NEWS RELEASE

Inovio Launches Zika Vaccine Trial in Midst of Puerto Rico Epidemic to Explore Early Signals of Vaccine Efficacy

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Inovio's second human Zika vaccine study, a placebo-controlled 160-subject trial, will test for safety, immune responses and initial evidence of efficacy

PLYMOUTH MEETING, Pa., Aug. 29, 2016 (GLOBE NEWSWIRE) -- Inovio Pharmaceuticals, Inc. (NASDAQ:INO) today announced it has initiated a clinical study of its preventive Zika vaccine (GLS-5700) in 160 subjects in Puerto Rico, where the Zika virus outbreak has been declared a public health emergency. The CDC estimates Zika will infect more than 25% of the Puerto Rican population by year end, providing the potential for this study's placebo control design to provide exploratory signals of vaccine efficacy.

Dr. J. Joseph Kim, Inovio's President & CEO, said, "The rapid progression of the Zika outbreak in Puerto Rico provides an immediate and unique opportunity to assess a preventive vaccine in a real world setting. Inovio and its collaborators are moving ahead with this second Zika vaccine clinical trial to evaluate safety, immune responses, and possible signals of vaccine efficacy. If the results are promising, we plan to meet with regulators in 2017 to map out the most efficient path forward to develop our Zika vaccine and help mitigate this widespread Zika outbreak that has expanded into the continental United States."

Inovio is developing its Zika vaccine, GLS-5700, with GeneOne Life Science, Inc. (KSE: 011000) and academic collaborators from the US and Canada who are also working to advance Inovio's Ebola and MERS vaccines through clinical development.

In June, Inovio was the first to commence a human Zika trial, with sites in the U.S. and Canada. All 40 subjects for the first clinical study have been fully enrolled and dosed. Inovio expects to report results before the end of this year.

There are no approved vaccines or therapies for Zika virus infection. While multiple companies and academic groups have announced development plans for Zika virus vaccines, only Inovio and a US government research center have started human clinical studies.

Inovio's second clinical study is a placebo-controlled, double-blind trial involving 160 healthy adult volunteers (80 subjects will receive vaccine and 80 subjects will receive placebo) to evaluate the safety, tolerability and immunogenicity of GLS-5700

administered with Inovio's CELLECTRA®-3P device. This proprietary intradermal DNA vaccine delivery device has been shown to maximize antigen expression and immune responses in multiple human studies. Inovio will also assess differences in Zika infection rates in participants given either placebo or vaccine as part of an exploratory endpoint. In preclinical testing, this synthetic vaccine induced robust antibody and T cell responses - the immune responses necessary to fight viral infections - in small and large animal models.

About the Zika Virus

First identified in Uganda, Zika virus subsequently spread to equatorial Asia and over the past 10 years has rapidly spread through the South Pacific and into South America, Central America, and the Caribbean. Zika virus is a flavivirus, a family of viruses including yellow fever, dengue, and West Nile virus, which are introduced to people through mosquito bites. Because the Aedes species of mosquitoes that can potentially transmit Zika virus are found throughout the world there is concern that Zika will continue to spread to new countries and regions. As of August, 2016, 66 countries and territories reported evidence of mosquito-borne transmission of the Zika virus since 2015, compared to 33 countries stated by WHO in their first Zika situation report in February 2016. Zika can also be sexually transmitted.

The most common symptoms of Zika virus are fever, rash, joint pain, and conjunctivitis. Zika has been linked to a severe birth defect called microcephaly which arises in infants of women infected during pregnancy. Microcephaly is marked by an abnormally small head and incomplete brain development. Zika is also associated with Guillain-Barré syndrome, which causes muscle weakness of the limbs and in severe cases may cause almost total paralysis including the inability to breathe. Recent reports suggest Zika may also be linked to other neurological abnormalities and perhaps abnormalities in other body systems.

No vaccine or therapy currently exists for the prevention or treatment of Zika virus infection.

About GeneOne Life Science

GeneOne Life Science, Inc. is an international DNA vaccine developer and leading contract manufacturer of DNA plasmid-based agents for preclinical and clinical trials for global companies and institutions. It researches and develops DNA vaccines to prevent and treat incurable diseases in South Korea and internationally. The company is headquartered in Seoul, South Korea. VGXI, Inc., GeneOne's wholly-owned manufacturing subsidiary located in Texas, is the largest pure-play cGMP DNA plasmid manufacturing facility in the world. VGXI manufactured the Zika vaccine and other emerging disease vaccines including Ebola and MERS.

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 has reported generating T cells in vivo in high quantity that are fully functional and 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, The Wistar Institute, University of Pennsylvania, DARPA, GeneOne Life Science, Plumbline Life Sciences, Drexel University, NIH, HIV Vaccines Trial Network, National Cancer Institute, U.S. Military HIV Research Program, and Laval University. For more information, visit **www.inovio.com**.

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 the Zika vaccine GLS-5700, 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 immunotherapy and vaccine products, the ability of our collaborators to attain development and commercial milestones for products we license and product sales that will enable us to receive future payments and royalties, 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, 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, 2015, our Form 10-Q for the quarter ended June 30, 2016, 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.

CONTACTS:
Investors: Bernie Hertel, Inovio Pharmaceuticals, 858-410-3101, **bhertel@inovio.com**
Media: Jeff Richardson, Inovio Pharmaceuticals, 267-440-4211, **jrichardson@inovio.com**

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