

Inovio receives \$24 million DARPA option grant for Ebola program development

Inovio Pharmaceuticals {NASDAQ: INO} have announced yet another grant from DARPA, to the tune of \$24 million, for further work on their Ebola DNA based vaccine development.

In a clinical trial the vaccine protected 100% of monkeys, and the next step, a clinical trial, is fully enrolled.

Inovio Receives \$24 Million Option Grant from DARPA to Advance Ebola Program Development

Clinical trial fully enrolled; Vaccine protected 100% of monkeys in Ebola virus challenge

PLYMOUTH MEETING, Pa. – Sep 21, 2015 – **Inovio Pharmaceuticals, Inc. {NASDAQ: INO}** announced today that the U.S. Defense Advanced Research Projects Agency (DARPA) has exercised its option to provide an additional \$24 million to support the Inovio-led development of multiple treatment and prevention approaches against Ebola.

The option exercise, part of the \$45 million Ebola program grant announced in April when Inovio received an initial \$21 million award, was contingent upon Inovio successfully leading the completion of certain pre-clinical and clinical development milestones.

DARPA has funded this program to develop a DNA-based vaccine

against Ebola, a therapeutic DNA-based monoclonal antibody product (dMAb™) to treat Ebola infection, and a conventional monoclonal antibody to treat Ebola.

In the intervening period from the grant award in April, Inovio and its collaborators have accomplished:

- Full enrollment of 75 volunteers for the phase I clinical study for Inovio's Ebola vaccine, INO-4212. Interim safety and immune response data is expected to be reported in 4Q 2015.
- Complete protection of vaccinated monkeys from a lethal Ebola virus challenge.
- Significant pre-clinical proof-of-concept demonstrated in animal models for the potential of its dMAb technology including with Ebola dMAb constructs. Screening of different Ebola dMAbs in pre-clinical studies is ongoing. Inovio recently reported the publication of its anti-dengue dMAb demonstrating protection against lethal challenge.

Dr. J. Joseph Kim, President and CEO, said, *"Inovio is executing all aspects of the Ebola program as planned. The DARPA program is funding an accelerated R&D program that is simultaneously working on three different counter-measures. Access to the full DARPA funding based on the accomplishment of certain program milestones allows Inovio and its collaborators to carry out all the elements of the proposal as rapidly as possible."*

Inovio is leading a world-class collaboration of industry and academic partners in an effort to prevent and treat Ebola including: MedImmune, the global biologics research and development arm of AstraZeneca; GeneOne Life Sciences of Korea (KSE: 011000) and its U.S. manufacturing subsidiary, VGXI, Inc.; the Perelman School of Medicine at the University of

Pennsylvania; and researchers at Emory University and Vanderbilt University.

DARPA, an agency of the U.S. Department of Defense that creates and supports novel technologies important for national security, has selected Inovio to develop products that if successful can add to the arsenal of rapid response capabilities. Inovio's Ebola program is initially targeted to treat first responders and Ebola-infected health care workers and patients, but could potentially be widely utilized to stem the spread of an Ebola outbreak.

About the Ebola Virus

The Ebola virus causes periodic outbreaks of a highly contagious and lethal human infectious disease marked by severe hemorrhagic fever, with a mortality rate that ranges between 50 and 90%. The infection typically affects multiple organs in the body and is often accompanied by severe bleeding. The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission.

At present, there are no U.S. FDA-approved pre- or post-exposure interventions available in the event of an outbreak, laboratory accident, or deliberate misuse. The Ebola virus is classified as a Category "A" Priority Pathogen by the U.S. Centers for Disease Control and Prevention. This designation prescribes an accelerated development pathway for FDA approval that determines efficacy based on two different validated animal studies followed by clinical evaluation in phase 1 and phase 2 trials to establish safety and immunogenicity for use in humans.

About Inovio Pharmaceuticals, Inc.

Inovio is taking immunotherapy to the next level in the fight against cancer and infectious diseases. We are the only immunotherapy company that is generating T cells, in vivo, in high quantity that are fully functional whose killing capacity correlates with relevant clinical outcomes with a favorable safety profile. With an expanding portfolio of immune therapies, the company is advancing a growing preclinical and clinical stage product pipeline. Partners and collaborators include MedImmune, Roche, University of Pennsylvania, DARPA, GeneOne Life Science, Drexel University, NIH, HIV Vaccines Trial Network, National Cancer Institute, U.S. Military HIV Research Program, and University of Manitoba.

For more information, visit www.inovio.com.

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This press release contains certain forward-looking statements relating to our business, including our plans to develop electroporation-based drug and gene delivery technologies and DNA vaccines, our expectations regarding our research and development programs and our capital resources. Actual events or results may differ from the expectations set forth herein

as a result of a number of factors, including uncertainties inherent in pre-clinical studies, clinical trials and product development programs (including, but not limited to, the fact that pre-clinical and clinical results referenced in this release may not be indicative of results achievable in other trials or for other indications, that the studies or trials may not be successful or achieve the results desired, including safety and efficacy for VGX-3100, that pre-clinical studies and clinical trials may not commence or be completed in the time periods anticipated, that results from one study may not necessarily be reflected or supported by the results of other similar studies and that results from an animal study may not be indicative of results achievable in human studies), the availability of funding to support continuing research and studies in an effort to prove safety and efficacy of electroporation technology as a delivery mechanism or develop viable DNA vaccines, our ability to support our broad pipeline of SynCon® active immune therapy and vaccine products, our ability to advance our portfolio of immune-oncology products independently, the adequacy of our capital resources, the availability or potential availability of alternative therapies or treatments for the conditions targeted by the company or its collaborators, including alternatives that may be more efficacious or cost-effective than any therapy or treatment that the company and its collaborators hope to develop, our ability to enter into partnerships in conjunction with our research and development programs, evaluation of potential opportunities, issues involving product liability, issues involving patents and whether they or licenses to them will provide the company with meaningful protection from others using the covered technologies, whether such proprietary rights are enforceable or defensible or infringe or allegedly infringe on rights of others or can withstand claims of invalidity and whether the company can finance or devote other significant resources that may be necessary to prosecute, protect or defend them, the level of corporate expenditures, assessments of the company's technology by

potential corporate or other partners or collaborators, capital market conditions, the impact of government healthcare proposals and other factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2014, our Form 10-Q for the quarter ended June 30, 2015, and other regulatory filings from time to time. There can be no assurance that any product in Inovio's pipeline will be successfully developed or manufactured, that final results of clinical studies will be supportive of regulatory approvals required to market licensed products, or that any of the forward-looking information provided herein will be proven accurate.