

March 8th 2022

Dear SMA Community,

In response to your request, we are excited to share news that we are moving ahead with an early-stage investigation into a new treatment for spinal muscular atrophy (SMA) that could potentially treat further unmet needs.

The compound that we call BIIB115, is currently in the pre-clinical stage of development, and builds on the foundational knowledge of nusinersen^{1,2}, which was designated an 'orphan medicine' for rare disease in April 2012³.

Nusinersen and BIIB115 are both 'antisense oligonucleotides' (ASOs) that target the underlying pathology of SMA^{1,2}.

Further comparisons are not possible given the early stages of our investigation. However clinical trials are being planned to help understand the compound's dosing as well as its safety, tolerability, and efficacy profiles. The clinical trial process is a rigorous one with multiple important phases. Initial clinical trials of experimental treatments focus on understanding their safety profile.

Establishing the efficacy of BIIB115 will come in later stage trials. We understand the desire of the community for trials comparing BIIB115 to established SMA treatments, however, given the development stage of BIIB115 it would be premature for us to commit to conduct these head-to-head clinical trials.

We do though recognize the urgency that SMA presents, and we remain committed to pioneering innovative therapies with the greatest of speed. Ongoing SHINE⁵ and NURTURE⁶ studies are evaluating the long-term impact of nusinersen.

Initial plans for BIIB115 clinical trials are in development, and we will be seeking feedback on their designs from community leaders like you. We see today's conversation as the first in a series to ensure that we develop a clinical program for BIIB115 that has been informed by the community.

Going forward, please remove 'lonis Pharmceuticals' from the project title of community updates. BIIB115 will solely be developed by Biogen.

Biogen recognizes the SMA community's interest in its products and will continue to share updates.

Please contact us should you have any further questions.

Best regards,

Michaela Hrdlickova Director Patient Advocacy SMA, Europe/Canada/Partner Markets, Biogen

References:

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- Biogen Press Release January 2022. Biogen Exercises Option with Ionis to Develop and Commercialize Investigational ASO for SMA. Available at: https://investors.biogen.com/newsreleases/news-release-details/biogen-exercises-option-ionis-develop-and-commercialize-0 (accessed Feb 2022)
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- SHINE: ClinicalTrials.gov NCT02594124. Available at: https://clinicaltrials.gov/ct2/show/NCT02594124 (accessed Feb 2022)
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