# Inovio Pharmaceuticals HPV Immunotherapy Selected as "Best Therapeutic Vaccine"

**Inovio Pharmaceuticals, {NASDAQ: INO}** announced today that its immunotherapy to treat cervical dysplasia (VGX-3100) was recognised as the "Best therapeutic vaccine by the world Vaccine Congress.

Inovio Pharmaceuticals HPV Immunotherapy Selected as "Best Therapeutic Vaccine" by World Vaccine Congress.

PLYMOUTH MEETING, Pa. — March 30, 2016 — **Inovio Pharmaceuticals**, **{NASDAQ: INO}** announced today that its immunotherapy to treat cervical dysplasia (VGX-3100) was recognized as "Best Therapeutic Vaccine" by the World Vaccine Congress held this week in Washington, D.C.

The Vaccine Industry Excellence (ViE) Awards honour outstanding vaccine advancements and achievements of therapeutic and preventive vaccine developers across the worldwide industry as judged by a panel of global biotech industry stakeholders.

Inovio was recognized by industry peers for "Best Therapeutic Vaccine" for its DNA-based immunotherapy, VGX-3100, a first-inclass product for treating high grade cervical neoplasia associated with human papillomavirus (HPV).

Medical researchers have previously tried to stimulate therapeutic immune responses against HPV and cervical lesions with little success. Inovio's phase II data from this immunotherapy demonstrated that robust CD8+ killer T cells activated in the body by VGX-3100 were correlated to the clearance of neoplastic cervical lesions as well as the virus which caused the disease. These results were statistically significant and clinically relevant, and were published last year in a peer-reviewed article in The Lancet, one of the world's leading medical journals. Inovio will take VGX-3100 into a phase III trial later this year.

Each year, the ViE award recognizes the therapeutic vaccine that addresses an unmet medical need and holds significant potential for vast geographical and market reach. This is the fourth consecutive year that Inovio's lead product has won this designation.

**Dr. J. Joseph Kim, President and CEO**, said, "Women around the world with HPV-related cervical pre-cancers would ideally have access to an effective non-surgical treatment to prevent

progression to cancer. We greatly appreciate the World Vaccine Congress' recognition of the potential of Inovio's VGX-3100 to address this opportunity."

## About VGX-3100

Inovio's VGX-3100 is an immunotherapy designed to activate — in the body — functional antigen-specific CD8+ killer T cells capable of clearing cells displaying the E6 and E7 antigens of HPV types 16 and 18. The E6 and E7 antigens are oncogenes responsible for transforming HPV-infected cells into pre-cancerous and cancerous cells. VGX-3100 met primary and secondary endpoints in a double-blind, placebo-controlled, randomized phase II clinical trial.

## About HPV and Cervical Dysplasia

Human papillomavirus (HPV) is the most common sexually transmitted disease, infecting over 12% of women worldwide. Persistent HPV infection can lead to dysplasia, or premalignant changes, in cervical cells; left untreated dysplasia can advance to cervical cancer. Approximately 350,000 women are diagnosed with cervical dysplasia each year in the U.S. Cervical dysplasia most often occurs in younger women (aged 25 to 35 years) and is divided into three progressive stages (CIN1, CIN2, and CIN3). HPV 16 and HPV 18 are the two genotypes most likely to cause high-grade CIN (2/3) and are estimated to cause approximately 70% of all cervical cancers in the U.S. and worldwide. Although effective prophylactic vaccines for HPV have been available for several years, only 40% of eligible adolescent females (aged 13 to 17 years) in the U.S. received all three doses of the regimen in 2014. Well-known preventive measures are not practiced universally and it is expected that high-risk HPV infections, high-grade CIN, and cervical cancer will continue to be a substantial public health problem for years to come.

The primary treatment today for high grade cervical dysplasia is the LEEP procedure, which is associated with pre-term birthing, infertility, heavy bleeding and other side effects. Recurrences occur in 10-16% of women treated by LEEP.

### About the ViE Awards.

The World Vaccine Congress & Expo, now in its 16th year, is the largest and most comprehensive event in the industry. Covering everything from the latest R&D to manufacturing to corporate development strategies, the Congress hosts the only awards ceremony dedicated to the vaccine industry. The ViE Awards honour individuals, organizations and initiatives which have made significant contributions over the past 12 months to innovation in the field of vaccines.

#### 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, Roche, The Wistar Institute, 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 please visit www.inovio.com

#### **CONTACT:**

Bernie Hertel
Inovio Pharmaceuticals
+1 858 410 3101
bhertel@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 preclinical 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 and INO-3112, 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 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 costeffective 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, 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 forwardlooking information provided herein will be proven accurate.