Dyne Therapeutics Announces Initiation of Phase 3 HARMONIA Trial of Z-Basivarsen in Myotonic Dystrophy Type 1 (DM1)

March 8, 2026

- HARMONIA trial will assess multi-system efficacy, safety and tolerability of z-basivarsen in DM1 -

- 48-week trial will enroll approximately 150 individuals, and first sites are now open for enrollment -

- Primary endpoint is the five times sit to stand (5xSTS) test; secondary and exploratory endpoints will assess muscle function, CNS manifestations, and patient- and clinician-reported outcomes -

- HARMONIA trial design and protocol aligned with FDA; trial intended to serve as confirmatory trial for traditional approval in the U.S. and support ex-U.S. marketing applications -

WALTHAM, Mass., March 08, 2026 (GLOBE NEWSWIRE) -- Dyne Therapeutics, Inc. (Nasdaq: DYN), a clinical-stage company focused on delivering functional improvement for people living with genetically driven neuromuscular diseases, today announced the initiation of the Phase 3 HARMONIA trial of zeleciment basivarsen (z-basivarsen, also known as DYNE-101), in individuals with myotonic dystrophy type 1 (DM1). The design of the HARMONIA trial is being presented at the 2026 Muscular Dystrophy Association (MDA) Clinical & Scientific Conference on Wednesday, March 11, 2026 at 9:30 a.m. ET. A corresponding poster is also available in the Scientific Publications & Presentations section of Dyne's website.

"We are proud to be contributing to key advances in myotonic dystrophy clinical research with the initiation of a field-defining Phase 3 study designed to demonstrate the broad potential benefits of z-basivarsen," said Doug Kerr, M.D., Ph.D., chief medical officer of Dyne. "Building on the ongoing registrational expansion cohort of the Phase 1/2 ACHIEVE trial, which is utilizing myotonia, as measured by video hand opening time, as an early indicator of clinical benefit for potential U.S. Accelerated Approval, HARMONIA is a larger and longer-term study utilizing a clinically meaningful functional measure as the primary endpoint. HARMONIA was designed to reinforce the best-in-class potential of z-basivarsen based on the differentiated capabilities of our FORCE platform to deliver therapeutics to a broad range of muscle systems as well as the CNS."

HARMONIA is a global, randomized, placebo-controlled, double-blind, confirmatory Phase 3 trial designed to assess the multi-system efficacy, safety, and tolerability of z-basivarsen administered intravenously to individuals with DM1. The trial will enroll approximately 150 participants age 16 and older who will be randomized 1:1 to receive 6.8 mg/kg of z-basivarsen or placebo every eight weeks (Q8W). The first trial sites are activated and open to enrollment.

The primary endpoint is the change from baseline in the five times sit to stand (5xSTS) test at week 49. The 5xSTS test is a reliable and responsive measure that reflects key areas of DM1 impairment, including lower extremity strength, balance and trunk strength, which are critical to performing daily activities. Secondary endpoints include video hand opening time, quantitative muscle testing, the 10-Meter Walk/Run test, the Myotonic Dystrophy Health Index, and additional patient- and clinician-reported outcomes. The trial also includes a broad set of exploratory endpoints designed to assess multiple domains of DM1 central nervous system (CNS) impact. Following the 48-week double-blind placebo-controlled treatment period, patients will be eligible to enroll in a 24-week long-term extension.

Dyne has aligned with the U.S. Food and Drug Administration (FDA) on the HARMONIA Phase 3 trial design and protocol. HARMONIA is intended to serve as a confirmatory trial to support conversion of Accelerated Approval to traditional approval in the U.S. and to support ex-U.S. marketing applications.

About the HARMONIA Trial
HARMONIA is a global, randomized, placebo-controlled, double-blind, confirmatory Phase 3 clinical trial evaluating the efficacy, safety and tolerability of zeleciment basivarsen (z-basivarsen, also known as DYNE-101) in people living with myotonic dystrophy type 1 (DM1). The trial will enroll approximately 150 participants age 16 and older who will receive 6.8mg/kg of z-basivarsen or placebo once every eight weeks for 48 weeks, and participants who complete the placebo-controlled period may enter a long-term extension during which all will receive 6.8mg/kg of z-basivarsen every eight weeks for up to 24 additional weeks. The primary endpoint of HARMONIA is the change from baseline in the five times sit to stand (5xSTS) test at week 49. The 5xSTS test is a reliable and responsive measure that reflects key areas of DM1 impairment, including lower extremity strength, balance and trunk strength, which are critical to performing daily activities. Secondary endpoints include video hand opening time, quantitative muscle testing, the 10-Meter Walk/Run test, the Myotonic Dystrophy Health Index, and additional patient- and clinician-reported outcomes. The trial also includes a broad set of exploratory endpoints designed to assess multiple domains of DM1 central nervous system impact.

About zeleciment basivarsen (z-basivarsen, formerly known as DYNE-101)
Z-basivarsen is an investigational therapeutic being evaluated in the Phase 1/2 global ACHIEVE clinical trial for people living with DM1. Z-basivarsen consists of an antisense oligonucleotide (ASO) conjugated to an antigen-binding fragment (Fab) that binds to the transferrin receptor 1 (TfR1) to enable delivery to muscle and the central nervous system. It is designed to deliver functional improvement in individuals living with DM1 by reducing toxic nuclear DMPK RNA to release splicing proteins and allow normal mRNA processing. Z-basivarsen has been granted Breakthrough Therapy, Orphan Drug and Fast Track designations by the U.S. Food and Drug Administration (FDA), as well as Orphan Drug designation from the European Medicines Agency (EMA) and the Ministry of Health, Labour and Welfare (MHLW) in Japan for the treatment of DM1.

About Myotonic Dystrophy Type 1 (DM1)
Myotonic dystrophy type 1 (DM1) is a rare, progressive, genetic neuromuscular disease with high morbidity and early mortality. DM1 affects ~40,000 people in the U.S. and ~55,000 people in the EU. The severity of symptoms and rate of progression varies. Symptoms can begin at any point in an affected person's life, depending on the DM1 subtype. Adult-onset DM1 symptoms typically appear between 20 to 40 years of age. DM1 is caused by mutations in the DMPK gene, leading to a widespread disruption of RNA splicing, known as spliceopathy, which drives the multi-system manifestations

of the disease. People experience a broad spectrum of symptoms, including: muscle weakness throughout the body, myotonia or difficulty relaxing muscles, excessive daytime sleepiness, fatigue, dysregulated sleep, cognitive impairments, cardiac arrhythmias, respiratory issues and gastrointestinal dysfunction. Although the genetic cause of DM1 is well understood, there are currently no approved disease-modifying treatments for DM1.

About Dyne Therapeutics
Dyne Therapeutics is focused on delivering functional improvement for people living with genetically driven neuromuscular diseases. We are developing therapeutics that target muscle and the central nervous system (CNS) to address the root cause of disease. The company is advancing clinical programs for Duchenne muscular dystrophy (DMD) and myotonic dystrophy type 1 (DM1) as well as preclinical programs for facioscapulohumeral muscular dystrophy (FSHD), Pompe disease and multiple DMD mutations. At Dyne, we are on a mission to deliver functional improvement for individuals, families and communities. Learn more at https://www.dyne-tx.com/, and follow us on X, 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, the potential of the FORCE platform, the clinical potential of zeleciment basivarsen (z-basivarsen, also known as DYNE-101), the potential of video hand opening time to serve as an intermediate clinical endpoint for U.S. accelerated approval, and the capability of Dyne's FORCE platform to deliver therapeutics to a broad range of muscle systems as well as the central nervous system, 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," "will" 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 enroll patients in clinical trials; uncertainties as to the FDA's and other regulatory authorities' interpretation of the data from Dyne's clinical trials and the regulatory approval process; whether Dyne's cash resources will be sufficient to fund its 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-K 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
Mia Tobias
ir@dyne-tx.com
781-317-0353

Media
Stacy Nartker
snartker@dyne-tx.com
781-317-1938