NEWS RELEASE

Inovio Pharmaceuticals and the Parker Institute for Cancer Immunotherapy Establish Clinical Development Collaboration To Evaluate Novel Cancer Immunotherapy Combinations

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- Advances development of Inovio's ASPIRE™ (Antigen SPecific Immune REsponses) immunotherapy platform as a foundation for novel combination regimen approaches

- Engages the Parker Institute's extensive immunotherapy expertise and academic and research network on studies that have the potential to address cancers with high unmet needs

PLYMOUTH MEETING, Pa. and SAN FRANCISCO, Jan. 09, 2018 (GLOBE NEWSWIRE) -- Inovio Pharmaceuticals, Inc. (NASDAQ:INO) and the Parker Institute for Cancer Immunotherapy have entered into a clinical collaboration agreement that provides for Inovio and the Parker Institute to undertake clinical evaluation of novel combination regimens within the field of immuno-oncology. The goal of the partnership is to design innovative studies that have the potential to address cancers with high unmet need. The initial trial under consideration between Inovio and the Parker Institute would address muscle invasive bladder cancer with INO-5401 in combination with checkpoint inhibitors and immune modulators.

Under the agreement, the Parker Institute will have responsibility for clinical study execution, working in collaboration with its established network of the most pre-eminent clinical academic and industry cancer centers. Based on Parker's novel approach to accelerating studies of cancer immunotherapies, Inovio will provide financial contributions if Inovio's product(s) studied under the collaboration reaches the initiation of a Phase 3 study.

The collaboration with Inovio represents the Parker Institute's first agreement within the field of DNA-based Immunotherapeutics. Inovio will benefit from the Parker Institute's innovative research model which brings together top academic cancer institutions and companies to share resources, data, and technology, accelerate research through unifying and managing clinical trial design, and

conduct multi-center clinical trials.

Dr. J. Joseph Kim, Inovio's President and CEO, said, "We thank the Parker Institute for their confidence in our technology. This partnership aligns with our goal to address cancer with our ASPIRE™ immunotherapies. Through the Parker Institute's unique business model, Inovio will be able to work with university research pioneers and combination oncology therapy partners while leveraging the Institute's unique capabilities and expertise."

"This collaboration between the Parker Institute and Inovio exemplifies the mission of the Parker Institute for Cancer Immunotherapy to unlock the promise of immunotherapy by rapidly progressing next generation treatments into clinical trials," said Fred Ramsdell, PhD, Vice President, Research, Parker Institute for Cancer Immunotherapy. "If this collaboration leads to better cancer patient responses to immunotherapy, this would mark an important milestone for the field."

In addition to the work with the Parker Institute, Inovio also is collaborating to advance two immuno-oncology products through late-stage development for treatment of HPV-related cancers, advanced bladder cancer, and GBM. The products are being studied in combination with checkpoint inhibitors, in collaboration with Medimmune, Genentech, and Regeneron respectively.

About Inovio's ASPIRE™ Immunotherapy Technology Platform

Inovio is advancing the medical potential of a unique class of immunotherapy technology. Its ASPIRE™ (Antigen SPecific Immune REsponses) immunotherapies platform, which is the foundation for all of Inovio's products is unique in its ability to leverage the body's naturally existing mechanisms to generate robust, highly targeted immune responses to prevent and treat disease – and to do so in the body without harmful side effects. Its SynCon® immunotherapy design and CELLECTRA® delivery transform novel genetic blueprints into functional antibody and killer T cell responses. Inovio was the first to report the activation – in the body – of significant, antigen-specific functional T cells correlated to statistically significant efficacy in a placebo-controlled, randomized, double-blind phase 2b clinical trial (HPV-related pre-cancer), with a very favorable safety profile. These data were published in The Lancet and independently described as a "major breakthrough" in the field by U.S. National Cancer Institute scientists. Inovio has achieved significant antigen-specific immune responses against multiple diseases and is advancing a growing pipeline of cancer and infectious disease immunotherapies and vaccines.

About Parker Institute for Cancer Immunotherapy

The Parker Institute for Cancer Immunotherapy brings together the best scientists, clinicians and industry partners to build a smarter and more coordinated cancer immunotherapy research effort.

The Parker Institute is an unprecedented collaboration between the country's leading immunologists and cancer centers. The program started by providing institutional support to six academic centers, including Memorial Sloan Kettering Cancer Center, Stanford Medicine, the University of California, Los Angeles, the University of California, San Francisco, the University of

Pennsylvania and The University of Texas MD Anderson Cancer Center. Recently, the institute also initiated programmatic support for top immunotherapy investigators, including a group of researchers at Dana-Farber Cancer Institute, Robert Schreiber, Ph.D., of Washington University School of Medicine in St. Louis, Nina Bhardwaj, M.D., Ph.D., of the Icahn School of Medicine at Mount Sinai and Phil Greenberg, M.D., of the Fred Hutchinson Cancer Research Center.

The Parker Institute network also includes more than 40 industry collaborations, more than 60 labs and more than 300 of the nation's top researchers focused on treating the deadliest cancers.

The goal is to accelerate the development of breakthrough immune therapies capable of turning most cancers into curable diseases. The institute was created through a $250 million grant from The Parker Foundation.

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, Regeneron, Genentech, The Wistar Institute, University of Pennsylvania, DARPA, GeneOne Life Science, Plumbline Life Sciences, ApolloBio Corporation, 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, including the planned initiation and conduct of clinical trials and the availability and timing of data from those trials, and the sufficiency of 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, 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 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, 2016, our Form 10-Q for the period ended September 30, 2017, and other regulatory filings we make from time to time. There can be no assurance that any product candidate in Inovio's pipeline will be successfully developed, manufactured or commercialized, that final results of clinical trials 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. Forward-looking statements speak only as of the date of this release, and Inovio undertakes no obligation to update or revise these statements, except as may be required by law.

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