



Inovio Biomedical is designing, developing and delivering a new generation of vaccines – DNA vaccines – to prevent and treat cancers and infectious diseases

Taking Vaccines into the Future

Investment Highlights

Vaccine market is growing strongly. Vaccines have protected hundreds of millions of people from diseases such as smallpox, polio, and measles. The compelling idea of stimulating the body's immune system is resulting in new vaccine innovations, such as Gardasil®. Industry research firm Kalorama expects the \$19.2B (2008) vaccine market to double by 2013.

Creating a new generation of vaccines to treat diseases. Technologically advanced DNA vaccines may not only prevent but treat cancers and challenging infectious diseases by inducing important T-cell immune responses.

Designing DNA vaccines to combat new, unmatched virus strains. Inovio universal vaccines are intended to provide cross-strain protection for rapidly evolving viruses such as HIV and influenza, an impossible challenge for conventional vaccines. Inovio DNA vaccines designed in 2007 achieved complete protection against a 1918 pandemic H1N1 virus challenge and protective HI titers against currently circulating swine-origin H1N1 influenza strains in 100% of tested animals.

Proprietary electroporation delivery technology showing potential to overcome industry bottleneck. Previous DNA vaccines have met numerous delivery challenges. However, interim human data shows Inovio's electroporation technology is safe, well tolerated, and significantly enhances cellular uptake of and immune responses to DNA vaccines.

Multi-indication pipeline targeting cancers and infectious diseases, with both internal and partner programs in clinical studies. See pipeline chart next page.

Validation and non-dilutive grants from funding organizations. NIH's NIAID: \$23.5M: HIV; Department of Defense: biodefense; MVI Path, supported by Bill & Melinda Gates Foundation: malaria.

Vaccine expertise and leadership. Management has Big Pharma and biotech experience, and taken several vaccines through marketing approval. Eminent scientific advisors in vaccine and DNA vaccine fields. Strong ties with University of Pennsylvania.

Significant patent portfolio encompassing synthetic consensus DNA vaccines and electroporation delivery of biopharmaceuticals.

About the Company

Listing: NYSE Amex: INO

Recent market price: \$2.22 (09/09/17)

52 week range: \$0.15-\$3.40

Shares o/s: 102.0M (09/09/17)

Market capitalization: \$226M (09/09/17)

Avg. daily volume (3 mo.): 3.5M

Cash: \$8.3M (09/06/30)

Financing: \$28.4M (net, 09/07/31)

News Update

Influenza collaboration with NIH's VRC (Vaccine Research Center)

First human demonstration of significant, persistent antibody response using electroporation-delivered DNA vaccine published in Human Gene Therapy

\$30M equity funding

Universal influenza vaccines demonstrate 100% protection against current pandemic A/H1N1 influenza viruses in animal studies

Universal dengue DNA vaccine uniquely demonstrates strong immune responses against all four serotypes in preclinical study

Eminent virologist Dr. Stanley Plotkin joins scientific advisory board

Inovio completes merger with DNA vaccine company VGX Pharmaceuticals

Other assets. Small molecule anti-inflammatory (rheumatoid arthritis, T1 diabetes) showed safety in phase I. 90%-owned animal health company with Australian marketing approval for swine growth hormone. 20% interest in VGX International, with DNA plasmid manufacturing plant in Texas.

Well-funded. \$28.4M net @ \$2.70/share closed July 31, adding to \$4.2M working capital, June 30th.

Preclinical & Clinical DNA Vaccine Pipeline

Proprietary DNA Vaccine /Electroporation Product Pipeline

Indication	Product	R&D	Pre-Clin	IND	Ph 1	Partner/Collaborator/ Funding
Cervical Cancer Therapeutic	VGX-3100	Completed	Completed	Completed	In Progress	
Avian Influenza	VGX-3400	Completed	Completed	In Progress		
Universal Influenza	Pandemic/Seasonal Flu	Completed	In Progress			
HIV	Preventive w/o Electroporation	Completed	Completed	Completed	In Progress	HIV Vaccine Trials Network
PENNVAX™ -B	Therapeutic w/o Electroporation	Completed	Completed	Completed	In Progress	University of Pennsylvania
	Preventive	Completed	In Progress			HIV Vaccine Trials Network
PENNVAX™-G	Preventive	Completed	In Progress			NIH/NIAID
PENNVAX™-GP	Preventive	Completed	In Progress			

License Partners & Collaborators Using Inovio's Electroporation Technology

Indication	Product	R&D	Pre-Clin	IND	Ph 1	Partner/Collaborator/ Funding
Prostate Cancer	PSMA	Completed	Completed	Completed	In Progress	University of Southampton
Hepatitis C Virus	NS3/4A	Completed	Completed	Completed	In Progress	Tripep
Breast/Lung/Prostate	V934: hTERT	Completed	Completed	Completed	In Progress	Merck
Breast/Colorectal/ Ovarian/Lung	V930: CEA/her-2	Completed	Completed	Completed	In Progress	Merck

Completed In Progress

2009/2010 Milestones

- Phase I interim data, therapeutic cervical cancer vaccine (VGX-3100)
- Phase I final data, preventive HIV PENNVAX-B™ w/o electroporation (HVTN)
- Phase I initiation, preventive HIV PENNVAX-B™ vaccine with electroporation (HVTN)
- Phase I initiation, avian flu vaccine (VGX-3400)
- Advance universal influenza vaccine preclinical development
- Phase I proof-of-concept data, prostate cancer vaccine (Southampton)
- Phase I proof-of-concept data, hepatitis C virus (Tripep)
- Ongoing Phase I enrollment, vaccine targeting multiple cancers expressing hTERT (V934, Merck)
- Phase I data, rheumatoid arthritis/type 1 diabetes anti-inflammatory candidate (VGX-1027)
- Ongoing corporate development to secure partnerships and scientific grants.

Management

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

Avtar Dhillon, M.D.
President and Chairman of the Board
Ex-MDS Capital Group

Niranjan Y. Sardesai, Ph.D.
Senior VP, Research & Development
Biotech experience/commercialized product

Kevin W. Rassas
Senior VP, Business Development
Int'l pharma management/biz dev

Peter Kies
Chief Financial Officer
Ex-Ernst & Young

Scientific Advisory Board

David B. Weiner, Ph.D., Chairman
Professor, Dept. of Pathology &
Laboratory Medicine, University of
Pennsylvania
DNA vaccine pioneer

Robert S. Langer, Sc.D.
Professor, Chemical & Biomedical
Engineering, Massachusetts Institute of
Technology
Int'l drug delivery expert

Stanley A. Plotkin, M.D.
Emeritus Professor, Wistar Institute &
University of Pennsylvania
Consultant, Sanofi Pasteur
Eminent virologist; developed rubella vaccine

Contact

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This Corporate Profile contains certain forward-looking statements relating to our business, including our plans to develop DNA vaccines and electroporation-based drug and gene delivery technologies. 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 profile may not be indicative of results achievable in other trials or for other indications, 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, our ability to obtain necessary regulatory approvals, the adequacy of our capital resources, capital market conditions, our ability to successfully integrate Inovio and VGX Pharmaceuticals and other factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2008, our Form 10-Q for the six months ended June 30, 2009, and other regulatory filings from time to time.