WiTricity has just announced its partnering with a medical company Thoratec Corporation, which is a world leader in device-based mechanical circulatory support therapies to save, support and restore failing hearts. They are partnering to integrate their technology into the field of mechanical circulatory support. Through this collaboration the two companies have been able to wirelessly transfer power to a HeartMate II LVAD, which helps to start and run the pump in a setting that replicates the Fully Implantable Ventricular Assist System. The agreement the two companies have come to is that Thoratec will provide funding to WiTricity to help further the development of this technology so soon it will be able to be implemented. The agreement gives Thoratec the option to license the technology that they would then incorporate into the companies broader FILVAS program. The program is targeted for the HeartMate platform but has the potential to be included in future generations of heart pumps. Thoratec's Vice President Laxmi Peri, said he believes “the technology can enable user-friendly transcutaneous energy transmission in a FILVAS setting, obviating the need for close coupling and perfect alignment between the system components.”

As we know 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 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 this case a power source will be placed outside the body, and a power capture coil would be implanted in the ventricular assist device. The technology enables the external coil to be placed a decent distance away, which is helping to eliminate one of the previous obstacles of the monitor needing to be close to the coils to ensure the coupling.