investor Relations & Business Development
(925) 738-0047

or

Neal B. Rosen
Ruder-Finn
(415) 692-3058