

Singapore opens non-GMP NATi mRNA biofoundry to advance mRNA manufacturing capabilities

06 November 2024 | News

First-of-its-kind facility in Asia paves the way for national pandemic preparedness and nucleic acid therapeutics manufacturing



The Nucleic Acid Therapeutics Initiative (NATi), a national platform hosted by the Agency for Science, Technology and Research (A*STAR), has officially launched the non-GMP Nucleic Acid Therapeutics Initiative (NATi) mRNA BioFoundry.

Located at the A*STAR Bioprocessing Technology Institute (BTI), this state-of-the-art facility marks a significant milestone in Singapore's efforts to build self-reliance in mRNA technology and strengthen the country's position in nucleic acid therapeutics.

Officiating the launch, Second Minister for Trade and Industry Dr Tan See Leng highlighted the facility's impact, "The NATi mRNA BioFoundry will position Singapore at the forefront of mRNA manufacturing, providing critical infrastructure to support nucleic acid therapeutics research and production. This marks an important first step towards realising RNA therapies that are not only discovered but also manufactured right here in Singapore, contributing to our ambition of becoming a leading hub for biomedical innovation."

The non-GMP NATi mRNA BioFoundry is a first-of-its-kind facility in Asia dedicated to mRNA manufacturing. As part of the \$97 million NATi programme announced by Minister Tan during this year's MTI Committee of Supply debate, this facility supports NATi's mission of advancing nucleic acid therapeutics.

Built in collaboration between NATi, A*STAR, and Wellcome Leap, the facility will strengthen Singapore's leadership in nucleic acid therapeutics and potentially pave the way for a commercially sustainable GMP Biofoundry in Singapore.

The non-GMP NATi mRNA BioFoundry provides vital infrastructure for developing and producing mRNA-based products, such as vaccines. While currently focused on research and preclinical production, the NATi mRNA BioFoundry is equipped to scale up swiftly during national health crises, ensuring Singapore's ability to respond effectively to future emergencies.