Press release
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Gene therapy for Duchenne muscular dystrophy: Genethon confirms two-year efficacy in patients treated with its drug candidate GNT0004 at therapeutic dose in the first phase of its clinical trial

EVRY, France, (March 11, 2026) - Genethon, a pioneer and leader in gene therapy for rare diseases, unveiled results at the *MDA Conference* in Orlando confirming the long-term efficacy of its GNT0004 gene therapy in Duchenne muscular dystrophy in patients treated at therapeutic doses in the first phase of an international multicenter clinical trial it is sponsoring.

The clinical trial, conducted by Genethon, includes boys ages 6 to 10 with Duchenne muscular dystrophy who have retained their ability to walk. In the dose escalation phase preceding the ongoing pivotal phase, five patients were treated with GNT0004, four in France and one in the United Kingdom, including two patients at the first dose and three at the second dose level. The data presented, based on long-term follow-up of the three patients treated at the second dose level, confirm the maintenance of clinical efficacy at two years across various parameters, the persistence of pharmacodynamic effects, and the safety of the treatment in combination with transient prophylactic immunosuppression.

At the dose of $3x10^{13}$ vg/kg, determined to be therapeutic, the following was observed in patients 2 years after injection:

- A significant gain in motor function as measured by a 34-point clinical assessment scale (NSAA): +9 points at 2 years (data from 3 patients) compared to a cohort of untreated patients followed in parallel with treated patients in the same clinical centers (matched by propensity score). A gain significantly greater than the minimum difference considered clinically relevant (>2.5 points).
- Clinical benefit maintained at 2 years**,** with improvement across all timed tests, key indicators for ambulatory patients, including a differential of 173 meters in the 6-minute walk test and +0.95 m/s in speed in the 10-meter walk test compared to untreated patients.
- A significant and sustained reduction in CPK levels (a biomarker of muscle damage) by an average of 70% at 2 years (compared to the patient's baseline condition before treatment) and for the first patient followed up for 3 years, still stable, reflecting a lasting effect on cell membrane stability.
- A slowdown in disease progression, as demonstrated by imaging, with a difference of more than 18% in the fat fraction in the muscles (a marker of disease progression), observed by quantitative MRI, compared to a cohort of untreated patients from the natural history.
- No serious side effects**,** confirming the safety of the product.

Authorized by the European Medicines Agency (EMA) and the UK Medicines and Healthcare products Regulatory Agency (MHRA), the pivotal phase of the trial began at the selected effective

dose ($3x10^{13}$ vg/kg), which is lower than that used for other drug candidates in clinical trials or gene therapy drugs for Duchenne muscular dystrophy.

This randomized, placebo-controlled, double-blind, multicenter pivotal phase began last September at all open sites and will include a total of 72 boys aged 6 to 10 with Duchenne muscular dystrophy who have retained their ability to walk.

About GNT0004 and the trial

The gene therapy product GNT0004 consists of an AAV8 (adeno-associated virus) vector and the optimized hMD1 transgene, a shortened but functional version of the gene encoding dystrophin, the protein that is deficient in people with Duchenne muscular dystrophy. This vector is designed to express itself in muscle tissue and also in the heart, thanks to a Spc5-12 promoter sequence specific to these tissues. GNT0004 is administered by a single intravenous injection. It was developed by Genethon, in collaboration, for the preclinical phases, with the teams of Prof. Dickson (University of London, Royal Holloway), the Institute of Myology (Paris) and Caroline Le Guiner (INSERM/University of Nantes/Nantes University Hospital).

About Genethon

A pioneer in the discovery and development of gene therapies for rare diseases, Genethon is a non-profit laboratory created by the AFM-Telethon. The first gene therapy drug, to which Genethon contributed, has been approved for marketing for spinal muscular atrophy. With more than 240 scientists and experts, Genethon's goal is to develop innovative therapies that change the lives of patients suffering from rare genetic diseases. Fifteen gene therapy products resulting from Genethon's research, or to which Genethon has contributed, are currently undergoing clinical trials for diseases of the liver, blood, immune system, muscles, and eyes. Others are preparing for clinical trials over the next five years. www.genethon.com

About Duchenne muscular dystrophy

Duchenne muscular dystrophy is a rare progressive genetic disease that affects all the muscles in the body and mainly boys (1 in 5,000). It is caused by abnormalities in the gene responsible for the production of dystrophin, a structural protein essential for the stability of muscle fiber membranes and their metabolism. The absence of dystrophin leads to progressive degeneration of the skeletal and cardiac muscles, loss of walking and respiratory abilities, cardiomyopathy, and death, usually between the ages of 20 and 40.

www.genethon.com

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