



Dear Investor,

Thank you for requesting information about Inovio Pharmaceuticals, Inc. (NASDAQ: INO). We appreciate your time to learn more about the promise of DNA immunotherapies and Inovio's vital role in advancing this field.

Inovio is striving to transform the way we treat and prevent various cancers and infectious diseases by creating synthetic DNA immunotherapies that stimulate the body's immune system to recognize slowly growing or evasive cancer cells and rapidly mutating infectious diseases, as well as safely and effectively treat those cancers and infectious diseases. We are striving to do that through the generation of robust T cell immune responses unique to the targeted diseases.

Our technology has achieved best-in-class T-cell immune responses compared to alternative technologies. We recently reported validating efficacy data in a large controlled study – the first for our technology and the field of DNA-based immune therapies - from our phase II HPV-caused cervical dysplasia study this past July. In this phase II study, women with late stage cervical dysplasia 2/3 (CIN2/3) associated with human papillomavirus (HPV) types 16 or 18 were treated with VGX-3100, Inovio's DNA immunotherapy. Treatment with VGX-3100 resulted in regression of CIN2/3 to early stage dysplasia (CIN1) or no disease, meeting the study's primary endpoint. In addition, the trial demonstrated clearance of HPV in conjunction with regression of cervical lesions as well as robust T-cell activity in subjects who received VGX-3100 compared to those who received placebo. These results are a breakthrough for the field of immunotherapies. Beyond the direct clinical implications of this phase II study, this efficacy and T cell data provides evidence that DNA immunotherapy technology can activate the immune system to fight cancers and infectious diseases. We expect this data to be published in a top-tiered medical journal this year and we intend to initiate a phase III clinical trial for VGX-3100 in early 2016.

While this phase II study was focused on cervical pre-cancers, VGX-3100 is intended to fight all pre-cancers and cancers caused by HPV types 16 & 18, including cervical, head and neck, and anogenital cancers – we view these as each being billion-dollar-plus markets. In 2014 we initiated two new studies (for head and neck and cervical cancer) in which we added to this immunotherapy a DNA-based immune activator called IL-12. Based on results achieved in a previous study, we expect the addition of IL-12 to further increase CD8 T cell levels above the level we saw with our DNA product alone. We expect interim data from one of these studies in the second half of 2015.

In addition to our HPV program, we have an extensive pipeline targeting other cancers and infectious diseases, including breast, lung, and pancreatic cancers associated with the antigen hTERT, prostate cancer, hepatitis, HIV, and Ebola. We look forward to multiple advancements in these areas in 2015, including phase I trial initiations for prostate cancer, hepatitis B, HIV, and Ebola.

We've also recently expanded our product portfolio to include immune activators (to enhance immune response activation and further drive immune responses to the site of infection) and DNA based monoclonal antibodies (dmAb), which have a more simplified design and better product stability, manufacturing, dosing, and cost effectiveness compared to competitors' monoclonal antibodies (which generated \$50B in revenue in 2014).

Best regards,



Bernie Hertel  
Vice President, Investor Relations and Communications  
[bhertel@inovo.com](mailto:bhertel@inovo.com)  
858 336 5579

\* \* \*

*This communication contains certain forward-looking statements relating to our business, including our plans to develop electroporation-based drug and gene delivery technologies and DNA vaccines 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, 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, 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, and other regulatory filings from time to time. There can be no assurance that any product in Inovo'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.*