MDA testimony in front of the Secretary's Advisory Committee on Heritable Disorders in Newborns and Children on moving the Duchenne muscular dystrophy nomination to full evidence review – 8/10/23

Thank you for the opportunity to comment on today's deliberations on moving Duchenne muscular dystrophy forward to full evidence review. I am Paul Melmeyer, Vice President, Public Policy and Advocacy, at the Muscular Dystrophy Association. MDA is proud to serve the Duchenne, spinal muscular atrophy, and Pompe communities along with many other rare neuromuscular disease communities.

Today we once again request that the Committee vote to move the Duchenne muscular dystrophy nomination forward to full evidence review. MDA was proud to co-sponsor the nomination of Duchenne last summer, as well as the re-nomination this Spring, and under the leadership of Parent Project Muscular Dystrophy, provide the evidence to the Committee required for consideration.

We understand one of the main concerns that the Committee may have with moving the nomination forward pertains to evidence of effectiveness of earlier administration of available therapies. Included in the nomination are several studies showing early effectiveness of treatment we wish to re-emphasize.

First, corticosteroids are recommended to be considered at time of diagnosis regardless of any evidence of physical decline, and steroids have been administered as young as the first year of life, complying with this standard of care. The data showing effectiveness of steroids is unequivocal: boys given steroids had statistically significant better scores on standing from a supine position, 9-meter week time, 4-stair climb, lifting a weight, and forced vital capacity compared to boys not given steroids. We are also expecting a new steroid option for boys with Duchenne, Vamorolone, to be approved this Fall.

Second, four exon skipping treatments have been approved by the FDA with no age restriction on the label, consequently boys could start the treatment upon diagnosis. While approved via accelerated approval, the evidence of effectiveness continues to grow. A recent retrospective and prospective comparison of long-term outcomes showed a delayed loss of ambulation and pulmonary decline for those using Eteplirsen compared to natural history. An additional study published within the last year showed a significant extended survival time, in this study 5-years longer, for those who took etiplirsen compared to those who did not. Both younger initiation and longer exposure time to eteplirsen were tied to better outcomes. Finally, an additional study published in 2021 showed a delayed loss of ambulation of an average of four years for patients on eteplirsen compared to natural history controls.

Finally, while its always difficult to predict when clinical trial readouts will occur, we understand there's a chance we will see data from Sarepta's Embark trial on the efficacy of Elevidys in ambulatory boys with Duchenne (including boys younger than four years old) around the end of this year.

In addition to these efficacy data, we wish to further emphasize several points Niki Armstrong at PPMD will soon be making about the importance of an earlier diagnosis when accessing Elevidys. As this Committee knows, the FDA approved Elevidys for boys ages four and five with Duchenne in June via accelerated approval. In just the last week or two, the first boy with Duchenne was commercially dosed shortly before his sixth birthday. This rush to dose him was due to him soon becoming ineligible to receive the therapy under its current label. This situation is reflective of the challenge many boys with Duchenne face in obtaining this gene therapy prior to their sixth birthday. With newborn screening providing a diagnosis at birth, under the current label, boys with Duchenne would have a full two years to obtain the therapy, and not only not have to rush to receive the treatment, but also not risk potentially being diagnosed at six years or older, which still happens to many boys with Duchenne. Newborn screening for Duchenne would allow access to Elevidys for all eligible boys born with Duchenne rather than just those privileged enough to be diagnosed prior to the sixth birthday.

Finally, we understand some still may question the utility of diagnosis at birth for those with Duchenne as treatments traditionally have not been administered until later in childhood. Not only do we believe corticosteroids, exon skipping therapies, and hopefully soon gene therapies, may be prescribed to boys as early as the first year of life much more frequently if newborn screening is adopted, but non-pharmaceutical interventions are also critically important, including speech and physical therapy, as these services are optimized the earlier they are administered in childhood development. Per recent treatment guidelines, interventions from physical, speech, and occupational therapists are recommended as soon after diagnosis as possible.

We believe that all of these reasons and more within our nomination package justify the Duchenne muscular dystrophy nomination moving forward to full evidence review, and we urge the Committee to vote to do so today.