



## **Parker to Supply Indego(R) Exoskeletons for Department of Defense Funded Clinical Study**

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**- Four year, multi-center study includes Vanderbilt Medical, Mayo Clinic and Tampa VA; - Study to provide evidence demonstrating the economic and rehabilitation benefits of exoskeletons**

CLEVELAND, Oct. 21, 2015 (GLOBE NEWSWIRE) -- Parker Hannifin Corporation (NYSE: PH), the global leader in motion and control technologies, today announced that its human motion business unit will supply Indego exoskeleton devices for a four year, multi-center study which has been funded by the U.S. Department of Defense and the Congressionally Directed Medical Research Programs (CDMRP). The human motion business unit develops, manufactures and is commercializing the Indego exoskeleton device which helps gait impaired individuals to stand and walk again.

Three highly regarded rehabilitation centers will participate in this extensive study: Vanderbilt Medical Center in Nashville, TN, Mayo Clinic in Rochester, MN and the James A. Haley Veterans' Hospital in Tampa, FL. During the project period, three different studies will be conducted. The first study will look at potential health, neurological recovery, and mobility benefits of walking with the Indego exoskeleton in complete and incomplete spinal cord injured individuals (SCI). In a second study, the impact of exoskeleton walking in conjunction with functional electrical stimulation (FES) will be assessed and the third study will investigate the use of this exoskeleton in a home/community setting. A total number of 54 subjects will be enrolled in the studies.

"This study will provide sound medical evidence to inform best practices for post injury SCI care and will assess effectively the rehabilitative and economic return of exoskeletal systems", said Prof. Michael Goldfarb from Vanderbilt University who is the Principal Investigator for this clinical study.

Currently about 270,000 individuals in the United States suffer with SCI, with roughly 12,000 new injuries sustained nationally each year. One of the most significant impairments resulting from SCI is loss of legged mobility. Recently, powered lower limb exoskeletons have emerged as a rehabilitative option for people with SCI. These devices have the potential to provide substantial health benefits, promote neurological and functional recovery, and provide community ambulation for gait impaired individuals. However, studies have yet to be conducted to quantify or substantiate these potential benefits.

"We are proud and honored that the Indego exoskeleton has been selected for this important research project and excited to expand our network of clinical partners to these prestigious centers, including our first major VA center", said Achilleas Dorotheou, VP and Head of Human Motion at Parker Hannifin Corporation. "This is still a new field where research is needed to learn more about the general application of exoskeleton devices and the key features that have to be offered to gait impaired individuals to facilitate health benefits."

### **About Indego**

Indego is a robotic exoskeleton or powered orthotic device that allows users to stand and walk, and holds great promise for affording people with paraplegia a new level of independence. Indego is an investigational device and limited by law for investigational use only. Parker has partnered with some of the world's leading rehabilitation centers to establish a body of evidence that demonstrates the benefits of using Indego, including Shepherd Center, Kessler Foundation, Rehabilitation Institute of Chicago, Craig Hospital and NYU Rusk Rehabilitation. Since September 2014, Indego has been available in Europe and the United States for research purposes in clinical settings, commercial availability is anticipated in 2015 pending regulatory approvals. To learn more about Indego, visit [www.indego.com](http://www.indego.com).

### **About Parker**

With annual sales of approximately \$13 billion in fiscal year 2015, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. The company employs approximately 55,000 people in 50 countries around the world. Parker has increased its annual dividends paid to shareholders for 59 consecutive fiscal years, among the top five longest-running dividend-increase records in the S&P 500 index. For more information, visit the company's website at [www.parker.com](http://www.parker.com), or its investor information website at [www.phstock.com](http://www.phstock.com).

### **About CDMRP**

The Congressionally Directed Medical Research Programs (CDMRP) originated in 1992 via a Congressional appropriation to foster novel approaches to biomedical research in response to the expressed needs of its stakeholders – the American public, the military, and Congress. The CDMRP encompasses an array of programs, all of which share the common goal of advancing paradigm shifting research, solutions that will lead to cures or improvements in patient care, or breakthrough technologies and resources for clinical benefit. The exoskeleton study described here is funded by the CDMRP Spinal Cord Injury Research Program (SCIRP) within the CDMRP, which focuses funding on innovative projects that have the potential to make a significant impact on improving the function, wellness, and overall quality of life for military service members as well as their caregivers, families, and the American public.

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