Dyne Therapeutics Demonstrates FORCE TM Platform's Potential to Deliver Potent Exon-Skipping Molecules Directly to Muscle to Treat Duchenne Muscular Dystrophy

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Enhanced dystrophin expression in multiple muscle tissues and sustained functional benefit in DMD disease model following single low dose

Data presented at American Society of Gene & Cell Therapy Annual Meeting

WALTHAM, Mass. – Dyne Therapeutics, a biotechnology company pioneering targeted therapies for patients with serious muscle diseases, today announced data demonstrating enhanced dystrophin expression in multiple muscle tissues and significant improvement in muscle function in a preclinical model of Duchenne muscular dystrophy (DMD) following treatment with the company's FORCE™ platform. The findings were highlighted in a poster presentation at the American Society of Gene & Cell Therapy (ASGCT) 23rd Annual Meeting.

"Targeting therapeutics directly to muscle tissue has been an enormous challenge for the industry for years. These exciting data reinforce our confidence that Dyne's FORCE platform can overcome this challenge and effectively deliver transformational therapies for DMD and other serious muscle diseases," said Joshua Brumm, president and CEO of Dyne. "We are focused on advancing our programs to the clinic, where we believe they will translate into life-changing benefits for patients."

Dyne's FORCE platform targets the TFR-1 receptor, which is highly expressed on the surface of muscle cells, enabling targeted delivery of a disease-modifying therapeutic payload directly to skeletal, cardiac and smooth muscle tissue. In DMD, the FORCE platform delivers exon-skipping antisense oligonucleotides to muscle cells to enable expression of a more complete, functional dystrophin protein and halt the severe muscle degeneration that characterizes DMD.

Key findings presented at ASGCT include:

- In the DMD *mdx* mouse model, treatment with a single low dose of FORCE-M23D resulted in effective exon skipping and dose-dependent dystrophin expression in both skeletal and cardiac muscle.
- Four weeks post-treatment, *mdx* mice treated with a single, low dose of FORCE-M23D showed substantially increased dystrophin expression in quadriceps muscle based on immunohistochemistry, compared to mice treated with a "naked" ASO not tethered to the precision delivery system of the FORCE platform.
- *Mdx* mice treated with a single, low dose of FORCE-M23D demonstrated improved function and muscle health in two separate studies:
    - In the hind limb fatigue challenge study, the *mdx* mice treated with Dyne's FORCE platform performed significantly better than those treated with a naked ASO at two weeks post-treatment.
    - In the home wheel running study, the performance of FORCE-treated mice improved to the level of wild-type mice at four weeks post-treatment.
    - Levels of creatine kinase, a biomarker for muscle damage, dropped significantly more in *mdx* mice treated with Dyne's FORCE platform compared to those treated with a naked ASO.

"We're excited to showcase the power of the FORCE platform to deliver redosable, titratable and highly targeted exon-skipping therapies," said Romesh Subramanian, Ph.D., Dyne's chief scientific officer. "ASO uptake across muscle tissue types — including the quadriceps, diaphragm and heart — is far more robust with the FORCE platform. Importantly, we have shown that this uptake results in both increased dystrophin expression and clear functional benefits in a validated DMD disease model. Those benefits were observed following a single low dose and sustained for at least a month post-treatment."

Along with DMD, Dyne is advancing programs in myotonic dystrophy type 1 (DM1) and facioscapulohumeral muscular dystrophy (FSHD).

The ASGCT poster, "Targeted Delivery of ASOs Demonstrates Potential to Treat Duchenne Muscular Dystrophy," is available for virtual viewing here.

About Dyne Therapeutics

Dyne Therapeutics is pioneering life-transforming therapies for patients with serious muscle diseases. The company's FORCE™ platform delivers oligonucleotides and other molecules to skeletal, cardiac and smooth muscle with unprecedented precision to restore muscle health. Dyne is advancing treatments for myotonic dystrophy type 1 (DM1), Duchenne muscular dystrophy (DMD) and facioscapulohumeral muscular dystrophy (FSHD). Dyne was founded by Atlas Venture and is headquartered in Waltham, Mass. For more information, please visit www.dyne-tx.com, and follow us on Twitter and LinkedIn.

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