ONWARD® Medical and Partners Awarded Christopher & Dana Reeve Foundation Grant to Further Study Brain-Computer Interface System

Grant will enable ONWARD Medical, CEA-Clinatec, and .NeuroRestore to evaluate the use of the ONWARD ARC-BCI™ System to restore thought-driven movement of the hands and arms after spinal cord injury (SCI)

EINDHOVEN, the Netherlands — September 3, 2024 — 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), today announces a grant from the Christopher & Dana Reeve Foundation to support expansion of an ongoing early clinical feasibility study to explore the use of a brain-computer interface (BCI) to restore thought-driven use of the hands and arms after SCI.

The ongoing early feasibility clinical study is also supported by the European Innovation Council under the Reverse Paralysis project. The first study participant was implanted with the investigational ARC-BCI System in August 2023. The Reeve Foundation's $1.1 million grant to study sponsor and ONWARD Medical research partner, .NeuroRestore, enables up to four additional participants to be implanted with the ONWARD ARC-BCI System.

.NeuroRestore is a collaboration between the Swiss Federal Institute of Technology (EPFL) and Lausanne University Hospital (CHUV) and key research partner to ONWARD Medical.

"While other companies are using BCI technology to interface with computers, ONWARD is leading the pursuit of BCI-augmented movement restoration," said ONWARD Medical CEO Dave Marver. "We are grateful to the Christopher & Dana Reeve Foundation for its support, which enables us to expand this important study."

"This grant reflects our vision to facilitate rapid scientific advancement to address the unmet needs of individuals living with SCI," said Marco Baptista, Ph.D., Chief Scientific Officer of the Christopher & Dana Reeve Foundation. "We look forward to working with ONWARD Medical in learning more about the potential for BCI technology to meet those challenges."

The ARC-BCI System combines the investigational WIMAGINE® BCI from CEA-Clinatec with investigational ONWARD ARC-IM® Therapy (implanted targeted spinal cord stimulation) to form a DigitalBridge™ that enables thought-driven movement restoration. The WIMAGINE BCI is an epidural implant with 7 years of human safety data and ONWARD ARC-IM Therapy has been applied in more than 30 study participants. ONWARD Medical is also investigating the use of its ARC-BCI System to address lower limb mobility challenges after SCI in a separate early feasibility clinical study.

The first-in-human use of ARC-IM Therapy paired with an implanted BCI in a clinical study resulted in an individual gaining augmented control over when and how he moved his paralyzed legs. The results of this study were published in *Nature* in May 2023.

Earlier this year, ONWARD Medical announced that it was accepted into the US FDA's new Total Product Lifecycle Advisory Program (TAP) for its ARC-BCI platform, which was also awarded FDA Breakthrough Device Designation (BDD).

To learn more about ONWARD Medical's commitment to partnering with the SCI Community to develop innovative solutions for restoring movement, function, and independence after spinal cord injury, please visit ONWD.com.

**All ONWARD® Medical devices and therapies, including but not limited to ARC-IM®, ARC-EX®, ARC-BCI™, and ARC Therapy™, alone or in combination with a brain-computer interface (BCI), are investigational and not available for commercial use.*

About ONWARD Medical

ONWARD® Medical is a medical technology company creating therapies to restore movement, function, and independence in people with spinal cord injury (SCI) and movement disabilities. Building on more than a decade of scientific discovery, preclinical, and clinical research 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).

ONWARD ARC Therapy is targeted, programmed spinal cord stimulation designed to be delivered by the Company's external ARC-EX® or implantable ARC-IM® platforms. ARC Therapy can also be delivered by the Company's ARC-BCI™ platform, which pairs the ARC-IM System with brain-computer interface (BCI) technology to restore movement after SCI with thought-driven control.

Use of non-invasive ARC-EX Therapy significantly improved upper limb function after SCI in the global pivotal Up-LIFT trial, with results published by *Nature Medicine* in May 2024. The Company has submitted its regulatory application to the FDA for clearance of the ARC-EX System in the US and is preparing for regulatory submission in Europe. In parallel, the Company is conducting clinical studies with its ARC-IM Therapy, which demonstrated positive interim clinical outcomes for improved blood pressure regulation following SCI. Other ongoing clinical studies focus on using ARC-IM Therapy to address mobility after SCI and gait challenges in Parkinson's disease as well as using the ARC-BCI platform to restore thought-driven movement of both upper and lower limbs after SCI.

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

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