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## **C4U and Noile-Immune Biotech Partnership on PRIME Allogeneic CAR-T Cell Therapy Using CRISPR/Cas3 Genome Editing Technology**

Noile-Immune Biotech Inc., (“Noile-Immune”) and C4U Corporation, (“C4U”) today announced that they have entered into an agreement on joint research and commercialization of next-generation allogeneic gene-modified immune cell therapy combining C4U’s CRISPR/Cas3 genome editing technology and Noile-Immune’s PRIME (Proliferation inducing and migration enhancing) technology designed to improve proliferation and trafficking of immune cells into solid tumors.

The CRISPR/Cas3 technology is the C4U’s core technology, which is developed by the founders and advisors of Scientific Advisory Board of C4U, Dr. Tomoji Mashimo, professor of the Institute of Medical Science, the University of Tokyo, and Dr. Junji Takeda, guest professor of the Research Institute for Microbial Diseases, Osaka University. CRISPR/Cas3 is the technology that can counter the CRISPR/Cas9 system, which is currently being researched all over the world, and is attracted attention as a promising genome editing technology that is not affected by the complicated patent status related to Cas9.

The PRIME technology, the core technology of Noile-Immune, is related to gene-modified immune cell therapies including CAR-T and TCR-T cells against cancer, and was developed by Dr. Koji Tamada, the scientific founder and director of Noile-Immune, professor of Yamaguchi University Graduate School of Medicine and Invited Professor at Center for Gene and Cell Therapy, The Institute of Medical Science, The University of Tokyo. PRIME technology not only enhances the functions of gene-modified immune cells by producing cytokines and chemokines, but also improves the ability of patient's own immune systems to cope with cancer cells.

“I am very pleased to establish an alliance with C4U, which has a unique genome editing technology, “ said Dr. Tamada. “In this project, we will

develop highly active allogeneic CAR-T cell therapy by combining our PRIME CAR-T technology and genome editing technology owned by C4U. Combination of these Japan-origin technologies is expected to create next-generation CAR-T cells that are highly versatile and beneficial for many solid cancer patients. This project aims to develop a stage-of-the-art cancer immunotherapy under various research supports including MEXT's Program for Building Regional Innovation Ecosystems."

"Noile-Immune's PRIME CAR-T technology is world's innovative technology that overcoming the weak points of CAR-T cells on the solid cancer and the sustainability," said Dr. Mashimo. "By combining our CRISPR/Cas3 genome editing technology to PRIME CAR-T technology, it is possible to produce more effective and superior allogeneic CAR-T cell therapy at reasonable cost compared to the conventional CAR-T cell therapy. We are confident that we can provide novel our therapy to a number of patients who are fighting to cancer."

Under this agreement, Noile-Immune and C4U will conduct joint research on allogeneic gene-modified immune cell therapy. Noile-Immune will bear part of the costs necessary to carry out this joint research. In addition, both companies have the right to commercialize the results obtained by this joint research, and the right to mutually receive royalties under the contract. Noile-Immune will pay the access fee for the core technology of C4U when commercializing. Additional terms of the agreement were not disclosed.

#### About Noile-Immune Biotech, Inc.

Noile-Immune is a biotechnology company focused on the development and commercialization of novel cancer immunotherapy products with breakthrough technology to eradicate cancer cells. The company aims to discover and develop innovative cancer immunotherapies through the partnerships with experts in academia including Yamaguchi University and The National Cancer Center Japan, and deliver the first-in-class and best-

in-class therapies to patients as well. Learn more at <https://www.noile-immune.com/english>.

#### About C4U Corporation

C4U (CRISPR for You) is a life science startup founded in March 2018 and originated from Osaka University. The company is working on the development of own core technology for new genome editing.

Learn more at <http://www.crispr4u.jp/en/>.