

World First: CorWave's Undulating Membrane Heart Pump Implanted in First Patient

- First-of-its-kind heart pump implanted in Australia, based on a breakthrough wave membrane technology. Unlike existing devices, CorWave's technology does not eliminate the effects of the native heartbeat and preserves the natural heart pulse.
- Early results suggest the pulsatility is preserved which could lead to a reduction of adverse events.
 - The patient, suffering from advanced heart failure, is doing well more than 30 days after the procedure and has been discharged from the hospital.

Clichy, France, July 9, 2025 – CorWave, a medical device company, announces the world's first implantation in a patient of its Left Ventricular Assist System (LVAS), the first heart pump based on breakthrough wave membrane technology. The procedure was performed by the team at St Vincent's Hospital in Sydney, Australia. This implantation represents a major technological milestone in the field of durable mechanical circulatory support, 27 years after the first use of a durable rotary pump – a technology that has since become the standard of care.

Inspired by the swimming motion of aquatic animals, CorWave's undulating membrane technology, developed since 2012, aims to preserve the physiological balance of the cardiovascular system, unlike currently used rotary pumps that deliver a continuous and fixed flow rate. The device has been designed to preserve the effects of the heartbeats on the vasculature and work in synchrony with the heart to preserve its function and structures. It can also automatically adjust blood flow according to the patient's activity, whether at rest or in motion.

CorWave's state-of-the-art innovation has three clinical objectives. First, to limit serious complications associated with current devices, such as strokes, bleeding, heart failure, or valvular diseases. Second, it aims to improve patients' quality of life with a broader resumption of daily, professional, and social activities. Finally, it should promote heart recovery, which is possible in certain patients.

This first patient successfully met the primary endpoint of 30-day survival without device-related complications. Suffering from advanced heart failure, he is doing well and has been discharged from the hospital. He himself reports feeling much better than before his surgery and experiencing no particular discomfort. He no longer experiences undue fatigue or shortness of breath, which are typical symptoms of advanced heart failure. The teams at CorWave and St Vincent's Hospital, a world center of excellence specialized in research on the physiological impact of heart pumps, have observed the proper functioning of the device and the patient's post-operative recovery.

Additional implantations will be necessary to more comprehensively evaluate the safety, performance, and clinical benefits of this technology as part of the ongoing clinical study. CorWave is continuing this study in accordance with regulatory requirements and good clinical practices, in close collaboration with the participating medical teams.

Louis de Lillers, CEO of CorWave, says: "This world first is a success and results from more than a decade of determined research and engineering. We owe this moment to the trust of the patient, the excellence of the team at St Vincent's, the perseverance of our team, investors and partners who have backed CorWave's vision over the years. We look forward to writing a new chapter in circulatory support alongside the scientific and

medical community, with the shared goal of significantly improving the lives of advanced heart failure patients."

Professor Christopher Hayward, cardiologist specializing in heart failure and heart transplantation at St Vincent's Hospital and principal investigator of the study remarked, "The entire medical team is impressed by the CorWave device's performance. We're very happy with the patient's post-operative recovery. The results we're seeing are very encouraging for the future."

Dr Paul Jansz, cardiothoracic surgeon, adds: "The surgical procedure is very similar to the implantation of the current generation of left ventricular assist devices. However, unlike the latter, this new generation system allows for the preservation of the natural pulse, which is potentially a game-changer. We could be opening up a new era of circulatory support."

Heart failure affects more than 64 million people worldwide, and several hundred thousand patients could eventually be candidates for durable circulatory support.

By offering an alternative based on breakthrough technology, CorWave confirms its ambition to become a reference player in the field of implantable cardiac assist devices.

About CorWave



CorWave is a French company that develops and manufactures innovative cardiac assist devices. CorWave's undulating membrane is a breakthrough technology that distinguishes itself from currently marketed Left Ventricular Assist Devices (LVADs) through its physiological operation, designed to reproduce pulse and blood flow velocities similar to those of a healthy heart. Ultimately, CorWave's membrane pump technology should reduce complications associated with current devices and improve the management of patients suffering from heart failure. A member of French Tech 120, CorWave was founded in 2012 by the start-up studio MD Start and is funded by renowned investors, including Bpifrance, EIC Fund, Montpensier Arbevel, M&L Healthcare, Novo Holdings, Seventure Partners, Sofinnova Partners, Ysios Capital, and

Vlerick Group. The company has raised over 80 million euros in equity funding and employs about a hundred people. In October 2023, after more than ten years of research and development, CorWave scaled up to industrial operations with the inauguration of its state-of-the-art urban factory in Clichy.

Further information: www.corwave.com | x.com/corwave | www.linkedin.com/company/corwave CorWave LVAS is a medical device currently available for clinical investigations only.

Press Contact:

Taddeo

Camille Duchiron, +33 650 524 443, camille.duchiron@taddeo.fr Marco Testa, +33 752 637 894, marco.testa@taddeo.fr



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