Standard BioTools SomaScan Assay Powers Key Insights into Semaglutide Treatment Published in Nature Medicine

January 8, 2025

Novo Nordisk initiated study validates the power of proteomics to provide unique insights into mechanisms of action and expanded drug indications as well as the potential for shorter and smaller clinical trials

SOUTH SAN FRANCISCO, Calif., Jan. 08, 2025 (GLOBE NEWSWIRE) -- Standard BioTools Inc. (NASDAQ: LAB) (the "Company") announced today that its SomaScan™ Platform played a pivotal role in a study published in the current issue of *Nature Medicine* titled "Proteomic changes upon treatment with semaglutide in individuals with obesity".

Conducted by a team of researchers from Novo Nordisk A/S and collaborators, this seminal paper investigated the effects of semaglutide on the circulating proteome from two independent phase 3 trials. Measuring approximately 6,400 human proteins in nearly 2,000 participants, the study uncovered significant changes in key protein biomarkers associated with metabolic pathways, providing new insights into the biological mechanisms of semaglutide and its potential to have broader health benefits beyond obesity.

"This study exemplifies how advanced proteomic analysis can transform our understanding of therapies in ways that have never been shown before," said Stephen Williams, MD, PhD, Chief Medical Officer of Standard BioTools. "SomaScan has the unique breadth to uncover the greatest number of actionable insights into complex biological processes, enabling researchers to detect nuanced drug effects earlier, to infer causality of pathways, to deliver highly reproducible results and accelerate the expansion of effective drug indications beyond those initially targeted."

Michael Egholm, PhD, President and Chief Executive Officer of Standard BioTools added, "These findings underscore the vital role of systematic proteomics in advancing precision medicine and improving outcomes for millions of individuals living with obesity and other diseases, firmly aligning with our mission to help pharmaceutical companies make better drugs faster."

With obesity rates continuing to rise globally, there is increasing interest in developing therapies that address both the condition and its associated health risks, with GLP-1 drugs emerging as the leading option becoming one of the fastest growing and largest drug classes in history. Furthermore, there are many follow-on novel, combinatorial or similar approaches in the pharma pipeline. Semaglutide, a GLP-1 receptor agonist, is a widely used therapeutic for obesity and metabolic disorders, yet its molecular effects on the proteome are not well understood. Using the SomaScan assay, researchers identified changes across hundreds of proteins, offering a deeper understanding of semaglutide's mode of action and new insights into the biological pathways underpinning its benefits, paving the way for accelerated development of future therapies.

The SomaScan Technology provided the following unique advantages in this breakthrough research:

- **Unique Mechanistic Insights:** SomaScan revealed specific effects of semaglutide on proteins and pathways, many of which were shown to play a causal role in a variety of indications beyond obesity, as well as insights into additional drug benefits.

- **Reliable and Reproducible Results:** The SomaScan assay's precision ensured consistent, quantitative findings across two independent phase 3 studies. Furthermore, many of the mechanistically relevant and potentially causal proteins discovered are not consistently measurable on any other platform.

- **Accelerated Clinical Development for Novel Indications:** A validated 27-protein predictor (a SomaSignal™ test or SST) of cardiovascular outcomes applied to these studies (STEP 1 and STEP 2) correctly detected previously observed cardiovascular benefits of semaglutide in Novo's SELECT study, reaching a high degree of statistical significance despite being only a small fraction of its size and duration. This highlights the ability of proteomics to characterize potential or unexpected health benefits earlier, from smaller and shorter clinical studies that were not otherwise powered to detect them.

These findings reinforce the critical role of proteomics in advancing precision medicine and highlight how SomaScan is uniquely capable of driving innovation in drug development.

About Standard BioTools Inc.

Standard BioTools Inc. (Nasdaq: LAB) has an established portfolio of essential, standardized next-generation technologies that help biomedical researchers develop medicines faster and better. As a leading solutions provider, the company provides reliable and repeatable insights in health and disease using its proprietary SomaScan, mass cytometry and microfluidics technologies, which help transform scientific discoveries into better patient outcomes. Standard BioTools works with leading academic, government, pharmaceutical, biotechnology, plant and animal research and clinical laboratories worldwide, focusing on the most pressing needs in translational and clinical research, including oncology, immunology and immunotherapy. Learn more at standardbio.com or connect with us on X, Facebook®, LinkedIn, and YouTube™.

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Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, statements regarding future business performance; the breadth and advantages of the SomaScan technology; and market and growth opportunity and potential. Forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from currently anticipated results, including, but not limited to, risks that the anticipated benefits and synergies of the merger with SomaLogic, Inc. (“SomaLogic”) and the integration of SomaLogic, including the potential for it to drive long-term profitable growth, may not be fully realized or may take longer to realize than expected; risks that the Company may not realize expected cost savings from the merger with SomaLogic, including the anticipated decrease in operational expenses, at the levels it expects; possible integration, restructuring and transition-related disruption, including through the loss of customers, suppliers, and employees and adverse impacts on the Company’s development activities and results of operation; integration and restructuring activities, including customer and employee relations, management distraction, and reduced operating performance; risks that internal and external costs required for ongoing and planned activities may be higher than expected, which may cause the Company to use cash more quickly than it expects or change or curtail some of the Company’s plans, or both; risks that the Company’s expectations as to expenses, cash usage, and cash needs may prove not to be correct for other reasons such as changes in plans or actual events being different than our assumptions; changes in the Company’s business or external market conditions; challenges inherent in developing, manufacturing, launching, marketing, and selling new products; interruptions or delays in the supply of components or materials for, or manufacturing of, the Company’s products; reliance on sales of capital equipment for a significant proportion of revenues in each quarter; seasonal variations in customer operations; unanticipated increases in costs or expenses; continued or sustained budgetary, inflationary, or recessionary pressures; uncertainties in contractual relationships; reductions in research and development spending or changes in budget priorities by customers; uncertainties relating to the Company’s research and development activities, and distribution plans and capabilities; potential product performance and quality issues; risks associated with international operations; intellectual property risks; and competition. For information regarding other related risks, see the “Risk Factors” section of the Company’s annual report on Form 10-K filed with the SEC on March 1, 2024, and in the Company’s other filings with the SEC. These forward-looking statements speak only as of the date hereof. The Company disclaims any obligation to update these forward-looking statements except as may be required by law.

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Source: Standard BioTools Inc.