

Press Release

CorWave is set to receive about \$3.5 million in financing through France's Worldwide Innovation Challenge for its NovaPulse program, a mini-invasive solution for cardiac support

CLICHY, France, April 3rd, 2018 – [CorWave](#), a French medical technology company that develops innovative implanted cardiac support devices for patients suffering from heart failure, announced today that it has been awarded almost \$3.5 million in financing for its R&D program NovaPulse in the Silver Economy category. This is part of phase 2 of France's *Concours Mondial d'Innovation* or Worldwide Innovation Challenge.

A breakthrough technology addressing an important public health issue: chronic heart failure.

The aim of the Worldwide Innovation Challenge is to foster talent and pave the way for the emergence of France's future economic champions. The challenge is financed by the Invest for the Future Program (PIA) and managed by Bpifrance. With this new financing, **CorWave will be able to step up the pace of development of NovaPulse, a new mini-invasive cardiac support pump**, and thereby improve the care of older patients suffering from chronic heart failure, one of the leading causes of death worldwide.

“Our breakthrough technology overcomes a major technological obstacle. Until now, established players in cardiac support were unable to develop mini-invasive support devices, despite investing over a hundred million dollars, owing to the limits of existing technologies. The NovaPulse program paves the way for less invasive implantation, particularly for older patients who are often too weak for open heart surgery. The NovaPulse program is focused on the development of CorWave Nemo, a partial support device, complementary to CorWave Neptune, our full support LVAD. Nemo is a significant addition to our pipeline boosting the potential of the company,” explains Louis de Lillers, CEO of CorWave.

“Phase 1 of the Worldwide Innovation Challenge gave us the resources to identify and establish the technological proof-of-concept required to provide a new type of partial support, small enough to fit into an envelope the size of an implantable defibrillator. Phase 2 provides the funding to significantly increase the resources dedicated to the Nemo product. One year ago, the NovaPulse team had two people working full time, while today there are almost ten of us. With these new resources, we have been able to start product development and preclinical trials,” says François Cornat, R&D project manager and technical advisor for the NovaPulse program.

CorWave was already a winner in phase 1 of the Worldwide Innovation Challenge in July 2016. It has since raised €15.5 million in funding from Novo Seeds, Ysio Capital, and from its historic investors, Sofinnova Partners, Bpifrance and Seventure, which had already invested €3.3 million in the company in 2013.



In March 2018, CorWave scaled up operations, with the opening of a pilot production unit at its new Clichy site. CorWave employs around **fifty engineers, technicians and researchers**.

In 2017, almost 10,000 cardiac support devices were implanted worldwide, a small number in relation to the number of people suffering from heart failure. A high level of complications is holding this therapy back; two years after implantation, four patients out of five are affected by at least one severe complication caused by the pump. The pumps currently on the market function in a very different way to the human heart. They cause a number of physiological imbalances, leaving the door open to complications.

CorWave is developing breakthrough technology; its undulating wave pumps reproduce the operation of the human heart and should therefore reduce complications. This progress would enable wider adoption of implantable cardiac support devices, which already represent a market of almost one billion dollars in annual sales.

About the Worldwide Innovation Challenge

The Worldwide Innovation Challenge is part of the Innovation 2030 Commission set up by the President of France and chaired by Anne Lauvergeon. It is able to allocate €300 million for the financing of innovative projects intended to foster talent and enable the emergence of France's future economic champions. The Challenge aims to identify and support the growth of entrepreneurs developing innovative projects whose potential is particularly significant for the French economy. For 2017/18, eight ambitions have been identified, reflecting strong societal expectations and sectors of growth. The Worldwide Innovation Challenge comprises three phases: (start-up – financing of up to €200,000), phase 2 (risk reduction, financing of up to €3million) and phase 3 (development, investments of up to €20 million).

Find out more: <http://innovation-2030.entreprises.gouv.fr/>

About CorWave

CorWave is a French company that develops innovative cardiac support devices. The CorWave undulating membrane is based on disruptive technology, protected by nine patent families, resulting from over ten years of research in France's National Scientific Research Centre (CNRS) labs and by AMS R&D. This technology stands out from other LVADs currently on the market due to its physiological design. Among other things, it is able to mimic a pulse and produce blood flow velocity similar to that of a healthy heart. Eventually, CorWave's membrane pump technology should reduce complications associated with current devices and improve the care of patients with heart failure, a market potentially worth several billion euros.

Founded in 2011 by the incubator MD Start and supported by well known investors, including Bpifrance, Medtronic, Novo Seeds, Seventure, Sofinnova and Ysios, CorWave has received over €20 million of financing and employs nearly fifty people.

Find out more: www.corwave.com

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