

UPDATE ON DEVELOPMENT OF THE CLEARAPI SARS-COV-2 NEUTRALISING ANTIBODY RAPID TEST KIT

The board of directors (the "**Board**") of Biolidics Limited (the "**Company**" and together with its subsidiaries, the "**Group**") refers to the Company's announcements made on 14 July 2020, 16 July 2020 and 20 September 2021 (the "**Announcements**") in relation to the licencing agreement with the Agency for Science, Technology and Research (A*STAR)'s Accelerate Technologies Pte Ltd, which grants the Company rights to use its technology for the detection of COVID-19 viral spike/Angiotensin Converting Enzyme 2 ("**ACE2**") blocking antibodies (the "**Technology**"), the update on the development of the Company's ClearEpi SARS-CoV-2 Neutralising Antibody Rapid Test Kit developed by Biolidics with the Technology (the "**ClearEpi NAB Test**"), and the receipt of confirmation for the CE marking for the ClearEpi NAB Test, respectively. Unless otherwise defined, capitalised terms used in this announcement shall have the same meaning as ascribed to them in the Announcements.

Further to the Announcements, the Board wishes to update that the Company had on 8 December 2021, (i) entered into a definitive agreement with its contract manufacturer for the production of the ClearEpi NAB Test (the "**Manufacturing Agreement**"); and (ii) obtained the relevant product liability insurance in respect of the ClearEpi NAB Test (the "**Insurance**"). The commercial production for the ClearEpi NAB Test (the "**Commercial Production**") is expected to commence in the current financial year ending 31 December 2021 ("**FY2021**").

The above updates are not expected to have a material impact on the financial performance of the Group for FY2021. Barring unforeseen circumstances, given the ongoing COVID-19 pandemic, and subject to the Company being able to successfully produce and secure sales for the ClearEpi NAB Test, the Company expects that the production and sale of the ClearEpi NAB Test to contribute positively to the revenue of the Group during this COVID-19 pandemic / endemic period in the financial year ending 31 December 2022. However, given the ever-evolving nature of the COVID-19 pandemic / endemic where new COVID-19 related products and services are constantly being developed and launched in the market, the Company is unable to quantify such financial impact as the sales uptake of the ClearEpi NAB Test cannot be determined as at the date of this announcement.

Save for their respective shareholdings in the Company (if any), the Company is not aware of any of its directors or substantial shareholders having any interest, direct or indirect, in the Manufacturing Agreement, the Insurance and the Commercial Production.

Shareholders and potential investors are reminded to exercise caution when dealing in the securities of the Company and should consult their stockbrokers, bank managers, solicitors, accountants or other professional advisers if they are in doubt about the actions that they should take.

BY ORDER OF THE BOARD

Song Tang Yih
Executive Director and Chief Executive Officer
8 December 2021

*This announcement has been prepared by the Company and has been reviewed by United Overseas Bank Limited (the "**Sponsor**") for compliance with Rules 226(2)(b) and 753(2) of the Singapore Exchange Securities Trading Limited ("**SGX-ST**") Listing Manual Section B: Rules of Catalyst. This announcement has not been examined or approved by the SGX-ST. The SGX-ST assumes no responsibility for the contents of this announcement, including the correctness of any of the statements or opinions made or reports contained in this announcement. The contact person for the Sponsor is Mr. Lim Hoon Khia, Director, Equity Capital Markets, who can be contacted at 80 Raffles Place, #03-03 UOB Plaza 1, Singapore 048624, telephone: +65 6533 9898.*

Appendix

Additional information on the Technology and the ClearEpi NAB Test

ACE2 is a cellular receptor for coronaviruses such as SARS and novel coronavirus SARS-CoV-2. Spike proteins from these coronaviruses recognize and bind to ACE2 on the surface of target cells (e.g. lung cells), allowing the virus to enter cells and infecting the person. Most commercially available serology tests against COVID-19, including the Company's COVID-19 Antibody Test Kit launched on 30 March 2020, detects the IgG and IgM antibodies (a group of antibodies produced by the body in response to the infection of SARS-CoV-2 virus). As such, these serology tests which detect the presence of IgG and IgM are currently used only as an assistive tool in the detection of COVID-19, and they are not able to detect specific antibodies that bind to the SARS-CoV-2 virus which interfere with its ability to infect target cells.

The clinical validation of the ClearEpi NAB Test was undertaken in Singapore. The Company engaged A*STAR Infectious Disease Labs (ID Labs) for the screening of the prototype, as part of the clinical validation of the ClearEpi NAB Test conducted by the Company. ID Labs is an A*STAR research institute set up in April 2021 to undertake disease-specific research efforts within A*STAR.

The ClearEpi NAB Test is intended for qualitative detection of circulating human IgG neutralising antibodies in serum or plasma that are capable of binding to SARS-CoV-2 spike protein and blocking ACE2 binding. Result from the test may provide indication of the individual's protective immunity against COVID-19^{1,3}.

The Company wishes to highlight that the ClearEpi NAB Test is intended for use as an aid in identifying individuals with an adaptive immune response to SARS-CoV-2 and should not be used to diagnose or exclude acute SARS-CoV-2 infection. As at the date of this announcement, it is unknown for how long antibodies persist following infection and if the presence of neutralising antibodies confers protective immunity.

The ClearEpi NAB Test can potentially serve as an important tool to assist in the area of assessing vaccine efficacy, vaccine deployment and social activities management (such as air travel²), among others.

The ClearEpi NAB Test will be limited to professional use and is not intended for at home testing.

(1) <https://www.nature.com/articles/s41591-021-01377-8>

(2) <https://www.aviationpros.com/airports/airport-technology/article/21226691/antibody-testing-for-air-travel-how-to-keep-airports-safely-unlocked>

(3) [https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(21\)00185-1/fulltext](https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(21)00185-1/fulltext)

Glossary of Terms

ACE2	<p>ACE2 or "Angiotensin Converting Enzyme 2" are proteins on the surface of many types of cells (e.g. lung cells).</p> <p>Viral Spike proteins from coronaviruses recognise and bind to ACE2 on the surface of target cells (e.g. lung cells), to facilitate the entry of the virus into the cells, resulting in an infection.¹</p>
Coronavirus (CoV)	<p>Coronaviruses (CoV) are a large family of viruses. The Coronavirus can cause illness from the common cold to more severe diseases, such as Severe Acute Respiratory Syndrome (SARS).²</p> <p>An infected individual may exhibit respiratory symptoms, cough, fever, shortness of breath and breathing difficulties. An infection can also cause severe acute respiratory syndrome, pneumonia, kidney failure and even death.</p>
COVID-19	Coronavirus disease 2019 (COVID-19) is an infectious disease caused by a newly discovered coronavirus, known as " SARS-CoV-2 ". ³
COVID-19 viral spike/ Angiotensin Converting Enzyme 2 ("ACE2") blocking antibodies	Blocking antibody is a specific type of antibody that can prevent harmful substances (e.g. viruses, bacteria, or toxins) from binding to the cell. COVID-19 viral spike/ Angiotensin Converting Enzyme 2 ("ACE2") blocking antibodies can bind to Viral Spike protein thereby preventing its interaction with the cellular receptor ACE2 on a target cell surface. ⁴
IgG and IgM	<p>The immune system makes different proteins to fight antigens, such as bacteria, viruses, and toxins. These proteins are known as antibodies. There are five subclasses of antibodies — IgA, IgG, IgM, IgD, and IgE.⁵</p> <ul style="list-style-type: none"> • Immunoglobulin G (IgG), the most abundant type of antibody, is found in all body fluids and protects against bacterial and viral infections. • Immunoglobulin M (IgM), which is found mainly in the blood and lymph fluid, is the first antibody to be made by the body to fight a new infection.
Protective immunity	Protective immunity is the ability to resist infection of an invading pathogen. ⁵
SARS-CoV-2	" SARS-CoV-2 " or "Severe Acute Respiratory Syndrome Coronavirus 2" is a strain of coronavirus, identified in 2019, which causes coronavirus disease 2019 (COVID-19). ³
Serology tests	Serology tests are blood tests that look for antibodies in the blood. ⁶
Viral Spike proteins	Viral Spike proteins are a type of proteins present on the surface of the coronaviruses, which facilitate entry of the virus into cells, causing an infection. ⁷

References

1. Hoffmann, Markus, et al. "SARS-CoV-2 cell entry depends on ACE2 and TMPRSS2 and is blocked by a clinically proven protease inhibitor." *Cell* (2020).
2. World Health Organisation. 2020. About COVID-19. [online] Available at: <<http://www.emro.who.int/health-topics/corona-virus/about-covid-19.html>> Accessed 12 July 2020.
3. World Health Organisation. 2020. Naming The Coronavirus Disease (COVID-19) And The Virus That Causes It. [online] Available at: <[https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it)> Accessed 11 July 2020.
4. Vinson, Valda. "An antibody defense against COVID-19." *Science* (2020): 1201-1203.
5. Immunobiology: The Immune System in Health and Disease. 5th edition. Janeway CA Jr, Travers P, Walport M, et al. New York: [Garland Science](#); 2001
6. Centers for Disease Control and Prevention. 2020. Information For Laboratories About Coronavirus (COVID-19). [online] Available at: <<https://www.cdc.gov/coronavirus/2019-ncov/lab/serology-testing.html>> Accessed 12 July 2020.
7. Belouzard, Sandrine, et al. "Mechanisms of coronavirus cell entry mediated by the viral spike protein." *Viruses* 4.6 (2012): 1011-1033.