ONWARD Medical to Advance Parkinson's Disease Pipeline with Support from The Michael J. Fox Foundation and US Department of Defense

The Michael J. Fox Foundation for Parkinson's Research is supporting a study addressing mobility challenges in Parkinson's disease; the first participant was enrolled in late 2024

A US Department of Defense grant will support a study addressing blood pressure instability; first enrollment is expected in 1H 2025

These studies both explore whether the ONWARD ARC-IM System has the potential to offer benefit beyond spinal cord injury

EINDHOVEN, the Netherlands — March 4, 2025 — ONWARD Medical N.V. (Euronext: ONWD), the medical technology company creating innovative spinal cord stimulation therapies to restore movement, function, and independence in people with spinal cord injury (SCI) and other movement disabilities, today announces two new grants to support early clinical feasibility studies using its investigational ONWARD ARC-IM System to explore the technology's potential to help people with Parkinson's disease.

The Michael J. Fox Foundation for Parkinson's Research (MJFF) awarded a $1M grant to researchers Jocelyne Bloch, MD and Grégoire Courtine, PhD of NeuroRestore to support a clinical feasibility study with 6 participants to explore whether the ONWARD ARC-IM System can address mobility challenges in Parkinson's. The study is underway with the first participant implanted in late 2024.

More than 90% of people living with Parkinson's experience walking and balance dysfunction, and approximately 60% experience annual falls.[1] Motor impairments severely impact quality of life, often leading to loss of independence and increased risk of injury.[2] Mobility issues are seldom sufficiently addressed with prevailing treatments, underscoring the urgent need for more effective therapies in Parkinson's.[3]

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[1] Stolze, Henning et al. "Prevalence of gait disorders in hospitalized neurological patients." Movement disorders: official journal of the Movement Disorder Society vol. 20,1 (2005): 89-94. doi:10.1002/mds.20266.

Ge, Hong-Liang et al. "The prevalence of freezing of gait in Parkinson's disease and in patients with different disease durations and severities." Chinese neurosurgical journal vol. 6 17. 14 May. 2020, doi:10.1186/s41016-020-00197-y

Allen, Natalie E et al. "Recurrent falls in Parkinson's disease: a systematic review." Parkinson's disease vol. 2013 (2013): 906274. doi:10.1155/2013/906274.

[2] Schrag, A et al. "What contributes to quality of life in patients with Parkinson's disease?" Journal of neurology, neurosurgery, and psychiatry vol. 69,3 (2000): 308-12. doi:10.1136/jnnp.69.3.308.

Bloem, B R et al. "Prospective assessment of falls in Parkinson's disease." Journal of neurology vol. 248,11 (2001): 950-8. doi:10.1007/s004150170047.

[3] Bloem, Bastiaan R et al. "Falls and freezing of gait in Parkinson's disease: a review of two interconnected, episodic phenomena." Movement disorders: official journal of the Movement Disorder Society vol. 19,8 (2004): 871-84. doi:10.1002/mds.20115.

The study will build on findings previously published by Courtine and Bloch in *Nature Medicine* in November 2023. In that study, ARC-IM Therapy was shown to improve mobility and balance, and reduce freezing-of-gait after Parkinson's.

US Department of Defense Parkinson's Research Program Grant

This approximately $1.5M grant was awarded to ONWARD and NeuroRestore. It will support a clinical feasibility study with 5 participants to explore the ability of the ONWARD ARC-IM System to address blood pressure instability in Parkinson's. The study is expected to commence in the first half of 2025.

Approximately 800,000 people in the US and Europe are challenged by blood pressure issues resulting from Parkinson's.[4] ONWARD previously received a grant from the US Defense Advanced Research Projects Agency (DARPA), part of the US Department of Defense, to support development of its investigational ARC-IM System to address blood pressure instability in spinal cord injury.

"The versatility and promise of the ONWARD ARC-IM System has been validated by grants from these distinguished organizations, supporting research to determine if our technology can be leveraged beyond spinal cord injury," said Dave Marver, CEO of ONWARD Medical. "There are 10 million people worldwide living with Parkinson's and we are hopeful the ARC-IM System may offer them new and powerful therapeutic options."

The ARC-IM System is designed to deliver targeted, personalized spinal cord stimulation to restore function and movement after spinal cord injury and other movement disabilities. The System consists of an implantable neurostimulator that generates precise electrical stimulation delivered by a lead placed on the spinal cord. Together, they are designed to deliver ARC Therapy to the area of the spinal cord that is responsible for movement or restoration of autonomic function.

To be kept informed about the Company's technologies, research studies, and the availability of therapies in your area, please complete this webform.

About ONWARD Medical

ONWARD Medical is a medical technology company creating therapies to restore movement, function, and independence in people with SCI and other movement disabilities. Building on more than a decade of scientific discovery, preclinical research, and clinical studies conducted at leading hospitals, rehabilitation clinics, and neuroscience laboratories, the Company has developed ARC Therapy, which has been awarded ten Breakthrough Device Designations from the US Food and Drug Administration (FDA). The Company's ARC-EX System is now cleared for commercial sale in the US. In addition, the Company is developing an investigational implantable system called ARC-IM with and without an implanted brain-computer interface (BCI).

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[4] Velseboer, Daan C., et al. "Prevalence of orthostatic hypotension in Parkinson's disease: a systematic review and meta-analysis." *Parkinsonism & related disorders* 17.10 (2011): 724-729-; Parkinson's Foundation; CIA report; Company analysis.

Headquartered in the Netherlands, the Company has a Science and Engineering Center in Switzerland and a US office in Boston, Massachusetts. The Company is listed on Euronext Paris, Brussels, and Amsterdam (ticker: ONWD).

For more information, visit ONWD.com and connect with us on LinkedIn and YouTube.

To be kept informed about the Company's technologies, research studies, and the availability of therapies in your area, please complete this webform.

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ARC-EX Indication for Use (US): The ARC-EX System is intended to deliver programmed, transcutaneous electrical spinal cord stimulation in conjunction with functional task practice in the clinic to improve hand sensation and strength in individuals between 18 and 75 years old that present with a chronic, non-progressive neurological deficit resulting from an incomplete spinal cord injury (C2-C8 inclusive).

Other Investigational Products: All other ONWARD Medical devices and therapies including ARC-IM and ARC-BCI are investigational and not available for commercial use.