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ASIA EDITION

Inovio announces demonstration of 100% immunogenicity of its Ebola Vaccine

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The Phase 1 data was published in The Journal of Infectious Diseases and further supports the advancement of the intradermal delivery platform for emerging infectious diseases.

Inovio Pharmaceuticals has announced that its Ebola vaccine, INO-4201, was safe, tolerable, and generated strong T cell and antibody responses. This Phase 1 data was published in The Journal of Infectious Diseases and further supports the advancement of the intradermal delivery platform for emerging infectious diseases. Significantly, the study demonstrated that intradermal (skin) administration with Inovio's CELLECTRA delivery device resulted in 100% of evaluable subjects generating antigen-specific antibody responses that persisted for more than one year in most subjects and generated T cell responses equivalent to or better than the group that received intramuscular delivery. The published data further validates the safety, potency, and product stability advantages of Inovio's vaccine and immunotherapy platform.

Dr. J. Joseph Kim, Inovio's President and CEO, said, "INO-4201 has already demonstrated protection in 100% of non-human primates following a challenge with a lethal dose of the Ebola virus. With strong preclinical and human data, Inovio is executing on our overall development strategy in advancing INO-4201 as a viable stockpile vaccine. Because Inovio's Ebola vaccine can be used to protect against Ebola infection and can be boosted multiple times without any anti-vector response, it could be employed to boost viral vector vaccines that cannot be effectively re-administered. We now look to secure partner funding to further advance our Ebola vaccine as a stand-alone vaccine as well as a boost for those previously immunized with viral vector vaccines."

Unlike viral vector vaccines which must be kept frozen, INO-4201 is stable at room temperature for more than one year. Non-live vaccine approaches that are simple to deliver and stable at room temperature are desirable in controlling Ebola virus outbreaks.

Inovio's Ebola vaccine was evaluated in five groups of healthy subjects. Of 70 evaluated subjects, 67 (96%) seroconverted and mounted a strong antibody response to the Ebola glycoprotein antigen following the three dose immunization regimen; 52 subjects (76%) seroconverted after only two doses.

Significantly, in the study arm using intradermal (skin) administration, 13 of 13 evaluable subjects (100%) generated antigen-specific antibody responses after only two doses and all remained seropositive after three immunizations.

To date INO-4201 has been well-tolerated and has not demonstrated systemic serious adverse effects, such as fever, joint pain, and low white blood cell counts, reported in association with some viral vector-based Ebola vaccines currently in development.

More information on this study, fully funded by U.S. Defense Advanced Research Projects Agency (DARPA), can be found in the most recent edition of The Journal of Infectious Diseases in the article entitled, "Intradermal SynCon® Ebola GP DNA Vaccine is Temperature Stable and Safely Demonstrates Cellular and Humoral Immunogenicity Advantages in Healthy

Volunteers," authored by Inovio and its collaborators.

Inovio is a late-stage biotechnology company focused on the discovery, development, and commercialization of DNA-based immunotherapies and vaccines that transform the treatment and prevention of cancer and infectious disease. Inovio's proprietary technology platform applies antigen sequencing and DNA delivery to activate potent immune responses to targeted diseases.