Press Release

Dynacure Announces Approval of Clinical Trial Application for DYN101, an Antisense Medicine to Treat Rare Disease 'Centronuclear Myopathies'

Company expects to initiate Phase 1 / 2 study 'Unite-CNM' in 2H2019

Strasbourg (France), April 30, 2019

Dynacure, a clinical stage drug development company focused on improving the lives of patients with rare and orphan disorders, today announced that The Medicines and Healthcare products Regulatory Agency (MHRA) has approved the Clinical Trial Application (CTA) for DYN101, an investigational antisense medicine designed to modulate the expression of dynamin 2 (DNM2) for the treatment of Centronuclear Myopathies (CNM). Dynacure expects to initiate its first in human study, a Phase 1 / 2 study 'Unite-CNM', in the second half of 2019. DYN101 is being developed in collaboration with Ionis Pharmaceuticals [NASDAQ: IONS], the leader in RNA-targeted drug discovery.

"This is the first regulatory approval for a clinical trial of DYN101, representing a promising advancement for patients suffering from most forms of centronuclear and myotubular myopathies," said Stephane van Rooijen (M.D. MBA), Chief Executive Officer of Dynacure. "With antisense, we believe there is an opportunity to reimagine the treatment of rare muscle-related disorders where no viable therapy exists."

Chris Freitag (M.D.), Chief Medical Officer of Dynacure, added, "Evaluating DYN101 in patients is an important next step in our efforts to understand the potential of this molecule to treat most forms of CNM and potentially other diseases driven by the overexpression of DNM2. The target engagement and efficacy observed in multiple mouse models of the disease give us great confidence in our ability to demonstrate potential disease-modifying results in humans."

Nicol Voermans (M.D. PhD), Neurologist Radboud University Medical Centre (the Netherlands) commented, "The start of clinical evaluation of the effect of DYN101 in

patients greater than 16 years of age with X-linked and ADCNM is a promising advancement in the treatment of CNM. Dynacure's approach has the potential to provide therapeutic benefit to a wide range of CNM patients by modulating DNM2."

About DYN101 for Centronuclear Myopathies

DYN101, an investigational antisense oligonucleotide using Ionis' proprietary antisense technology, is designed to modulate the expression of dynamin 2 (DNM2) for the treatment of Centronuclear Myopathies. Centronuclear and myotubular myopathies (CNM) are rare congenital myopathies with variable inheritance ranging from X-linked recessive (XLCNM/ Myotubular Myopathy), autosomal dominant (ADCNM), and autosomal recessive (ARCNM), all associated with poor prognosis. Centronuclear Myopathies affect between 4,000 and 5, 000 patients in the EU, US, Japan and Australia[1].

Preclinical studies have demonstrated that DYN101 has the potential to be disease modifying in CNM, with compelling preclinical efficacy in treating animal models of XLCNM and ADCNM[2,3]. Prevention and reversion of the disease was observed with a clear dose-dependent improvement in whole body strength and mice survival.

The development plan for DYN101 was designed to be very broad and it is the only known program being investigated for most CNM populations, XLCNM, ADCNM and ARCNM. In addition to investigating DYN101 for CNM, Dynacure aims to expand its use and explores additional indications where the overexpression of DNM2 is a disease-driving factor.

About the Phase 1 / 2 Study 'Unite-CNM' (DYN101-C101)

'Unite-CNM' (DYN101-C101) is a European multicenter, ascending dose study to evaluate the safety, tolerability, pharmacokinetics and preliminary efficacy of DYN101 in approximately 18 patients greater than 16 years of age with XLCNM or ADCNM. Enrolled patients will have a run-in period or be rolled over from an ongoing natural history study, sponsored by the Institute of Myology in France, which includes 60 subjects that have XLCNM or ADCNM. While the Phase 1 / 2 study will primarily focus on finding an optimal dose of the drug via safety, tolerability and target attainment after 12 weeks of treatment, multiple domains of efficacy will also be assessed in an exploratory analysis, which include muscular function, respiratory function and muscle strength. After completing the Unite-CNM

study, Dynacure expects to investigate a potentially registration-directed Phase 2 / 3 study (all age groups) that would include European and US sites.

About Dynacure

Dynacure is a clinical-stage drug development company focused on improving the lives of patients with rare and orphan diseases. The Dynacure team leverages its proven track record in rare disease drug development to build a pipeline of novel drugs. Dynacure is developing DYN101, an investigational antisense medicine designed to modulate the expression of dynamin 2 for the treatment of Centronuclear Myopathies, with Ionis Pharmaceuticals. Dynacure is also building a complementary research portfolio targeting other orphan disorders. The company maintains its headquarters in Strasbourg, France. Dynacure's investors are Andera Partners, Bpifrance, IdInvest, Ionis Pharmaceuticals, Kurma Partners and Pontifax.

For more information, please visit www.dynacure.com.

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