Sixth Wave AMIPS Detects Delta Variant of SARS-CoV-2

written by Raj Shah | August 3, 2021
August 3, 2021 (Source) — Sixth Wave Innovations Inc. (CSE: SIXW) (OTCQB: SIXWF) (FSE: AHUH) ("Sixth Wave", "SIXW" or the "Company") is pleased to announce that its molecular detection technology has successfully detected the Delta variant of the SARS-CoV-2 virus that causes COVID-19. Detection was accomplished through a colour-based sensor that uses the Company's patent-pending Accelerated Molecular Imprinted Polymers ("AMIPs™") technology.

The test work was performed under the direction of Dr. Michael Joyce, a senior research scientist in medical microbiology at the University of Alberta's Li Ka Shing Institute of Virology ("LKS").

The worldwide spread of SARS-CoV-2 has led to mutations and multiple variants of the virus that can increase its virulence, morbidity, and mortality. The Delta variant is spreading widely among the unvaccinated public, as well as showing an ability to infect fully vaccinated individuals. There is widespread agreement in the scientific community that the virus will continue to mutate and likely produce additional variants of concern.

The Company's work has clearly demonstrated the ability to create a molecular imprinted polymer for additional viruses and bacteria, demonstrating that the AMIPS market extends well beyond clinical testing and COVID-19. The Company is quickly moving through a program of development and scale-up milestones toward a wide range of AMIPs Virus rapid detection devices. The spectrum of prospective products will include SIXW's SmartMask™

offerings (see <u>SIXW Press Release dated May 15, 2020</u>), in addition to smart-clothing, PPE applications, airborne sensors, breathalyzers, ELISA-based technologies, cartridge/lateral flow designs, and others.

Sixth Wave's AMIPs technology has the rapid detection capability to keep pace with this constantly changing diagnostic environment. Published market analysis indicates the market for COVID-19 diagnostic testing is expected to grow for the next few years and remain at levels higher than 2020 through at least 2027.

(https://www.grandviewresearch.com/industry-analysis/covid-19-di agnostics-market).

The ability to detect the presence of Delta or other variants will therefore be crucial.

"In the span of just a few months, we have validated detection of the critical variants of the COVID-19 virus and have moved significantly toward detection levels that are clinically relevant," said Dr. Jon Gluckman, President, and CEO of Sixth Wave. "The continued successes in the development of the AMIPs platform are compelling and a testament to the work of the combined Sixth Wave and University of Alberta team."

The colour-based sensor testing using a pseudo-ELISA test format demonstrated functionality similar to an enzyme-linked immunosorbent assay ("ELISA") test) and was achieved using a commercial off-the-shelf fluorescent dye. The virus samples were tested in cell culture supernatant to allow for basic specificity parameters. The fluorescent-based sensors demonstrated a significant signal compared to the negative control (cell culture supernatant without virus).

"By imprinting and detecting the whole virus, AMIPs can be

highly resistant to virus mutation compared to technologies such as immunoassay-based techniques that use antibodies that bind a small region of the virus spike protein," said Dr. Gluckman. "The project is now focused on achieving additional sensitivity, and is testing selectivity against other viruses and potential interferents that would be present in clinical samples."

The results of this work align closely with research being performed by Sixth Wave and York University toward the development of additional sensor formats using AMIPS. As noted in the Company's <u>July 27</u>, <u>2021 press release</u>, several techniques for creating novel sensor arrays using AMIPS have shown high sensitivity and are applicable for detecting biological material in both air and liquid samples.

As previously reported, SIXW has filed two patents regarding the AMIPs™ technology and its application to specific products that can utilize AMIPs™. The Company is not making any express or implied claims that its current AMIPs™ product has the ability to eliminate, cure, contain, or detect, at a commercial level, COVID-19 (or SARS-2 coronavirus) at this time.

For more information on the AMIPs™ and associated molecular imprinting technology, please visit: https://www.amips.com

About Sixth Wave

Sixth Wave is a nanotechnology company with patented technologies that focus on extraction and detection of target substances at the molecular level using highly specialized Molecularly Imprinted Polymers (MIPs). The Company is in the process of a commercial rollout of its Affinity™ cannabinoid purification system, as well as, IXOS®, a line of extraction polymers for the gold mining industry. The Company is in the development stages of a rapid diagnostic test for viruses under

the Accelerated MIPs (AMIPs™) label.

Sixth Wave can design, develop and commercialize MIP solutions across a broad spectrum of industries. The company is focused on nanotechnology architectures that are highly relevant for the detection and separation of viruses, biogenic amines, and other pathogens, for which the Company has products at various stages of development.

For more information about Sixth Wave, please visit our website at: www.sixthwave.com

ON BEHALF OF THE BOARD OF DIRECTORS

"Jonathan Gluckman"

Jonathan Gluckman, Ph.D., President & CEO

For information, please contact the Company:

Phone: (801) 582-0559

E-mail: info@sixthwave.com

Cautionary Notes

This press release includes certain statements that may be deemed "forward-looking statements" including statements regarding the planned use of proceeds and performance of the AMIPs™ technologies. All statements in this release, other than statements of historical facts, that address future events or developments that the Company expects, are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance, and actual events or developments may differ materially from those in forward-looking statements. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause the Company's actual performance and financial results in future periods to differ

materially from any projections of future performance or results expressed or implied by such forward-looking statements. In particular, successful development and commercialization of the AMIPs™ technology are subject to the risk that the AMIPs™ technology may not prove to be successful in detecting virus targets effectively or at all, the uncertainty of medical product development, the uncertainty of timing or availability of required regulatory approvals, lack of track record of developing products for medical applications and the need for additional capital to carry out product development activities. The value of any products ultimately developed could be negatively impacted if the patent is not granted. The Company has not yet completed the development of a prototype for the product that is subject to its patent application and has not yet applied for regulatory approval for the use of this product from any regulatory agency.