



Dyne Therapeutics' Preclinical Data Demonstrating FORCE™ Platform Delivery to CNS Featured in Oral Presentation at ASGCT Annual Meeting

May 17, 2023

- Broad Distribution in CNS Demonstrated in Non-Human Primates -

- Achieved Reduction of Toxic Nuclear DMPK RNA and Foci in the Brain in a DM1 Disease Model -

WALTHAM, Mass., May 17, 2023 (GLOBE NEWSWIRE) -- [Dyne Therapeutics, Inc.](#) (Nasdaq: DYN), a clinical-stage muscle disease company focused on advancing innovative life-transforming therapeutics for people living with genetically driven diseases, is delivering an oral presentation today at the [American Society of Gene & Cell Therapy \(ASGCT\) 26th Annual Meeting](#) in Los Angeles highlighting new preclinical data demonstrating the FORCE™ platform achieved delivery to the central nervous system (CNS) in non-human primates and robust pharmacological effects in the brain in a model of myotonic dystrophy type 1 (DM1).

Oral Presentation: FORCE™ Platform Delivers Oligonucleotides to the Brain in a DM1 Mouse Model and in NHPs (abstract #82)

Session: Nucleic Acid Therapeutics

Date/Time: Wednesday, May 17, 2023, at 4:00 p.m. PT

Presenter: Stefano Zanotti, Ph.D., Executive Director, Head of Neuromuscular Research, Dyne

The presentation will be available in the [Scientific Publications & Presentations section](#) of Dyne's website following the session.

The FORCE platform was designed to overcome the limitations of delivering oligonucleotide therapeutics to muscle tissue by leveraging transferrin receptor 1 (TfR1). TfR1-mediated delivery also has been shown by the field to facilitate uptake of therapeutics by the CNS. Many people living with rare muscle diseases experience CNS symptoms that contribute to the burden of disease, including cognitive deficits and dysregulated sleep, which affect individuals with DM1.

Data being presented at ASGCT show that intravenous (IV) administration of FORCE conjugate, a TfR1-binding Fab antibody conjugated to an antisense oligonucleotide (ASO), achieved delivery to the CNS via TfR1 in both non-human primates (NHPs) and the innovative hTfR1/DMSXL mouse model. The hTfR1/DMSXL model, developed by Dyne, expresses the human TfR1 and carries a human *DMPK* gene with more than 1,000 CTG repeats that represents a severe DM1 phenotype. In these studies, FORCE conjugate was well tolerated.

Highlights from the ASGCT data include:

- In NHPs, FORCE conjugate achieved superior delivery compared to unconjugated ASO when both were administered via IV. In addition, IV administration of FORCE showed broader distribution throughout the brain compared to intrathecal (IT) administration of unconjugated ASO.
- FORCE conjugate also delivered to the brain of hTfR1/DMSXL mice and demonstrated robust knockdown of toxic human nuclear *DMPK* RNA and foci reduction.

"We have previously demonstrated that the FORCE platform enables delivery of oligonucleotides to skeletal, smooth and cardiac muscle in multiple, well-validated preclinical models, and we are excited to now highlight TfR1-mediated delivery to the CNS in these data at ASGCT. The CNS manifestations of neuromuscular disorders contribute significantly to the disease burden, and we look forward to further evaluating the potential of the FORCE platform in this area and advancing our commitment to delivering life-transforming therapies to patients," said Oxana Beskrovnyaya, Ph.D., chief scientific officer of Dyne.

About Dyne Therapeutics

Dyne Therapeutics is a clinical-stage muscle disease company focused on advancing innovative life-transforming therapeutics for people living with genetically driven diseases. With its proprietary FORCE™ platform, Dyne is developing modern oligonucleotide therapeutics that are designed to overcome limitations in delivery to muscle tissue. Dyne has a broad pipeline for serious muscle diseases, including clinical programs for myotonic dystrophy type 1 (DM1) and Duchenne muscular dystrophy (DMD), and a preclinical program for facioscapulohumeral muscular dystrophy (FSHD). For more information, please visit <https://www.dyne-tx.com/>, and follow us on [Twitter](#), [LinkedIn](#) and [Facebook](#).

Forward-Looking Statements

This press release contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this press release, including statements regarding Dyne's strategy, future operations, prospects and plans, objectives of management, and the potential of the FORCE platform, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "objective," "ongoing," "plan," "predict," "project," "potential," "should," or "would," or the negative of these terms, or other comparable terminology are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Dyne may not actually achieve the plans, intentions or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements as a result of various important factors, including: uncertainties inherent in the identification and development of product candidates, including the initiation and completion of preclinical studies and clinical trials; uncertainties as to the availability and timing of results from preclinical studies and clinical trials; the timing of

and Dyne's ability to initiate and enroll patients in clinical trials; whether results from preclinical studies will be predictive of the results of later preclinical studies and clinical trials; whether Dyne's cash resources will be sufficient to fund the Company's foreseeable and unforeseeable operating expenses and capital expenditure requirements; as well as the risks and uncertainties identified in Dyne's filings with the Securities and Exchange Commission (SEC), including the Company's most recent Form 10-Q and in subsequent filings Dyne may make with the SEC. In addition, the forward-looking statements included in this press release represent Dyne's views as of the date of this press release. Dyne anticipates that subsequent events and developments will cause its views to change. However, while Dyne may elect to update these forward-looking statements at some point in the future, it specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing Dyne's views as of any date subsequent to the date of this press release.

Contacts:

Investors

Amy Reilly

areilly@dyne-tx.com

857-341-1203

Media

Stacy Nartker

snartker@dyne-tx.com

781-317-1938