Aptar Pharma and Massachusetts General Hospital Collaborate on Platform to Establish Predictive, Data-Driven Model for Advancing Nose-to-Brain Drug Delivery

Goal is to help pharmaceutical innovators evaluate opportunities earlier and accelerate future central nervous system pipelines

Crystal Lake, Illinois, September 14, 2026 - AptarGroup, Inc. (NYSE:ATR), a global leader in drug delivery, dosing and protection technologies, and consumer product dispensing, today announced that it has signed an agreement for a research collaboration led by Alice Stanton, PhD from Massachusetts General Hospital (MGH) to advance the science of nose-to-brain (N2B) drug delivery.

Aptar and its collaborators will develop an integrated translational research platform combining in vitro, in vivo and computational technologies and evaluate a broad range of molecular classes and physicochemical properties to quantitatively characterize the mechanisms, pathways, and kinetics of nose-to-brain transport.

“Through this study, we will profile the intranasal pathway to the brain and develop a tool to mimic this route, towards robust and non-invasive delivery of medicines that may otherwise be stopped by the blood-brain barrier or impeded by absorption in other tissues. The ability to provide effective drug delivery to the brain via the nose could catalyze an inflection point for disease treatments,” said Alice Stanton, PhD, Assistant Professor and Investigator in the Center for Genomic Medicine at Massachusetts General Brigham and Assistant Professor of Neurology at Harvard Medical School.

Over the past decade, nasal drug delivery has become an established route for both local and systemic therapies, enabling innovative treatments across a range of therapeutic areas. More recently, growing interest in direct nose-to-brain delivery has emerged as researchers and pharmaceutical companies seek new approaches to treat neurological and central nervous system (CNS) disorders like Alzheimer’s disease, Parkinson’s disease, multiple sclerosis, depression and more.

The development of the N2B New Approach Methodologies (NAM), consistent with the U.S. FDA’s support for these approaches, aims to enable screening compounds that are amenable for N2B delivery, supporting safer treatment for patients while reducing costs. The resulting

NAM is designed to incorporate Aptar's nasal drug delivery systems to help improve candidate selection, inform formulation and device design decisions, and support acceleration of the development of therapies targeting neurological diseases. This work is intended to result in a NAM designed to screen compounds for nose-to-brain delivery during drug development.

While pioneering studies, including those conducted at Wake Forest University School of Medicine, have demonstrated that direct transport from the nose to the brain can occur, critical scientific questions remain. Pharmaceutical innovators continue to work with partners such as Aptar to determine which molecules are best suited for N2B delivery, which physicochemical properties drive transport and how preclinical results can reliably predict human outcomes.

As a leader in advanced nasal drug delivery, Aptar has decades of research and investment in its proprietary nasal delivery systems, backed by 30 years of related field data. Aptar has invested in technologies specifically designed to target the upper nasal cavity, including its Cerespray™ and Neurospray™ platforms. These technologies are intended to support precise deposition in regions associated with nose-to-brain transport and are part of Aptar's broader commitment to advancing CNS drug delivery.

"Interest in nose-to-brain delivery has accelerated significantly in recent years, yet one of the most common questions we hear from pharmaceutical innovators is whether a specific molecule is truly suitable for this pathway," said Reenal Gandhi, Global Business Development Director, Aptar Pharma. "Our goal is to transform nose-to-brain delivery from a promising concept into a more predictable and data-driven development pathway, helping pharmaceutical innovators evaluate opportunities earlier and accelerate future CNS pipelines."

Over time, these proprietary tools are expected to support a broad range of future nose-to-brain development programs, creating long-term value across multiple CNS applications.

By combining Aptar's expertise in nasal drug delivery technologies with the world-class research capabilities of the Stanton lab, and MGH, the collaboration seeks to advance the scientific foundation of nose-to-brain drug delivery and unlock new opportunities for CNS therapeutics.

The Stanton Lab works on "Technology Towards Treatments." Driven by the need for better treatments for neurological disease, the Stanton Lab combines neurogenetics, omics, and cell biology techniques with tools spanning nanotechnology, machine learning, microfluidics, microphysiological systems, biomaterials engineering, and tissue engineered organoid approaches. For more information, visit www.stantonlab.info/research.

About Aptar

Aptar is a global leader in drug delivery, dosing and protection technologies, and consumer product dispensing. Aptar partners with the world's top healthcare and consumer brands to deliver medicines and create exceptional user experiences. Serving diverse markets, from pharmaceutical to beauty to food and beverage, Aptar combines market expertise with proprietary design, engineering and science to develop innovative solutions that help improve lives worldwide. Headquartered in Crystal Lake, Illinois, Aptar employs 14,000 dedicated people across 20 countries. Learn more at http://www.aptar.com.

This press release contains forward-looking statements, including regarding the use of Aptar's nasal spray technology and the development, capabilities and outcome of the N2B research collaboration. Forward-looking statements generally can be identified by the fact that they do not relate strictly to historical or current facts and by use of words such as "expects," "anticipates," "believes," "estimates," "future," "potential," "continues" and other similar expressions or future or conditional verbs such as "will," "should," "would" and "could" are intended to identify such forward-looking statements. Forward-looking statements are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are based on our beliefs as well as assumptions made by and information currently available to us. Accordingly, our actual results or other events may differ materially from those expressed or implied in such forward-looking statements due to known or unknown risks and uncertainties that exist in our operations and business environment including, but not limited to: *risks that early-stage or preclinical research findings, including those from this collaboration, may not be replicated or may not predict outcomes in later-stage development or in humans; risks that the resulting NAM tool may not achieve its intended predictive capability or gain acceptance by pharmaceutical partners or regulators; risks related to clinical development activities conducted by third parties; development and commercialization risks; customer adoption; regulatory requirements and compliance; and competition, including technological advances. For additional information on these and other risks and uncertainties, please see our filings with the Securities and Exchange Commission, including the discussion under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Form 10-K and Form 10-Qs. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.*

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