



Foundational Study Shows Soft Suit Exoskeleton Improves Walking for Stroke Survivors

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Study Examines Use of Restore™ System Developed by Harvard's Wyss Institute

MARLBOROUGH, Mass. and YOKNEAM ILIT, Israel, Aug. 2, 2017 /PRNewswire-USNewswire/ -- A new study published in the [Journal of Science Translational Medicine](#) finds that use of a soft suit exoskeleton system facilitates normal walking ability for ambulatory patients following a stroke. The [paper](#), which is authored by researchers at Harvard University's Wyss Institute for Biologically Inspired Engineering and Boston University, is a seminal study, providing key findings that will propel additional research of how to improve mobility for patients following a stroke.



The prototype utilized in the study is a soft suit exoskeleton created by the Wyss Institute that is now moving towards commercialization by ReWalk Robotics Ltd. (Nasdaq: RWLK) ("ReWalk"). The study included 9 participants, and examined the immediate improvements in walking capability that could be obtained when wearing the Restore system. The study highlighted the potential for the technology to provide gait assistance and training during walking and concludes:

These improvements in paretic limb function contributed to a 20 +/- 4% reduction in forward propulsion interlimb asymmetry and a 10 +/- 3% reduction in the energy cost of walking, which is equivalent to a 32 +/- 9% reduction in the metabolic burden associated with poststroke walking. Relatively low assistance (~12% of biological torques) delivered with a lightweight and nonrestrictive exosuit was sufficient to facilitate more normal walking in ambulatory individuals after stroke.

"This foundational study shows that soft wearable robots can have significant positive impact on gait functions in patients post-stroke, and it is the result of a translational-focused multidisciplinary team of engineers, designers, biomechanists, physical therapists and most importantly patients who volunteered for this study and gave valuable feedback that guided our research," said Wyss Core Faculty member Conor Walsh who is also the John L. Loeb Associate Professor of Engineering and Applied Sciences at SEAS and the Founder of the [Harvard Biodesign Lab](#).

ReWalk is working with the Wyss Institute on the development of lightweight designs to complete clinical studies, pursue regulatory approvals and commercialize the systems on a global scale. The first commercial application will be for stroke survivors, followed by Multiple Sclerosis patients and then additional applications. There are an estimated 3 million stroke survivors with lower limb disability in the U.S.

"Exoskeletons are now a commercially available, disruptive technology that have changed the lives of many individuals in the paraplegic community," said ReWalk CEO Larry Jasinski. "The ongoing research at the Wyss Institute on soft exosuits adds a new dimension to exoskeletons that can potentially meet the needs of individuals that have had a stroke, as well as for those diagnosed with Multiple Sclerosis, Parkinson's disease or people who have limitations in walking. The Restore is a unique lightweight design that can assist and constantly adjust in real time to the user's needs on every step they take. The depth of this fundamental science is a meaningful element in applying research to the everyday needs of this patient community."

The Restore transmits power to key joints of the legs with cable technologies, powered with software and mechanics that are similar to the technologies used in the ReWalk exoskeleton system for individuals with spinal cord injury. The cables are connected to fabric-based designs that attach to the legs and foot, thus lending the name "soft suit."

The full article in the Journal of Science Translational Medicine can be downloaded [here](#).

[About ReWalk Robotics Ltd.](#)

ReWalk Robotics Ltd. develops, manufactures and markets wearable robotic exoskeletons for individuals with spinal cord injury. Our mission is to fundamentally change the quality of life for individuals with lower limb disability through the creation and development of market leading robotic technologies. Founded in 2001, ReWalk has headquarters in the U.S., Israel and Germany. For more information on the ReWalk systems, please visit www.rewalk.com.

ReWalk® is a registered trademark of ReWalk Robotics Ltd. in Israel.

Forward-Looking Statements

In addition to historical information, this press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, Section 27A of the U.S. Securities Act of 1933, and Section 21E of the U.S. Securities Exchange Act of 1934. Such forward-looking statements may include projections regarding ReWalk's future performance and, in some cases, may be identified by words like "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "future," "will," "should," "would," "seek" and similar terms or phrases. The forward-looking statements contained in this press release are based on management's current expectations, which are subject to uncertainty, risks and changes in circumstances that are difficult to predict and many of which are outside of ReWalk's control. Important factors that could cause ReWalk's actual results to differ materially from those indicated in the forward-looking statements include, among others: ReWalk's expectations regarding future growth, including its ability to increase sales in its existing geographic markets, expand to new markets and achieve its planned expense reductions; the conclusion of ReWalk's management for the financial statements for fiscal 2016 and the first quarter of 2017, and the opinion of ReWalk's auditors in their report on the Company's financial statements for fiscal 2016, that there are substantial doubts as to ReWalk's ability to continue as a going concern; ReWalk's ability to maintain and grow its reputation and the market acceptance of its products; ReWalk's ability to achieve reimbursement from third-party payors for its products; ReWalk's expectations as to its clinical research program and clinical results; ReWalk's expectations as to the results of, and the Food and Drug Administration's potential regulatory developments with respect to, ReWalk's mandatory post-market 522 surveillance study; the outcome of ongoing shareholder class action litigation relating to ReWalk's initial public offering; ReWalk's ability to repay its secured indebtedness; ReWalk's ability to improve its products and develop new products; ReWalk's ability to maintain adequate protection of its intellectual property and to avoid violation of the intellectual property rights of others; ReWalk's ability to gain and maintain regulatory approvals; ReWalk's ability to secure capital from its equity and debt financings in light of limitations under its Form S-3, the price range of its ordinary shares and conditions in the financial markets, and that the risk that such financings may dilute our shareholders or restrict our business; ReWalk's ability to use effectively the proceeds of its 2016 follow-on offering; ReWalk's ability to maintain relationships with existing customers and develop relationships with new customers; the impact of the market price of our ordinary shares on the determination of whether we are a passive foreign investment company; and other factors discussed under the heading "Risk Factors" in ReWalk's Annual Report on Form 10-K for the year ended December 31, 2016, as amended, filed with the U.S. Securities and Exchange Commission and other documents subsequently filed with or furnished to the U.S. Securities and Exchange Commission. Any forward-looking statement made in this press release speaks only as of the date hereof. Factors or events that could cause ReWalk's actual results to differ from the statements contained herein may emerge from time to time, and it is not possible for ReWalk to predict all of them. Except as required by law, ReWalk undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

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