Sixth Wave AMIPS(TM) Technology 250 Times More Sensitive than Commercial Rapid Antigen Tests in COVID Virus Detection with No Cross-Reactivity

written by Raj Shah | May 24, 2022

May 24, 2022 (Source) – **Sixth Wave Innovations Inc. (CSE: SIXW) (OTCQB: SIXWF) (FSE: AHUH) ("Sixth Wave", "SIXW" or the "Company")** is pleased to announce that its patent pending Accelerated Molecularly Imprinted Polymer ("**AMIPs**™") technology has successfully detected the SARS-CoV-2 virus at sensitivity levels two hundred and fifty times lower than commercially available rapid antigen tests. This makes AMIPs™ sensitive enough to detect both symptomatic and asymptomatic persons before they are contagious to others, an achievement that cannot be claimed by rapid antigen self-tests.

Collaborating with researchers at the world-renowned Li Ka Shing Institute of Virology at the University of Alberta ("Institute"), saliva samples were spiked with live SARS-CoV-2 virus using a protocol like established ELISA clinical tests. The battery of tests resulted in detection levels down to 1,000 virus particles in 25 microliters of sample with the AMIPs™ prototype test. Sixth Wave continues to rely on the Li Ka Shing Institute for the preparation of viruses, implementation of testing methods, use of recognized analytic methods and equipment, and live virus testing under a funded Agreement between the parties.

The ability to detect the virus in saliva samples is a critical diagnostic tool as the healthcare system transitions from a COVID-19 pandemic to an endemic state. The AMIPs™ tech's synthetic nature and robust design provide attributes for testing such as:

- Faster results
- non-invasive
- less expensive
- no special storage or handling requirements
- long shelf life
- inexpensive scalable manufacturing
- rapid development times for variants or new viral threats

According to the company Research and Markets: (https://www.researchandmarkets.com/reports/5390566/global-covid-19-antigen-test-market-size-share) The global COVID-19 antigen test market size is expected to reach USD 8.3 billion by 2027. The market is estimated to expand at a CAGR of 6.7% from 2021 to 2027.

"Lack of sensitivity of current rapid antigen tests has been a significant reason for the lack of widespread acceptance and adoption of point-of-care and at-home testing. Sixth Wave has demonstrated that our AMIPs™ technology can alleviate that concern with sensitivity that approaches PCR levels of detection," states Dr. Garrett Kraft, Vice President of Innovations at Sixth Wave. "When directly comparing the main diagnostic technologies, rapid antigen tests have detection limits on the order of 10 million viruses in 1 milliliter of sample. Sixth Wave AMIPs™ are at 40,000 viruses/mL of sample, and PCR (the gold standard for diagnostics) is at about 10 viruses/mL of sample. We are achieving the technical targets established at the onset of this project by solidly positioning AMIPs™ in the gap between PCR and rapid antigen testing

capabilities."

"With people becoming contagious and actively shedding infections virus at viral loads of 100,000 viruses/mL, AMIPs™ performance can effectively diagnose symptomatic and asymptomatic patients before they are contagious, thus making it a fast and reliable tool for diagnosing patients before they can spread the virus," Explained Dr. Mike Joyce, Virologist at the Li Ka Shing Institute of Virology.

SIXW has advanced the AMIPs™ prototype through sensitivity and cross-reactivity (selectivity against other respiratory pathogens) testing using the ZeptoMetrix NATtrol™ Respiratory Verification Panel, an industry standard panel of 22 common respiratory pathogens used for development of diagnostics, with excellent results in specificity and sensitivity. Preparations are underway for independent clinical testing and compilation of required test data for regulatory approval in Canada and the United States.

"With the achievement of these new technical milestones, AMIPs™ is perfectly positioned to fill a market need by introducing a product that will bridge the gap between PCR and rapid antigen tests," declared Dr. Jon Gluckman, CEO of Sixth Wave. "The AMIPs™ technology promises to offer fast and accurate results from a non-invasive test at an affordable price. We have rapidly advanced this new technology platform from an abstract concept to a pre-market prototype that promises to contend with the entrenched technologies of the in vitro diagnostic market for COVID-19. We continue to progress towards Sixth Wave's vision of personalized medicine. That vision is predicated on the expansion of the AMIPs™ diagnostic platform to not only detect COVID-19, but Influenza and other pathogens simultaneously in a single test."

The Company is not making any express or implied claims that its current AMIPs™ product can eliminate, cure, contain, at a commercial level, COVID-19 (or SARS-2 coronavirus) at this time.

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 web site at: www.sixthwave.com.

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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 of its patent application and has not yet applied for regulatory approval for the use of this product from any regulatory agency.