

Mosanna Therapeutics Reports Positive Results from the Phase 1 MOSAIC Study of MOS118 for Obstructive Sleep Apnea

- *MOS118 is an investigational, locally acting, nighttime nasal spray designed to treat obstructive sleep apnea (OSA) by restoring natural neuromuscular control of the upper airway during sleep*
- *MOS118 was well tolerated across all dose cohorts with no serious adverse events reported following both single and multiple doses of MOS118 in healthy volunteers*
- *Results support progression into patients with OSA*

REDWOOD CITY, Calif., September 29, 2026 – Mosanna Therapeutics, Inc., a clinical-stage biopharmaceutical company developing a locally acting pharmacologic treatment for obstructive sleep apnea (OSA), today announced results from its Phase 1 MOSAIC study. MOS118 was safe and well tolerated across all doses, with no serious adverse events reported. These results support progression of the study into patients with OSA.

“With these results we can now proceed to evaluate MOS118 in the patients it is intended to treat, testing a distinct pharmacologic approach to obstructive sleep apnea,” said David A. Weber, Ph.D., Chief Executive Officer of Mosanna Therapeutics. *“MOS118 is designed to restore the body's natural reflex for maintaining an open airway during sleep with a simple, locally acting nasal spray. We believe this approach has the potential to offer patients an easy-to-use treatment that fits into their nightly routine.”*

OSA is a chronic disorder in which the upper airway repeatedly narrows or collapses during sleep, interrupting breathing, reducing oxygen levels, and fragmenting sleep. These repeated disruptions are associated with broader health risks, including hypertension and cardiovascular disease. An estimated 80 million adults in the United States have OSA, yet fewer than 25 million are diagnosed. Treatment has long relied on continuous positive airway pressure (CPAP), dental appliances, or surgery to physically maintain an open airway, but many diagnosed patients decline CPAP or are unable to use it consistently. Recent advances in pharmacotherapy are expanding the treatment landscape, but a need remains for convenient therapies that act directly on the physiology responsible for airway collapse.

MOS118 is being developed to address impaired neuromuscular control of the upper airway. Pressure-sensing nerves in the nasal and upper airway detect the negative pressure created during inhalation and signal the upper-airway dilator muscles to activate. This natural protective response, known as the negative pressure reflex, becomes less responsive during sleep in people with OSA. MOS118 is designed to sensitize sensory nerve endings in the upper airway, amplifying this reflex and restoring the dilator muscle activity that helps keep the airway open.

The Phase 1 MOSAIC study is a randomized, double-blind, placebo-controlled evaluation with an integrated single-ascending-dose and multiple-ascending-dose design. The study enrolled a total of 32 healthy adult volunteers across four sequential dose cohorts and evaluated the safety, tolerability, and pharmacokinetics of MOS118. Safety monitoring included continuous 12-lead electrocardiogram telemetry with matched pharmacokinetic assessments, nasal examinations, and local-tolerance assessments. MOS118 was safe and well tolerated across all dose cohorts, with no serious adverse events reported.

Mosanna will next evaluate the safety and tolerability of nightly dosing of MOS118 over seven days in 24 patients with OSA. The Phase 1 MOSAIC study is being conducted in the United States under the FDA-cleared Investigational New Drug (IND) application for MOS118.

About MOS118

MOS118 is an investigational small-molecule pan-potassium channel inhibitor formulated as a microparticle suspension for intranasal administration at bedtime. It is designed to activate mechanosensitive afferent neurons throughout the nasal and upper airway, amplifying the negative pressure reflex that maintains upper-airway dilator muscle activity during sleep. The microparticle formulation is intended to retain MOS118 at the nasal and upper-pharyngeal target tissues and limit systemic exposure. MOS118 has the potential to offer a noninvasive, nonmechanical pharmacologic treatment for OSA that can be easily integrated into a patient's bedtime routine.

About Mosanna Therapeutics

Mosanna Therapeutics is a clinical-stage biopharmaceutical company advancing medicines that introduce pharmacologic approaches in areas that have historically received limited drug-development attention. Its experienced team brings expertise across clinical development, regulatory affairs, and CMC to guide programs through the critical stages of development. The company's lead program, MOS118, is an investigational, locally acting nighttime nasal spray designed to restore the body's natural neuromuscular control of the upper airway during sleep as a potential treatment for obstructive sleep apnea. Founded in 2022, Mosanna is backed by a global syndicate of life sciences investors and is headquartered in Redwood City, California. For more information, visit www.mosanna.com.

Contacts

Company: Pranav Tadi, VP Finance & Corporate Operations, info@mosanna.com

Media: Jessica Yingling, Ph.D., Little Dog Communications Inc., jessica@litldog.com

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