

27th April 2020

Human Metabolome Technologies, Inc.
(Stock code: 6090, TSE Mothers)

Human Metabolome Technologies, Inc. (“HMT”) joins collaborative project for the development of COVID-19 DNA vaccine, led by AnGes, Inc. (“AnGes”) and Osaka University — participation in metabolomics-based biomarker discovery.

HMT is pleased to announce that it has signed a collaborative project agreement with AnGes, Inc. for the development of a DNA vaccine against COVID-19. This project was jointly launched by AnGes and Osaka University on 5th March 2020.

Using HMT’s metabolomics*¹ technology, time-dependent metabolic changes in the body after vaccination will be analyzed together with other biometric information such as antibody titers; this will be performed in collaboration with AnGes. In addition, biomarkers*² that will serve as evaluation indicators for vaccine efficacy will be screened.

HMT has been conducting exploratory research on various biomarkers based on its proprietary technology and will perform this study as part of a joint effort to contribute to the development of countermeasures against COVID-19.

The impact of the above matter on HMT’s business performance for the fiscal year ending on 30th June 2020 is expected to be negligible.

*** 1 Metabolomics:**

Metabolomics comprehensively characterizes metabolites that exist in cells and living organisms for the holistic understanding of life phenomena. Along with genomics and proteomics, which profile genes and proteins respectively, metabolomics has garnered attention as one of the core analytical technologies in the life sciences.

*** 2 Biomarker:**

A measurable indicator of the severity or presence of a medical condition

o Corporate information

AnGes, Inc.

Headquarters: 1F, Saito Bio-Incubator, 7-7-15, Saito-asagi, Ibaraki, Osaka, Japan
President: Ei Yamada
Stock code: 4563 (TSE Mothers)
Scope of business: Research & development of gene-based medical products

Human Metabolome Technologies, Inc.

Headquarters: 246-2, Mizukami, Kakuganji, Tsuruoka, Yamagata, Japan
President: Katsuhito Hashizume
Stock code: 6090 (TSE Mothers)
Scope of business: Contract metabolome analysis
Biomarker development

○ Reference information

Project overview: Development of prophylactic DNA vaccines for COVID-19 using plasmid DNA production technology — reference from news released on 5th March 2020.

- AnGes, Inc. and Osaka University (Dept. of Clinical Gene Therapy; Dept. of Health Development and Medicine) commenced joint project for development of DNA vaccines for the prevention of COVID-19, utilizing their experience in plasmid DNA product development.
- Takara Bio Inc., which has the technologies and facilities for plasmid DNA production, is responsible for manufacturing of vaccines.
- Daicel Corporation is developing an intradermal gene transfer device and will work closely with Osaka University (Impulse Science for Medicine; Dept. of Health Development and Medicine) to bring the device into clinical application.
- The use of this novel gene delivery device is expected to increase the efficiency of intradermal gene expression and antibody production capability, enabling the development of more efficient DNA vaccines.
- EPS Holdings, Inc. provides administrative support to facilitate and expedite clinical trial start up.
- Peptide Institute, Inc. provides peptide synthesis for antibody titer measurement.
- Shin Nippon Biomedical Laboratories, Ltd. oversees safety assessments of the DNA vaccines in non-clinical studies.

About Human Metabolome Technologies, Inc. (HMT)

HMT is a biotech venture founded in 2003, based on the research achievements attained at the Institute for Advanced Biosciences (IAB), Keio University, Japan. HMT provides capillary electrophoresis mass spectrometry-based metabolomics services for researchers from companies and public research institutions. HMT is currently working on the development of clinical tests that utilize biomarkers for objective assessment of specific diseases. The company was listed on TSE Mothers in December 2013, on the 10th anniversary of its founding. (<http://humanmetabolome.com/>)

Public Relations Inquiries

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