CAMP4 Therapeutics to Present New Preclinical Data Demonstrating CMP-002 Improves Seizure Threshold and Severity in a Model of SYNGAP1-Related Disorder

May 14, 2026

CMP-002 administration resulted in a statistically significant improvement in seizure phenotypes and parameters in a SYNGAP1 haploinsufficient mouse model

Results build upon prior preclinical evidence of neurodevelopmental benefit and suggest the potential for broader therapeutic impact

CAMBRIDGE, Mass., May 14, 2026 (GLOBE NEWSWIRE) -- CAMP4 Therapeutics Corporation ("CAMP4" or "the Company") (Nasdaq: CAMP), a clinical-stage biopharmaceutical company developing a pipeline of regulatory RNA-targeting therapeutics designed to upregulate gene expression with the goal of restoring healthy protein levels to treat a broad range of genetic diseases, today announced the presentation of new preclinical data for CMP-002, the Company's lead investigational antisense oligonucleotide (ASO) therapeutic candidate for SYNGAP1-related disorder (SRD), at the TIDES Oligonucleotide & Peptide Therapeutics conference on May 14, 2026.

The new data demonstrate that CMP-002 administration produced a statistically significant improvement in both seizure threshold and severity of chemically-induced tonic-clonic seizures in mice haploinsufficient for SYNGAP1.

"SYNGAP1-related disorder is characterized by a constellation of neurological symptoms, of which seizures are among the most common, resulting in a devastating burden on patients and their families," said Daniel Tardiff, PhD, Chief Scientific Officer of CAMP4. "Our prior work established that CMP-002 can meaningfully restore motor and behavioral function in preclinical models, and these new seizure data are an important extension of that story. Given this evidence, we believe that by restoring SYNGAP1 protein towards healthy levels, CMP-002 may address a broad range of symptoms that define this disease. We look forward to sharing these findings with the broader oligonucleotide therapeutics community at TIDES."

Because SYNGAP1 haploinsufficient mice do not exhibit spontaneous and readily countable seizures, the study employed a seizure induction model using pentylenetetrazol (PTZ). PTZ is a GABA receptor antagonist that increases excitatory signaling and induces seizures. In the new study, PTZ was administered to induce tonic-clonic seizures one month after administration of CMP-002 to juvenile mice. SYNGAP1 haploinsufficient mice experienced a greater seizure burden compared to wild-type mice, while intervention with a single dose of CMP-002 led to a statistically significant resistance to the onset of tonic-clonic seizures following repeated PTZ administration, as well as a statistically significant decrease in seizure severity.

Together, these data suggest that restoring SYNGAP1 protein toward healthy levels with CMP-002 may improve both the neurodevelopmental and seizure phenotypes that define SRD, supporting the potential of CMP-002 to provide broad disease-modifying benefit.

CAMP4 expects to advance CMP-002 into a Phase 1/2 clinical trial in individuals with SYNGAP1-related disorder in the second half of 2026.

About CAMP4 Therapeutics
CAMP4 is developing disease-modifying treatments for a broad range of genetic diseases where amplifying healthy protein may offer therapeutic benefits. Our approach amplifies mRNA by harnessing a fundamental mechanism of how genes are controlled. To amplify mRNA, our therapeutic ASO drug candidates target regulatory RNAs (regRNAs), which act locally on transcription factors and are the master regulators of gene expression. CAMP4's proprietary RAP Platform® enables the mapping of regRNAs and generation of therapeutic candidates designed to target the regRNAs associated with genes underlying haploinsufficient and recessive partial loss-of-function disorders, of which there are more than 1,200, in which a modest increase in protein expression may have the potential to be clinically meaningful. For more information, visit camp4tx.com.

About SYNGAP1-Related Disorder
SYNGAP1-related disorder (also referred to as SYNGAP1) is a rare, haploinsufficient CNS disorder caused by mutations in the SYNGAP1 gene, resulting in approximately 50% of normal SYNGAP protein levels. The condition affects over 10,000 individuals in the United States and is characterized by intellectual disability in 100% of patients, epilepsy in approximately 85%, severe behavioral problems in approximately 70%, sleep problems in approximately 60%, and limited communication, with approximately 30% of patients being non-verbal. There are currently no approved disease-modifying therapies for patients living with SYNGAP1.

About CMP-002

CMP-002 is CAMP4's lead investigational ASO therapeutic candidate designed to bind to a SYNGAP1-specific regRNA to increase SYNGAP1 gene expression and restore SYNGAP protein toward near wild-type levels. Administered intrathecally, CMP-002 has demonstrated dose-dependent increases in SYNGAP protein expression in patient-derived neurons, reversal of disease-relevant behavioral phenotypes in a humanized haploinsufficient mouse model, statistically significant improvement of seizure phenotypes and parameters in a chemically induced seizure mouse model, and broad brain distribution with significant SYNGAP protein upregulation in non-human primates. The Company expects to initiate a global Phase 1/2 clinical trial in SYNGAP1 patients in 2H 2026.

About TIDES Oligonucleotide & Peptide Therapeutics
TIDES is a leading annual conference focused on the development, manufacturing, and clinical advancement of oligonucleotide and peptide therapeutics. The conference convenes scientists, clinicians, and industry leaders to accelerate the translation of these modalities from discovery to the clinic.

Forward-Looking Statements
This press release contains forward-looking statements which involve risks, uncertainties and contingencies, many of which are beyond the control of the Company, which may cause actual results, performance, or achievements to differ materially from anticipated results, performance, or achievements. All statements other than statements of historical facts contained in this press release are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements concerning the anticipated timing to advance CMP-002 into a clinical trial and the therapeutic potential of the Company's platform technology and product candidates. The forward-looking statements in this press release speak only as of the date of this press release and are subject to a number of known and unknown risks, uncertainties and assumptions that could cause the Company's actual results to differ materially from those anticipated in the forward-looking statements, including, but not limited to: the uncertainty of preclinical and clinical development, which is lengthy and expensive, and characterized by uncertain outcomes, and risks related to additional costs or delays in completing, or failing to complete, the development and commercialization of the Company's current product candidates or any future product candidates; the Company's dependence on the services of the Company's senior management and other clinical and scientific personnel, and the Company's ability to retain these individuals or recruit additional management or clinical and scientific personnel; risks related to the manufacturing of the Company's product candidates, which is complex, and the risk that the Company's third-party manufacturers may encounter difficulties in production; the Company's ability to obtain and maintain sufficient intellectual property protection for the Company's platform technology and product candidates; and other risks and uncertainties described in the section "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2025 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2026, as well as other information the Company files with the Securities and Exchange Commission. The forward-looking statements in this press release are inherently uncertain and are not guarantees of future events. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond the Company's control, you should not unduly rely on these forward-looking statements. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual future results, levels of activity, performance and events and circumstances could differ materially from those projected in the forward-looking statements. Moreover, the Company operates in an evolving environment. New risks and uncertainties may emerge from time to time, and management cannot predict all risks and uncertainties. Investors, potential investors, and others should give careful consideration to these risks and uncertainties. Except as required by applicable law, the Company does not undertake to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

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