



News Release

Strategic Business Alliance with U-Medico for the Design, Development, and Analysis of Plasmid DNA and Viral Vectors for Gene Therapy

KOBE, July 25, 2025 -- Synplogen Co., Ltd. (Head Office: Chuo-ku, Kobe; Representative Director, CEO: Kazuhiko Yamamoto; hereinafter “Synplogen”) and U-Medico, Inc. (Head Office: Minoh, Osaka; CEO: Ayano Fukuhara; hereinafter “U-Medico”) have entered into a strategic business alliance agreement. The alliance aims to integrate both companies’ respective technologies, expertise, corporate brands, and customer networks to jointly provide design, development, CMC (Chemistry, Manufacturing, and Control), and quality testing services for plasmid DNA and viral vectors used in gene therapy products.

Synplogen is a synthetic biology startup originating from Kobe University. It offers services based on its proprietary OGAB™ method for DNA synthesis and Combinatorial-OGAB™ (Combi-OGAB™) method for constructing DNA libraries with diverse combinations. These technologies enable the synthesis of long and complex DNA sequences and support the construction of combinatorial libraries. As a biofoundry specializing in the field of gene therapy, Synplogen also provides cost-effective and high-quality “Gene Therapy Biofoundry™” services. These integrated, one-stop solutions -both physically and functionally- include everything from DNA synthesis and large-scale plasmid DNA preparation, to the design and development of viral vectors and mRNA, CMC development, quality testing, and even technology transfer to partner manufacturers equipped with GMP-compliant facilities, all conducted at its in-house R&D center in Kobe.

U-Medico is a contract research organization (CRO) founded by Professor Susumu Uchiyama of Graduate School of Engineering, The University of Osaka, who also serves as the company’s Chief Scientific Officer. The company leverages cutting-edge scientific technologies to provide high-quality services in the fields of quality analysis and formulation development for biopharmaceuticals such as antibodies and fusion proteins, as well as gene therapy products. In particular, U-Medico has established a highly precise analytical method using analytical ultracentrifugation (AUC) to quantify the ratio of full and empty particles—an essential parameter in the quality assessment of AAV vectors. Starting in 2025, the company will also launch AUC-based contract services compliant with GMP standards, thereby meeting the quality requirements for investigational new drugs. Furthermore, U-Medico is expanding its services to include process development aimed at maximizing AAV production efficiency, as well as the manufacturing and sale of high-quality reference standards based on advanced analytical technologies. Through these efforts, the company provides scientific support for both the development and quality assurance of gene therapy products.

By combining Synplogen’s Gene Therapy Biofoundry™ services—built on innovative technologies such as OGAB™ method, which has been used in over 300 projects involving long and complex DNA synthesis, and the proprietary “All-in-One Plasmid™”—with U-Medico’s world-class analytical capabilities and CMC development expertise, the two companies will provide customized services tailored to the specific characteristics of each client’s gene therapy pipeline.

In addition, Synplogen and U-Medico will collaborate with TAIYO Pharma Tech Co., Ltd., with whom Synplogen has already formed a business alliance. Under the shared concept of “Shared Manufacturing Organization,” the three companies aim to establish a vertically integrated value chain for gene therapy development in closely connected region (Kobe and Osaka). This will encompass DNA design and development, CMC development, quality testing, and GMP-compliant manufacturing of investigational gene therapy products—ultimately contributing to the early practical application of innovative gene therapy products.

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| Company: | Synplogen Co., Ltd. |
| Address: | 6-3-7 Minatojima Minamimachi, Chuo-ku, Kobe, Hyogo, Japan |
| Established: | February 2017 |
| Representative: | Kazuhiko Yamamoto, Representative Director, CEO |
| Capital: | JPY 3,847.28 million (including capital reserves) |
| Business: | Custom DNA synthesis and Gene Therapy Biofoundry™ services |
| URL: | https://www.synplogen.com/en/ |

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| Company: | U-Medico, Inc. |
| Address: | 7F Erimo Building, 2-1-1 Senbanishi, Minoh, Osaka, Japan |
| Established: | August 2006 |
| Representative: | Ayano Fukuhara, CEO |
| Capital: | JPY 430 million |
| Business: | Formulation development and biophysical characterization of biopharmaceuticals, including antibodies, fusion proteins, and viral vector-based gene and cell therapy products |
| URL: | https://u-medico.co.jp/en/ |

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| Company: | TAIYO Pharma Tech Co., Ltd. |
| Address: | 4-38 Aketacho, Takatsuki, Osaka, Japan |
| Established: | April 2019 |

Representative: Eiji Sato, President and CEO
Capital: JPY 300 million
Business: Contracted Manufacturing Organization
URL: <https://www.taiyo-pt.co.jp/en/>

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