Press Release



March 26, 2024 A-SEEDS Co., Ltd.

## A-SEEDS Co., Ltd. Receives Award from the New Energy and Industrial Technology Development Organization (NEDO) for the Deep Tech Startup Support Project (DTSU)

A-SEEDS Co., Ltd. (located in Matsumoto, Nagano Prefecture; CEO: Shigeki Yagyu, hereinafter referred to as "the Company"), is delighted to announce our selection in the Practical Application and Commercialization Phase of the third round of the 2023 Deep Tech Startup Support Project (DTSU), administered by the National Research and Development Agency, New Energy and Industrial Technology Development Organization (NEDO). This award supports our continued efforts to advance the clinical application of CAR-T cell therapy, with the goal of offering this innovative treatment to cancer patients who currently have limited therapeutic options.

#### **Project Name:**

# Development of Mass-Production Technology for the Clinical Implementation of Innovative CAR-T Cell Therapy

### Project Overview:

The objective of this project is to develop mass-production technology for CAR-T cell therapy, a novel approach to cancer treatment, utilizing non-viral gene editing methods. Our focus extends to establishing a manufacturing base in collaboration with pharmaceutical formulation development and manufacturing support companies, both domestically and globally. This foundation will support the conduct of international clinical trials and the pursuit of regulatory approvals.

Since its establishment in April 2020, A-SEEDS Co., Ltd. has been committed to addressing the challenges of clinical application for CAR-T cell therapy. Our mission is to provide effective treatments for cancer patients with few alternatives, striving to offer new hope to as many patients as possible. We have **developed a manufacturing process for clinical-grade CAR-T** 

cell therapy utilizing the PiggyBac transposon system (PB method) and have initiated Phase 1 trials in partnership with Shinshu University and the National Cancer Center Hospital East.

In order to make CAR-T cell therapy, produced via the PB method, a viable and cost-effective clinical option, it is essential to streamline and automate the production process to minimize labor and equipment expenses. This project will focus on developing automated culture methods with robotic manufacturing equipment to mass-produce CAR-T cells using the PB method. We aim to lay the groundwork for manufacturing CAR-T cell products leveraging this technology, in preparation for international clinical trials and regulatory approvals. By improving the efficacy of our CAR-T cell products and leveraging the outcomes of this project as a competitive edge, we aspire to pioneer the world's first mass-production technology for CAR-T cell therapy using the PB method, thereby positioning our nation at the forefront of CAR-T cell therapy development.

#### ■ A-SEEDS Co., Ltd.

A-SEEDS, an innovative biotech company sprouted from Shinshu University, is dedicated to pioneering advanced treatments for life-threatening cancers. Harnessing the potential of non-viral genetic engineering, our cutting-edge immune cell therapy opens up new horizons of hope for patients seeking effective and transformative solutions.

Company name	A-SEEDS Co., Ltd.
Location	3-1-1 CSMIT, Asahi, Matsumoto, Nagano,
Representative	Shigeki Yagyu
Establishment	April 2020
Capital	36 million yen
Home page URL	https://www.a-seeds.co.jp/en-home

#### ■ Contact Info.

A-SEEDS Co., Ltd.

Kiyohito Tani

Tel: 0263-31-5882

E-mail: kiyohito.tani@a-seeds.co.jp