



## Sarepta Therapeutics Reports Positive Clinical Results from Phase 2 MOMENTUM Study of SRP-5051 in Patients with Duchenne Muscular Dystrophy Amenable to Skipping Exon 51

5/3/21

- **Results suggest a highly potent next-generation treatment that could offer greater efficacy with less frequent dosing**
- **SRP-5051 dosed monthly at 30 mg/kg delivered mean exon skipping of 10.79% and mean dystrophin expression of 6.55%, consistently higher than the other SRP-5051 dosing cohorts at 12 weeks and weekly eteplirsen at 24 weeks**
- **Sarepta's predictive model indicates that SRP-5051 at 30 mg/kg will achieve greater than 10% dystrophin with monthly chronic dosing**

CAMBRIDGE, Mass., May 03, 2021 (GLOBE NEWSWIRE) -- Sarepta Therapeutics, Inc. (NASDAQ:SRPT), the leader in precision genetic medicine for rare diseases, today announced positive results from Part A of the MOMENTUM study (Study 5051-201), a global, Phase 2, multi-ascending dose clinical trial of SRP-5051, its next-generation peptide phosphorodiamidate morpholino oligomer (PPMO) treatment for patients with Duchenne muscular dystrophy who are amenable to exon 51 skipping.

In biopsies taken at a median of 12 weeks and after only three doses, results from Part A of MOMENTUM study found that the 30 mg/kg of SRP-5051 dosed monthly resulted in 18 times the exon skipping and eight times the dystrophin production as eteplirsen, dosed weekly for 24 weeks. Exon-skipping and dystrophin production in the 30 mg/kg cohort were also consistently higher than the 20 mg/kg cohort of MOMENTUM. Hypomagnesemia was identified in patients taking SRP-5051. Cases have resolved with magnesium supplementation and an analysis of all available data indicate that the hypomagnesemia is monitorable and manageable.

"We are pleased to report strong, dose-dependent exon-skipping and dystrophin expression results with monthly dosing of SRP-5051 – in ambulant and non-ambulant patients. Even at an early timepoint of 12 weeks and after as few as only three doses, these data confirm the potential of Sarepta's next-generation PPMO platform to be a step order improvement over our current PMO platform, and to profoundly impact the course of Duchenne. While we saw exceptional expression after only a few initial doses, our models predict that we will exceed dystrophin expression levels of 10% of normal or greater over time with SRP-5051," said Doug Ingram, president and chief executive officer, Sarepta. "We are excited to have chosen our target dose for further development. Part A of MOMENTUM is now complete and Sarepta will work with great urgency to discuss the results with regulatory agencies and gain their insights, including the development path to support an accelerated approval of SRP-5051 in the United States."

### Results from the 30 mg/kg dose cohort:

- In biopsies taken at a median of week 12, 30 mg/kg of SRP-5051 dosed monthly resulted in mean exon skipping of 10.79% (n=4). Exon skipping was measured by digital drop polymerase chain reaction (ddPCR).
  - This correlates to >4x increase in exon skipping compared to the 20 mg/kg cohort of SRP-5051 at 12 weeks (mean exon skipping of 2.57%, n=2) and an 18x increase in exon skipping compared to a weekly 30 mg/kg dose of eteplirsen at 24 weeks (mean exon skipping of 0.59%, n=16).
- At a median of week 12, 30 mg/kg of SRP-5051 resulted in mean dystrophin production of 6.55% of normal. Dystrophin expression was measured by western blot.
  - This is twice the dystrophin expression compared to the 20 mg/kg cohort at week 12 (mean expression of 3.06%) and eight times that of the eteplirsen comparison group (mean expression of 0.82%).

There were three serious, treatment-emergent adverse events in two patients in the 30 mg/kg cohort, including two cases of hypomagnesemia. The events were asymptomatic and have resolved with magnesium supplementation. Markers of kidney function have generally been normal and not shown any consistent relationship to the hypomagnesemia.

Predictive modeling for dystrophin accumulation that includes assumptions of known turnover of dystrophin in the muscle and an analysis of data generated with the PPMO platform indicates that SRP-5051 at 30 mg/kg is likely to deliver greater than 10% dystrophin over time with monthly dosing.

Full results will be presented at a future medical meeting.

### About MOMENTUM (Study SRP-5051-201)

MOMENTUM is a multi-arm, ascending dose study designed to identify the maximum tolerated dose of SRP-5051, infused monthly. The study will enroll up to 24 patients, both ambulant and non-ambulant, between the ages of 7 to 21 at sites in the U.S., Canada, Australia and European Union. The primary endpoint is safety, and secondary and exploratory endpoints include exon-skipping, dystrophin expression and tissue concentration. More information can be found on [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

### About SRP-5051

SRP-5051 uses Sarepta's PPMO chemistry and exon-skipping technology to skip exon 51 of the dystrophin gene. SRP-5051 is designed to bind to exon 51 of dystrophin pre-mRNA, resulting in exclusion of this exon during mRNA processing in patients with genetic mutations that are amenable to

exon 51 skipping. Exon skipping is intended to allow for production of an internally truncated dystrophin protein. PPMO is Sarepta's next-generation chemistry platform designed around a proprietary cell-penetrating peptide conjugated to the PMO backbone, with the goal of increasing tissue penetration, increasing exon skipping and significantly increasing dystrophin production. Around 13% of DMD patients have mutations which make them amenable to skipping exon 51. If successful, the PPMO offers the potential for improved efficacy and less frequent dosing for patients.

#### **About Duchenne Muscular Dystrophy**

DMD is an X-linked rare degenerative neuromuscular disorder causing severe progressive muscle loss and premature death. One of the most common fatal genetic disorders, DMD affects approximately one in every 3,500 - 5,000 male births worldwide. A devastating and incurable muscle-wasting disease, DMD is associated with specific errors in the gene that codes for dystrophin, a protein that plays a key structural role in muscle fiber function. Progressive muscle weakness in the lower limbs spreads to the arms, neck and other areas of the body. The condition is universally fatal, and death usually occurs before the age of 30 due to respiratory or cardiac failure.

#### **About EXONDYS 51**

EXONDYS 51 (eteplirsen) uses Sarepta's proprietary phosphorodiamidate morpholino oligomer (PMO) chemistry and exon-skipping technology to bind to exon 51 of dystrophin pre-mRNA, resulting in "skipping" of this exon during mRNA processing in patients with genetic mutations that are amenable to exon 51 skipping. Exon skipping is intended to allow for production of an internally truncated dystrophin protein.

EXONDYS 51 is indicated for the treatment of Duchenne muscular dystrophy in patients who have a confirmed mutation of the DMD gene that is amenable to exon 51 skipping.

This indication is approved under accelerated approval based on an increase in dystrophin production in skeletal muscle observed in some patients treated with EXONDYS 51. Continued approval may be contingent upon verification of a clinical benefit in confirmatory trials.

EXONDYS 51 has met the full statutory standards for safety and effectiveness and as such is not considered investigational or experimental.

#### **Important Safety Information About EXONDYS 51**

Hypersensitivity reactions, including rash and urticaria, pyrexia, flushing, cough, dyspnea, bronchospasm, and hypotension, have occurred in patients who were treated with EXONDYS 51. If a hypersensitivity reaction occurs, institute appropriate medical treatment and consider slowing the infusion or interrupting the EXONDYS 51 therapy.

Adverse reactions in DMD patients (N=8) treated with EXONDYS 51 30 mg or 50 mg/kg/week by intravenous (IV) infusion with an incidence of at least 25% more than placebo (N=4) (Study 1, 24 weeks) were (EXONDYS 51, placebo): balance disorder (38%, 0%), vomiting (38%, 0%) and contact dermatitis (25%, 0%). The most common adverse reactions were balance disorder and vomiting. Because of the small numbers of patients, these represent crude frequencies that may not reflect the frequencies observed in practice. The 50 mg/kg once weekly dosing regimen of EXONDYS 51 is not recommended.

In the 88 patients who received  $\geq 30$  mg/kg/week of EXONDYS 51 for up to 208 weeks in clinical studies, the following events were reported in  $\geq 10\%$  of patients and occurred more frequently than on the same dose in Study 1: vomiting, contusion, excoriation, arthralgia, rash, catheter site pain, and upper respiratory tract infection.

For further information, please see the full [Prescribing Information](#).

#### **About Sarepta Therapeutics**

Sarepta is on an urgent mission: engineer precision genetic medicine for rare diseases that devastate lives and cut futures short. We hold leadership positions in Duchenne muscular dystrophy (DMD) and limb-girdle muscular dystrophies (LGMDs), and we currently have more than 40 programs in various stages of development. Our vast pipeline is driven by our multi-platform Precision Genetic Medicine Engine in gene therapy, RNA and gene editing. For more information, please visit [www.sarepta.com](http://www.sarepta.com) or follow us on [Twitter](#), [LinkedIn](#), [Instagram](#) and [Facebook](#).

#### **Forward-Looking Statements**

This press release contains "forward-looking statements." Any statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "will," "intends," "potential," "possible" and similar expressions are intended to identify forward-looking statements. These forward-looking statements include statements regarding market opportunities; the potential benefits of PPMO, including offering greater efficacy with less frequent dosing, being a step order improvement over our current PMO platform, and profoundly impacting the course of Duchenne; our prediction that SRP-5051 at 30 mg/kg will achieve greater than 10% dystrophin over time with monthly dosing; and our plans, including to work with great urgency to discuss the results with regulatory agencies and gain their insights, including the development path to support an accelerated approval of SRP-5051 in the United States and to present full results at a future medical meeting.

These forward-looking statements involve risks and uncertainties, many of which are beyond our control. Known risk factors include, among others: success in preclinical and clinical trials, especially if based on a small patient sample, does not ensure that later clinical trials will be successful; the data presented in this release may not be consistent with the final data set and analysis thereof or result in a safe or effective treatment benefit; different methodologies, assumptions and applications we utilize to assess particular safety or efficacy parameters may yield different statistical results, and even if we believe the data collected from clinical trials of our product candidates are positive, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities; if the actual number of patients suffering from DMD is smaller than estimated, our revenue and ability to achieve profitability may be adversely affected; we may not be able to execute on our business plans and goals, including meeting our expected or planned regulatory milestones and timelines, clinical development plans, and bringing our product candidates to market, due to a variety of reasons, some of which may be outside of our control, including possible limitations of company financial and other resources, manufacturing limitations that may not be anticipated or resolved for in a timely manner, regulatory, court or agency decisions, such as decisions by the United States Patent and Trademark Office with respect to patents that cover our product candidates and the COVID-19 pandemic; and even if Sarepta's programs result in new commercialized products, Sarepta may not achieve the expected revenues from the sale of such products; and those risks identified under the heading "Risk Factors" in Sarepta's most recent Annual Report on Form 10-K for the year ended December 31, 2020, as well as other Securities and Exchange Commission (SEC) filings made by the Company which you are encouraged to review.

Any of the foregoing risks could materially and adversely affect the Company's business, results of operations and the trading price of Sarepta's common stock. For a detailed description of risks and uncertainties Sarepta faces, you are encouraged to review the SEC filings made by Sarepta. We

caution investors not to place considerable reliance on the forward-looking statements contained in this press release. Sarepta does not undertake any obligation to publicly update its forward-looking statements based on events or circumstances after the date hereof.

**Internet Posting of Information**

We routinely post information that may be important to investors in the 'For Investors' section of our website at [www.sarepta.com](http://www.sarepta.com). We encourage investors and potential investors to consult our website regularly for important information about us.

Source: Sarepta Therapeutics, Inc.

**Investor Contact:**

Ian Estepan, 617-274-4052

[iestepan@sarepta.com](mailto:iestepan@sarepta.com)

**Media Contact:**

Tracy Sorrentino, 617-301-8566

[tsorrentino@sarepta.com](mailto:tsorrentino@sarepta.com)