



Cartesian Therapeutics Announces Clinical Responses in First Cohort of Phase 1b/2a Trial in Myasthenia Gravis

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- *In cohort of three patients intended to test safety, all patients showed full-class improvement in the Myasthenia Gravis Foundation of America (MGFA) Clinical Classification and substantial improvement in Myasthenia Gravis Composite scale.*
- *Descartes-08 was well tolerated in all three patients*

Gaithersburg, MD, August 24, 2021 – Cartesian Therapeutics, a fully integrated, clinical-stage biopharmaceutical company pioneering RNA cell therapy in and beyond oncology, today announced clinical data from the first cohort of an ongoing Phase 1/2a clinical trial of Descartes-08 in patients with generalized Myasthenia Gravis (gMG). Descartes-08 is an mRNA-modified, autologous CAR T-cell product directed against B-Cell Maturation Antigen (BCMA).

The cohort was intended to test safety and tolerability. Descartes-08 was well tolerated, with no cytokine release syndrome (CRS) or other serious product-related adverse events. Of note, all patients experienced at least a full class improvement on the MGFA Clinical Classification. Patients also showed marked improvement on the Myasthenia Gravis Composite (MGC) scale, a standard measure of overall disease severity. About three months after Descartes-08 administration, mean improvement in MGC scale was over 50%.

"This is the first clinical trial of CAR T-cells for an autoimmune disease," said site investigator Tahseen Mozaffar, M.D., of the University of California, Irvine. "Naturally, the first patients enrolled are some of our most severely affected and difficult-to-treat patients, who have been followed for many years. At this point, the results should be viewed only as case studies, but the two patients at our study site who received Descartes-08 improved functionally to levels at which I have not seen before."

Metin Kurtoglu, M.D., Ph.D., Chief Medical Officer at Cartesian Therapeutics, elaborated on the excitement of the study, saying, "These results, while early, are intriguing because of their consistency and effect size. They are exactly what one would predict when anti-BCMA CAR T-cells are administered to patients with a textbook autoantibody disease. For us, the more important question is whether mRNA-modified cell therapies can be safely and cost-effectively used to treat autoimmune diseases like generalized Myasthenia Gravis. With our RNA Armory® platform, we continue to believe that the answer is, 'Yes.'"

The ongoing study is now enrolling 12-15 more patients to study different treatment schedules.

Murat Kalayoglu, M.D., Ph.D., President and Chief Executive Officer at Cartesian Therapeutics, added, "We have much work to do to define the safety and efficacy of Descartes-08 in generalized Myasthenia Gravis, and the latest results add to the safety database for application of our RNA Armory® platform beyond oncology. As a physician who once treated generalized Myasthenia Gravis patients, I am excited to see what else we learn from this study. Together with the entire Cartesian team, we are also eager to study Descartes-08 in other autoimmune diseases such as rheumatoid arthritis and lupus."

About Descartes-08

Descartes-08 is an mRNA-modified, autologous CAR T-cell product directed against B-Cell Maturation Antigen (BCMA) that utilizes a novel modality and mechanism of action for treating gMG and other autoimmune diseases. Descartes-08 differs from anti-B-cell agents, which do not address long-lived plasma cells, and differs from FcRn blockers or complement inhibitors, which attempt to intervene only after autoantibodies are produced and pathogenic mediators are amplified. Descartes-08 is intended to halt production of autoantibodies by targeting pathogenic long-lived plasma cells with the potential to survive for decades within the body.

About the Phase 1b/2a Clinical Trial

The ongoing Phase 1b/2a study (NCT04146051) of Descartes-08 is a non-randomized, single group, open-label study to determine the safety and preliminary efficacy of Descartes-08 in generalized Myasthenia Gravis (gMG) at multiple centers in the United States and Canada. This study aims to enroll approximately 18 patients. For more information, visit <https://www.cartesiantherapeutics.com/clinical-trials/>.

About Generalized Myasthenia Gravis

Generalized myasthenia gravis (gMG) is a chronic autoimmune condition in which autoantibodies attack specific proteins at the neuromuscular junction. This disrupts the way that nerves can communicate with muscles, resulting in muscle weakness and fatigue. Myasthenia gravis affects almost 200,000 patients in the US, EU, and Japan. Those living with gMG can experience a variety of symptoms, ranging from drooping eyelids and double vision to debilitating muscle weakness and respiratory failure.

About Cartesian Therapeutics

Founded in 2016 and with three assets in clinical trials, Cartesian is the leader in RNA cell therapy. The company is pioneering RNA cell therapies in and beyond oncology, with products in development for autoimmune, oncologic and respiratory disorders. All investigational therapies are manufactured at Cartesian's wholly owned, state-of-the-art cGMP manufacturing facility in Gaithersburg, MD. For more information visit www.cartesiantherapeutics.com.

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