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PRESS RELEASE

Genethon and Hansa Biopharma announce initiation of a Phase 2 trial of imlifidase as a pre-treatment to GNT-0003 in severe Crigler-Najjar syndrome

The trial will be conducted in patients with pre-existing anti-AAV antibodies which limit use of gene therapy treatment

Lund, Sweden and Evry, France 3 December 2024. Hansa Biopharma, “Hansa” (Nasdaq Stockholm: HNSA) and Genethon, a pioneer and a leader in gene therapy research and development for rare genetic diseases, today announced initiation of GNT-018-IDES, a Phase 2 trial in patients with Crigler-Najjar syndrome with pre-existing antibodies against adeno-associated virus (AAV) vectors. The trial will evaluate the efficacy and safety of a single intravenous administration of Genethon’s gene therapy GNT-0003 following pre-treatment with imlifidase, Hansa’s first-in-class immunoglobulin G (IgG) antibody cleaving enzyme therapy, in patients with severe Crigler-Najjar syndrome and pre-formed antibodies to AAV serotype 8 (AAV8).

Søren Tulstrup, President and CEO, Hansa Biopharma said, “We know that anti-AAV antibodies prevent up to 1 in 3 people from benefitting from gene therapies using AAV-vectors.[1-4] That’s why our collaboration with Genethon and the initiation of the Phase 2 clinical trial in Crigler-Najjar syndrome is so important. This collaboration with Genethon is the second of our three partnerships with leading gene therapy companies to have reached the clinical stage, marking an important milestone in our efforts to enable a much larger group of patients to benefit from potentially lifesaving gene therapies.”

Antibodies against AAV vectors remain a major challenge, as their presence in patients excludes them from entering clinical studies with potentially curative gene therapy treatments and from access to currently marketed and future gene therapies.

Frédéric Revah, CEO, Genethon added: "This new clinical trial reflects Genethon’s commitment in pursuing innovative strategies to ensure and broaden access to gene therapies for patients suffering from rare diseases. Patients with pre-existing neutralizing antibodies against AAV vectors cannot today benefit from gene therapy. The initiation of this clinical trial and the collaboration with Hansa Biopharma is a crucial step for Genethon and highlights several years of pioneering research to understand and control the immune response to AAV in order to make gene therapy more effective and to increase the number of patients able to access it."

GNT-018-IDES, sponsored by Genethon, is a single arm Phase 2 trial with a total of three patients aged ≥18 years with Crigler-Najjar syndrome and pre-formed anti-AVV8 antibodies and requiring phototherapy. Once screened, patients will undergo a three-month observational period before being dosed with imlifidase followed by GNT-0003. Genethon and Hansa expect to communicate data from the trial in 2025.

GNT-0003 is currently being evaluated in a pivotal clinical trial following the positive results of the phase 1-2 dose escalation study showing safety and efficacy of GNT-0003, and was granted PRIME priority drug status from the EMA. If successful, GNT-0003 would be the first gene therapy treatment for Crigler-Najjar syndrome.

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Notes to editors

About imlifidase

Imlifidase is a unique antibody-cleaving enzyme originating from Streptococcus pyogenes that specifically targets IgG and inhibits IgG-mediated immune response.[5] It has a rapid onset of action, cleaving IgG-antibodies and inhibiting their activity within hours after administration. Imlifidase has conditional marketing approval in Europe and is marketed under the trade name IDEFIRIX® for the desensitization treatment of highly sensitized adult kidney transplant patients with a positive crossmatch against an available deceased donor.[5]

About Crigler-Najjar syndrome

Crigler-Najjar syndrome is a rare genetic liver disease characterized by abnormally high levels of bilirubin in the blood (hyperbilirubinemia), which leads to irreversible neurological damage manifested as muscle weakness, lethargy, deafness, mental retardation, and eye movement paralysis. This accumulation of bilirubin is caused by a deficiency of the UGT1A1 enzyme, responsible for transforming bilirubin into a substance that can be eliminated by the body. It can result in significant neurological damage and death if not treated quickly. At present, patients must undergo phototherapy for up to 12 hours a day to keep their bilirubin levels below the toxicity threshold. Crigler-Najjar syndrome is an ultra-rare disease affecting less than one case per one million people per year.[6]

About imlifidase and gene therapy

Imlifidase is currently being evaluated as a pre-treatment to gene therapy in areas of high unmet need. Many gene therapies are based on the use of Adeno Associated Viruses (AAV) vectors.[1-4,7] In some patients the immune system carries antibodies that counteract the gene therapy treatment preventing its success. [1-4,8-10] Pre-treatment with imlifidase prior to AAV-based gene therapy treatment has the potential to inactivate antibodies and thereby enable gene therapy in patients with pre-existing antibodies to AAV-based gene therapies.[9] Currently, it is estimated that anti-AAV antibodies on average prevent 1 in 3 people from benefiting from gene therapy treatments.[1-4,8]

About Hansa Biopharma

Hansa Biopharma is a pioneering commercial-stage biopharmaceutical company on a mission to develop and commercialize innovative, lifesaving and life-altering treatments for patients with rare immunological conditions. Hansa Biopharma has developed a first-in-class immunoglobulin G (IgG) antibody-cleaving enzyme therapy, which has been shown to enable kidney transplantation in highly sensitized patients. Hansa Biopharma has a rich and expanding research and development program based on the Company's proprietary IgG-cleaving enzyme technology platform, to address serious unmet medical needs in transplantation, autoimmune diseases, gene therapy and cancer. Hansa Biopharma is based in Lund, Sweden, and has operations in Europe and the U.S. The company is listed on Nasdaq Stockholm under the ticker HNSA. Find out more at www.hansabiopharma.com and follow us on LinkedIn.

About Genethon

A pioneer in the discovery and development of gene therapies for rare diseases, Généthon is a non-profit organization created by the AFM-Téléthon. The first gene therapy to treat spinal muscular atrophy, incorporating technologies developed at Genethon, is marketed worldwide. With over 200 scientists and professionals, Genethon pursues its goal of developing innovative therapies that change the lives of patients suffering from rare genetic diseases. Thirteen products from Genethon's R&D or collaborations are in clinical trials for diseases of the liver, blood, immune system, muscles and eyes. A further seven products could enter clinical trials in the next five years. To find out more www.genethon.com

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