**ASX Announcement**

## Update on the progression of the NanoCelle® NASAL Covid-19 vaccine program

**SYDNEY, May 31, 2022** - Medlab Clinical Ltd (ASX:MDC) (Medlab, the Company), an Australian biotech using nano-particle delivery technology to enhance medicines' effectiveness, is pleased to update shareholders on the progress of our NanoCelle® Nasal nucleic acid (mRNA/SiRNA) program.

This is a **NEW** delivery path, adding to our existing buccal inside mouth cheek delivery path.

In December 2021, MDC received a non-repayable government grant to collaborate with two leading Australian Universities (University of NSW and Macquarie University) on the development of a nasal nanoparticle COVID-19 vaccine using nucleic acid.

Laboratory work has now commenced, and The Woolcock Institute at Macquarie University are awaiting the nucleic acid from UNSW to proceed further.

An interim report, has been received from the Woolcock Institute at Macquarie University that provides:

- All Nanoparticle loading was performed at Medlab
- Blank nanocelles (i.e., formulation free from encapsulated insulin) and insulin nanocelles were assessed for their physicochemical properties at the Woolcott Institute
- The physiochemical properties and aerosolized feature of nanocelles were characterized Appropriate particle size and charge, on our NanoCelle® delivery platform technology was reported with an Insulin active pharmaceutical ingredient (API) nanoparticle
- The physiochemical properties and aerosolized feature of nanocelles were characterized
- Insulin nanocelles:
    - were considered to be more well-tolerated in nasal epithelial cells
    - demonstrated higher encapsulation efficiency
    - more stable particle size and polydispersity index
    - the nasal formulation insulin nanocelles showed satisfactory droplet size
- Currently, the Woolcott Institute is conducting experiments to confirm the viability (i.e., active) of Insulin to metabolise glucose in a cell culture system, further, to confirm the utility of the NanoCelle® delivery technology

In light of these results the nasal delivery of a medicine, such as nucleic acid as nanoparticle, shows great promise, and Medlab looks forward to updating the market further as the program progresses.

We are currently awaiting confirmation from UNSW that the nucleic acid is ready for deployment into the NanoCelle® environment, with expectations of advanced program readouts around November this year.

**- ENDS -**

**Authorisation & Additional information**

This announcement was authorised by the Board of Directors of Medlab Clinical Limited.

**About Medlab Clinical:**

Medlab Clinical LTD (ASX:MDC) is pioneering the development and Commercialisation of a delivery technology, allowing for enhanced medical properties, including increased efficacy, safety, patient compliance and stability.

Medlab's pipeline comprises several small and large molecules from repurposing generic medicines to enhancing the delivery of immunotherapies.

NanoCelle®, the patented delivery platform is wholly owned by Medlab and developed in Medlab's owned OGTR Registered Laboratory.

NanoCelle® is designed to address known medication problems, addressing global unmet medical needs. Medlab operates in Australia (Head Office), USA, and the UK.

For more information, please visit www.medlab.co

**Medlab** – *better medicines, better patient care*

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