Lilly's phase 2 retatrutide results published in The New England Journal of Medicine show the investigational molecule achieved up to 17.5% mean weight reduction at 24 weeks in adults with obesity and overweight

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In a secondary endpoint, retatrutide demonstrated a mean weight reduction up to 24.2% at 48 weeks

Lilly to further investigate retatrutide for the treatment of obesity in the TRIUMPH phase 3 clinical program

INDIANAPOLIS, June 26, 2023 /PRNewswire/ -- Eli Lilly and Company (NYSE: LLY) announced today new phase 2 data from retatrutide, Lilly's investigational molecule being studied for the treatment of obesity. At 24 weeks, retatrutide (1 mg, 4 mg, 8 mg or 12 mg) met the primary endpoint for the efficacy estimand in participants living with obesity or overweight[i] without diabetes, demonstrating a mean weight reduction up to 17.5% (41.2 lb. or 18.7 kg)[ii]. In a secondary endpoint, retatrutide demonstrated a mean weight reduction up to 24.2% (57.8 lb. or 26.2 kg)[ii] at the end of the 48-week treatment duration. The results were presented in a symposium at the American Diabetes Association's® 83rd Scientific Sessions and were simultaneously published in *The New England Journal of Medicine (NEJM)*.

The safety profile of retatrutide was similar to other incretin-based therapies. Gastrointestinal side effects were the most commonly reported adverse events, were generally mild-to-moderate in severity, and usually occurred during the dose escalation period.

"Obesity is a treatable chronic disease with a complex underlying biology. We are now in the midst of a rapidly expanding therapeutic landscape of potential highly effective treatment options for individuals with obesity," said Ania Jastreboff, MD, Ph.D., Associate Professor of Medicine & Pediatrics, Endocrinology & Metabolism, at Yale School of Medicine; Director, Yale Obesity Research Center (Y-Weight); and co-Director of the Yale Center for Weight Management. "Participants treated with the highest dose of retatrutide achieved a mean weight reduction of 24.2%; this translates to an average absolute weight reduction of about 58 pounds over 11 months of the study. Given that participants had not yet reached a weight plateau at the time the study ended, it appears that full weight reduction efficacy was not yet attained. Longer duration phase 3 trials will enable comprehensive evaluation of efficacy and tolerability of this potential pharmacotherapeutic for the treatment of obesity."

Treatment with retatrutide was associated with improvements in cardiometabolic measures (exploratory endpoints) including systolic and diastolic blood pressure, triglycerides, LDL-cholesterol, total cholesterol, HbA1c, and fasting glucose and insulin at weeks 24 and 48.

The TRIUMPH phase 3 development program is evaluating the safety and efficacy of retatrutide for chronic weight management, obstructive sleep apnea (OSA), and knee osteoarthritis (OA) in people with obesity and overweight. The core registration studies include:

- **TRIUMPH-1**: randomized, double-blind, placebo-controlled trial to investigate the efficacy and safety in participants without type 2 diabetes who have obesity or overweight, including participants with OSA and OA
- **TRIUMPH-2**: randomized, double-blind, placebo-controlled trial to investigate the efficacy and safety in participants with type 2 diabetes who have obesity or overweight including participants with OSA
- **TRIUMPH-3**: randomized, double-blind, placebo-controlled trial to investigate the efficacy and safety in participants with Class II (BMI ≥ 35 kg/m^2 and < 40 kg/m^2) or Class III (BMI ≥ 40 kg/m^2) obesity and established cardiovascular disease
- **TRIUMPH-4**: randomized, double-blind, placebo-controlled trial to investigate the efficacy and safety in participants who have obesity or overweight with OA

"We believe that combining glucagon receptor agonism with GIP and GLP-1 receptor agonism may be one of the reasons retatrutide showed this level of weight reduction," said Dan Skovronsky, M.D., Ph.D., Lilly's chief scientific and medical officer, and president of Lilly Research Laboratories. "These phase 2 data have given us confidence to further explore the potential of retatrutide in phase 3 trials that will look beyond weight reduction and focus on treating obesity and its complications comprehensively."

About The Study (NCT 04881760)
The phase 2 study was a 48-week, randomized, double-blind, placebo-controlled trial evaluating the efficacy, tolerability, and safety of retatrutide at various doses and dose-escalation regimens in people with obesity, or overweight with weight-related conditions, except type 2 diabetes. The trial, conducted in the United States, randomized 338 participants in a 2:1:1:1:1:2:2 ratio to receive retatrutide 1 mg, 4 mg (with initial dose of 2 mg), 4 mg (with initial dose of 4 mg), 8 mg (with initial dose of 2 mg), 8 mg (with initial dose of 4 mg), 12 mg (with initial dose of 2 mg) or placebo, administered subcutaneously once weekly for 48 weeks. The primary endpoint was percent change in weight from baseline at 24 weeks.

About Lilly
Lilly unites caring with discovery to create medicines that make life better for people around the world. We've been pioneering life-changing discoveries for nearly 150 years, and today our medicines help more than 51 million people across the globe. Harnessing the power of biotechnology, chemistry and genetic medicine, our scientists are urgently advancing new discoveries to solve some of the world's most significant health challenges, redefining diabetes care, treating obesity and curtailing its most devastating long-term effects, advancing the fight against Alzheimer's disease, providing solutions to some of the most debilitating immune system disorders, and transforming the most difficult-to-treat cancers into manageable diseases. With each step toward a healthier world, we're motivated by one thing: making life better for millions more people. That includes delivering innovative clinical trials that reflect the diversity of our world and working to ensure our medicines are accessible and affordable. To learn more, visit

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[i] For this study (NCT 04881760), participants needed to have a Body Mass Index (BMI) of ≥27 kg/m^2 to be classified as overweight.

[ii] The results are least-squares mean from the analysis guided by the efficacy estimand with 48 weeks of data from all eligible, randomized participants excluding data after permanent treatment discontinuation.

Cautionary Statement Regarding Forward-Looking Statements

This press release contains forward-looking statements (as that term is defined in the Private Securities Litigation Reform Act of 1995) about retatrutide as a potential treatment for people with obesity or overweight and the timeline for future readouts, presentations, and other milestones relating to retatrutide and its clinical trials and reflects Lilly's current beliefs and expectations. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of drug research, development, and commercialization. Among other things, there is no guarantee that planned or ongoing studies will be completed as planned, that future study results will be consistent with study results to date, that retatrutide will prove to be a safe and effective treatment for obesity, that retatrutide will receive regulatory approval, or that Lilly will execute its strategy as expected. For further discussion of these and other risks and uncertainties that could cause actual results to differ from Lilly's expectations, see Lilly's Form 10-K and Form 10-Q filings with the United States Securities and Exchange Commission. Except as required by law, Lilly undertakes no duty to update forward-looking statements to reflect events after the date of this release.

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