Inovio will Independently Develop Hepatitis B Immunotherapy after Roche quits

Inovio Pharmaceuticals, {NASDAQ: INO} today announced the company will continue to develop its hepatitis B DNA immunotherapy (INO-1800) independently following Roche's notice that it will discontinue its collaboration with Inovio and its development of INO-1800.

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PLYMOUTH MEETING, PA – August 3, 2016 – **Inovio Pharmaceuticals, {NASDAQ: INO}** today announced the company will continue to develop its hepatitis B DNA immunotherapy (INO-1800) independently following **Roche**'s notice that it will discontinue its collaboration with Inovio and its development of INO-1800.

INO-1800 was licensed to Roche from Inovio in 2013. All of Roche's rights to INO-1800, including the right to license the product to other parties, will be returned. Inovio will continue to advance its current phase I study of INO-1800, which is enrolling as planned in 30 clinical sites in the U.S. and Asia-Pacific regions. Inovio anticipates completing enrollment in the first half of 2017 and expects results in the second half of 2017.

This randomised, open-label, active-controlled, dose escalation study is evaluating the safety, tolerability, and immunogenicity of INO-1800, alone or in combination with INO-9112, Inovio's IL-12-based immune activator in adults with chronic hepatitis B infection.

The primary endpoints are safety and tolerability. The

secondary endpoints will evaluate the cellular and humoural immune response to INO-1800 and investigate the therapy's effect on several viral and antiviral parameters. All trial subjects are also medicated with standard-of-care oral antiviral therapies. The study has completed interim safety reviews with a favorable safety profile to date. Immunology analyses are planned after completion of enrollment.
Dr. J. Joseph Kim, Inovio's President & CEO, said, "*While we acknowledge Roche's strategic decision in the area of hepatitis B, we are optimistic that our potent immunotherapy platform will make a difference in this globally important chronic viral infection, similar to what we have demonstrated in HPV-related disease. Inovio was already managing the phase 1 clinical trial so the study will continue on track without disruption.*"

About INO-1800 for Hepatitis B

Inovio has reported preclinical data showing its hepatitis B immunotherapy (INO-1800) generated strong T-cell and antibody responses that led to the elimination of targeted liver cells in mice. Notably, researchers found that hepatitis B-specific T cells exhibited a killing function and could migrate to and stay in the liver and cause clearance of chronically infected cells without evidence of liver injury. These results indicate that INO-1800 may have potential to treat chronic hepatitis B infection.

Hepatitis B and Liver Cancer

Chronic infection with hepatitis B virus is one of the major causes and risk factors for liver cirrhosis and liver cancer. The virus is very infectious, with over 240 million people chronically infected worldwide. More than 60 million of these people are at risk of the major complications of liver cirrhosis and liver cancer, which cause over 700,000 deaths globally each year.

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

CONTACT:
Bernie Hertel
+1 858 410 3101
bhertel@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, 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 immunotherapy and vaccine products, our ability to advance our portfolio of immuno-oncology products independently, 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, 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, 2015, our Form 10-Q for the quarter ended March 31, 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.