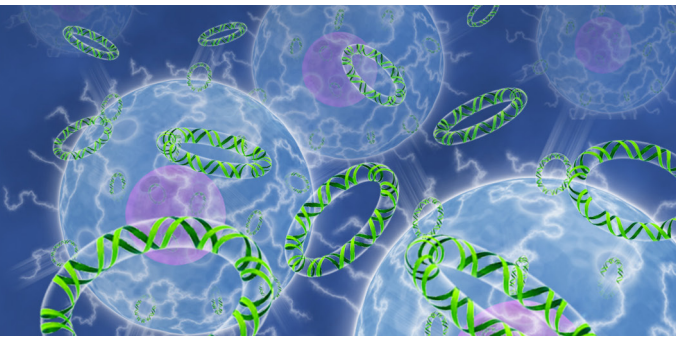
Inovio.

Revolutionizing the fight against cancer and infectious diseases.



Inovio's DNA-based immunotherapy technology achieved a ground-breaking milestone for the immunotherapy field, showing clinically significant efficacy in a phase II clinical study. Its products activate robust targeted immune responses to prevent and treat disease, with a favorable safety profile to date. Inovio is advancing a growing preclinical and clinical stage product pipeline.

Investment Highlights

First-in-class clinically significant efficacy achieved in large, controlled phase II study of high grade cervical pre-cancer (CIN 2/3).

- VGX-3100, our immunotherapy to treat pre-cancers and cancers caused by HPV, achieved a 49.5% response rate of women regressing pre-cancerous cervical disease to low grade pre-cancer (CIN 1) or no disease. This compared to 30.6% in the placebo group.
- 40.2% of women regressed the pre-cancer AND cleared HPV compared to only 14.3% in the placebo group, suggesting a strong role for this therapy to play as a first-line treatment potentially able to provide unique benefit to patients.
- Current surgical procedures are invasive and have been associated with pre-term births; they do not necessarily eliminate the cancer-causing virus.

SynCon® vaccines designed to treat, as well as prevent

- DNA code in the immunotherapy enables the body to produce the desired target antigen(s) relating to a cancer or infectious disease, inducing antigen-specific preventive antibody and therapeutic T-cell immune responses most similar to the body's natural immune response.
- Consensus DNA sequence is designed to create two strategic capabilities: break the tolerance of the body to cancerous cells or generate universal immune responses against multiple unmatched strains of a disease such as influenza. The novel SynCon® DNA sequences are patentable.
- Synthetic DNA vaccines: cannot reproduce a virus; do not induce unwanted immune response; rapidly designed; scalable, cost efficient manufacturing; better room temperature stability.

Targeting multi-billion dollar therapeutic markets for cancers, HIV, and hepatitis, and significant opportunities for improved preventive vaccines against challenging infectious diseases.

Roche partnership established in September 2013.

- Collaboration with a global leader in innovative cancer drugs to develop and commercialize Inovio's prostate cancer and hepatitis B immunotherapies
- $10M up-front + $412.5M in development and commercial milestone payments
- Roche funding all ongoing development costs
- Up to double-digit royalties on sales of a marketed product

About the Company

NASDAQ	INO
Recent market price[1]	$9.85
52-week range	$6.52-$15.80
Shares outstanding[2]	60.3M
Market capitalization[1]	$594M
Avg. daily vol. (3 mo.)[1]	1.4M
Cash, cash equivalents & short term investments[2]	$109M
Cash runway	4Q 2017
Debt[2]	$0

[1] September 30, 2014 [2] June 30, 2014

Recent Advances

9/30/14 Jennifer Laux appointed Vice President of Commercial Development

9/24/14 Ebola vaccine moving into human trial with GeneOne Life Science

9/22/14 HPV immunotherapy development expanded to aerodigestive cancers

9/15/14 INO begins trading on NASDAQ Global Select Market Exchange

8/11/14 Advancing VGX-3100 into a phase III clinical trial

7/23/14 HPV immunotherapy achieves primary efficacy endpoint in randomized phase II cervical dysplasia trial

7/01/14 Added to Russell Global, 2000® & Microcap® Indexes

6/23/14 Cervical cancer clinical trial initiated

6/17/14 Broadens intellectual property portfolio from University of Pennsylvania

6/10/14 Trial for head & neck cancer caused by HPV initiated

inovio

Best-in-class T-cell immune responses from multiple clinical studies.

- Robust T cell responses in phase II mirror those achieved in phase I
- Robust antigen-specific, dose-related T-cell immune responses reported in 78% of subjects in phase I study of late stage cervical pre-cancer for HPV immunotherapy. Demonstrated two-year durability and strong killing effect of T-cells against targeted cells. This data was published in the peer reviewed journal *Science Translational Medicine.*
- HIV immunotherapy generated a seven-fold increase (7% to 52%) in response rate of subjects generating robust CD8 T-cells when delivered with electroporation. This data was published in peer reviewed *Journal of Infectious Diseases.*
- hTERT DNA cancer immunotherapy generated T-cell immune responses 18-fold higher than the next best peer technology, reduced tumors, prevented tumor recurrence, and increased the rate of survival in preclinical studies.
- The emergence of passive checkpoint inhibitors, with their ability to "release the brakes" on T cells by inhibiting cancer cells cloaking and defensive capabilities, has produced compelling data highlighting the killing function of T cells. However, their effectiveness in only some patients has also defined the need for an active immunotherapy, such as Inovio's, capable of "pushing the gas pedal" to increase the generation of antigen-specific T cells to overwhelm cancer cells' defenses and/or complement checkpoint inhibitors.

Universal immune responses from multiple studies.

- SynCon® H1N1 influenza vaccine induced protective immune responses in humans against the nine key unmatched strains of H1N1 influenza of the past 100 years, including the 1918 pandemic flu. SynCon H5N1 (avian) flu vaccine generated strong immune responses against six unmatched strains of H5N1.

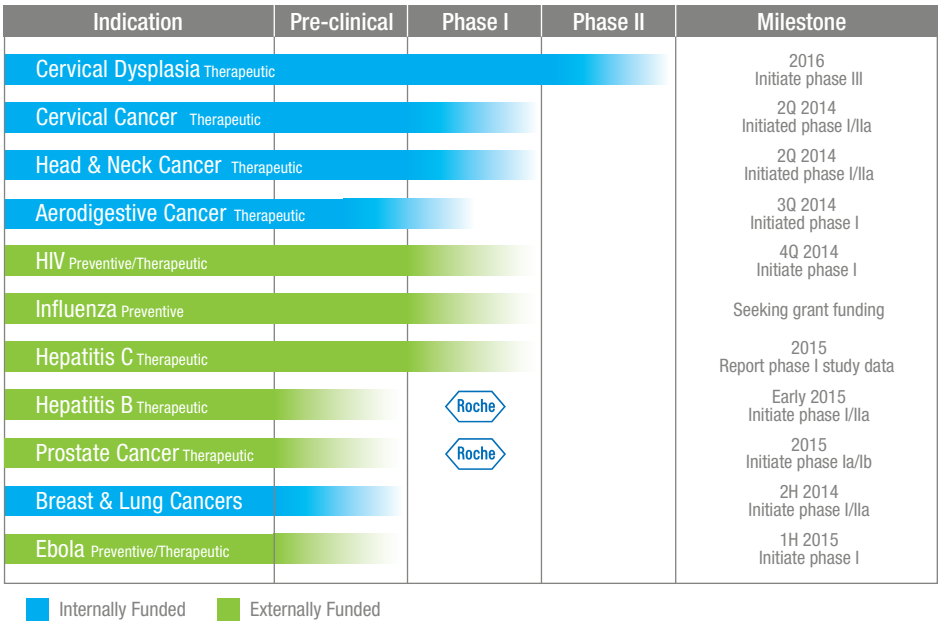
Strong leadership with broad experience in vaccines, biotech and pharma.

Almost $60M in third party funding, including NIH and Gates-funded PATH.

Funding. Operating runway through 4Q 2017, excluding phase III funding.

Working toward **additional partnerships** with pharmaceutical companies.

Product Pipeline



See detailed product pipeline: http://www.inovio.com/products/pipeline/

Management

J. Joseph Kim, Ph.D.
President and Chief Executive Officer
Ex-Merck

Peter Kies
Chief Financial Officer
Ex-Ernst & Young

Niranjan Y. Sardesai, Ph.D.
Chief Operating Officer
Developed/commercialized products

Mark L. Bagarazzi, M.D.
Chief Medical Officer
Ex-Merck regulatory affairs, vaccines

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