BioVaxys Shares New Data on its DPX™ Immune Educating Platform at Personalized Cancer Vaccine Summit

DPX Formulations Superior to Mixing with Commonly Used Adjuvants

DPX Without Antigen Cargo Has Immune Stimulating Properties

Unique Potential for DPX in New Fields of Use

VANCOUVER, BC, Dec. 5, 2024 /CNW/ -- BioVaxys Technology Corp. (CSE: BIOV) (FRA: 5LB) (OTCQB: BVAXF) ("BioVaxys" or the Company") presented a new study today at the Personalized Cancer Vaccine Summit (formerly known as the mRNA Cancer Vaccine Summit) in Boston, MA, that supports further differentiation of its DPX immune educating platform from current aqueous, emulsion, and LNP antigen delivery systems. The study demonstrates that DPX formulations with tumor-derived peptide neoantigens are highly effective vaccines to inhibit or prevent tumor growth following tumor challenges. DPX formulations were more effective than mixing with commonly used adjuvants, and DPX formulations were demonstrated to be as effective as the gold standard, bone marrow-derived dendritic cells. A highly significant result of the study is DPX formulations (with a checkpoint inhibitor) without a packaged cargo peptide appear to have meaningful immune stimulating properties on their own.

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BioVaxys' DPX™ technology ("DPX") is a patented delivery platform that can incorporate a range of bioactive molecules, such as mRNA/polynucleotides, peptides/proteins, virus-like particles, and small molecules, to produce targeted, long-lasting immune responses enabled by various formulated components. The DPX platform, which is non-aqueous and non-systemic, facilitates antigen delivery to regional lymph nodes and has been demonstrated to induce robust and durable T cell and B cell responses in pre-clinical and clinical studies for both cancer and infectious disease.

David Berd, MD, Chief Medical Officer of BioVaxys, delivered the keynote presentation entitled "A Novel Delivery System for Personalized Peptide & mRNA Vaccines for More Targeted Therapies" based on studies of tumor neopeptides conducted by Hakimeh Ebrahimi-Nik, DVM, PhD, of The Ohio State University Comprehensive Cancer Center and Pelotonia Institute for Immuno-Oncology, where her team studies the molecular mechanisms that enhance immune responses against tumors.

Dr. Nik's study utilized the Meth A mouse tumor model, a widely used experimental model in cancer research. Novel, tumor-specific peptides (neopeptides) were identified and biomanufactured using standard molecular techniques. Several peptides served as effective vaccines when injected with bone marrow-derived dendritic cells. Administration of these vaccines prior to a challenge with live Meth A sarcoma cells completely or partially prevented tumor growth, while vaccines composed of non-protective peptides did not. Dr. Nik then tested the immunoprotective properties of DPX formulations, made by incorporating a rejection peptide, Neo1, into the DPX formulation. To make the vaccine more potent the drug 9D9---a checkpoint inhibitor---was administered with the vaccine. DPX-Neo1 plus 9D9 was found to be as effective in preventing tumor growth as the standard Neo1 + dendritic cells vaccine.

Studies with another rejecting peptide, Tfdpa, showed even more striking results. The DPX-peptide formulation provided *better* protection against tumor growth than the Tfdpa + dendritic cell vaccine. Of high importance, in these experiments DPX without a peptide antigen cargo + 9D9 showed a significant immunoprotecting effect on its own.

The study also compared the immunoprotecting effect of DPX+peptide antigen with vaccines consisting of peptide mixed with the commonly used immunological adjuvants Montanide (a water-in-oil emulsion mixed with water based antigen), AddaVax (a squalene-based oil-in-water nano-emulsion),and TiterMax (copolymers, squalene, and a stabilizer), with DPX formulations shown to be more effective than any of these popular adjuvants.

BioVaxys President and Chief Operating Officer, Kenneth Kovan, stated, "This study extends the commercial utility of the DPX platform to the high potential field of tumor neopeptides, with resulting implications for the development of human personalized cancer vaccines and use as a vaccine adjuvant."

The global vaccine adjuvants market was USD 1,350.6 million in 2022 and is forecast to reach USD 2,950.57 million by 2030 with a CAGR of 13.37%. Factors such as the increasing prevalence of Infectious Disease, expanding vaccination programs, and advancements in adjuvant development are driving market expansion. Additionally, the growing focus on developing vaccines for emerging diseases and the need for improved vaccine efficacy and safety further contribute to market growth[1].

[1] *Databridge Market Research (2023)*

About BioVaxys Technology Corp.

BioVaxys Technology Corp. (**www.biovaxys.com**) is a clinical-stage biopharmaceutical company dedicated to improving patient lives with novel immunotherapies based on its DPX™ immune-educating technology platform and its HapTenix© 'neoantigen' tumor cell construct platform, for treating cancers, infectious disease, antigen desensitization for food allergy, and other immunological diseases. Through a differentiated mechanism of action, the DPX™ platform delivers instruction to the immune system to generate a specific, robust, and persistent immune response. The Company's clinical stage pipeline includes maveropepimut-S (MVP-S), based on the DPX™ platform, and is in Phase IIB clinical development for advanced Relapsed-Refractory Diffuse Large B Cell Lymphoma (DLBCL) and platinum resistant Ovarian Cancer. MVP-S delivers antigenic peptides from survivin, a well-recognized cancer antigen commonly overexpressed in advanced cancers, and also delivers an innate immune activator and a universal CD4 T cell helper peptide. MVP-S has been well tolerated and has demonstrated defined clinical benefit in multiple cancer indications as well as the activation of a targeted and sustained, survivin-specific anti-tumor immune response. BioVaxys is also developing DPX™+SurMAGE, a dual-targeted immunotherapy combining antigenic peptides for both the survivin and MAGE-A9 cancer proteins to elicit immune responses to these two distinct cancer antigens simultaneously, DPX™-RSV for Respiratory Syncytial Virus, DPX+rPA for peanut allergy prophylaxis, and BVX-0918, a personalized immunotherapeutic vaccine using its proprietary HapTenix© 'neoantigen' tumor cell construct platform for refractive late-stage ovarian cancer. BioVaxys common shares are listed on the CSE under the stock symbol 'BIOV', trade on the Frankfurt Bourse (FRA: 5LB), and in the US (OTCQB: BVAXF). For more information, visit **www.biovaxys.com** and connect with us on X and LinkedIn.

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. 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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