New Preclinical Data from Dyne Therapeutics' Myotonic Dystrophy Type 1 Program to be Featured in Presentations During Upcoming American Society of Gene & Cell Therapy Annual Meeting

April 27, 2021

Company to host webcast including leading DM1 expert, Dr. Charles Thornton, following presentations on May 14, 2021

WALTHAM, Mass., April 27, 2021 (GLOBE NEWSWIRE) -- Dyne Therapeutics, Inc. (Nasdaq: DYN), a muscle disease company focused on advancing innovative life-transforming therapeutics for people living with genetically driven diseases, today announced that new preclinical data from its myotonic dystrophy type 1 (DM1) program will be featured in presentations during the American Society of Gene & Cell Therapy (ASGCT) 24th Annual Meeting, to be held virtually May 11-14, 2021. ASGCT abstracts are available on the meeting website, and Dyne's presentations are noted below.

Presentation: Splice Correction and Reduction of Toxic *DMPK* RNA *In Vitro* and *In Vivo* Utilizing Novel Antibody Targeted Antisense Oligonucleotides
Scientific Symposium: Hot Topics and Remaining Challenges in RNAi and Oligonucleotide Therapy for 2021
Date/Time: Friday, May 14, 2021 at 10:26 a.m. ET
Presenter: Romesh Subramanian, Ph.D., Chief Scientific Officer

Oral Presentation: The FORCE™ Platform Achieves Robust Knock Down of Toxic Human Nuclear *DMPK* RNA and Foci Reduction in DM1 Cells and in Newly Developed hTfR1/DMSXL Mouse Model (Abstract #247)
Session: Oligonucleotide Therapeutics
Date/Time: Friday, May 14, 2021 at 1:15 p.m. ET
Presenter: Stefano Zanotti, Ph.D., Director, Mechanistic Biology

The presentations will include new data, expanding upon initial findings reported in January 2021 utilizing Dyne's innovative hTfR1/DMSXL mouse model expressing human TfR1 and carrying a human *DMPK* gene that represents a severe DM1 phenotype with more than 1,000 CTG repeats, as well as results from *in vitro* studies.

Dyne's FORCE™ platform leverages the importance of transferrin 1 receptor, TfR1, in muscle biology as the foundation for its novel approach. TfR1, which is highly expressed on the surface of muscle cells, is required for iron transport into muscle cells. Dyne links therapeutic payloads to its TfR1-binding fragment antibody (Fab) to develop targeted therapeutics for muscle diseases. Dyne's lead DM1 candidate consists of a Fab conjugated to an antisense oligonucleotide (ASO) to enable targeted delivery to muscle tissue to reduce accumulation of toxic *DMPK* RNA in the nucleus, release splicing proteins, allow normal mRNA processing and translation of normal proteins, and potentially stop or reverse disease progression.

DM1 Program Webcast

Following the presentations on May 14, 2021, Dyne plans to host a live webcast event at 4:00 p.m. ET to review the company's DM1 program and preclinical data, and to provide an overview of the disease and treatment challenges. Joining management on the webcast will be Charles Thornton, M.D., the Saunders Distinguished Professor of Neuromuscular Research at the University of Rochester. Dr. Thornton directs the Muscular Dystrophy Cooperative Research Center in Rochester and the Myotonic Dystrophy Clinical Research Network, a multicenter consortium for clinical research and therapeutic trials. He has been engaged in bench and clinical research on myotonic dystrophy for 30 years.

The live and archived webcast can be accessed in the Investors & Media section of Dyne's website at: https://investors.dyne-tx.com/news-and-events/events-and-presentations. The archived webcast will be made available shortly after the event and accessible for 90 days.

About Dyne Therapeutics

Dyne Therapeutics is building a leading muscle disease company dedicated to 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 seen with other approaches. Dyne's broad portfolio of therapeutic candidates for serious muscle diseases includes programs for myotonic dystrophy type 1 (DM1), Duchenne muscular dystrophy (DMD) and 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, 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 conduct of research activities and the initiation and completion of preclinical studies and clinical trials; uncertainties as to the availability and timing of results from preclinical studies; the timing of and Dyne's ability to submit and obtain regulatory approval for investigational new drug applications; 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; the impact of the COVID-19 pandemic on Dyne's business and operations; as well as the risks and

uncertainties identified in Dyne's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 10-K for the year ended December 31, 2020 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.

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