Use of Tirzepatide Shown to Improve Sleep Apnea and Cardiovascular Outcomes

SURMOUNT-OSA Study Highlights Potential Dual-Action Benefits of Novel Therapy for Obesity

ORLANDO, FL, JUNE 21, 2024 – Today, findings from the SURMOUNT-OSA, a study of tirzepatide in patients with obstructive sleep apnea (OSA) and obesity, were announced, revealing significant improvements in both sleep apnea severity and related metabolic issues. The results were presented as a Late-Breaking Symposium at the 84th Scientific Sessions of the American Diabetes Association® (ADA) in Orlando, FL, and were simultaneously published in the *New England Journal of Medicine (NEJM)*.

OSA affects up to 1 billion people globally and over 30 million adults in America alone. It is particularly common in individuals with obesity, which is the most significant risk factor. About 40% of people with obesity have OSA, and around 70% of OSA patients have obesity. This condition, marked by repeated airway obstruction during sleep, leads to various health issues, including hypertension, cardiovascular disease, diabetes, stroke, and impaired cognitive function. Traditional treatments for OSA, like continuous positive airway pressure (CPAP) devices, do not address obesity revealing a need for solutions that can treat both sleep apnea and obesity. The SURMOUNT-OSA study investigates tirzepatide, a novel treatment targeting both conditions.

The two randomized, double-blind, placebo-controlled trials included 469 individuals with moderate-to-severe OSA and obesity. Study 1 enrolled patients unable or unwilling to use PAP therapy and Study 2 enrolled patients on PAP therapy at baseline. Participants were assigned to receive either tirzepatide or a placebo for 52 weeks. The primary endpoint was the change in the apnea-hypopnea index (AHI), which measures the severity of sleep apnea. Key secondary endpoints included change of sleep apnea specific hypoxic burden (SASHB), CV risk factors including changes in body weight, systolic blood pressure and inflammation (hsCRP), and changes in patient-reported sleep related impairment and sleep disturbance.

Key findings revealed that participants who took tirzepatide experienced a significant decrease in AHI compared to those who took the placebo, indicating an improvement in sleep disordered breathing. In Study 1, the change in AHI at 52 weeks was -27.4 and -30.4 events/h with tirzepatide and -4.8 and -6,0 events/h with placebo in Study 1 and

Study 2, respectively. Notable changes of CV risk factors included reductions in body weight (18% in Study 1, and 20% in Study 2) and improvements in systolic blood pressure (-9.6 in Study 1 and -7.6 in Study 2).

“The results of the study have demonstrated the ability of tirzepatide to address both obesity and sleep apnea, offering an effective and comprehensive treatment solution," said Atul Malhotra, MD, professor of medicine at University of California San Diego School of Medicine, director of sleep medicine at UC San Diego Health, and the study’s principal investigator and lead author of the NEJM article. “Its potential to be used alongside or independently of CPAP could revolutionize how we manage these interconnected conditions. These findings show the potential for the first highly effective drug treatment for sleep apnea.”

Looking ahead, the authors emphasized the need for further analyses to explore the long-term benefits of tirzepatide on cardiovascular outcomes and its potential role in the broader management of obesity-related conditions.

Research presentation details:

Dr. Malhotra will present the findings at the following symposium:

- Late-Breaking Symposium: SURMOUNT-OSA Trial Results and Potential Role of Tirzepatide in Treating Obesity-Related Obstructive Sleep Apnea
- Presented on Friday, June 21, 2024 at 3:45 PM ET.

###

About the ADA’s Scientific Sessions

The ADA's 84th Scientific Sessions, the world's largest scientific meeting focused on diabetes research, prevention, and care, will be held in Orlando, FL on June 21-24. More than 11,000 leading physicians, scientists, and health care professionals from around the world are expected to convene both in person and virtually to unveil cutting-edge research, treatment recommendations, and advances toward a cure for diabetes. Attendees will receive exclusive access to thousands of original research presentations and take part in provocative and engaging exchanges with leading diabetes experts. Join the Scientific Sessions conversation on social media using #ADAScientificSessions.

About the American Diabetes Association

The American Diabetes Association (ADA) is the nation’s leading voluntary health organization fighting to bend the curve on the diabetes epidemic and help people living with diabetes thrive. For 83 years, the ADA has driven discovery and research to treat,

manage, and prevent diabetes while working relentlessly for a cure. Through advocacy, program development, and education we aim to improve the quality of life for the over 136 million Americans living with diabetes or prediabetes. Diabetes has brought us together. What we do next will make us Connected for Life®. To learn more or to get involved,
visit us at diabetes.org or call 1-800-DIABETES (1-800-342-2383). Join the fight with us on Facebook (American Diabetes Association), Spanish Facebook (Asociación Americana de la Diabetes), LinkedIn (American Diabetes Association), Twitter (@AmDiabetesAssn), and Instagram (@AmDiabetesAssn).