

HOOKIPA Pharma Announces Publication of HB-101 Phase 1 Results in The Journal of Infectious Diseases

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NEW YORK and VIENNA, Austria, April 21, 2020 (GLOBE NEWSWIRE) -- HOOKIPA Pharma Inc. (NASDAQ: HOOK, 'HOOKIPA'), a company developing a new class of immunotherapeutics targeting infectious diseases and cancers based on its proprietary arenavirus platform, today announced the publication in *The Journal of Infectious Diseases* of the Phase 1 results of HOOKIPA's VaxWave[®]-based prophylactic Cytomegalovirus (CMV) vaccine candidate HB-101, which is currently in a Phase 2 clinical trial.

The paper concludes that HB-101 was well tolerated and induced CMV-specific poly-functional CD8 T cell and neutralizing antibody responses in nearly all subjects. The absence of vector-neutralizing antibody responses allowed all CMV antigen-specific immune responses to be increased in a statistically significant manner upon repeated vaccine re-administration, which should facilitate additional booster vaccinations. Hence, HOOKIPA's vaccine candidate holds promise for prevention of clinically significant CMV infection in transplant recipients and unborn children.

"The impact of CMV infections, especially in the field of immunosuppressed patients, like transplant recipients, is severe and a prophylactic CMV vaccine would be game-changing," commented Paul Griffiths, MD DSc FRCPath, Professor of Virology, Institute of Immunity & Transplantation at University College London. "The field needs a vaccine that induces both cell-mediated and humoral immunity. These Phase 1 results from HOOKIPA are very encouraging, so I look forward to seeing the results from the Phase 2 trial that is underway in transplant patients."

Cytomegalovirus, or CMV, is a virus that is commonly transmitted in childhood and early adulthood. Approximately 60% of the U.S. population has been exposed and is latently infected. Worldwide data indicate that half the people in industrialized countries and up to 99% of people in developing countries, including China and India, have been infected. Infections typically result in lifelong latent persistence of the virus with few symptoms, if any. However, in unborn children, when infected in utero, CMV infection can lead to significant morbidity and mortality. In addition, in immunosuppressed patients, such as transplant recipients, primary CMV infection or reactivation of CMV causes significant morbidity, mortality and graft rejection.

The publication, "A randomized dose-escalating Phase I trial of a replication-deficient lymphocytic choriomeningitis virus vector-based vaccine against human cytomegalovirus," is available online in <u>The Journal of Infectious Diseases</u>.

About HOOKIPA

HOOKIPA Pharma Inc. (NASDAQ: HOOK) is a clinical stage biopharmaceutical company developing a new class of immunotherapeutics targeting infectious diseases and cancers based on its proprietary arenavirus platform that is designed to reprogram the body's immune system.

HOOKIPAs proprietary arenavirus-based technologies, VaxWave[®], a replication-deficient viral vector, and TheraT[®], a replication-attenuated viral vector, are designed to induce robust antigen specific CD8⁺ T cells and pathogen-neutralizing antibodies. Both technologies are designed to allow for repeat administration to augment and refresh immune responses. TheraT[®] has the potential to induce CD8⁺ T cell response levels previously not achieved by other immuno-therapy approaches. HOOKIPAs "off-the-shelf" viral vectors target dendritic cells in vivo to activate the immune system.

HOOKIPA's VaxWave [®]-based prophylactic Cytomegalovirus (CMV) vaccine candidate is currently in a Phase 2 clinical trial in CMV-negative patients awaiting kidney transplantation from living CMV-positive donors as well as CMV-positive patients awaiting kidney transplantation from CMV-positive or -negative donors. To expand its infectious disease portfolio, HOOKIPA has entered into a collaboration and licensing agreement with Gilead Sciences, Inc. to jointly research and develop functional cures for HIV and chronic Hepatitis B infections.

In addition, HOOKIPA is building a proprietary immuno-oncology pipeline by targeting virally mediated cancer antigens, self-antigens and next-generation antigens. The TheraT[®] based lead oncology product candidates, HB-201 and HB-202, are in development for the treatment of Human Papilloma Virus16-positive cancers. The Phase 1/2 clinical trial for HB-201 was initiated in December 2019. The HB-202 IND submission is intended for the first half of 2020.

Find out more about HOOKIPA online at www.hookipapharma.com.

HOOKIPA Forward Looking Statements

Certain statements set forth in this press release constitute "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements can be identified by terms such as "believes," "expects," "plans," "potential," "would" or similar expressions and the negative of those terms. Such forward-looking statements involve substantial risks and uncertainties that could cause HOOKIPA's research and clinical development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the drug development process, including HOOKIPA's programs' early stage of development, the process of designing and conducting preclinical and clinical trials, the regulatory approval processes, the timing of regulatory filings, the challenges associated with manufacturing drug products, HOOKIPA's ability to successfully establish, protect and defend its intellectual property, risks relating to business interruptions resulting from the coronavirus (COVID-19) disease outbreak or similar public health crises and other matters that could affect the sufficiency of existing cash to fund operations and HOOKIPA's ability to achieve the milestones under the agreement with Gilead. HOOKIPA undertakes no obligation to update or revise any forward-looking statements. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the company in general, see HOOKIPA's annual report on Form 10-K for the full year ended December 31, 2019 which is on the Security and Exchange Commission's website at www.sec.gov and HOOKIPA's website at <u>www.hookipapharma.com</u>.

Investors and others should note that we announce material financial information to our investors using our investor relations website

(https://ir.hookipapharma.com/), SEC filings, press releases, public conference calls and webcasts. We use these channels, as well as social media, to communicate with our members and the public about our company, our services and other issues. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on the U.S. social media channels listed on our investor relations website.

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