To Whom It May Concern

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NANO MRNA Co., Ltd.
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(CodeNo.4571)

RUNX1 mRNA, a disease modifier for knee osteoarthritis
Study plan Approval for initiation of Phase 1 clinical trial

NANO MRNA is pleased to announce that PrimRNA AU Pty Ltd, an Australian subsidiary of its subsidiary PrimRNA Inc., has been approved the Phase 1 trial plan of RUNX1 mRNA, an mRNA-based knee osteoarthritis (OA) drug to the Human Research Ethics Committees (HREC) for the initiation of the trial.

PrimRNA will register this clinical trial with the Therapeutic Goods Administration (TGA) and subsequently start the Phase 1 clinical trial.

PrimRNA is pursuing the development of a novel therapeutic approach based on administering mRNA for RUNX1, a key factor in cartilage formation, to repair cartilage tissue. NANO MRAN will continue to support PrimRNA's clinical development.

RUNX1 mRNA

A DDS formulation of mRNA encoding RUNX1, a transcription factor that promotes cartilage regeneration. It is a new type of osteoarthritis treatment for knee joints that is administered directly into the knee joint to promote the repair of damaged cartilage tissue.

Osteoarthritis of the knee

Osteoarthritis is a disease in which the cartilage in the knee wears away due to ageing and obesity, causing severe pain in the knee and making walking difficult. Currently, the only treatment available is a coping drug that aims to reduce pain, so the creation of diseasemodifying drugs with cartilage-repairing properties is anticipated. The number of patients is increasing worldwide. The global market size is estimated at approximately USD 9.5 billion in 2024 and is expected to grow to USD 24.3 billion by 2034 (source: Towards HEALTHCARE). The emergence of disease-modifying drugs such as RUNX1 mRNA preparations is expected to further expand the market.

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