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January 24, 2025

Company name: Modalis Therapeutics Corporation
Stock exchange listing: Tokyo Stock Exchange
Ticker/Code number: 4883
URL: https://www.modalistx.com/en/
Corporate Representative: Haruhiko Morita

LAMA2-CMD Patent Granted in Japan

- The patent application "Method for treating muscular dystrophy by targeting LAMA1 gene" developed and applied for by MODALIS was granted in Japan.
- The patent is related to MDL-101, a gene therapy drug for Laminin alpha-2–Congenital Muscular Dystrophy (LAMA2-CMD), using MODALIS' proprietary CRISPR-GNDM® epigenome editing technology.

January 24, 2024, Modalis Therapeutics Corporation TSE 4883.T (Modalis) announced it has received a notice from the Japan Patent Office that our patent (JP2022-50966) for our CRISPR-GNDM® based LAMA2-CMD treating gene therapy concerning MDL-101 has been granted in Japan.

Laminin Alpha-2–Congenital Muscular Dystrophy (LAMA2-CMD), also known as Merosin-Deficient Congenital Dystrophy Type 1A (MDC1A) is a severe, early onset congenital muscular dystrophy caused by the absence of the LAMA2 protein, which is made up of more than 3,000 amino acids, and causes weakness and wasting (atrophy) of the muscles used for movement (skeletal muscles). Because of its large size, it cannot be loaded onto an AAV vector, and so it is thought that the conventional approach to gene therapy development will be difficult. For this reason, there are currently no treatments, including gene therapy, that address the underlying cause of LAMA2-CMD.

Modalis' proprietary CRISPR-GNDM®, is capable of specific modulation of the expression of disease-relevant genes, without introducing double-strand DNA breaks, and our MDL-101 is potentially the first-in-class therapeutics to solve the challenge and provide life-changing therapeutics for the patients of LAMA2-CMD by inducing expression of LAMA2's sister gene LAMA1 across muscle tissues to compensate for the deficient function of LAMA2.

The patented invention that was assessed this time claims a therapeutic method using the CRISPR-GNDM® approach that causes an increase in the expression of the LAMA1 gene, and we believe that the fact that this was granted as a patent is due to the fact that its novelty and inventive step were supported. The granting of a patent in Japan related to our lead program, along with the orphan drug

designation that was granted in the United States last year, will establish a strong intellectual property right that will protect the business for MDL-101. In addition, the granting of a patent in Japan, one of the major countries, will lead to the granting of patents in other major countries in the future.

Having the company mission "*Every life deserves attention*" Modalis has been working and continues to work actively for the treatment of patients suffering from diseases for which there is no cure.

About MDL-101

MDL-101 is an experimental, epigenetic editing therapy that is being developed for the treatment of LAMA2-Congenital Muscular Dystrophy (LAMA2-CMD). MDL-101 is comprised of a guide nucleotide targeting LAMA1 gene, a highly homologous sister gene of the disease-causing gene LAMA2, enzyme-null Cas9 (dCas9) fused with trans-activating domain driven by a muscle-specific promoter and coded in a muscle-specific AAV vector. MDL-101 upregulates LAMA1 gene products in patients' muscle tissue to compensate for loss-of-function caused by mutation of LAMA2, and therefore has the potential to provide a one-time, durable treatment to benefit people living with LAMA2-CMD.

About Modalis:

Modalis Therapeutics develops precision genetic medicines using epigenome editing technology. Modalis is pursuing therapies for orphan genetic diseases using its proprietary CRISPR-GNDM® technology which enables the gene/locus-specific modulation of gene expression or epigenome editing without the need for DNA cleavage or altering DNA sequence. Headquartered in Tokyo with all research and development operations in Waltham Massachusetts, the company is listed on the Tokyo Stock Exchange's Growth market. For additional information, visit www.modalistx.com.

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