

## News Release

### NANO MRNA, a Strategic Subsidiary of Nano Holdings, Signs LOI to Acquire Next-Generation LNP Technology Venture Luna RD

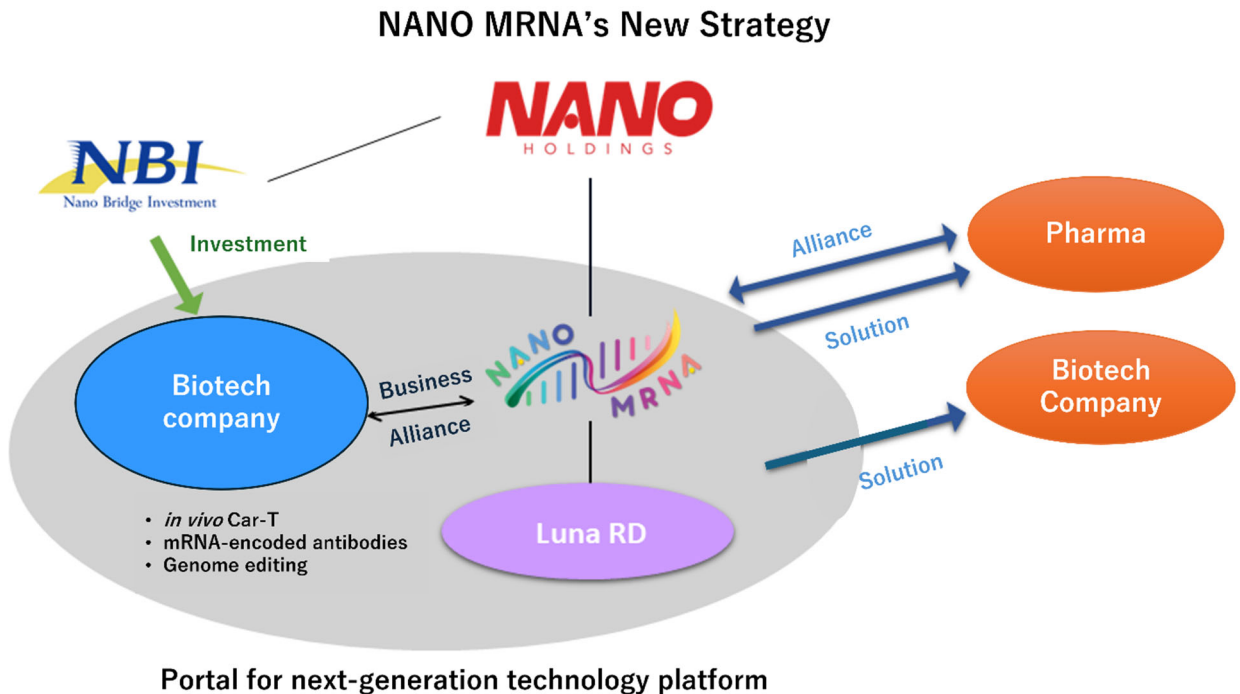
Tokyo, Japan — April 3, 2026 — Nano Holdings, Inc. (TSE Growth Market: 4571; Chairman, President and CEO: Atsushi Matsumura; Nano Holdings)

Nano Holdings, Inc. announced today that its Board of Directors has approved a plan for its strategic subsidiary, NANO MRNA Co., Ltd., to enter into a Letter of Intent (LOI) with Luna RD Co., Ltd., a biotechnology company specializing in next-generation lipid nanoparticle (LNP) technologies, with the intention of pursuing an acquisition of Luna RD. This proposed transaction marks the first strategic M&A initiative under NANO MRNA’s forward-looking platform strategy.

#### 1. Strategic Positioning of NANO MRNA within Nano Holdings

NANO MRNA became a strategic subsidiary of Nano Holdings effective April 1, 2026. With nucleic acid technologies at its core, NANO MRNA aims to evolve into a world-leading drug discovery platform company, delivering integrated solutions to the diverse technical challenges faced by pharmaceutical and biotechnology companies developing next-generation therapies.

Looking ahead, Nano Holdings and its investment subsidiary, Nano Bridge Investment, will actively pursue a strategy to consolidate world-class nucleic acid technologies onto NANO MRNA’s platform through business and capital partnerships, M&A transactions, and strategic investments.



## 2. Strategic Significance of the Acquisition of Luna RD

Luna RD is a biotechnology venture founded by Professor Tomohiro Asai of the University of Shizuoka, with drug delivery system (DDS) technologies that are critical to the advancement of mRNA and other nucleic acid-based therapeutics.

A key differentiator of Luna RD's platform is its proprietary lipid nanoparticle (LNP) formulation, which eliminates the need for polyethylene glycol (PEG)—a component traditionally considered essential in conventional LNP systems.

PEG-containing LNP technologies are often subject to significant royalty obligations due to existing patent constraints, even after successful commercialization. Luna RD's technology not only has the potential to mitigate these limitations but also offers advantages in reducing safety risks associated with PEG. Through this acquisition, NANO MRNA aims to deliver LNP solutions that provide both enhanced safety and greater freedom to operate, thereby expanding the potential of next-generation drug development.

## 3. Intellectual Property and Business Environment Surrounding LNP Technologies

In the field of lipid nanoparticle (LNP) technology, companies such as [Acuitas Therapeutics](#) and [Genevant Sciences](#) / [Arbutus Biopharma](#) hold extensive intellectual property covering foundational LNP compositions and key lipid components. In addition, companies such as [Arcturus Therapeutics](#) have developed proprietary LNP delivery platforms and related know-how.

In the development of mRNA and nucleic acid therapeutics, licensing agreements for such technologies can require upfront and milestone payments ranging from several million to several hundred million U.S. dollars (USD) per program, in addition to ongoing royalty obligations of several percent.

In the COVID-19 vaccine space, there have been documented cases where total licensing fees and settlement payments related to LNP patent disputes have exceeded USD 1 billion. As a result, intellectual property constraints and associated economic burdens have become structural challenges in the development of next-generation mRNA and nucleic acid therapeutics.

## 4. Future Outlook

Following execution of the LOI, NANO MRNA will undertake due diligence and advance discussions toward a definitive acquisition agreement. Subject to the completion of the final agreement and customary closing procedures, Luna RD is expected to become a subsidiary of NANO MRNA.

Further details of NANO MRNA's growth strategy will be communicated through video content to be published on Nano Holdings' website

## 5. Impact on Financial Results

Details of the transaction, including the acquisition terms, will be disclosed promptly in accordance with applicable timely disclosure requirements once finalized.

The impact on the Company's consolidated financial results for the fiscal year ending March 2027 will be reflected in the financial forecast to be included in the earnings announcement scheduled for May 15, 2026.

**Company Overview of Luna RD Co., Ltd.**

Company Name: Luna RD Co., Ltd.

Head Office: 21-11-301 Kawahara-cho, Shimizu-ku, Shizuoka City, Shizuoka, Japan

Established: November 18, 2021

Notes

**\*1 Acuitas Therapeutics**

A Canada-based company providing foundational LNP technologies. The company does not conduct proprietary drug discovery, but instead licenses its LNP platform to pharmaceutical companies. While privately held, Acuitas is widely recognized for supporting the commercialization of mRNA vaccines.

**\*2 Genevant Sciences / Arbutus Biopharma**

A collaboration between Arbutus Biopharma, which holds key LNP-related patents, and Genevant Sciences, which develops nucleic acid DDS technologies based on LNPs. Both companies engage in licensing and enforcement of LNP-related intellectual property. As of the end of March 2026, Arbutus Biopharma (Nasdaq-listed) had a market capitalization of approximately USD 880 million.

**\*3 Arcturus Therapeutics**

A Nasdaq-listed mRNA therapeutics company developing its pipeline based on proprietary LNP technology (LUNAR®) and self-amplifying mRNA technologies. As of the end of March 2026, its market capitalization was approximately USD 220 million.

**Investor and Media Contact**

Nano Holdings, Inc.

Corporate Communication

<https://www.nano-hd.com/en>