ReShape Lifesciences™ Presents Data on Proprietary Diabetes Bloc-Stim Neuromodulation™ Device at ObesityWeek®

November 3, 2022

Stimulation of Vagus Celiac Fibers with Concurrent High Frequency Alternating Current Block of Hepatic Fibers Decreases Glucose Variability in a Swine Model of Type 2 Diabetes

SAN CLEMENTE, Calif., Nov. 03, 2022 (GLOBE NEWSWIRE) -- **ReShape Lifesciences ™ (Nasdaq: RSLS),** the premier physician-led weight loss and metabolic health solutions company, today announced the presentation of data on its proprietary Diabetes Bloc-Stim Neuromodulation™ (DBSN™) device in an abstract at the Obesity Society Annual Meeting, during the ObesityWeek® conference being held in San Diego, CA, November 1 – 4, 2022, with continued virtual access through December 31, 2022.

"Despite medication, surgery and diet, type 2 diabetes remains challenging to effectively treat," stated Jonathan Waataja, Director of Research at ReShape Lifesciences. "Encouragingly, the company's technology has demonstrated both safety and efficacy in a swine model of type 2 diabetes, showing that bioelectronic modulation of nerves innervating organs that regulate plasma glucose (PG), utilizing our proprietary DBSN™ device, may be a novel treatment option for type 2 diabetes."

The abstract reported is as follows:

Metabolic Effects of Dual Neuromodulation of Vagus Nerve in a Type 2 Diabetic Model
ID: Poster-297
Session Title: Neuroscience
Track 2:
Authors: Raj Nihalani, M.D., Jonathan Waataja, Ph.D., Charles Billington, M.D.

Standalone stimulation of the vagus nerve, or vagotomy treatments, has mixed or undesirable results. Neuromodulation consisting of stimulation of celiac fibers innervating the pancreas with simultaneous reversible electrical blockade of neuronal hepatic fibers innervating the liver is a new therapeutic concept that that has been successfully tested in animal models of type 2 diabetes mellitus (T2DM). Previously, the area under the curve of oral glucose tolerance tests (OGTTs) was calculated to quantify glycemic control. However, fluctuations in glucose during the OGTTs was not accessed. These fluctuations may have importance in treating T2DM, in that large fluctuations in PG have been shown to increase oxidative stress and lead to co-morbidities in T2DM. As part of this study, these fluctuations were studied during OGTTs in diabetic swine. Celiac fibers were stimulated at a frequency of 1 Hz with concurrent application of high frequency alternating current (5000 Hz) blockade to hepatic fibers. Standard deviation (SD) and % coefficient of variation (%CV) were used to quantify glycose variability during the OGTTs in an alloxan treated swine model of type 2 diabetes (n=3 w/ 3 OGTT). It was found that the DBSN™ significantly decreased SD and %CV compared to placebo.

"The opportunity to present such compelling data on our proprietary DBSN™ device at this industry conference is a testament to the market potential of the technology to treat type 2 diabetes," stated Paul F. Hickey, President and Chief Executive Officer of ReShape Lifesciences. "Backed by a strong intellectual property portfolio, the DBSN™ device has the potential to deliver truly personalized therapy by being able to adjust insulin production, as needed, for any individual. As previously reported, we are utilizing our second NIH SBIR grant to focus on the development of the technology to treat the metabolic disorder, hypoglycemia. We believe we are on track to further the evaluation of the DBSN™ device to address the significant global diabetes market, by reducing patients' dependence on medications. As previously stated, we continue to finance the development of the DBSN™ though a non-dilutive funding strategy and potential strategic alliances."

About Diabetes Bloc-Stim Neuromodulation™ Device
The Diabetes Bloc-Stim Neuromodulation™ (DBSN™) system is a novel therapeutic concept that is implanted minimally invasively and delivers bio-electronic neuromodulation of vagus nerve branches that are innervating organs which regulate plasma glucose. The DBSN™ system stimulates vagus celiac fibers of the pancreas to release insulin during stimulation, while blocking the hepatic vagal branch, innervating the liver, to decrease glucose release and decrease insulin resistance following ligation. The DBSN™ system utilizes a proprietary, reversable and adjustable electrical blockade felt to be key to the future of personalized medicine. The DBSN™ system is superior to both standalone stimulation of the vagus nerve that has shown mixed results, and vagus nerve ligation that has undesirable effects.

About ReShape Lifesciences™
ReShape Lifesciences™ is America's premier weight loss and metabolic health-solutions company, offering an integrated portfolio of proven products and services that manage and treat obesity and metabolic disease. The FDA-approved Lap-Band® Program provides minimally invasive, long-term treatment of obesity and is an alternative to more invasive surgical stapling procedures such as the gastric bypass or sleeve gastrectomy. Reshape**care** ™ is a virtual weight-management program that supports lifestyle changes for all weight loss patients led by board-certified health coaches to help them keep the weight off over time. The recently launched ReShape Marketplace™ is an online collection of quality wellness products curated for all consumers to help them achieve their health goals. The investigational Diabetes Bloc-Stim Neuromodulation™ (DBSN™) system utilizes a proprietary vagus nerve block and stimulation technology platform for the treatment of Type 2 diabetes and metabolic disorders. The Obalon® balloon technology is a non-surgical, swallowable, gas-filled intra-gastric balloon that is designed to provide long-lasting weight loss. The ReShape Vest™ System is an investigational minimally invasive, laparoscopically implanted medical device that wraps around the stomach, emulating the gastric volume reduction effect of conventional weight loss surgery. It helps enable rapid weight loss in persons with obesity without permanently changing patient anatomy. For more information, please visit www.reshapelifesciences.com.

Forward-Looking Safe Harbor Statement

This press release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from those discussed due to known and unknown risks, uncertainties, and other factors. These forward-looking statements generally can be identified by the use of words such as "expect," "plan," "anticipate," "could," "may," "intend," "will," "continue," "future," other words of similar meaning and the use of future dates. Forward-looking statements in this press release include statements about our expectation that the marketing campaign should continue to promote increased demand for Lap-Band® procedures and, thus, potentially a significant increase in revenues for ReShape. These and additional risks and uncertainties are described more fully in the company's filings with the Securities and Exchange Commission, including those factors identified as "risk factors" in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q. We are providing this information as of the date of this press release and do not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise, except as required by law.

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