

BIOVAXYS ANNOUNCES complete inhibition of ACE-2 binding activity of hapten-modified SARS-CoV-2 protein

SUGGESTS superior cardiac safety compared to mRNA AND ADENOVIRUS VECTOR vaccines

VANCOUVER, BC, Feb. 16, 2022 /CNW/ -- BioVaxys Technology Corp. (CSE: BIOV) (FRA: 5LB) (OTCQB: BVAX) ("BioVaxys" or "Company") announced today that studies on BVX-0320, its haptenized SARS-CoV-2 s-spike protein vaccine, demonstrate that the vaccine does not bind to the Angiotensin Converting Enzyme-2 (ACE2) receptor. The finding suggests that the Company's haptenized SARS-CoV-2 spike protein vaccine may not lead to the unusual but serious myocarditis observed with mRNA vaccines. Previous studies in mice have shown that BVX-0320 stimulates a robust antibody and T cell response and was safe and well tolerated.

There have been several local and systemic adverse events associated with mRNA COVID-19 vaccines, with pericarditis, myocarditis and myocardial infarction as examples of cardiac complications related to these vaccines.^[1] A study published in the Journal of Hematological Oncology ^[2] concludes that the Receptor Binding Domain (RBD) of the SARS-CoV-2 spike protein binds to the ACE2 receptor and that this binding of SARS-CoV-2 to ACE2 prevents the enzyme from converting angiotensin II, potentiating cardiac issues. The ACE2 receptor is present in many cell types and tissues including the lungs, heart, blood vessels, kidneys, liver, gastrointestinal tract and epithelial cells. Currently available vaccines, whether comprised of either recombinant full-length or partial spike protein can result in rare, but life-threatening side effects, such as abnormal blood clotting or myocarditis. These toxicities may be caused by unwanted binding of the vaccine spike protein to ACE2 receptors in the heart or platelet factor 4. The BioVaxys vaccine for Covid-19, BVX-0320, comprises a portion of the SARS-CoV-2 spike protein that is modified by the hapten, dinitrophenyl (DNP); hapten modification prevents ACE2 binding while retaining immunogenicity.

The recently completed study on ACE2 binding inhibition by CDMO Millipore-Sigma was part of a bioproduction run of BVX-0320 contracted by BioVaxys last September; the new batch is being used for the Company's ongoing pan-sarbecovirus vaccine collaboration with The Ohio State University. The work with Millipore-Sigma also resulted in major improvements in the manufacturing process and analytic methods. Millipore is a subsidiary of Merck KGaA (Deutsche Bourse: MRCG), one of the largest pharmaceutical companies in the world, with a market capitalization of US\$95 billion.

For greater certainty, BioVaxys is not making any express or implied claims that the Company can currently treat COVID-19.

[1] Cardiac complications following mRNA COVID-19 vaccines: A systematic review of case reports and case series, Rev Med Virol 2021 Dec 17

[2] SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19, J Hematol Oncol 2020 Sep 4;13(1):120

About BioVaxys Technology Corp.

Based in Vancouver, [BioVaxys Technology Corp. \(www.biovaxys.com\)](http://www.biovaxys.com) is a British Columbia-registered, clinical stage biotechnology company that is developing viral and oncology vaccine platforms, as well as immuno-diagnostics. The Company is advancing a SARS-CoV-2 vaccine based on its haptenized viral protein technology and is planning a European clinical trial of its haptenized autologous cell vaccine used in combination with anti-PD1 and anti-PDL-1 checkpoint inhibitors that will initially be developed for Stage III/Stage IV ovarian cancer. Also in development is CoviDTH®, a diagnostic for evaluating the presence or absence of a T cell immune response to SARS-CoV-2, the virus that causes COVID-19. BioVaxys has two issued US patents and multiple US, PCT and National Phase applications related to its vaccine and diagnostic portfolio products. BioVaxys common shares are listed on the CSE under the stock symbol "BIOV" and trade on the Frankfurt Bourse (FRA: 5LB) and in the US (OTCQB: BVAXF).

ON BEHALF OF THE BOARD

Signed "James Passin"

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Cautionary Statements Regarding Forward Looking Information

*This press release includes certain "forward-looking information" and "forward-looking statements" (collectively "forward-looking statements") within the meaning of applicable Canadian and United States securities legislation including the United States Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, included herein, without limitation, statements relating to the future operating or financial performance of the Company, are forward looking statements. Forward-looking statements are frequently, but not always, identified by words such as "expects", "anticipates", "believes", "intends", "estimates", "potential", "possible", and similar expressions, or statements that events, conditions, or results "will", "may", "could", or "should" occur or be achieved. Forward-looking statements in this news release relate to, among other things, completion of the murine model study, regulatory approval for a Phase I study of its BVX-0320 Vaccine Candidate in humans and the overall development of BioVaxys' vaccines, including any haptenized SARS-CoV-2 protein vaccine. **There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those expressed or implied in such forward-looking statements.***

These forward-looking statements reflect the beliefs, opinions and projections on the date the statements are made and are based upon a number of assumptions and estimates, primarily the assumption that BioVaxys will be successful in developing and testing vaccines, that, while considered reasonable by the Company, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies including, primarily but without limitation, the risk that BioVaxys' vaccines will not prove to be effective and/ or will not receive the required regulatory approvals. With regards to BioVaxys' business, there are a number of risks that could affect the development of its biotechnology products, including, without limitation, the need for additional capital to fund clinical trials, its lack of operating history, uncertainty about whether its products will complete the long, complex and expensive clinical trial and regulatory approval process for approval of new drugs necessary for marketing approval, uncertainty about whether its autologous cell vaccine immunotherapy can be developed to produce safe and effective products and, if so, whether its vaccine products will be commercially accepted and profitable, the expenses, delays and uncertainties and complications typically encountered by development stage biopharmaceutical businesses, financial and development obligations under license arrangements in order to protect its rights to its products and technologies, obtaining and protecting new intellectual property rights and avoiding infringement to third parties and their dependence on manufacturing by third parties.

The Company does not assume any obligation to update the forward-looking statements of beliefs, opinions, projections, or other factors, should they change, except as required by law.

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