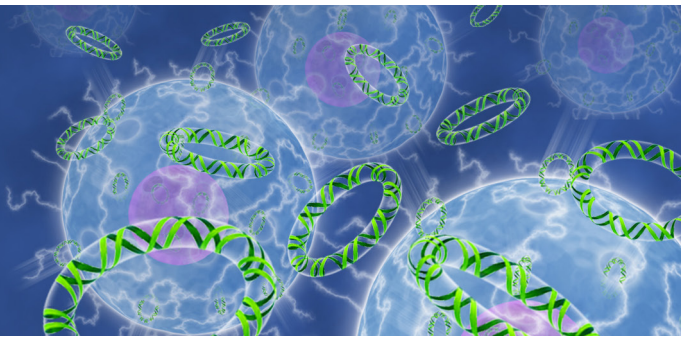
Inovio. Revolutionizing Vaccines.



Inovio is developing synthetic DNA vaccines to prevent and treat cancers and infectious disease. In humans, our SynCon® vaccines delivered using our proprietary electroporation technology are generating best-in-class immune responses, with therapeutic T-cells exceeding other technologies in terms of magnitude, breadth, and response rate. Roche exclusively licensed Inovio's DNA immunotherapies for prostate cancer and hepatitis B. Phase II data from our cervical pre-cancer study of our HPV immuno-therapy in mid-2014 will be the first to assess our technology's efficacy, and will assess immune responses in a larger population.

Investment Highlights

SynCon® vaccines designed to treat, as well as prevent

- DNA code in the vaccine 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 more 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 + preclinical R&D support and near-term regulatory milestones
- $412.5M in milestone payments for certain development and commercial events
- Roche to fund all ongoing development costs
- Up to double-digit royalties on sales of a marketed product
- Roche may pay other development milestone payments if it pursues other indications with INO-5150 or INO-1800

Phase II cervical dysplasia study of therapeutic vaccine for HPV-associated diseases; multiple clinical and preclinical programs advancing Inovio's proprietary DNA vaccines.

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

- The emergence of passive checkpoint inhibitors, with their ability to "release the

About the Company

NYSE MKT	INO
Recent market price[1]	$9.85
52-week range	$2.44-$15.80
Shares outstanding[3]	60M
Market capitalization[1]	$591M
Avg. daily vol. (3 mo.)[1]	1.5M
Cash, cash equivalents & short term investments[2]	$116.8M
Cash runway	4Q 2017
Debt[2]	$0

[1] June 6, 2014 [2] Mar. 31, 2014 [3] Mar. 31 (reflecting June 6th 1:4 reverse split)

Recent Advances

5/27/14 DNA-based monoclonal anti-body therapy completely protects animals from lethal viral challenge

5/27/14 Inovio subsidiary sells animal health assets

5/23/14 1 for 4 reverse split announced

5/13/14 Inovio acquired DNA therapies to treat Alzheimer's & multiple sclerosis

4/01/14 Inovio appoints VP of Quality

3/26/14 Inovio recognized with "Best Therapeutic Vaccine" award

3/04/14 Closing of $63.3 million under-written financing

2/18/14 Inovio bolsters research & clinical development leadership

1/23/14 Potent new immune activator, DNA-based IL-33 cytokine, unveiled

11/20/13 DNA vaccine for MERS virus induces robust immune response in preclinical trial

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brakes" on T cells, has produced compelling data highlighting the importance of T cells. This has validated the need and potential 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.

- 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 vaccine 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.

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.
- H1N1 SynCon® flu vaccine also achieved a 60% protective immune response rate when tested against the currently circulating H1N1 A/California/07/09 strain.
- H7N9 synthetic vaccine provided protection in 100% of vaccinated animals when exposed to the virus in a challenge study.

SynCon vaccines delivered using electroporation have demonstrated a **favorable safety profile** in humans to date.

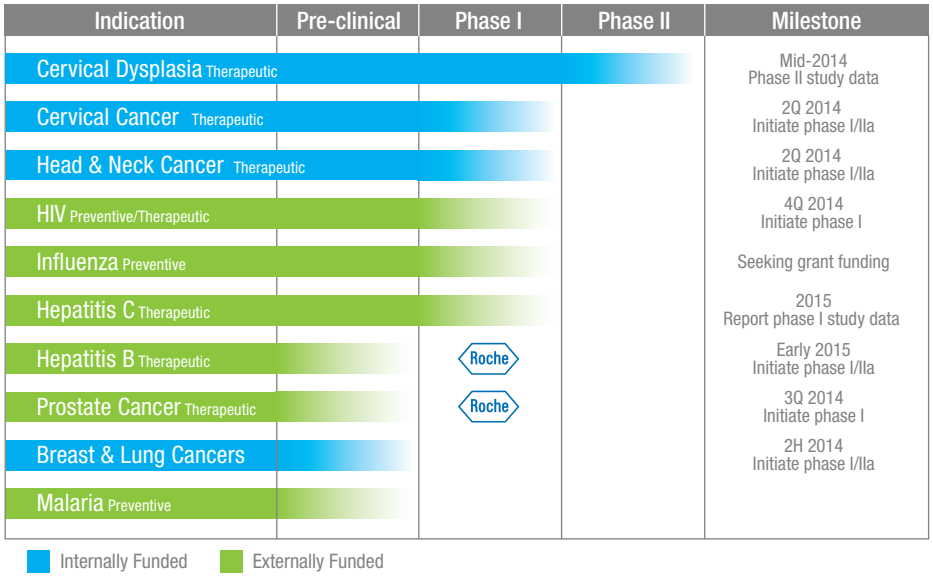
Strong leadership with broad experience in vaccines, biotech and pharma.

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

Funding. Operating runway through 4Q 2017.

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

Product Pipeline



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

Management

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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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