Publication in Cell Shows That Vaccitech's SNAPvax™ Has the Potential to Treat Cancer by Reversing Suppressive Tumor Microenvironment with Novel "Vax-Innate" Paradigm

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*Vaccitech collaborators at NIH's Vaccine Research Center demonstrate that IV administration of SNAPvax in animal models activates two key pathways leading to improved T cell mediated tumor killing in a paradigm referred to as "**VAX-INNATE**"*

***VAX-INNATE: Vaccine** induced cytotoxic T cells + **Innate** immune activation and reversal of suppressive tumor microenvironment (TME)*

IND submission for SNAPvax candidate for HPV+ cancers (VTP-1100) aiming to leverage VAX-INNATE paradigm planned for first half of 2023

OXFORD, United Kingdom, Oct. 27, 2022 (GLOBE NEWSWIRE) -- Vaccitech plc (NASDAQ: VACC), a clinical-stage biopharmaceutical company engaged in the discovery and development of novel immunotherapeutics and vaccines, today announced the publication of research in preclinical animal models demonstrating the potential of Vaccitech's SNAPvax for use in a novel paradigm for cancer treatment referred to as " **VAX-INNATE**." The results show that intravenous (IV) administration of SNAPvax not only primes and expands tumor-specific cytotoxic T cells that mediate tumor killing but also reverses suppression in the tumor microenvironment associated with significantly improved tumor regression.

The research evaluated SNAPvax co-delivering tumor antigens and a powerful Toll-like receptor (TLR)-7/8 adjuvant by two different routes (IV or subcutaneous) in tumor-bearing mice. While SNAPvax primed and expanded a high magnitude of antigen-specific T cells by both routes of administration, SNAPvax administered by the IV route induced systemic Type I interferon that markedly reduced the number of immunosuppressive monocytes and macrophages in the TME leading to improved T cell mediated tumor regression.

"The research by Baharom and the Seder Lab at NIH offers new insights as to how cancer vaccines can be best leveraged to maximize therapeutic effect," said Andrew Ishizuka, M.D., Ph.D., Senior Vice President at Vaccitech. "It is broadly recognized that T cells and checkpoint inhibitors that unleash their potential are essential, but this study highlights the critical importance of engaging the innate immune system to reverse suppressor populations in the TME that can otherwise inhibit T cells. SNAPvax, along with our viral platforms, ChAdOx and MVA, are ideal for providing these essential ingredients and we are looking forward to validating SNAPvax's potential alone and in combination with ChAdOx in upcoming clinical studies."

"Our objective is to be a leader in immunotherapies where T cell priming, activation and expansion may have an important role in the treatment of disease," said Bill Enright, Chief Executive Officer of Vaccitech. "This publication in *Cell* exemplifies Vaccitech's leadership position in the field by demonstrating the rigorous scientific standards to which the SNAPvax platform was built and the significant advantages which it holds. We look forward to advancing SNAPvax to the clinic on its own and in combination with ChAdOx as we have seen synergistic responses using SNAPvax + ChAdOx as a heterologous prime-boost in the preclinical setting."

An Investigational New Drug (IND) application submission for SNAPvax candidate (VTP-1100) targeting human papilloma virus (HPV) associated cancer is expected during the first half of 2023.

The aforementioned research was first published online in *Cell* and can be accessed at the link in the citation below.

Citation: Baharom et al. Systemic vaccination induces CD8+ T cells and remodels the tumor microenvironment, Cell (2022), https://doi.org/10.1016/j.cell.2022.10.006

About SNAPvax™
SNAPvax is a fully synthetic and biocompatible platform that utilizes self-assembly to co-deliver multiple antigens and immunomodulators in nanoparticles of precise, programmable size and composition for inducing the specific T cell populations needed for diverse therapeutic indications ranging from cancer to autoimmunity**.** Publications in *Nature Biotechnology* and *Nature Immunology* describe how the SNAPvax cancer vaccine was systematically optimized to co-deliver immunostimulants and tumor antigens for inducing high magnitude cytotoxic T cells for treating cancer. Preclinical studies have shown that efficacy with SNAPvax is further enhanced when used in combination with our ChAdOx platform.

About Vaccitech plc
Vaccitech ("the Company") is a clinical-stage biopharmaceutical company engaged in the discovery and development primarily of novel immunotherapies for the treatment of chronic infectious diseases, cancer, autoimmunity and diseases where the T cell arm of the immune system is believed to play an important role. The company's proprietary platforms include modified simian adenoviral vectors (ChAdOx1 and ChAdOx2), other viral vectors including the well-validated Modified Vaccinia Ankara (MVA) and synthetic nano-particle technologies (SNAPvax™ and Syntholytic™). The combination of different technologies in a mix and match approach (heterologous prime-boost) consistently generates significantly higher magnitudes of T cells compared with other technologies and approaches. The company has a broad pipeline of both clinical and preclinical stage therapeutic programs to treat solid tumors, chronic viral infections, as well as a few prophylactic viral vaccine programs. Vaccitech co-invented a COVID-19 vaccine with the University of Oxford, now approved for use in many territories and exclusively licensed worldwide to AstraZeneca through Oxford University Innovation, or OUI. Vaccitech is entitled to receive a share of all milestones and royalty income received by OUI from AstraZeneca.

Forward Looking Statement
This press release contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, which can generally be identified as such by use of the words "may," "will," "plan," "forward," "believe," "potential," and similar expressions, although not all

forward-looking statements contain these identifying words. These forward looking statements include, without limitation, express or implied statements regarding: the timing of the IND submission for the lead SNAPvax cancer product candidate; the Company's objectives and strategies; and the potential of SnapVax and the Company's other viral platforms. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to numerous risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to: the success, cost and timing of the Company's product development activities and planned and ongoing clinical trials, the Company's ability to execute on its strategy, regulatory developments, the Company's ability to fund its operations, global economic uncertainty and the impact that the current ongoing COVID-19 pandemic will have on the Company's clinical trials, preclinical studies and access to capital and other risks identified in the Company's filings with the Securities and Exchange Commission (the "SEC"), including its Annual Report on Form 10-K for the year ended December 31, 2021, its Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 and subsequent filings with the SEC. The Company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. The Company expressly disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

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