

## **Entered into a business alliance JUZEN CHEMICAL CORPORATION for nucleic acid-related operations**

- Establishing an integrated system in Toyama Prefecture from nucleic acid raw material amidites to GMP-compliant oligonucleotide manufacturing -

Fukuzyu Pharmaceutical Co., Ltd. (Headquarters: Toyama City, Toyama Prefecture; President: Teruo Kosugi; hereinafter "Fukuzyu Pharmaceutical") and JUZEN CHEMICAL CORPORATION (Headquarters: Toyama City, Toyama Prefecture; President: Daisuke Hirota; hereinafter "JUZEN CHEMICAL") have signed a business alliance agreement to strengthen collaboration in the field of nucleic acid therapeutics.

In recent years, **nucleic acid therapeutics** have attracted attention as a new drug discovery modality that addresses unmet medical needs, including hereditary diseases and cancer, and advancing research and development as well as manufacturing systems and ensuring stable supply have become important challenges.

Through this partnership, the two companies will leverage their respective strengths cultivated over many years to establish an integrated, **end-to-end system in Toyama Prefecture, covering everything from nucleic acid raw materials to GMP-compliant manufacturing of oligonucleotide drug substances.**

Specifically, Fukuzyu Pharmaceutical will apply the advanced organic synthesis techniques and manufacturing know-how it has accumulated through producing low-molecular-weight active pharmaceutical ingredients to **manufacture specialized amidites, which are raw materials for nucleic acid medicines, and lipid nanoparticles (LNPs) used for DDS (drug delivery systems).** Meanwhile, JUZEN CHEMICAL will use its **oligonucleotide manufacturing** area to handle **oligonucleotide production under a GMP framework aimed at clinical trials and commercial supply, starting from the research and development stage.**

This allows customers to proceed seamlessly from ordering raw materials to manufacturing oligonucleotides, enabling them to benefit from high-value solutions

such as faster development speed, consistent quality assurance, and a more resilient supply chain.

Furthermore, JUZEN CHEMICAL has already been advancing a business partnership with NIPPON GENE CO., LTD. in the field of nucleic acid drug manufacturing, and through this collaboration the “Toyama-origin nucleic acid drug ecosystem” composed of JUZEN CHEMICAL, Fukuzyu Pharmaceutical, and NIPPON GENE will become even stronger. A major strength of this collaboration is that basic research, raw material supply, oligonucleotide manufacturing, and GMP supply can all be completed within Toyama Prefecture.

Both companies will continue to enhance synergistic effects through face-to-face technical collaboration and information sharing and contribute to the research and development and stable supply of nucleic acid pharmaceuticals.

---

### **About Fukuzyu Pharmaceutical Co., Ltd.**

Fukuzyu Pharmaceutical has cultivated advanced organic synthesis techniques, quality control systems, and the ability to comply with GMP through many years of manufacturing active pharmaceutical ingredients and intermediates for small-molecule drugs. Leveraging these technological foundations, we have in recent years been actively expanding into the field of nucleic acid therapeutics (specialized amidites and lipid nanoparticles).

Company name: Fukuzyu Pharmaceutical Co., Ltd.

President: Teruo Kosugi

Head Office: 48 Hagiwara, Toyama City, Toyama

URL: <https://www.fkj.co.jp/>

---

## **About JUZEN CHEMICAL CORPORATION**

JUZEN CHEMICAL aims to be the best partner and a CDMO that can provide one-stop services for global pharmaceutical companies—from R&D support and clinical trial drug manufacturing to stable supply of commercial products—so we are actively pursuing new technologies and investing in equipment. In 2024, we will carry out expansion and extension work on our GMP-compliant active pharmaceutical ingredient manufacturing plant, as well as strengthen facilities for nucleic acid therapeutics, and are taking on new modalities.

Company name: JUZEN CHEMICAL CORPORATION

President: Daisuke Hirota

Head Office: 1-10 Kiba-machi, Toyama-city, Toyama

URL: <https://www.juzen-chem.co.jp/>

---

## **About Nippon Gene Co., Ltd.**

Nippon Gene is a biotechnology company that develops and manufactures research reagents, in vitro diagnostic pharmaceuticals, and testing and diagnostic reagents. In April 2026, it absorbed Nippon Gene Material Co., Ltd., strengthening its manufacturing and research system for the oligo synthesis business. We will continue to support research and development in the field of nucleic acid therapeutics by supplying small-quantity, many-variety oligonucleotides.

Company name: NIPPON GENE CO., LTD.

President: Atsushi Yoneda

Head office: 1-5, Kanda Nishikicho, Chiyoda-ku, Tokyo

Factory: 2-7-18 Toiya-machi, Toyama City, Toyama

URL: <https://nippongene.com/>

Contact for inquiries regarding this matter

Fukuzyu Pharmaceutical Co., Ltd.

Sales Department

e-mail : [sales@fkj.co.jp](mailto:sales@fkj.co.jp)