Zacks Small-Cap Research

February 14, 2017
Grant Zeng, CFA
312-265-9466
gzeng@zacks.com

scr.zacks.com
10 S. Riverside Plaza, Chicago, IL 60606

GeoVax Labs Inc. (GOVX-OTC)

GOVX: Zacks Company Report

GOVX: New HIV clinical trial initiated, entering into HBV, Zika, Cancer immunotherapy market

Current Price (02/14/17)	$0.06
Valuation	**$0.25**

UPDATE

GeoVax continues to move forward with its various vaccine programs.

A new Phase I trial (HVTN114) was just initiated. The entry into HBV and oncology immunotherapy further expands pipeline.

The continued pipeline expansion, multiple collaborations, and high-quality SAB members all serve to validate the broad utility and promise of the company's MVA-VLP vaccine vector platform.

We continue to believe that there is an upside potential to the company shares.

SUMMARY DATA

52-Week High	**$0.10**
52-Week Low	**$0.05**
One-Year Return (%)	**-25.39**
Beta	**0.17**
Average Daily Volume (sh)	**183,472**
Shares Outstanding (mil)	**50**
Market Capitalization ($mil)	**$3**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**N/A**
Insider Ownership (%)	**N/A**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**10.5**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2015 Estimate	**N/A**
P/E using 2016 Estimate	**N/A**

Risk Level	**Above Avg.,**
Type of Stock	**Small-Growth**
Industry	**Med-Biomed/Gene**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2015	0.10 A	0.07 A	0.09 A	0.16 A	0.43 A
2016	0.05 A	0.17 A	0.44 A	0.44 E	1.09 E
2017					1.00 E
2018					1.50 E

Earnings per Share
(EPS is operating earnings before non recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2015	-$0.02 A	-$0.02 A	-$0.02 A	-$0.02 A	-$0.08 A
2016	-$0.04 A	-$0.02 A	-$0.01 A	-$0.01 E	-$0.07 E
2017					-$0.06 E
2018					-$0.07 E

© Copyright 2017, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

New CSO Appointed

On December 14, 2016, GeoVax announced that the company has promoted **Farshad Guirakhoo**, PhD, to the role of Chief Scientific Officer **(CSO),** effective January 1, 2017. Dr. Guirakhoo joined GeoVax in 2015 as Senior Vice President of Research and Development. Previous CSO Harriet Robinson, PhD, will continue to hold an instrumental position with GeoVax as Chief Scientific Officer Emeritus.

As Sr. VP of R&D, Farshad has played a critical role in the growth of the company's vaccine pipeline. In the new role of CSO, Dr. Guirakhoo will lead the scientific advancement of GeoVax's technology pipeline.

Dr. Farshad Guirakhoo has been a veteran in the biotech industry. Before joining GeoVax in 2015, Dr. Guirakhoo served in senior management and scientific roles within the biotechnology industry with Vaxess Technologies, Hookipa Biotech, Sanofi Pasteur, Acambis, Inc. and OraVax, Inc. He earned his Ph.D. in Virology at the Medical University of Vienna, Vienna, Austria, holds a M.Sc. degree in Genetics and a B.Sc. degree in Biology. He conducted his Post-Doctoral training at the Medical University of Vienna and at the US National Centers for Disease Control and Prevention (CDC), Division of Vector-Borne Infectious Diseases in Fort Collins, CO. In his scientific career, Dr. Guirakhoo has filed over 90 patent applications and is author/co-author of more than 80 peer reviewed publications, including book chapters. He was instrumental in the development and commercialization of the Imojev Japanese encephalitis virus vaccine and the Dengvaxia vaccine for Dengue virus. In 2014, he was named as one of the 50 Most Influential People in Vaccines.

World-class Scientific Advisory Board Established

On Jan 3, 2017, GeoVax announced the formation of its inaugural Scientific Advisory Board (SAB) to provide expert guidance as the company advances its vaccine development for multiple targets including HIV, hemorrhagic fever (Ebola, Sudan, Marburg, Lassa), Zika virus, chronic Hepatitis B, and immuno-oncology. This world-class SAB will provide strategic guidance for multiple vaccine development efforts.

Inaugural members of the SAB include:

Thomas P. Monath, MD, (Chairman). Dr. Monath currently serves as CSO and COO of BioProtection Systems, a subsidiary of NewLink Genetics Corporation, where he is leading the development of an Ebola virus vaccine in partnership with Merck.

Stanley A. Plotkin, MD. Dr. Plotkin is Professor Emeritus at the University of Pennsylvania in Philadelphia, PA and Adjunct Professor at the Johns Hopkins University, Baltimore, MD.

Barney S. Graham, MD, PhD. Dr. Graham is Senior Investigator at the Vaccine Research Center (VRC), NIAID, NIH, Bethesda, MD. Dr. Graham is an immunologist, virologist, and clinical trials physician whose primary interests are viral pathogenesis, immunity, and vaccine development. His work is focused on respiratory syncytial virus (RSV), influenza, coronaviruses, HIV, and other emerging viral diseases.

Scott C. Weaver, PhD. Dr. Weaver is Director of the University of Texas Medical Branch (UTMB) Institute for Human Infections and Immunity and the Scientific Director of the Galveston National Laboratory. Dr. Weaver, an internationally recognized virologist and vector biologist, studies arthropod-borne viruses (arboviruses), their transmission by mosquitoes, and develops vaccines to control the diseases that they cause.

Olivera (Olja) J. Finn, PhD. Dr. Finn is University of Pittsburgh Distinguished Professor of Immunology and Surgery and Founding Chair of the Department of Immunology, a position she held from 2001 to 2013.

Collaboration with Burnet Institute to Expand to Malaria Vaccine

In early Jan 2017, GeoVax entered into a research collaboration agreement with **the Burnet Institute** for the development of a vaccine to prevent **malaria infection**.

The Burnet Institute is a leading infectious diseases research institute in Australia.

The project will include the design, construction, and characterization of multiple malaria vaccine candidates using GeoVax's MVA-VLP vaccine platform combined with malaria Plasmodium falciparum and Plasmodium vivax sequences identified by the Burnet Institute. The vaccine design, construction, and characterization will be performed at GeoVax with further characterization and immunogenicity studies in mice and rabbits conducted at Burnet Institute using their unique functional assays that provide key information on vaccine efficacy.

A first generation infection-blocking malaria vaccine **RTS, S/AS01** (Mosquirix) is a recombinant protein-based malaria vaccine, which was approved by European regulators in July 2015. It requires 4 doses and has been recommended by the WHO for pilot implementation studies. Since this vaccine is based on a single antigen and has modest efficacy (**30-40%,** depending on the age of subjects), the WHO has defined a Road Map for developing and licensing of next generation malaria vaccines. These vaccines are expected to contain multiple antigens designed to block both infection and transmission of malaria with at least a **75% efficacy** rate.

In multiple clinical trials, GeoVax's MVA-VLP-HIV vaccine (producing VLPs in vaccinated subjects) induces a Th1 biased immune response with both durable functional antibodies (IgG1 and IgG3) and CD4+ and CD8+ T cell responses, both of which are hallmarks of an ideal malaria vaccine required for killing intracellular parasites. GeoVax's proprietary MVA-VLP platform will be used to elicit high titer, durable antibody, and cellular responses to Burnet antigens selected to block both infection and transmission phases of the parasite.

GeoVax to Collaborate with Georgia State University On Development of Therapeutic Hepatitis B Vaccine

In mid-Jan, 2017, GeoVax entered into a research collaboration agreement with **Georgia State University** Research Foundation (GSU) to advance the development of a therapeutic vaccine for treatment of chronic Hepatitis B Virus (HBV) infections.

The project will include the design, construction, characterization and animal testing of multiple vaccine candidates using GeoVax's MVA-VLP vaccine platform. Vaccine antigens include both GeoVax and GSU's proprietary designed sequences. The vaccine design, construction, and characterization will be performed at GeoVax with further characterization and immunogenicity studies in mice conducted at GSU in collaboration with the **Shenzhen Graduate School of Peking University**. Unique functional assays developed by Dr. Ming Luo, Professor in the Department of Chemistry at Georgia State University, and performed at Peking University will provide key information on vaccine efficacy.

The GeoVax HBV vaccine will be based on the Company's novel Modified Vaccinia Ankara (MVA) Virus-Like Particle (VLP) platform **(MVA-VLP),** which generates noninfectious VLPs in the individual being vaccinated. VLPs mimic a natural infection, triggering the body to produce a robust and durable immune response with both antibodies and T cells. The GeoVax MVA-VLP platform has already demonstrated outstanding safety in four clinical trials for the Company's HIV vaccine candidates, which included 500 participants.

Hepatitis B is a contagious liver disease caused by the Hepatitis B virus (HBV). For some people, Hepatitis B is an acute -- or short-term -- illness; but for others, it can become a long-term, chronic infection that may lead to cirrhosis or liver cancer.

There are multiple preventive vaccines on the market to protect against Hepatitis B infection, but they cannot help patients already diagnosed with the disease. Although chronic Hepatitis B infections can be treated with drugs, **less than 5%** of chronic Hepatitis B infections are cured. These drugs only suppress the replication of the virus. Therefore, most people who start treatments must continue with them for life. Moreover, diagnosis and treatment options are very limited in resource/low income-constrained populations, which leads to a majority of patients succumbing within months of diagnosis.

Over the years, GeoVax has gained significant experience in developing therapeutic vaccines for infectious diseases including HIV and other viruses. The company's MVA-VLP technology is well-suited for the development of a therapeutic vaccine against the Hepatitis B virus.

We believe GeoVax's approach to vaccine design and method of treatment has significant merit. The company's strategy is to use its therapeutic vaccine in combination with the standard-of-care treatment to reduce the duration of drug therapy, side effects, and potential drug resistance. The goal is to significantly increase the current cure rate of Hepatitis B infections while reducing the overall treatment costs at the same time.

The entry into the HBV space further demonstrates the broad utility of GeoVax's MVA-VLP platform and solidifies GeoVax as a leader in the next generation of vaccine developers.

Phase I HIV Human Clinical Trial Initiated

On Jan 23, 2017, GeoVax announced the initiation of the **next human clinical trial** of GeoVax's preventive HIV vaccine, **GOVX-B11**. The **Phase I** trial (designated HVTN 114) is being conducted by the HIV Vaccine Trials Network (HVTN) and is funded by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH).

The trial will enroll up to **100 individuals** who participated in the HVTN 205 Phase IIa trial of the GOVX-B11 vaccine (concluded in 2012) and will test the ability of late boosts (additional vaccinations) to increase the antibody responses elicited by the GeoVax vaccine. These "late boosts" will consist of the GeoVax **MVA62B** vaccine with or without a **gp120** protein vaccine. The gp120 protein, AIDSVAX® B/E, supplied by Global Solutions for Infectious Diseases (GSID), is the same protein used to boost immune responses in the partially protective RV144 trial in Thailand, and is being used here to assess the effect of late boosts of GOVX-B11 while newer proteins are cGMP manufactured and safety tested for use with GOVX-B11 in future clinical trials. Eligible participants in HVTN 114 will receive either (a) another MVA62B boost, (b) a combined boost of MVA62B and AIDSVAX® B/E, or (c) AIDSVAX® B/E alone.

GOVX-B11 is being developed for use against the clade B subtype of HIV prevalent in the Americas and Western Europe. GOVX-B11 is a DNA/MVA vaccine that expresses non-infectious virus-like particles (VLPs). Clinical trials for GOVX-B11 have been conducted by the NIH-supported HIV Vaccine Trials Network (HVTN) with funding from the National Institute of Allergy and Infectious Disease (NIAID). The HVTN has tested various doses and combinations of the DNA and MVA vaccines in 500 humans with very encouraging results.

Update on Third Quarter Financials

Total revenue was $440,106 for the three-month ended September 30, 2016, which was related to grants from the NIH in support of its HIV/AIDS vaccine development efforts. This compared to $93,130 of grant revenue reported for the comparable periods of 2015. As of September 30, 2016, there is $680,419 in approved grant funds remaining and available for use.

R&D expenses were $683,939 for 3Q16, as compared to $378,521 for the comparable period of 2015. R&D expenses included direct costs funded by NIH grants, as well as other vaccine manufacturing and testing costs.

G&A expenses were $220,707 for the three month ended September 31, 2016, as compared to $335,932 for the comparable period of 2015.

Net loss was $464,200 ($0.01 per share) for the three months ended September 30, 2016, compared to $619,899 ($0.02 per share) for the same period in 2015.

As of September 30, 2016, GeoVax held **cash** of $511,096, as compared to $1,060,348 at December 31, 2015. During July and August (thru August 4) the Company received $344,500 in net proceeds from the exercise of outstanding stock purchase warrants.

In **early August**, GeoVax was awarded a NIH contract worth up to $7.8 million. The award is a Staged Vaccine Development contract to further develop GeoVax's preventive HIV vaccine (**GOVX-B11**) and to manufacture the DNA component of GOVX-B11 for use in advanced human clinical trials.

The base portion of the contract, with a value of $199,442, will support preparatory work for initiation of manufacturing. The contract also includes $7.6 million in additional development options that may be exercised by NIH, bringing the total potential value of the contract to $7.8 million. The scope of the product development plan covered by the contract includes process development, cGMP-compliant manufacturing of vaccine bulk drug substance and final drug product, testing and characterization of the manufactured products, stability studies, and regulatory filings.

The multi-year contract will pay 100% of the manufacturing cost of the DNA vaccine component of GeoVax's HIV vaccine candidate, GOVX-B11. The amount of DNA vaccine to be produced pursuant to the full contract will be sufficient for efficacy testing of GOVX-B11 in the presence and absence of a gp120 protein boost.

Also on June 29, GeoVax was awarded a Small Business Innovative Research (SBIR) grant by the NIH in support of its **clade C HIV** vaccine development program **for Africa**. The grant award of $294,038 is for the second year of a two-year project period which began July 1, 2015, with a two-year project budget of $593,623

The grant is supporting the **preclinical testing** in non-human primates of a vaccine designed for the clade C subtype of HIV prevalent in Sub-Saharan Africa. This project is using GeoVax's Modified Vaccinia Ankara (MVA) Virus-Like Particle (VLP) vaccine technology, and builds on the GeoVax clade B HIV vaccine, GOVX-B11, which is designed for the epidemic in the Americas and Western Europe.

We welcome these grants awarded by the government agency which not only boosts the company's balance sheet in a non-dilutive way, but further validates GeoVax's vaccine technology and its clinical and preclinical programs.

GeoVax Ebola Vaccine Protects Non-Human Primates against Lethal Challenge

On June 1, 2016, GeoVax announced that testing of its Ebola vaccine in non-human primates showed 100% protection against a lethal Ebola virus challenge.

In this study, the Ebola vaccine was administered as either a single inoculation (prime) or as two inoculations at a four-week interval (prime-boost) to groups of four rhesus macaques each. A control group received the MVA vector without Ebola virus protein inserts. Four weeks after inoculation, animals in all three groups were exposed to a lethal dose of Ebola virus. Three of the four unvaccinated animals died within 12 days, while all of the vaccinated animals survived.

In early September 2015, GeoVax announced positive **animal data** from its Ebola vaccine candidate, **GOVX-E301**, in rodent models. GOVX-E301 provided 100 percent protection in guinea pigs and Syrian golden hamsters, two rodent models for Ebolavirus infections. The GOVX-E301

vaccine uses a recombinant modified vaccinia Ankara (MVA) vector to express non-infectious virus-like particles (VLPs) using genetic sequences from the 2014 Ebolavirus outbreak in West Africa.

The non-human primate data are encouraging because it shows that a single dose of MVA-VLP Ebola vaccine is sufficient for protection against a lethal challenge. This is not only important for the control of natural Ebola outbreaks, but also for rapid control of Ebola intentionally released as a bioterrorism agent.

GeoVax' MVA-VLP vaccine against the Ebola virus is one component of a tetravalent hemorrhagic fever virus vaccine being developed by GeoVax. The other components are Sudan virus (Sudan ebolavirus), Marburg virus, and Lassa virus MVA-VLP vaccines. These vaccines are envisioned as either individual vaccines in epidemic situations or combined as a tetravalent vaccine for the protection of the millions of individuals who live in at-risk areas, travelers, military personnel, healthcare workers, and others.

The company is ready for **human clinical trials** during **1H17**.

Update on Zika Vaccine Program (GOVX-ZM01)

In early February, 2016, GeoVax started a program to develop a vaccine for the prevention of **Zika virus** infections using its novel MVA-VLP vaccine platform. The company believes that it can rapidly advance a vaccine candidate to human clinical testing.

GeoVax is forming **a number of collaborations** to speed the development process of a safe and effective Zika vaccine.

GeoVax has been engaged with scientists at three renowned institutions:

- the CDC for animal testing and access to Zika convalescent sera to help in vaccine development;
- the University of Georgia (UGA) for alternative animal testing models and vaccine development;
- the University of Texas Medical Branch (UTMB) for additional reagents necessary for testing GeoVax's vaccine candidates.

The GeoVax Zika vaccine (designated **GOVX-ZM01**) utilizes the company's proven Modified Vaccinia Virus Ankara –Virus-Like Particle (MVA-VLP) platform that supports in vivo production of non-infectious VLP from the cells of the very person receiving the vaccine.

On June 21, GeoVax discussed its Zika vaccine development plan at the American Society for Virology's 35th Annual Meeting, held at Virginia Polytechnic Institute and State University in Blacksburg, Virginia on June 18-22, 2016.

To rapidly develop a Zika vaccine, GeoVax is leveraging its Modified Vaccinia Virus Ankara (MVA) Virus-Like Particle (VLP) technology for the construction of a Zika vaccine. The MVA-VLP vaccines elicit both antibodies and T cells and hold promise as both single dose, and as prime-boost vaccines.

During the **third quarter of 2016,** the Company demonstrated VLP production from its vaccine candidate and has now commenced preclinical animal studies.

GeoVax is developing **two MVA-VLP vaccine candidates** for Zika virus using sequences from the Asian strain that recently spread to the Americas. This strain is associated with microcephaly in newborns and Guillian-Barre syndrome in adults.

The Company's **first vaccine** is designed to express Zika pre-Membrane and Envelope (prME) proteins to produce Zika VLPs intended to elicit neutralizing antibodies that can block the Zika virus at its entry point into the host. In natural infections, flaviviruses produce non-infectious prME VLPs as well as infectious virus. The **second vaccine** expresses Zika VLPs plus an additional Zika non-structural protein that is shown with other flaviviruses to induce protective antibodies as well as cellular responses against flavivirus infections in humans.

Update on Oncology Immunotherapy Program

On Dec 8, 2015, GeoVax announced that it has begun a new program to evaluate its MVA-VLP vaccine platform for use in **cancer immunotherapy**, and has entered into a Collaborative Research Agreement with the University of Pittsburgh for selection and testing of vaccine candidates.

The Company recently announced a collaboration with **ViaMune**, Inc. for co-development of each company's cancer immunotherapy programs. Upon successful completion of the initial experiments, GeoVax and ViaMune have agreed to contribute their respective intellectual property to a joint venture for further development and commercialization. The goal of the joint venture would be to develop vaccine products for the treatment of multiple cancer indications.

Cancer vaccine or immunotherapy has become the key player in the fight against cancer. The FDA has recently approved a few cancer vaccines/immunotherapies. These include Provenge from Dendreon for the treatment of prostate cancer, Ketruda from Merck for the treatment of lung cancer and melanoma, Opdivo from Bristol-Myers Squibb for the treatment of melanoma, lung cancer and kidney cancer, and Yervoy from Bristol-Myers Squibb for the treatment of melanoma. The cancer immunotherapy will become a multibillion-dollar market in a few years.

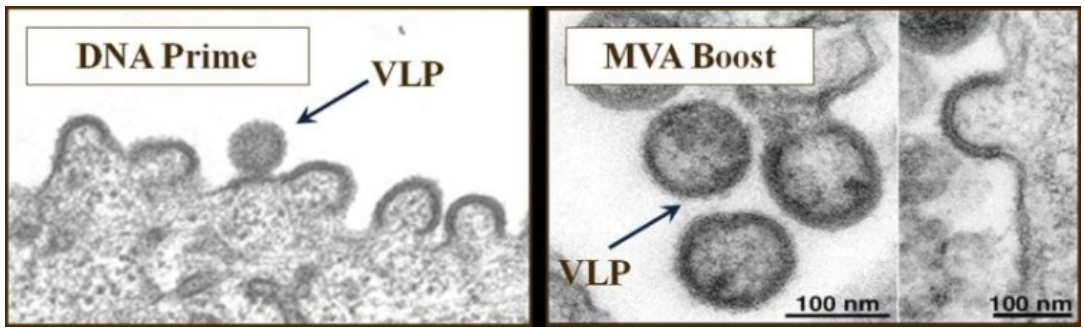
Some tumor-associated antigens are over-expressed or aberrantly expressed in many types of cancer. These antigens in the actual tumors are often recognized as abnormal by patients' immune systems but are not sufficiently immunogenic to trigger an effective immune response. The tumor antigens must be presented to the body in a different form, or in a different way, to enlist the immune system in fighting the cancer. GeoVax's MVA-VLP platform may be able to do exactly this.

The Company's vaccine technology incorporates two vaccine delivery components:

- a recombinant DNA (deoxyribonucleic acid, the primer) and
- a recombinant poxvirus, known as MVA (modified vaccinia Ankara, the booster)

When used together, the recombinant DNA component is used to **prime** the immune response, which is then **boosted** by administration of the recombinant MVA component. However, in certain settings the recombinant **MVA alone** may be sufficient for priming and boosting the immune responses.

Both the DNA and MVA vaccines produce **virus-like particles (VLP)**. Expression of multiple proteins by the vaccine is important because each protein provides targets for cytotoxic T-cells. Elicitation of a multi-target T-cell response limits immune escape, just as multi-drug therapies limit drug escape.



For the DNA Prime, VLPs are seen budding from a DNA-expressing cell. For the MVA boost, fully formed particles as well as a budding particle are shown. The VLPs display trimeric membrane-bound forms of the viral envelope glycoprotein (Env). The VLPs are immature and are rendered non-infectious by deletion of essential genes and introduction of inactivating mutations in essential viral enzymes.

VLPs are designed to elicit:

- protective antibodies – block infection

- cytotoxic T cells – type of white blood cell that kills infected cells

Similarly, GeoVax believes that certain cancer antigens can be genetically modified and delivered using its MVA-VLP platform to train a patient's own immune system to selectively seek and destroy those cells bearing such antigens.

GeoVax's MVA-VLP vaccine platform will allow co-expression of specific cancer antigens and immunomodulatory elements (if needed) tailored to induce a patient's humoral and cellular responses to effectively target and destroy cancer cells.

We welcome the company's decision to expand its platform into the application of cancer immunotherapy. This will further demonstrate the broad utility of the company's MVA vaccine vector beyond infectious diseases for a wide range of possible vaccines.

The cancer immunotherapy program is a new area for GeoVax. The company's primary focus will continue to be infectious disease targets, as with its HIV and Ebola vaccine programs, but the application of its vaccine technology to oncology offers the prospect of addressing some very important unmet medical needs, as well as a significant opportunity to increase shareholder value.

The company has entered a research collaboration with the University of Pittsburgh, which will screen GeoVax's antigen-expressing vaccine candidates using monoclonal antibodies and select vaccines for testing in animal models. The company intends to pursue additional collaborations with leading research institutions and others with novel cancer antigens or technologies suitable for use with its MVA-VLP platform.

Update on Hemorrhagic Fever Vaccine

On Feb 29, 2016, GeoVax announced that it has entered into a Cooperative Research and Development Agreement for Material Transfer with the United States Army Medical Research Institute of Infectious Diseases (USAMRIID) to collaborate on GeoVax's effort to develop a vaccine against **hemorrhagic fever viruses.**

Pursuant to the agreement, GeoVax and USAMRIID will share materials and related information for in vitro and in vivo assessment of GeoVax's MVA-VLP **tetravalent vaccine** against **Ebola Zaire, Ebola Sudan, Marburg, and Lassa fever viruses.**

Researchers at USAMRIID have generated and characterized, in great detail, a wide panel of anti-filovirus and Lassa virus antibodies with different specificities and functionalities. One of these antibodies is now part of ZMapp, an experimental drug comprising three chimeric monoclonal antibodies first tested in humans during the 2014 Ebola epidemic.

Hemorrhagic fever viruses fatal to humans are endemic to Africa where reservoirs remain in animal hosts such as bats, and as the 2014/15 Ebola epidemic showed, these viruses may quickly spread beyond the borders where the outbreak first begins.

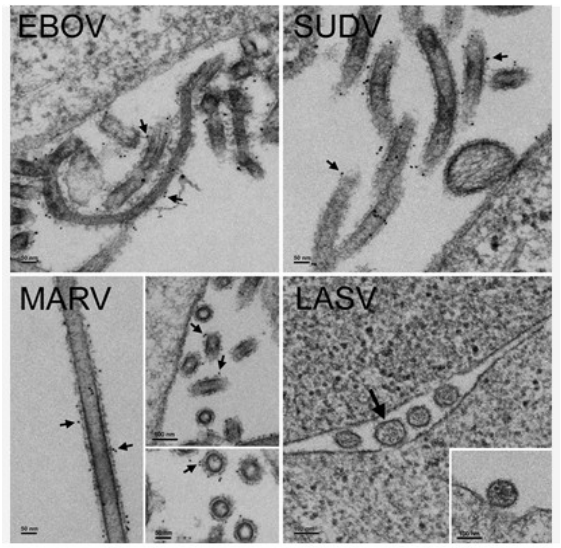
GeoVax has demonstrated 100% protection in small animal models. The next step will be testing in non-human primates.

GeoVax is now preparing for additional challenge studies for the full tetravalent vaccine, which are expected to commence during the **fourth quarter of 2016.**

On July 27, GeoVax provided an update on its Tetravalent Hemorrhagic Fever Vaccine (THV) program.

The company's **GOVX- E303** is based on the Company's novel Modified Vaccinia Ankara (MVA) VLP platform, which generates noninfectious VLPs.

GeoVax has previously demonstrated VLP formation as well as 100% protection in non-human primates after single, or prime/boost, inoculations with its Ebola-Zaire vaccine. The Company now has vaccine constructs against each of the three additional hemorrhagic fever targets and has demonstrated VLP production for each target infection. GeoVax's vaccines are being developed for use as either individual vaccines in epidemic or biothreat situations or combined as a single tetravalent vaccine for protection of the millions of individuals who live in at-risk areas, travelers, military personnel, and healthcare workers.



Attractive Valuation

We maintain our fair valuation at $0.25 per share for GeoVax.

GeoVax has developed the technology for the development of both preventive and therapeutic HIV/AIDS vaccines. The Company's vaccine candidates are the only HIV vaccines for America/Europe entering efficacy trial.

There is a compelling amount of data to indicate the GOVX-B11 could be successful provided the company can secure the necessary funding under favorable terms. Continued development of the new Ebola/Marburg vaccine program and recent expansion to Zika vaccine, HBV and oncology immunotherapy further expands the company's pipeline.

GeoVax has a strong position in intellectual property. The excellent relationship with Emory University put the Company in a better position to get the most advanced vaccine technology in the first hand, therefore providing a sustainable growth engine for the Company.

The Company has a modest cash burn rate ($2 to $3 million annually) due to generous government support. Down the road, we believe GeoVax will continue to seek non-dilutive government and non-government support for its HIV vaccine development. If the boost trial and/or Phase IIb trial proves to be positive, we believe it would be likely for the Company to find a partner from big pharma or biotech companies who seek to boost or enter into the anti-HIV/AIDS market. We believe this could be a major valuation inflection for the company in 2017.

Based on the current fundamentals of the Company, we believe current valuation is attractive. With a decent pipeline and mid-stage candidates, GeoVax is only valued at $3.2 million in market cap. This is a huge discount in our view. We understand that HIV/AIDS vaccines have been tough to develop and that this is a high risk area for any biotech company especially for smaller ones with limited resources.

However, we think GeoVax has done great job so far in the HIV/Ebola vaccine area and is well positioned to continue to create shareholder value down the road.

Moreover, the pipeline expansion to HBV and cancer programs further diversifies the risks.

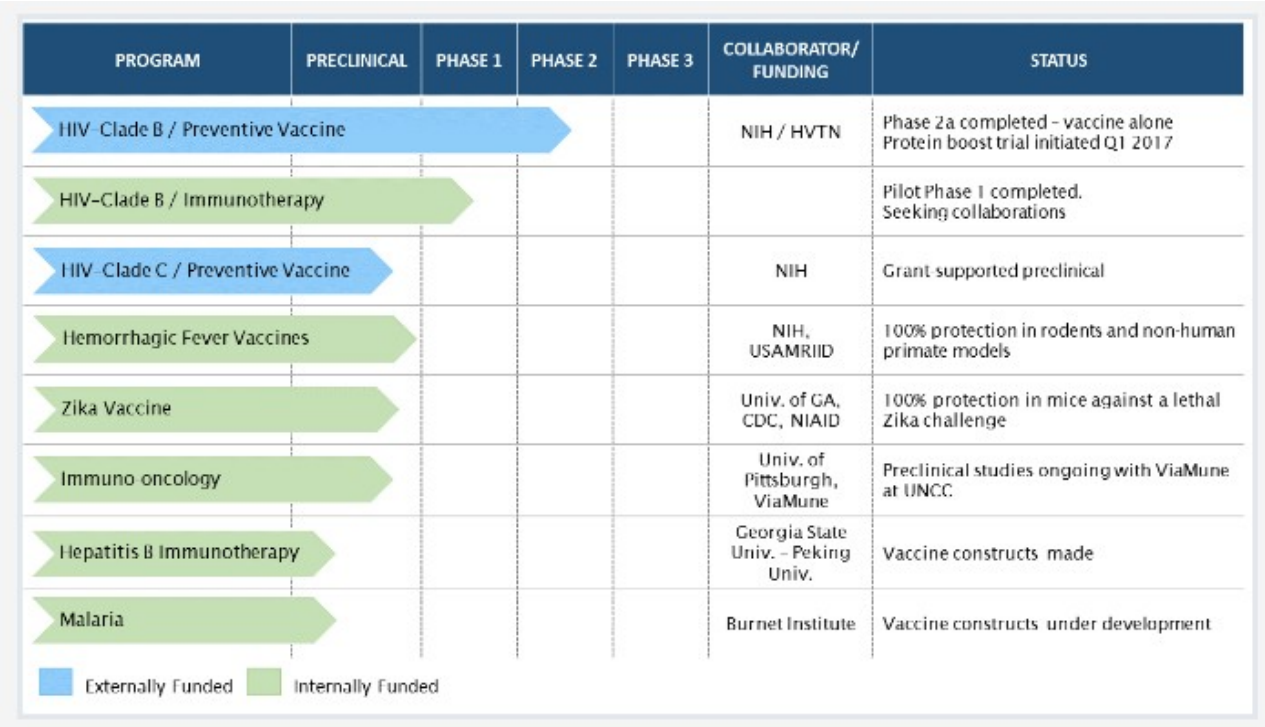
The continued pipeline expansion, multiple collaborations, and high-quality SAB members all serve to validate the broad utility and promise of the company's MVA-VLP vaccine vector platform.

We see GeoVax as a risk reward opportunity with significant long term positive returns. Our price target of $0.25 represents a market cap of $12 million.

But risks must be taken into account when investors add positions.

One major risk is development/regulatory risk. We remind investors that GeoVax's HIV/AIDS vaccines are still in mid-stage development and the Company still needs to navigate through the regulatory process in the US and around the world, which proves to be long and tough. When it comes to HIV/AIDS vaccine, investors should be aware that this has been a tough area to tackle considering the failed developments already.

Cash burn is still a concern. Although most of GeoVax's clinical trials have been supported by the government grants, there is no guarantee that the Company will continue to get enough support to continue late stage clinical studies. In such a case, the Company needs alternative financing measures, which include equity or debt financing. We remind investors that equity financing will dilute existing shareholder base.



PROJECTED INCOME STATEMENT

	2015A (Dec)					2016E (Dec)					2017E (Dec)	2018E (Dec)	2019E (Dec)	2020E (Dec)
$ in million except per share data	Q1	Q2	Q3	Q4	FYA	Q1	Q2	Q3	Q4	FYE	FYE	FYE	FYE	FYE
Grant revenue	$0.10	$0.07	$0.09	$0.16	$0.43	$0.05	$0.17	$0.44	$0.45	$1.10	$1.20	$1.50	$2.00	$3.00
Product Revenue	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$10.00
Total Revenues	**$0.10**	**$0.07**	**$0.09**	**$0.16**	**$0.43**	**$0.05**	**$0.17**	**$0.44**	**$0.45**	**$1.10**	**$1.20**	**$1.50**	**$2.00**	**$13.00**
YOY Growth	-34.1%	-60.3%	-71.1%	-28.4%	-51.5%	-54.0%	132.6%	373.2%	180.9%	157.9%	8.7%	25.0%	33.3%	550.0%
CoGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
Gross Income	**$0.10**	**$0.07**	**$0.09**	**$0.16**	**$0.43**	**$0.05**	**$0.17**	**$0.44**	**$0.45**	**$1.10**	**$1.20**	**$1.50**	**$2.00**	**$11.50**
Gross Margin	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.5%
R&D	$0.40	$0.38	$0.38	$0.53	$1.69	$0.44	$0.40	$0.68	$0.70	$2.22	$2.50	$3.00	$4.00	$6.00
% R&D	390.3%	538.2%	406.5%	328.9%	395.5%	920.2%	239.1%	155.4%	155.6%	201.0%	208.3%	200.0%	200.0%	46.2%
SG&A	$0.40	$0.36	$0.34	$0.33	$1.43	$0.91	$0.34	$0.22	$0.20	$1.67	$2.50	$3.50	$4.80	$6.00
%SG&A	388%	511%	361%	204%	334%	1904%	207%	50%	44%	151%	208%	233%	240%	46%
Operating Income	**($0.7)**	**($0.7)**	**($0.6)**	**($0.7)**	**($2.7)**	**($1.3)**	**($0.6)**	**($0.5)**	**($0.5)**	**($2.8)**	**($3.8)**	**($5.0)**	**($6.8)**	**($0.5)**
Operating Margin	-	-	-	-	-	-	-	-	-	-	-	-		
Other Net	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Pre-Tax Income	**($0.7)**	**($0.7)**	**($0.6)**	**($0.7)**	**($2.7)**	**($1.3)**	**($0.6)**	**($0.5)**	**($0.5)**	**($2.8)**	**($3.8)**	**($5.0)**	**($6.8)**	**($0.5)**
Income taxes(benefit)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.5	$0.5	$0.5
Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reported Net Income	**($0.7)**	**($0.7)**	**($0.6)**	**($0.7)**	**($2.7)**	**($1.3)**	**($0.6)**	**($0.5)**	**($0.5)**	**($2.8)**	**($3.8)**	**($5.5)**	**($7.3)**	**($1.0)**
YOY Growth	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Margin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diluted Shares Out	32.0	32.0	32.0	31.9	32.0	34.6	37.4	44.3	46.0	40.6	65.0	75.0	85.0	95.0
Reported EPS	**($0.02)**	**($0.02)**	**($0.02)**	**($0.02)**	**($0.08)**	**($0.04)**	**($0.02)**	**($0.01)**	**($0.01)**	**($0.07)**	**($0.06)**	**($0.07)**	**($0.09)**	**($0.01)**
One time charge	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*	*$0.00*
Non GAAP Net Income	**($0.7)**	**($0.7)**	**($0.6)**	**($0.7)**	**($2.7)**	**($1.3)**	**($0.6)**	**($0.5)**	**($0.5)**	**($2.8)**	**($3.8)**	**($5.5)**	**($7.3)**	**($1.0)**
Non GAAP EPS	**($0.02)**	**($0.02)**	**($0.02)**	**($0.02)**	**($0.08)**	**($0.04)**	**($0.02)**	**($0.01)**	**($0.01)**	**($0.07)**	**($0.06)**	**($0.07)**	**($0.09)**	**($0.01)**

Source:company filings and Zacks estimate

© Copyright 2017, Zacks Investment Research. All Rights Reserved.

HISTORICAL STOCK PRICE



DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, Grant Zeng, CFA, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESMENT BANKING, REFERRALS, AND FEES FOR SERVICE

Zacks SCR does not provide nor has received compensation for investment banking services on the securities covered in this report. Zacks SCR does not expect to receive compensation for investment banking services on the Small-Cap Universe. Zacks SCR may seek to provide referrals for a fee to investment banks. Zacks & Co., a separate legal entity from ZIR, is, among others, one of these investment banks. Referrals may include securities and issuers noted in this report. Zacks & Co. may have paid referral fees to Zacks SCR related to some of the securities and issuers noted in this report. From time to time, Zacks SCR pays investment banks, including Zacks & Co., a referral fee for research coverage.

Zacks SCR has received compensation for non-investment banking services on the Small-Cap Universe, and expects to receive additional compensation for non-investment banking services on the Small-Cap Universe, paid by issuers of securities covered by Zacks SCR Analysts. Non-investment banking services include investor relations services and software, financial database analysis, advertising services, brokerage services, advisory services, equity research, investment management, non-deal road shows, and attendance fees for conferences sponsored or

© Copyright 2017, Zacks Investment Research. All Rights Reserved.

co-sponsored by Zacks SCR. The fees for these services vary on a per client basis and are subject to the number of services contracted. Fees typically range between ten thousand and fifty thousand USD per annum.

POLICY DISCLOSURES

Zacks SCR Analysts are restricted from holding or trading securities placed on the ZIR, SCR, or Zacks & Co. restricted list, which may include issuers in the Small-Cap Universe. ZIR and Zacks SCR do not make a market in any security nor do they act as dealers in securities. Each Zacks SCR Analyst has full discretion on the rating and price target based on his or her own due diligence. Analysts are paid in part based on the overall profitability of Zacks SCR. Such profitability is derived from a variety of sources and includes payments received from issuers of securities covered by Zacks SCR for services described above. No part of analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports are based on data obtained from sources we believe to be reliable, but are not guaranteed as to be accurate nor do we purport to be complete. Because of individual objectives, this report should not be construed as advice designed to meet the particular investment needs of any investor. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

ZACKS RATING & RECOMMENDATION

ZIR uses the following rating system for the 1110 companies whose securities it covers, including securities covered by Zacks SCR:
Buy/Outperform: The analyst expects that the subject company will outperform the broader U.S. equity market over the next one to two quarters.
Hold/Neutral: The analyst expects that the company will perform in line with the broader U.S. equity market over the next one to two quarters.
Sell/Underperform: The analyst expects the company will underperform the broader U.S. Equity market over the next one to two quarters.

The current distribution is as follows: Buy/Outperform- 17.2%, Hold/Neutral- 76.6%, Sell/Underperform – 5.5%. Data is as of midnight on the business day immediately prior to this publication.