



August 24, 2026

Press Release

C4U Corporation

C4U and Cellafa Bioscience Enter Into A Collaborative Research Agreement

C4U Corporation ("C4U") and Cellafa Bioscience Inc. ("Cellafa") are pleased to announce that we have recently entered into a collaborative research agreement regarding an efficient method for inducing the differentiation of iPS Cells into neutrophils.

C4U is a biotech startup that aims for the social implementation of proprietary CRISPR genome editing technologies, including CRISPR-Cas3.

Cellafa is a company established through a joint venture between Astellas Pharma and Yaskawa Electric to supply next-generation regenerative medicine products by robotics and AI.

In this collaborative research, Cellafa will share insights regarding efficient differentiation method from iPSCs to hematopoietic progenitor cells, which was identified utilizing Cellafa's AI robotic technology, and both companies aim to establish an efficient method for differentiation into neutrophils from iPSC genome-edited by C4U's proprietary CRISPR-Cas3 technology.

The iPSC-derived neutrophils obtained through this research are planned to be used for acquiring safety and pharmacological data necessary for the development of a novel gene therapy for primary immunodeficiency, which C4U is conducting.

About C4U Corporation

C4U is a biotech startup originated from the University of Osaka, and focused on the development of safe and efficient gene therapies utilizing its proprietary CRISPR-Cas3 gene editing platform. In comparison to the CRISPR-Cas9 platform, CRISPR-Cas3 presents the distinct benefits of: 1) no off-target by the higher selectivity of deletion site (improved safety); 2) efficient knockouts by the larger deletion of gene sequences; and 3) an entirely independent patent portfolio. C4U has been granted a worldwide exclusive license to CRISPR-Cas3 by the University of Osaka for use in eukaryotic cells thus simplifying sublicensing transactions which is in sharp contrast to the complex and heavily litigated CRISPR-Cas9 patent landscape.

C4U promotes the development of novel treatments for various diseases through both in-house research and collaborations with other companies, while simultaneously working to expand its CRISPR-Cas3 platform for application across a wide range of industries.

In addition, C4U has begun work on the enAsCas12f, a novel genome editing tool that offers strengths distinct from those of CRISPR-Cas3. The enAsCas12f achieves high editing efficiency despite being less than one-third size of CRISPR-Cas9, and is expected to be applied not only in *in vivo* gene therapy but also in fields such as agriculture and plant science.

<https://www.crispr4u.jp/en/>

About Cellafa Biosciences Inc.

Cellafa Bioscience is a company established through a joint venture between Astellas Pharma and Yaskawa Electric, dedicated to next-generation cell therapy process development and manufacturing.

While cell therapy holds great promise for high therapeutic efficacy, challenges remain regarding stable clinical-grade manufacturing. Cellafa contributes to the industrialization of cell therapy by utilizing the humanoid robot "Maholo" and AI to digitize and optimize manufacturing processes—enabling their rapid transfer to other sites—and by providing end-to-end partner support through a PRDMO (Partnership + R&D + Manufacturing) model that spans everything from process development to the GMP-compliant production of investigational drugs.

<https://cellafa.com/>

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