As Filed with the Securities and Exchange Commission on March 23, 2021.

Registration No. 333-239958

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

#### **POST-EFFECTIVE AMENDMENT NO. 1**

## FORM S-1

## **REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

# **GEOVAX LABS, INC.**

(Exact name of registrant as specified in its charter)

Delaware			
(State or other jurisdiction of			
incorporation or organization)			

2834 (Primary Standard Industrial Classification Code Number) 87-0455038 (I.R.S. Employer Identification Number)

### 1900 Lake Park Drive, Suite 380, Smyrna, Georgia 30080, (678) 384-7220

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David A. Dodd With a copy to: **President & Chief Executive Officer** T. Clark Fitzgerald III GeoVax Labs, Inc. Womble Bond Dickinson (US) LLP 1900 Lake Park Drive, Suite 380 271 17th Street NW, Suite 2400 Smyrna, Georgia 30080 Atlanta, Georgia 30363 Tel: (678) 384-7220 Tel: (404) 879-2455 Fax: (678) 384-7283 Fax: (404) 870-4869 Email: ddodd@geovax.com Email: clark.fitzgerald@wbd-us.com

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Amendment No. 1.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.  $\square$ 

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [		Accelerated filer		Non-accelerated f	iler 🔀
Smaller reporting comp	any🖂	Emerging grow	vth c	ompany 🗌	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The registrant hereby amends this Post-Effective Amendment No. 1 to registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Post-Effective Amendment No. 1 to registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Post-Effective Amendment No. 1 to registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

## EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this "Amendment") to the Registration Statement on Form S-1, as amended (Commission File No. 333-239958) (the "Original Registration Statement"), of GeoVax Labs, Inc. (the "Company") is being filed pursuant to the undertakings in the Original Registration Statement to update and supplement the information contained in the Original Registration Statement, which was originally declared effective by the Securities and Exchange Commission on September 24, 2020.

The Original Registration Statement, as amended by this Amendment, pertains solely to the registration of 1,869,966 shares of common stock, par value \$0.001 per share, underlying warrants (the "September Warrants") previously issued by the Company to investors in its September 2020 public offering. The Registrant's issuance and sale of the September Warrants, as well as the underlying common stock, was registered under the Original Registration Statement.

For the convenience of the reader, this Amendment sets forth the Original Registration Statement in its entirety, as amended by this Amendment.

No additional securities are being registered under this Amendment. All applicable registration fees were paid in connection with the initial filings of the Original Registration Statement.

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

### SUBJECT TO COMPLETION, DATED MARCH 23, 2021

PROSPECTUS



# GEOVAX LABS, INC.

# Up to 1,869,966 Shares of Common Stock Underlying Previously Issued Warrants

This prospectus relates to the offer and sale by GeoVax Labs, Inc., a Delaware corporation of up to 1,869,966 shares of common stock, \$0.001 par value, underlying warrants previously issued by us that are issuable at a price of \$5.00 per share from time to time upon exercise of outstanding warrants (the "September Warrants") issued to investors in our September 2020 public offering, the issuance of which was previously registered on a Registration Statement on Form S-1 (File No. 333- 239958).

Upon exercise of the September Warrants, we will receive proceeds from the exercise of such warrants if exercised for cash and not on a cashless basis, subject to an 8% commission. See "Plan of Distribution." Any proceeds received from the exercise of such warrants will be used for general working capital and other corporate purposes.

Our common stock and the September Warrants are listed on the NASDAQ Capital Market under the symbols "GOVX" and "GOVXW," respectively. On March 19, 2021, the last reported sale price of our common stock on the NASDAQ Capital Market was \$5.20 per share and the last reported sale price of September Warrants was \$2.18 per warrant. We urge prospective purchasers of our common stock to obtain current information about the market prices of our common stock and September Warrants.

This prospectus may only be used where it is legal to offer and sell the shares covered by this prospectus. We have not taken any action to register or obtain permission for this offering or the distribution of this prospectus in any country other than the United States.

Investing in the common stock involves a high degree of risk. See "Risk Factors" beginning on page \_ for a discussion of these risks.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is March 23, 2021

PROSPECTUS SUMMARY	1
THE OFFERING	5
RISK FACTORS	6
USE OF PROCEEDS	15
MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS	15
CAPITALIZATION	15
DILUTION	16
BUSINESS	18
AVAILABLE INFORMATION	34
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	34
SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS, DIRECTORS AND OFFICERS	41
MANAGEMENT	42
EXECUTIVE COMPENSATION	44
DIRECTOR COMPENSATION	48
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	50
DESCRIPTION OF SECURITIES	
DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES	59
PLAN OF DISTRIBUTION	60
LEGAL MATTERS	60
EXPERTS	60
INTERESTS OF NAMED EXPERTS AND COUNSEL	60
WHERE YOU CAN FIND MORE INFORMATION	60
INDEX TO FINANCIAL STATEMENTS	62

## TABLE OF CONTENTS

You should rely only on information contained in this prospectus. We have not authorized anyone to provide you with additional information or information different from that contained in this prospectus. Neither the delivery of this prospectus nor the sale of our securities means that the information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or the solicitation of an offer to buy our securities in any circumstances under which the offer or solicitation is unlawful or in any state or other jurisdiction where the offer is not permitted.

The information in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since those dates.

We have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You are required to inform yourself about, and to observe any restrictions relating to, this offering and the distribution of this prospectus.

### CAUTIONARY STATEMENT CONCERNING FORWARD LOOKING STATEMENTS

Some of the statements in this prospectus and in the documents incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our ability to control or predict and that may cause actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or implied by forward-looking statements.

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these identifying words. Our forward-looking statements may include, among other things, statements about:

- our ability to continue as a going concern and our history of losses;
- our ability to obtain additional financing;
- our use of the net proceeds from this offering;
- our ability to prosecute, maintain or enforce our intellectual property rights;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- the implementation of our business model and strategic plans for our business and technology;
- the successful development and regulatory approval of our technologies and products;
- the potential markets for our products and our ability to serve those markets;
- the rate and degree of market acceptance of our products and any future products;
- our ability to retain key management personnel; and
- regulatory developments and our compliance with applicable laws.

Forward-looking statements are inherently subject to risks and uncertainties, many of which we cannot predict with accuracy and some of which we might not even anticipate. Although we believe that the expectations reflected in such forward-looking statements are based upon reasonable assumptions at the time made, we can give no assurance that such expectations will be achieved. Actual events or results may differ materially. Readers are cautioned not to place undue reliance on forward-looking statements. We have no duty to update or revise any forwardlooking statements after the date of this prospectus or to conform them to actual results, new information, future events or otherwise.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these forward-looking statements.

You should read the risk factors and the other cautionary statements made in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

#### PROSPECTUS SUMMARY

The following is only a summary. We urge you to read the entire prospectus, including the more detailed consolidated financial statements and notes to the consolidated financial statements. Investing in our securities involves risks. Therefore, please carefully consider the information provided under the heading "Risk Factors" starting on page 6.

#### **Company Overview**

GeoVax Labs, Inc. ("GeoVax" or the "Company") is a clinical-stage biotechnology company developing immunotherapies and vaccines against infectious diseases and cancers using a novel vector vaccine platform (Modified Vaccinia Ankara-Virus Like Particle or "GV-MVA-VLP<sup>TM</sup>").

In January 2020, we announced the start of our program to develop a vaccine for prevention of novel coronavirus (COVID-19) infection. That effort has resulted in four COVID-19 vaccine candidates. Three COVID-19 vaccine candidates have been designed and constructed and are being tested using relevant experimental animal challenge models.

Our other current development programs are focused on preventive vaccines against hemorrhagic fever viruses (Ebola, Sudan, Marburg, and Lassa fever), Zika virus and malaria; preventive and therapeutic vaccines against Human Immunodeficiency Virus (HIV); as well as immunotherapies for solid tumor cancers.

For our infectious disease vaccines, our recombinant MVA vector expresses target proteins on highly immunogenic virus-like particles ("VLPs") in the person being vaccinated, with the intended result of producing durable immune responses with the safety characteristics of the replication deficient MVA vector and cost-effective manufacturing.

In cancer immunotherapy, we believe that stimulating the immune system to treat or prevent cancers is a compelling concept and that the opportunity for immune-activating technologies is promising, especially in light of advancements such as checkpoint inhibitors leading the way in oncology. Despite drug approvals in limited indications and promising results in clinical trials, there remains a significant need and opportunity for further advancements. We believe our GV-MVA-VLP<sup>TM</sup> platform is well-suited for delivery of tumor-associated antigens and we plan to pursue development of our platform in this space.

Our most advanced vaccine program is focused on prevention of the clade B subtype of HIV prevalent in the regions of the Americas, Western Europe, Japan and Australia; our HIV vaccine candidate, GOVX-B11, will be included in an upcoming clinical trial (HVTN 132) managed by the HIV Vaccine Clinical Trials Network (HVTN) with support from the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH), which we expect may begin in late 2021. Additionally, during August 2020 a consortium led by researchers at the University of California, San Francisco (UCSF) began a clinical trial using our vaccine as part of a combinational therapy to induce remission in HIV-positive individuals. Through the efforts of our collaborator, American Gene Technologies International, Inc. (AGT), we expect that our HIV vaccine will also enter clinical trials during 2021 in combination with AGT's gene therapy technology to seek a functional cure for HIV.

Our other vaccine and immunotherapy programs are at various other stages of development as described below.

#### **Recent Developments**

On January 11, 2021, we **a**nnounced that the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), had awarded the Company a Small Business Innovative Research (SBIR) grant in support of its development of a vaccine against SARS-CoV-2, the virus that causes COVID-19.

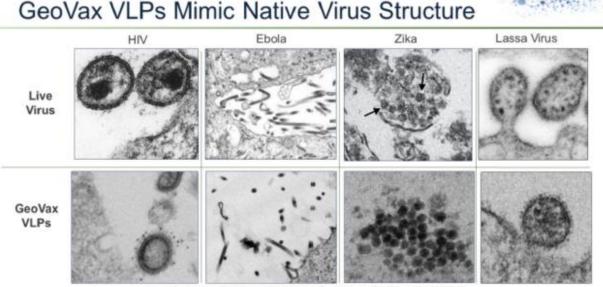
The Phase 1 grant, titled, "*Preclinical Development of GV-MVA-VLP Vaccines Against COVID-19*," will support the ongoing design, construction and preclinical testing of GeoVax's vaccine candidates in preparation for human clinical trials. The efficacy testing will be performed in collaboration with the University of Texas Medical Branch (UTMB).

#### **Our Differentiated Vaccine and Immunotherapy Platform**

Vaccines typically contain agents (antigens) that resemble disease-causing microorganisms. Traditional vaccines are often made from weakened or killed forms of the virus or from its surface proteins. Some newer vaccines use recombinant DNA (deoxyribonucleic acid) technology to generate vaccine antigens in bacteria or cultured cells from specific portions of the DNA sequence of the target pathogen. The generated antigens are then purified and formulated for use in a vaccine. We believe the most successful of these purified antigens have been non-infectious virus-like particles (VLPs) as exemplified by vaccines for hepatitis B (Merck's Recombivax® and GSK's Engerix®) and Papilloma viruses (GSK's Cervarix®, and Merck's Gardasil®). Our approach uses recombinant DNA and/or recombinant MVA to produce VLPs in the person being vaccinated (in vivo) reducing complexity and costs of manufacturing. In human clinical trials of our HIV vaccines, we believe we have demonstrated that our VLPs, expressed from within the cells of the person being vaccinated, can be safe, yet elicit both strong and durable humoral and cellular immune response.

VLPs mimic authentic viruses in form but are not infectious or capable of replicating and can cause the body's immune system to recognize and kill targeted viruses to prevent an infection. VLPs can also train the immune system to recognize and kill virus-infected cells to control infection and reduce the length and severity of disease. One of the biggest challenges with VLP-based vaccines is to design the vaccines in such a way that the VLPs will be recognized by the immune system in the same way as the authentic virus would be. We design our vaccines such that, when VLPs for enveloped viruses like HIV, Ebola, Marburg or Lassa fever are produced *in vivo* (in the cells of the recipient), they include not only the protein antigens, but also an envelope consisting of membranes from the vaccinated individual's cells. In this way, they are highly similar to the virus generated in a person's body during a natural infection. VLPs produced *in vitro* (in a pharmaceutical plant), by contrast, have no envelope; or, envelopes from the cultured cells (typically hamster or insect cells) used to produce them. We believe our technology therefore provides distinct advantages by producing VLPs that more closely resemble the authentic viruses. We believe this feature of our immunogens allows the body's immune system to more readily recognize the virus. By producing VLPs *in vivo*, we believe we also avoid potential purification issues associated with *in vitro* production of VLPs.

Figure 1 below shows examples of thin section electron micrographs of actual viruses and VLPs for these viruses expressed by GeoVax MVA-VLP vaccines.



HIV Image Form Schubert et al. (2000)/PMAD 97: 13057-62. Ebole image Form CDC. 2kis Image Form Maker et al. (2006) 374:950-958.

Figure 1. Comparison of MVA-VLPs and native virus structures

In the MVA-VLP platform, we take advantage of MVA's large "coding capacity" to insert genes that encode multiple proteins, the combination of which is adequate to support the generation of VLPs by the MVA infected cells. Utility has been demonstrated for multiple vaccine candidates wherein the MVA-encoded viral matrix proteins and

glycoproteins assemble into VLPs. MVA was originally developed as a safer smallpox vaccine for use in immunecompromised individuals. It was developed by attenuating the standard smallpox vaccine by passaging it (over 500 passages) in chicken embryos or chicken embryo fibroblasts, resulting in a virus with limited ability to replicate in human cells (thus safe) but with high replication capability in avian cells (thus cost effective for manufacturing). The deletions also resulted in the loss of immune evasion genes which assist the spread of wild type smallpox infections, even in the presence of human immune responses.

#### Strategy

Our corporate strategy is to advance, protect and exploit our differentiated vaccine/immunotherapy platform leading to the successful development of preventive and therapeutic vaccines against infectious diseases and various cancers. With our design and development capabilities, we are progressing and validating an array of cancer and infectious disease immunotherapy and vaccine product candidates. Our goal is to advance products through regulatory registration and commercialization while maintaining consideration of collaborations and partnering that will maximize the financial value return to our stockholders. We also seek to leverage third party resources through collaborations and partnerships for preclinical and clinical testing, as well as strategic supply chain relationships with various government, academic and industry entities to ensure and achieve the highest level of expertise and quality in support of our developments.

We selected MVA for use as the live viral component of our vaccines because of its well-established safety record and because of the ability of this vector to carry sufficient viral sequences to produce VLPs. MVA was originally developed as a safer smallpox vaccine for use in immune-compromised individuals. It was developed by attenuating the standard smallpox vaccine by passaging it (over 500 passages) in chicken embryos or chicken embryos fibroblasts, resulting in a virus with limited ability to replicate in human cells (thus safe) but with high replication capability in avian cells (thus cost effective for manufacturing). The deletions also resulted in the loss of immune evasion genes which assist the spread of wild type smallpox infections, even in the presence of human immune responses.

#### **Our Product Development Pipeline**

Our primary focus is to advance, independently and in partnerships, the products developed from our GV-MVA-VLP<sup>TM</sup> platform. We are currently developing a number of vaccines and immunotherapies for prevention or treatment of infectious diseases and cancer. The table below summarizes the status of our product development programs, which are discussed in greater detail in the following pages.

<u>Development</u> <u>Collaborators / Sponsors</u>
1 Emory
l completed Univ. of Pittsburgh, ViaMune
1
l Leidos
completed NIH, HVTN, Emory
AGT, UCSF
l completed NIH, CDC
1 Leidos, Burnet Institute
l completed NIH, USAMRIID, UTMB
1 NIH, DoD, Scripps, IHV, UTMB, USNRL,
Geneva Foundation
1 UTMB

We are seeking to develop a broad product pipeline based on our GV-MVA-VLP<sup>TM</sup> platform and have been pleased with the results, particularly considering the challenges we have faced in obtaining sufficient capital prior to our underwritten public offering in September 2020, and the related relatively small number of scientifically skilled employees we employ. These constraints have made it necessary to set priorities as to our primary focuses, and those will change as opportunities, resources, and other circumstances dictate. During 2019, for example, in addition to

working with our collaborators/sponsors, we chose to focus a portion of our management time and budget in the area of immuno-oncology. More recently, the emergence of novel coronavirus (COVID-19) led us to decide to devote our management time and resources, and our platform, to address this epidemic. At times, some of our development programs are paused as we shift our focus due to our limited resources.

### **Principal Risks**

Any investment in our securities involves a high degree of risk. You should consider carefully the risks described below, and the more detailed information at "Risk Factors" on page 6 of this prospectus, together with all of the other information contained in this prospectus.

- We have a history of operating losses, and we expect losses to continue for the foreseeable future;
- Our business will require continued funding. If we do not receive adequate funding, we will not be able to continue our operations;
- Our products are still being developed, are unproven, and may not be successful;
- We depend upon key personnel who may terminate their employment with us at any time. If we were to lose the services of any of these individuals, our business and operations may be adversely affected;
- Regulatory and legal uncertainties could result in significant costs or otherwise harm our business;
- We face intense competition and rapid technological change that could result in products that are superior to the products we are developing; and our product candidates are based on new medical technology and, consequently, are inherently risky;
- Concerns about the safety and efficacy of our products could limit our future success;
- We may experience delays in our clinical trials that could adversely affect our financial results and our commercial prospects;
- Failure to obtain timely regulatory approvals required to exploit the commercial potential of our products could increase our future development costs or impair our future sales;
- Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations;
- We could lose our license rights to our important intellectual property if we do not fulfill our contractual obligations to our licensors;
- Other parties may claim that we infringe their intellectual property or proprietary rights, which could cause us to incur significant expenses or prevent us from selling products;
- The market price of our common stock is highly volatile;
- Our common stock does not have a vigorous trading market and investors may not be able to sell their securities when desired; and
- We will need additional capital, and the sale of additional shares or other equity securities could result in additional dilution to our stockholders

#### **Corporate Information**

We are incorporated under the laws of the State of Delaware. Our principal corporate offices are located at 1900 Lake Park Drive, Suite 380, Smyrna, Georgia 30080 (metropolitan Atlanta). Our telephone number is (678) 384-

7220. The address of our website is www.geovax.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the "Investors" section of our website as soon as reasonably practicable after such materials have been electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). Information contained on our website does not form a part of this prospectus.

### THE OFFERING

Common Stock Offered by us	Up to 1,869,966 shares of common stock issuable upon exercise of the outstanding September Warrants. Each September Warrant is exercisable at any time for the purchase of one share of our common stock at an exercise price of \$5.00 per share. The September Warrants expire on September 29, 2025.
Common Stock Outstanding prior to this offering	6,315,467 <sup>(1)</sup>
Common Stock Outstanding after this offering	8,185,433 shares, assuming full exercise of the September Warrants
Use of Proceeds	We will receive approximately \$9,349,830 of proceeds if all the currently outstanding September Warrants are exercised for cash net of an 8% commission and our anticipated offering expenses. See "Plan of Distribution." We currently intend to use these proceeds for general corporate purposes. See "Use of Proceeds."
NASDAQ Capital Markets Symbols	Our common stock and the September Warrants are listed on the NASDAQ Capital Market under the symbols "GOVX" and "GOVXW," respectively.
Risk Factors	Investment in our securities involves a high degree of risk and could result in a loss of your entire investment. See "Risk Factors" beginning on page 6 to read about factors you should consider before buying our shares of common stock.

The number of shares of our common stock outstanding after the completion of this offering is based on 6,315,467 shares of our common stock outstanding as of March 23, 2021, and excludes

- 2,793,635 shares of common stock issuable upon the exercise of other outstanding warrants with a weighted average exercise price of \$5.07 per share; or
- 980,000 shares of our common stock which are reserved for issuance under our 2020 Stock Incentive Plan. The issuance of 750,000 of those shares is contingent upon receipt of stockholder approval of their inclusion in the 2020 Stock Incentive Plan. On December 2, 2020, we granted options to purchase 602,000 shares under the plan at an exercise price of \$2.79 per share. Of those, 536,000 are contingent upon receipt of stockholder approval.

#### **RISK FACTORS**

Any investment in our securities involves a high degree of risk. You should consider carefully the risks described below, together with all of the other information contained in this prospectus, before you decide whether to purchase our securities. If any of these actually occur, our business, financial condition or operating results could be adversely affected. The risks described below are not the only ones we face. Additional risks not currently known to us or that we currently do not deem material also may become important factors that may materially and adversely affect our business. The trading price of our securities could decline due to any of these described or additional risks and you could lose part or all of your investment.

### **Risks Related to Our Business**

#### We have a history of operating losses, and we expect losses to continue for the foreseeable future.

As a research and development-focused company, we have had no product revenue to date and revenues from our government grants and other collaborations have not generated sufficient cash flows to cover operating expenses. Since our inception, we have incurred operating losses each year due to costs incurred in connection with research and development activities and general and administrative expenses associated with our operating losses and expect cumulative losses to increase as our research and development, preclinical, clinical, and manufacturing efforts expand. Our ability to generate revenue and achieve profitability depends on our ability to successfully complete the development of our product candidates, conduct preclinical tests and clinical trials, obtain the necessary regulatory approvals, and manufacture and market or otherwise commercialize our products. Unless we are able to successfully meet these challenges, we will not be profitable and may not remain in business.

# Our business will require continued funding. If we do not receive adequate funding, we will not be able to continue our operations.

To date, we have financed our operations principally through the sale of our equity securities and through government grants and clinical trial support. We will require substantial additional financing at various intervals for our operations, including clinical trials, operating expenses, intellectual property protection and enforcement, for pursuit of regulatory approvals, and for establishing or contracting out manufacturing, marketing and sales functions. There is no assurance that such additional funding will be available on terms acceptable to us or at all. If we are not able to secure the significant funding that is required to maintain and continue our operations at current levels, or at levels that may be required in the future, we may be required to delay clinical studies or clinical trials, curtail operations, or obtain funds through collaborative arrangements that may require us to relinquish rights to some of our products or potential markets.

The costs of conducting all of our human clinical trials to date for our preventive HIV vaccine have been borne by the HVTN, with funding by NIAID, and we expect NIAID support for additional clinical trials. GeoVax incurs costs associated with manufacturing the clinical vaccine supplies and other study support. We cannot predict the level of support we will receive from the HVTN or NIAID for any additional clinical trials of our HIV vaccines.

Our current operations are also partially supported by U.S. government grants awarded to us to support our COVID-19 and Lassa Fever vaccine programs. We are pursuing additional support from the federal government for our vaccine programs; however, as we progress to the later stages of our vaccine development activities, government financial support may be more difficult to obtain, or may not be available at all. Furthermore, there is some risk that actual funding for grants could be delayed, cut back, or eliminated due to government budget constraints. Therefore, it will be necessary for us to look to other sources of funding to finance our development activities.

We expect that our current working capital, combined with proceeds from current government grants, will be sufficient to support our planned level of operations into 2023. We will need to raise additional funds to significantly advance our vaccine development programs and to continue our operations. In order to meet our operating cash flow needs we plan to seek sources of non-dilutive capital through government grant programs and clinical trial support. We may also plan additional offerings of our equity securities, debt, or convertible debt instruments. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, the consequences could have a material adverse effect on our business, operating results, financial condition and prospects.

# Significant disruptions of information technology systems or breaches of information security systems could adversely affect our business.

We rely upon a combination of information technology systems and traditional recordkeeping to operate our business. In the ordinary course of business, we collect, store, and transmit confidential information (including, but not limited to, personal information and intellectual property). We have also outsourced elements of our operations to third parties, including elements of our information technology systems and, as a result, we manage a number of independent vendor relationships with third parties who may or could have access to our confidential information. Our information technology and information security systems and records are potentially vulnerable to security breaches, service interruptions, or data loss from inadvertent or intentional actions by our employees or vendors. Our information technology and information security systems and records are also potentially vulnerable to malicious attacks by third parties. Such attacks are of ever-increasing levels of sophistication and are made by groups and individuals with a wide range of expertise and motives (including, but not limited to, financial crime, industrial espionage, and market manipulation).

While we have invested, and continue to invest, a portion of our limited funds in our information technology and information security systems, there can be no assurance that our efforts will prevent security breaches, service interruptions, or data losses. Any security breaches, service interruptions, or data losses could adversely affect our business operations and/or result in the loss of critical or sensitive confidential information or intellectual property, and could result in financial, legal, business, and reputational harm to us or allow third parties to gain material, inside information that they may use to trade in our securities.

# Our business could be adversely affected by widespread public health epidemics or other catastrophic events beyond our control.

In addition to our reliance on our own employees and facilities, we depend on our collaborators, laboratories and other facilities for the continued operation of our business. Despite any precautions we take, public health epidemics, such as COVID-19, or other catastrophic events, such as natural disasters, terrorist attack, hurricanes, fire, floods and ice and snowstorms, may result in interruptions in our business.

In response to the COVID-19 pandemic, we have suspended all non-essential travel for our employees, are canceling or postponing in-person attendance at industry events, and limiting in-person work-related meetings. Currently, as a result of the work and travel restrictions related to the ongoing pandemic, several of our business activities are being conducted remotely which might be less effective than in-person meetings or in-office work. Despite these precautions, the necessary work within our laboratory and of our collaborators has continued without significant interruption. Although we continue to monitor the situation and may adjust our current policies as more information and guidance become available, temporarily suspending travel and limitations on doing business in-person has and could continue to negatively impact our business development efforts and create operational or other challenges, any of which could harm our business, financial condition and results of operations.

In addition, the COVID-19 pandemic could disrupt our operations due to absenteeism by infected or ill members of management or other employees because of our limited staffing. COVID-19 related illness could also impact members of our Board of Directors resulting in absenteeism from meetings of the directors or committees of directors, and making it more difficult to convene the quorums of the full Board of Directors or its committees needed to conduct meetings for the management of our affairs.

### Risks Related to Development and Commercialization of Product Candidates and Dependence on Third Parties

#### Our products are still being developed and are unproven. These products may not be successful.

To become profitable, we must generate revenue through sales of our products. However, our products are in varying stages of development and testing. Our products have not been proven in human clinical trials and have not been approved by any government agency for sale. If we cannot successfully develop and prove our products and processes, or if we do not develop other sources of revenue, we will not become profitable and at some point, we would discontinue operations.

# We depend upon key personnel who may terminate their employment with us at any time. If we were to lose the services of any of these individuals, our business and operations may be adversely affected.

The success of our business strategy will depend to a significant degree upon the continued services of key management, technical and scientific personnel and our ability to attract and retain additional qualified personnel and managers. Competition for qualified personnel is intense among companies, academic institutions and other organizations. The ability to attract and retain personnel is adversely affected by our financial challenges. If we are unable to attract and retain key personnel and advisors, it may negatively affect our ability to successfully develop, test, commercialize and market our products and product candidates.

#### Regulatory and legal uncertainties could result in significant costs or otherwise harm our business.

To manufacture and sell our products, we must comply with extensive domestic and international regulation. In order to sell our products in the United States, approval from the U.S. Food and Drug Administration (the "FDA") is required. Satisfaction of regulatory requirements, including FDA requirements, typically takes many years, and if approval is obtained at all, it is dependent upon the type, complexity and novelty of the product, and requires the expenditure of substantial resources. We cannot predict whether our products will be approved by the FDA. Even if they are approved, we cannot predict the time frame for approval. Foreign regulatory requirements differ from jurisdiction and may, in some cases, be more stringent or difficult to meet than FDA requirements. As with the FDA, we cannot predict if or when we may obtain these regulatory approvals. If we cannot demonstrate that our products can be used safely and successfully in a broad segment of the patient population on a long-term basis, our products would likely be denied approval by the FDA and the regulatory agencies of foreign governments.

# We face intense competition and rapid technological change that could result in products that are superior to the products we will be commercializing or developing.

The market for vaccines that protect against or treat human infectious diseases is intensely competitive and is subject to rapid and significant technological change. We have numerous competitors in the United States and abroad, including, among others, large companies with substantially greater resources than us. If any of our competitors develop products with efficacy or safety profiles significantly better than our products, we may not be able to commercialize our products, and sales of any of our commercialized products could be harmed. Some of our competitors and potential competitors have substantially greater product development capabilities and financial, scientific, marketing and human resources than we do. Competitors may develop products earlier, obtain FDA approvals for products more rapidly, or develop products that are more effective than those under development by us. We will seek to expand our technological capabilities to remain competitive; however, research and development by others may render our technologies or products obsolete or noncompetitive, or result in treatments or cures superior to ours.

# Our product candidates are based on new medical technology and, consequently, are inherently risky. Concerns about the safety and efficacy of our products could limit our future success.

We are subject to the risks of failure inherent in the development of product candidates based on new medical technologies. These risks include the possibility that the products we create will not be effective, that our product candidates will be unsafe or otherwise fail to receive the necessary regulatory approvals, and that our product candidates will be hard to manufacture on a large scale or will be uneconomical to market.

Many pharmaceutical products cause multiple potential complications and side effects, not all of which can be predicted with accuracy and many of which may vary from patient to patient. Long term follow-up data may reveal previously unidentified complications associated with our products. The responses of potential physicians and others to information about complications could materially adversely affect the market acceptance of our products, which in turn would materially harm our business.

# We may experience delays in our clinical trials that could adversely affect our financial results and our commercial prospects.

We do not know whether planned pre-clinical and clinical trials will begin on time or whether we will complete any of our trials on schedule, if at all. Product development costs will increase if we have delays in testing or approvals or if we need to perform more or larger clinical trials than planned. Significant delays may adversely affect our financial results and the commercial prospects for our products and delay our ability to become profitable.

We rely heavily on the HVTN, independent clinical investigators, vaccine manufacturers, and other thirdparty service providers for successful execution of our clinical trials, but do not control many aspects of their activities. We are responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practices, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates. There is also a risk of changes in clinical trial strategy and timelines due to the HVTN and NIAID altering their trial strategy.

# Failure to obtain timely regulatory approvals required to exploit the commercial potential of our products could increase our future development costs or impair our future sales.

None of our vaccines are approved by the FDA for sale in the United States or by other regulatory authorities for sale in foreign countries. To exploit the commercial potential of our technologies, we are conducting and planning to conduct additional pre-clinical studies and clinical trials. This process is expensive and can require a significant amount of time. Failure can occur at any stage of testing, even if the results are favorable. Failure to adequately demonstrate safety and efficacy in clinical trials could delay or preclude regulatory approval and restrict our ability to commercialize our technology or products. Any such failure may severely harm our business. In addition, any approvals we obtain may not cover all of the clinical indications for which approval is sought or may contain significant limitations in the form of narrow indications, warnings, precautions or contraindications with respect to conditions of use, or in the form of onerous risk management plans, restrictions on distribution, or post-approval study requirements.

# State pharmaceutical marketing compliance and reporting requirements may expose us to regulatory and legal action by state governments or other government authorities.

Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs and file periodic reports on sales, marketing, pricing and other activities. Similar legislation is being considered in other states. Many of these requirements are new and uncertain, and available guidance is limited. Unless we are in full compliance with these laws, we could face enforcement action, fines, and other penalties and could receive adverse publicity, all of which could harm our business.

### Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations.

In the United States and foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval. Among policy makers and payors in the United States and elsewhere, including in the European Union, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "Affordable Care Act"), substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act includes a number of provisions that are intended to lower healthcare costs, including provisions relating to prescription drug prices and government spending on medical products.

Since its enactment, there have also been judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as efforts by to repeal or replace certain aspects of the statute. We continue to evaluate the effect that the Affordable Care Act and subsequent changes to the statute has on our business. It is uncertain the extent to which any such changes may impact our business or financial condition.

There has also been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products. There have been several Congressional inquiries and proposed bills, as well as state efforts, designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. In June 2017, the FDA issued a Drug Competition Action plan intended to lower prescription drug prices by encouraging competition from generic versions of existing products. In July 2018, the FDA issued a Biosimilar Action Plan, intended to similarly promote competition to prescription biologics from biosimilars.

Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures. For example, in September 2017, the California State Assembly approved SB17, which requires pharmaceutical companies to notify health insurers and government health plans at least 60 days before any scheduled increases in the prices of their products if they exceed 16% over a two-year period, and further requiring pharmaceutical companies to explain the reasons for such increase. Effective in 2016, Vermont passed a law requiring certain manufacturers identified by the state to justify their price increases.

We expect that these, and other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs, once marketing approval is obtained.

# We may not be successful in establishing collaborations for product candidates we seek to commercialize, which could adversely affect our ability to discover, develop, and commercialize products.

We expect to seek collaborations for the development and commercialization of product candidates in the future. The timing and terms of any collaboration will depend on the evaluation by prospective collaborators of the clinical trial results and other aspects of a product's safety and efficacy profile. If we are unable to reach agreements with suitable collaborators for any product candidate, we will be forced to fund the entire development and commercialization of such product candidates, ourselves, and we may not have the resources to do so. If resource constraints require us to enter into a collaboration agreement early in the development of a product candidate, we may be forced to accept a more limited share of any revenues the product may eventually generate. We face significant competition in seeking appropriate collaborators. Moreover, these collaboration arrangements are complex and time-consuming to negotiate and document. We may not be successful in our efforts to establish collaborations, we may not be able to ensure fulfillment by collaborators of their obligations or our expectations.

#### We do not have manufacturing, sales or marketing experience.

We do not have experience in manufacturing, selling, or marketing. To obtain the expertise necessary to successfully manufacture, market, and sell our products, we must develop our own commercial infrastructure and/or collaborative commercial arrangements and partnerships. Our ability to execute our current operating plan is dependent on numerous factors, including, the performance of third-party collaborators with whom we may contract.

### Our products under development may not gain market acceptance.

Our products may not gain market acceptance among physicians, patients, healthcare payers and the medical community. Significant factors in determining whether we will be able to compete successfully include:

- the efficacy and safety of our products;
- the time and scope of regulatory approval;
- reimbursement coverage from insurance companies and others;
- the price and cost-effectiveness of our products, especially as compared to any competitive products; and
- the ability to maintain patent protection.

#### We may be required to defend lawsuits or pay damages for product liability claims.

Product liability is a major risk in testing and marketing biotechnology and pharmaceutical products. We may face substantial product liability exposure in human clinical trials and for products that we sell after regulatory approval. We carry product liability insurance and we expect to continue such policies. However, product liability claims, regardless of their merits, could exceed policy limits, divert management's attention, and adversely affect our reputation and demand for our products.

# Reimbursement decisions by third-party payors may have an adverse effect on pricing and market acceptance. If there is not sufficient reimbursement for our products, it is less likely that they will be widely used.

Market acceptance of products we develop, if approved, will depend on reimbursement policies and may be affected by, among other things, future healthcare reform measures. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs they will cover and establish payment levels. We cannot be certain that reimbursement will be available for any products that we may develop. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for our products. If reimbursement is not available or is available on a limited basis, we may not be able to successfully commercialize products that we develop.

### **Risks Related to Our Intellectual Property**

# We could lose our license rights to our important intellectual property if we do not fulfill our contractual obligations to our licensors.

Our rights to significant parts of the technology we use in our products are licensed from third parties and are subject to termination if we do not fulfill our contractual obligations to our licensors. Termination of intellectual property rights under any of our license agreements could adversely impact our ability to produce or protect our products. Our obligations under our license agreements include requirements that we make milestone payments to our licensors upon the achievement of clinical development and regulatory approval milestones, royalties as we sell commercial products, and reimbursement of patent filing and maintenance expenses. Should we become bankrupt or otherwise unable to fulfill our contractual obligations, our licensors could terminate our rights to critical technology that we rely upon.

# Other parties may claim that we infringe their intellectual property or proprietary rights, which could cause us to incur significant expenses or prevent us from selling products.

Our success will depend in part on our ability to operate without infringing the patents and proprietary rights of third parties. The manufacture, use and sale of new products have been subject to substantial patent rights litigation in the pharmaceutical industry. These lawsuits generally relate to the validity and infringement of patents or proprietary rights of third parties. Infringement litigation is prevalent with respect to generic versions of products for which the patent covering the brand name product is expiring, particularly since many companies that market generic products focus their development efforts on products with expiring patents. Pharmaceutical companies, biotechnology companies, universities, research institutions or other third parties may have filed patent applications or may have been granted patents that cover aspects of our products or our licensors' products, product candidates or other technologies.

Future or existing patents issued to third parties may contain patent claims that conflict with those of our products. We expect to be subject to infringement claims from time to time in the ordinary course of business, and third parties could assert infringement claims against us in the future with respect to our current products or with respect to products that we may develop or license. Litigation or interference proceedings could force us to:

- stop or delay selling, manufacturing or using products that incorporate, or are made using the challenged intellectual property;
- pay damages; or
- enter into licensing or royalty agreements that may not be available on acceptable terms, if at all.

Any litigation or interference proceedings, regardless of their outcome, would likely delay the regulatory approval process, be costly and require significant time and attention of our key management and technical personnel.

# Any inability to protect intellectual property rights in the United States and foreign countries could limit our ability to manufacture or sell products.

We will rely on trade secrets, unpatented proprietary know-how, continuing technological innovation and, in some cases, patent protection to preserve our competitive position. Our patents and licensed patent rights may be challenged, invalidated, infringed or circumvented, and the rights granted in those patents may not provide proprietary protection or competitive advantages to us. We and our licensors may not be able to develop patentable products with acceptable patent protection. Even if patent claims are allowed, the claims may not issue, or in the event of issuance, may not be sufficient to protect the technology owned by or licensed to us. If patents containing competitive or conflicting claims are issued to third parties, we may be prevented from commercializing the products covered by such patents or may be required to obtain or develop alternate technology. In addition, other parties may duplicate, design around or independently develop similar or alternative technologies.

We may not be able to prevent third parties from infringing or using our intellectual property, and the parties from whom we may license intellectual property may not be able to prevent third parties from infringing or using the licensed intellectual property. We generally attempt to control and limit access to, and the distribution of, our product documentation and other proprietary information. Despite efforts to protect this proprietary information, unauthorized parties may obtain and use information that we may regard as proprietary. Other parties may independently develop similar know-how or may even obtain access to these technologies.

The laws of some foreign countries do not protect proprietary information to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary information in these foreign countries.

Neither the U.S. Patent and Trademark Office nor the courts have established a consistent policy regarding the breadth of claims allowed in pharmaceutical patents. The allowance of broader claims may increase the incidence and cost of patent interference proceedings and the risk of infringement litigation. On the other hand, the allowance of narrower claims may limit the value of our proprietary rights.

### **Risks Related To Our Common Stock**

# Upon exercise of our outstanding warrants we will be obligated to issue a substantial number of additional shares of common stock which will dilute our present shareholders.

We are obligated to issue additional shares of our common stock in connection with our outstanding warrants. Currently outstanding warrants are exercisable for 2,793,635 shares. The exercise of these warrants will cause us to issue additional shares of our common stock and will dilute the percentage ownership of our shareholders.

#### The market price of our common stock is highly volatile.

The market price of our common stock has been, and is expected to continue to be, highly volatile. Certain factors, including announcements of new developments by us or other companies, regulatory matters, new or existing medicines or procedures, concerns about our financial position, operating results, litigation, government regulation, developments or disputes relating to agreements, patents or proprietary rights, may have a significant impact on the market price of our stock. In addition, potential dilutive effects of future sales of shares of common stock by us, and subsequent sales of common stock by the holders of our options and warrants could have an adverse effect on the market price of our shares.

In addition, the securities markets from time to time experience significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock.

# We will need additional capital, and the sale of additional shares or other equity securities could result in additional dilution to our stockholders.

In order to meet our operating cash flow needs, we may plan additional offerings of our equity securities, debt, or convertible debt instruments. The sale of additional equity securities could result in significant additional dilution to our stockholders. The incurrence of indebtedness could result in debt service obligations and operating and financing covenants that would restrict our operations. We cannot assure investors that financing will be available in amounts or on terms acceptable to us, if at all.

# Certain provisions of our certificate of incorporation which authorize the issuance of additional shares of preferred stock may make it more difficult for a third party to effect a change in control.

Our certificate of incorporation authorizes our Board of Directors to issue up to 10,000,000 shares of preferred stock. We have issued, and there are outstanding, 100 shares of Series B Convertible Preferred Stock. The remaining shares of preferred stock may be issued in one or more series, the terms of which may be determined at the time of issuance by our Board of Directors without further action by the stockholders. These terms may include voting rights including the right to vote as a series on particular matters, preferences as to dividends and liquidation, conversion rights, redemption rights and sinking fund provisions. The issuance of any newly issued preferred stock could diminish the rights of holders of our common stock, and therefore could reduce the value of our common stock. In addition, specific rights granted to future holders of preferred stock could be used to restrict our ability to merge with, or sell assets to, a third party. The ability of our Board of Directors to issue preferred stock could make it more difficult, delay, discourage, prevent or make it costlier to acquire or effect a change-in-control, which in turn could prevent the stockholders from recognizing a gain in the event that a favorable offer is extended and could materially and negatively affect the market price of our common stock.

### We have never paid dividends and have no plans to do so.

Holders of shares of our common stock are entitled to receive such dividends as may be declared by our Board of Directors. To date, we have paid no cash dividends on our shares of common stock and we do not expect to pay cash dividends on our common stock in the foreseeable future. We intend to retain future earnings, if any, to provide funds for operations of our business. Therefore, any potential return investors may have in our common stock will be in the form of appreciation, if any, in the market value of their shares of common stock.

# If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

We are subject to reporting obligations under the United States securities laws. The SEC, as required by the Sarbanes-Oxley Act of 2002, adopted rules requiring every public company to include a management report on such company's internal controls over financial reporting in its annual report. Effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent fraud. As a result, our failure to achieve and maintain effective internal controls over financial reporting could result in the loss of investor confidence in the reliability of our financial statements, which in turn could negatively impact the trading price of our stock.

#### Public company compliance may make it more difficult for us to attract and retain officers and directors.

The Sarbanes-Oxley Act, the Dodd-Frank Act, the JOBS Act, the FAST Act, and rules subsequently implemented by the SEC have required changes in corporate governance practices of public companies. As a public company, we expect these rules and regulations, and amendments to them, to contribute to our compliance costs and to make certain activities more time consuming and costly. As a public company, we also expect that these rules and regulations may make it difficult and expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be difficult for us to attract and retain qualified persons to serve on our board of directors or as executive officers.

# Our Certificate of Incorporation and Bylaws may be amended by the affirmative vote of a majority of our stockholders.

Under the Delaware General Corporation Law, a corporation's certificate of incorporation may be amended by the affirmative vote of the holders of a majority of the outstanding shares entitled to vote, and a majority of the outstanding shares of each class entitled to vote as a class, unless the articles require the vote of a larger percentage of shares. Our Certificate of Incorporation, as amended, does not require the vote of a larger percentage of shares. As permitted under the Delaware General Corporation Law, our Bylaws give our board of directors the power to adopt, amend, or repeal our Bylaws. Our stockholders entitled to vote have concurrent power to adopt, amend, or repeal our Bylaws.

# Broker-dealers may be discouraged from effecting transactions in shares of our common stock if we are considered to be a penny stock and thus subject to the penny stock rules.

The SEC has adopted a number of rules to regulate "penny stocks" that restrict transactions involving stock which is deemed to be penny stock. Such rules include Rules 3a51-1, 15g-1, 15g-2, 15g-3, 15g-4, 15g-5, 15g-6, 15g-7, and 15g-9 under the Exchange Act. These rules may have the effect of reducing the liquidity of penny stocks. "Penny stocks" generally are equity securities with a price of less than \$5.00 per share (other than securities registered on certain national securities is provided by the exchange or system). Our securities have in the past constituted, and may again in the future, if we are delisted from Nasdaq, constitute, "penny stock" within the meaning of the rules. The additional sales practice and disclosure requirements imposed upon U.S. broker-dealers may discourage broker-dealers from effecting transactions in shares of our common stock, which could severely limit the market liquidity of such shares and impede their sale in the secondary market.

A U.S. broker-dealer selling penny stock to anyone other than an established customer or "accredited investor" (generally, an individual with net worth in excess of \$1,000,000 (exclusive of personal residence) or an annual income exceeding \$200,000, or \$300,000 together with his or her spouse) must make a special suitability determination for the purchaser and must receive the purchaser's written consent to the transaction prior to sale, unless the broker-dealer or the transaction is otherwise exempt. In addition, the "penny stock" regulations require the U.S. broker-dealer to deliver, prior to any transaction involving a "penny stock", a disclosure schedule prepared in accordance with SEC standards relating to the "penny stock" market, unless the broker-dealer or the transaction is otherwise exempt. A U.S. broker-dealer is also required to disclose commissions payable to the U.S. broker-dealer and the registered representative and current quotations for the securities. Finally, a U.S. broker-dealer is required to submit monthly statements disclosing recent price information with respect to the "penny stock".

Stockholders should be aware that, according to the SEC, the market for "penny stocks" has suffered in recent years from patterns of fraud and abuse. Such patterns include (i) control of the market for the security by one or a few broker-dealers that are often related to the promoter or issuer; (ii) manipulation of prices through prearranged matching of purchases and sales and false and misleading press releases; (iii) "boiler room" practices involving high-pressure sales tactics and unrealistic price projections by inexperienced sales persons; (iv) excessive and undisclosed bid-ask differentials and markups by selling broker-dealers; and (v) the wholesale dumping of the same securities by promoters and broker-dealers after prices have been manipulated to a desired level, resulting in investor losses. Our management is aware of the abuses that have occurred historically in the penny stock market. Although we do not expect to be in a position to dictate the behavior of the market or of broker-dealers who participate in the market, management will

strive within the confines of practical limitations to prevent the described patterns from being established with respect to our securities.

### **USE OF PROCEEDS**

We intend to use the net proceeds from this offering to advance our product candidates, including research and technical development, manufacturing, clinical studies, capital expenditures, and working capital. We may also use the net proceeds from this offering to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction.

### MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

### **Market Information**

On September 25, 2020, our common stock began trading on The Nasdaq Capital Market under the symbol GOVX, and on September 29, 2020, the September Warrants began trading under the symbol "GOVXW". The closing price of our common stock and September Warrants on the Nasdaq Capital Market on March 19, 2021 was \$5.20 and \$2.18, respectively.

#### **Dividend Policy**

To date, we have paid no cash dividends on our shares of common stock and we do not expect to pay cash dividends on our common stock in the foreseeable future. We intend to retain future earnings, if any, to provide funds for operations of our business. Therefore, any potential return investors may have in our common stock will be in the form of appreciation, if any, in the market value of their shares of common stock. We are not subject to any legal restrictions respecting the payment of dividends, except that we may not pay dividends if the payment would render us insolvent. Any future determination as to the payment of cash dividends on our common stock will be at the discretion of our Board of Directors.

#### Transfer Agent, Warrant Agent and Registrar

The transfer agent and registrar for our common stock and warrant agent for our September Warrants is American Stock Transfer & Trust Company, LLC, 6201 15th Avenue, Brooklyn, NY 11219, telephone (718) 921-8200.

#### Holders of Common Stock and September Warrants

As of March 23, 2021, there were an estimated 14 holders of record of our common stock and one holder of record of our September Warrants. A substantial number of our shares of common stock and September Warrants are held in street name and may, therefore, be held by additional beneficial owners. This number does not include beneficial owners for whom are securities are held by nominees in street name.

### CAPITALIZATION

The following table sets forth our capitalization as of December 31, 2020:

- on an actual basis; and
- on an as adjusted basis to give effect to (i) the issuance and sale by us of 1,644,000 shares of common stock in February 2021 at a price of \$6.25 per share after deducting commissions and offering expenses payable by us, (ii) the issuance and sale by us of 690,034 shares of common stock, upon exercise of September Warrants for cash during January and February 2021 at exercise price of \$5.00 per share after deducting commissions payable by us, (iii) the issuance and sale by us of 145,866 shares of common stock, upon the cashless exercise of warrants in January 2021, and (iv) the issuance and sale by us of 1,869,966 shares of common stock, assuming exercise of all currently outstanding September Warrants for cash in this offering at exercise price of \$5.00 per share after deducting the estimated commissions and offering expenses payable by us, and the use of proceeds therefrom.

You should read this table together with our financial statements and the related notes, and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	As of December 31, 2020 (unaudited)		
	Actual	As Adjusted	
Cash and cash equivalents	\$ 9,883,796	\$ 31,059,796	
Total liabilities	825,047	825,047	
Stockholder's equity:			
Convertible preferred stock	76,095	76,095	
Common stock	3,834	8,184	
Additional paid-in capital	55,294,504	76,466,154	
Accumulated deficit	(45,805,581)	(45,805,581)	
Total stockholders' equity	\$ 9,568,852	\$ 30,744,852	

The table and discussion above are based on 3,834,095 shares of common stock outstanding as of December 31, 2020, and 8,183,961 shares as adjusted, and do not include, as of that date:

- 923,669 shares of common stock issuable upon the exercise of other outstanding warrants with a weighted average exercise price of \$5.22 per share; and
- 980,000 shares of our common stock which are reserved for issuance under our 2020 Stock Incentive Plan. The issuance of 750,000 of those shares is contingent upon receipt of stockholder approval of their inclusion in the 2020 Stock Incentive Plan. On December 2, 2020, we granted options to purchase 602,000 shares under the plan at an exercise price of \$2.79 per share. Of those, 536,000 are contingent upon receipt of stockholder approval.

#### DILUTION

If you invest in our common stock by exercising September Warrants, your interest will be diluted to the extent of the difference between the public offering price per share of common stock and the pro forma as adjusted net tangible book value per share of common stock.

Our net tangible book value is the amount of our total tangible assets less our total liabilities. Net tangible book value per share is our net tangible book value divided by the number of shares of common stock. Our net tangible book value at December 31, 2020 was \$9,568,852, or \$2.50 per share, based on 3,834,095 shares of our common stock outstanding at that date.

After giving effect to (i) the issuance and sale by us of 1,644,000 shares of common stock in February 2021 at a price of \$6.25 per share after deducting commissions and offering expenses payable by us, (ii) the issuance and sale by us of 690,034 shares of common stock, upon exercise of September Warrants for cash during January and February 2021 at exercise price of \$5.00 per share after deducting commissions payable by us, (iii) the issuance and sale by us of 145,866 shares of common stock, upon the cashless exercise of warrants in January 2021, and (iv) the issuance and sale by us of 1,869,966 of shares of common stock, assuming exercise of all currently outstanding September Warrants for cash at the exercise price of \$5.00 per shares, after deducting the estimated commissions due and offering expenses payable by us, our pro forma net tangible book value as of December 31, 2020 would have been approximately \$30,744,852, or \$3.76 per share of common stock. This represents an immediate increase in pro forma net tangible book value of \$1.26 per share to our existing holders of common stock and an immediate dilution of \$1.24 per share to investors purchasing shares by exercise of September Warrants.

The following table illustrates this dilution on a per share basis:

Exercise price per share	\$ 5.00
Net tangible book value per share as of December 31, 2020	\$ 2.50
Increase in net tangible book value per share attributable to exercise of September Warrants	\$ 1.26
Pro forma net tangible book value per share after exercise of September Warrants	\$ 3.76
Dilution per share to new investors	\$ 1.24

The foregoing discussion and table do not take into account further dilution to new investors that could occur upon the exercise of outstanding warrants having a per share exercise or conversion price less than the per share offering price to the public in this offering. We may also choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The table and discussion above are based on 3,834,095 shares of common stock outstanding as of December 31, 2020, and 8,183,961 shares as adjusted, and do not include, as of that date:

- 923,669 shares of common stock issuable upon the exercise of other outstanding warrants with a weighted average exercise price of \$5.22 per share; or
- 980,000 shares of our common stock which are reserved for issuance under our 2020 Stock Incentive Plan. The issuance of 750,000 of those shares is contingent upon receipt of stockholder approval of their inclusion in the 2020 Stock Incentive Plan. On December 2, 2020, we granted options to purchase 602,000 shares under the plan at an exercise price of \$2.79 per share. Of those, 536,000 are contingent upon receipt of stockholder approval.

### BUSINESS

#### Overview

We collaborated with the laboratory of Dr. Bernard Moss at NIH/NIAID on four different generations of MVA vectors, spanning over 15 years of collaboration, to effectively express vaccine proteins that assemble into VLPs. These efforts led to the development of different shuttle vectors and the identification of multiple insertion sites for introducing foreign genes encoding the vaccine target proteins into MVA in a manner that optimizes each product for manufacturing stability. Each MVA-VLP vaccine has up to two expression cassettes, each encoding one or more antigens selected from pathogens of interest. At a minimum, each vaccine expresses two antigens required for VLP formation; in the case of HIV and hemorrhagic fever vaccines for example, a viral matrix protein and an envelope glycoprotein. We use a synthetic early late promoter that provides high, yet not lethal, levels of insert expression, which is initiated immediately after infection in cells of the vaccinated individual.

Our GV-MVA-VLP<sup>™</sup> vaccine platform affords other advantages:

- *Safety:* Our HIV vaccines have demonstrated outstanding safety in multiple human clinical trials. Safety for MVA, generally, has been shown in more than 120,000 subjects in Europe, including immunocompromised individuals during the initial development of MVA and more recently with the development of MVA as a safer vaccine against smallpox.
- **Durability:** Our technology raises highly durable (long-lasting) vaccine responses, the most durable in the field of vectored HIV vaccines. We hypothesize that elicitation of durable vaccine responses is conferred on responding B cells by the vaccinia parent of MVA, which raises highly durable responses for smallpox.
- Limited pre-existing immunity to vector: Following the eradication of smallpox in 1980, smallpox vaccinations subsequently ended, leaving all but those born before 1980 and selected populations (such as vaccinated laboratory workers and first responders) unvaccinated and without pre-existing immunity to MVA-derived vaccines. A potential interference of pre-existing immunity to a vector may be more problematic with those vectors related to parent viruses used in routine vaccinations (e.g. measles) or constitute common viruses that infect people of all ages (e.g. cytomegalovirus).
- **Repeated use of the platform for different vaccines used in sequence:** In mouse experiments, we have shown that two of our vaccines (e.g. GV-MVA-VLP-Zika followed by GV-MVA-VLP-Ebola) can be given at <4 week intervals without any negative impact on their immunogenicity (lack of vector immunity).
- *No need for adjuvants:* MVA generally stimulates strong innate immune responses and does not require the use of adjuvants.
- Thermal stability: MVA is stable in both liquid and lyophilized formats (> 6 years of storage).
- *Genetic stability and manufacturability:* If appropriately engineered, MVA is genetically stable and can reliably be manufactured in either the established Chick Embryo Fibroblast cell substrate, or novel continuous cell lines that support scalability as well as greater process consistency and efficiency.

#### **Our Cancer Immunotherapy Programs**

Cancer is the second most common cause of death in the US, exceeded only by heart disease. Its global burden is expected to rise to 22 million new cases per year by 2030. There have been multiple technology advancements and product approvals that have highlighted the potential of immunology approaches to treat cancer. Monoclonal antibodies (mAbs) such as Herceptin<sup>®</sup> and dendritic cell therapy Provenge<sup>®</sup> for prostate cancer have had varying degrees of success. Dendritic or other cell-based therapy is a highly personalized medicine involving removing cells from the patient, modifying and multiplying them, and then returning them to the body. In addition to the high cost and complex processes to manufacture products, this approach has not been shown to generate high levels of cancer-specific T cells.

The field of immuno-oncology has received new momentum with the discovery and initial launch of a form of immune checkpoint inhibitors (ICIs), a type of monoclonal antibodies (Mabs). Tumors hijack the body's natural immune checkpoints by over expressing immune checkpoint ligands (proteins that bind to and activate the inhibitory activity of immune checkpoints), as a mechanism of immune resistance, especially against the T cells that are specific for tumor antigens and can kill cancer cells. ICIs block the interaction of immune checkpoints with their ligands on tumor cells, allowing otherwise poorly functional T cells to resume proliferation, cytokine production and killing of tumor cells.

More recently, a new category of immunotherapies called adoptive cell transfer, CAR-T technology for example, has provided further evidence of the merit of providing an enhanced T cell presence to fight cancer. Unfortunately, they have also been associated with significant side effects. Moreover, adoptive cell transfer such as CAR-T, like dendritic cell therapy, involves removing T cells from a patient, modifying them to better target a cancer cell, multiplying the T cells, then returning them to the patient. These complex therapeutic products need to be manufactured and released for each patient, leading to expensive manufacturing and increased supply chain complexity.

Unlike conventional therapies (e.g. radiation, chemotherapy, antibody, etc.), therapeutic cancer vaccines have the potential to induce responses that not only result in the control and even clearance of tumors but also establish immunological memory that can suppress and prevent tumor recurrence. Convenience, safety, and low toxicity of cancer vaccines could make them invaluable tools to be included in future immunotherapy approaches for treating tumors. Currently, there are only a few vectored cancer vaccines being tested in combination with ICIs, all of which are in early clinical stages.

Collaborations with University of Pittsburgh and ViaMune – We have established a collaboration with Dr. Olivera Finn, a leading expert in cancer immunotherapy at the University of Pittsburgh. Dr. Finn was one of the first to show that many tumors express an abnormal form of cell surface-associated Mucin 1 (MUC1) protein that is recognized by the immune system as foreign. Given this, we are developing our GV-MVA-VLP<sup>TM</sup> vaccine platform to deliver abnormal forms of MUC1 with the goal of raising therapeutic anti-tumor antibodies and T cell responses in cancer patients. Our collaboration with Dr. Finn has shown that a combination of our MVA-VLP-MUC1 vaccine candidate with a MUC1 synthetic peptide was capable of breaking tolerance to human MUC1 in huMUC1 transgenic mice and inducing immune responses with protective efficacy against challenge in a lymphoma tumor model (experiments were performed at the University of Pittsburgh).

We are also collaborating with ViaMune, Inc., which has developed a fully synthetic MUC1 vaccine candidate (MTI). The collaboration will assess each companies' vaccine platform, separately, and in combination, with the goal of developing a tumor MUC1 vaccine that can produce a broad spectrum of anti-tumor antibody and T cell responses. The resulting MUC1 vaccine could be combined with ICIs as a novel vaccination strategy for cancer patients with advanced MUC1+ tumors. We have produced a MVA-VLP-MUC1 vaccine candidate, demonstrated VLP production by electron microscopy using MUC1 immunogold staining, and showed that the VLPs express a hypo-glycosylated form of MUC1 in human cell lines. Preclinical studies of the combined MTI and MVA-VLP-MUC1 vaccine with MTI and ICI have significantly reduced the tumor burden in a mouse model for colorectal cancer.

*Collaboration with Emory Vaccine Center* – In July 2018, we began collaborating with Emory University on the development of a therapeutic vaccine for human papillomavirus (HPV) infection, with a specific focus on head and neck cancer (HNC). This is an important research area as there are currently no medical treatments for chronic HPV infections, which can lead to the formation of cancerous tumors. The GeoVax/Emory collaboration will include testing GeoVax's MVA-VLP-HPV vaccine candidates in therapeutic animal models of HPV in the laboratory of Dr. Rafi Ahmed, Director of the Emory Vaccine Center. Dr. Ahmed, a member of the National Academy of Sciences, is a world-renowned immunologist whose work during the past decade has been highly influential in shaping understanding of memory T cell differentiation and T and B cell-mediated antiviral immunity. We believe our collaboration with Emory on the HPV project is extremely valuable as it was Dr. Ahmed who first discovered in 2006 that the PD-1 pathway could also be exploited by many pathogens to repress normal T cell function during chronic viral infection. This led to development of numerous blockbuster anti-PD1 antibodies currently being used for treatment of various cancers and which hold promise as adjunctive therapy for several chronic infectious diseases. To increase the therapeutic efficacy of our HPV vaccine, we intend to apply a combination strategy which could include

co-administration of anti-PD1 antibodies and/or other newly discovered immunotherapy drugs to improve a patient's own anti-cancer immune response.

*Collaboration with Leidos* – In November 2018, we began collaborating with Leidos, Inc. on a research program evaluating the combination of the companies' respective technologies in the field of cancer immunotherapy. Currently, there are major limitations on cancer immunotherapies which include high costs (limiting patient access, straining both the healthcare system and the patient's own finances), the need for multiple injections, and significant side effects. Moreover, monotherapy with one checkpoint inhibitor drug can induce drug resistance in some patients making it necessary to combine with other drugs and treatments, which in turn may further increase toxicity. We have shown that our MVA platform can be safe in humans without any major side effects and believe that delivery of the immune checkpoint inhibitors with or without the tumor-associated antigens may overcome some of the challenges associated with the use of immune checkpoint inhibitors in cancers or other chronic infectious diseases. The GeoVax/Leidos collaboration includes the design, construction, and characterization of multiple immunotherapeutic vaccine candidates using our GV-MVA-VLP<sup>TM</sup> vaccine platform combined with certain novel peptide PD-1 checkpoint inhibitors developed by Leidos. We believe this effort may lead to expanded efforts in cancer immunotherapy, treatments for chronic Hepatitis B infections, or other diseases where an immunological-based therapeutic approach would be beneficial.

#### **Our Infectious Disease Vaccine Programs**

#### **Our COVID-19 Vaccine Program**

Coronaviruses are common in many species of animals including mammals, avian and bats. In rare occasions these viruses can evolve to cross the animal species and infect humans and quickly spread from person to person resulting in lethal, but usually rare, respiratory infections. Recent epidemic with SARS and MERS coronaviruses resulted in 774 and 858 deaths, respectively. In January 2020, WHO identified a novel coronavirus, SARS-CoV-2 (or COVID-19), in the city of Wuhan, China. On January 31, World Health Organization (WHO) declared the novel coronavirus to be a global health emergency, and on March 11, 2020 WHO declared a global pandemic. As of late March, 2021, more than 120 million people worldwide have been infected and nearly 2.7 million people have died as a result of COVID-19 infections. The situation is fluid, with the infection and death statistics changing significantly on a regular basis.

During January 2020, we initiated vaccine development for prevention and/or control of COVID-2019 infection. Using our GV-MVA-VLP<sup>TM</sup> vaccine platform and expertise, multiple COVID-19 vaccine candidates have been designed and constructed, and are being tested in animal challenge models. Preclinical small animal studies are currently being conducted in collaboration with researchers at the University of Texas Medical Branch at Galveston. (UTMB) and at BioQual, Inc.

In January 2021, the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), awarded the Company a Small Business Innovative Research (SBIR) grant in support of our development of a vaccine against SARS-CoV-2, the virus that causes COVID-19. The Phase 1 grant, titled, *"Preclinical Development of GV-MVA-VLP Vaccines Against COVID-19,"* will support the ongoing design, construction and preclinical testing of our vaccine candidates in preparation for human clinical trials. The efficacy testing will be performed in collaboration with UTMB.

There are currently three COVID-19 vaccines approved by the FDA for use in the United States. These first generation of SARS-CoV-2 vaccines are based on the 'Spike (S)' protein and are designed to induce antibodies that block infection of human cells, an effect referred to as virus neutralization. The GV-MVA-VLP platform provides the opportunity to design and test vaccine candidates that differ significantly through the inclusion of multiple SARS-CoV-2 proteins that are presented to the immune system as VLPs. Unique among other vaccines approved or under development, the experimental GeoVax candidates are therefore specifically designed to provide a broader and more long-lived level of protective immunity against SARS-CoV-2 which should protect against emerging variants while avoiding the potential side effects that can limit vaccine utility and acceptance.

#### **Our HIV/AIDS Vaccine Programs**

**About HIV/AIDS.** An estimated 37 million people are living with HIV worldwide, with approximately 1.8 million newly infected annually. Since the beginning of the epidemic, more than 70 million people have been infected with the HIV virus and about 35 million have died of HIV. The United States currently has an estimated 1.1 million HIV-infected individuals, with approximately 40,000 new infections per year. Gay and bisexual men bear the greatest burden by risk group, representing nearly 70% of new infections in the U.S. African-Americans also bear a disproportionate burden, representing 43% of people living with HIV, yet representing just 12% of the total population.

There are several AIDS-causing HIV virus subtypes, or clades, that are found in different regions of the world. These clades are identified as clades A, B, C and so on. The predominant clade found in Europe, North America, parts of South America, Japan and Australia is clade B, whereas the predominant clades in Africa are clades A and C. In India, the predominant clade is clade C. Genetic differences between the clades may mean that vaccines or treatments developed against HIV of one clade may only be partially effective or ineffective against HIV of other clades. Thus, there is often a geographical focus to designing and developing HIV vaccines.

At present, the standard approach to treating HIV infection is to inhibit viral replication through the use of combinations of drugs – antiretroviral therapies (ART). Available drugs include reverse transcriptase inhibitors, protease inhibitors, integration inhibitors and inhibitors of cell entry. However, HIV is prone to genetic changes that can produce strains that are resistant to currently approved drugs. When HIV acquires resistance to one drug within a class, it can often become resistant to the entire class, meaning that it may be impossible to re-establish control of a genetically altered strain by substituting different drugs in the same class. Furthermore, these treatments continue to have significant limitations which include toxicity, patient non-adherence to the treatment regimens and cost. Thus, over time, viruses acquire drug-resistant mutations, and many patients develop intolerance to the medications or simply give up taking the medications due to cost, inconvenience or side effects.

There is no approved vaccine to prevent HIV infection. Prevention of HIV infection remains a worldwide unmet medical need, even in the United States and other first world countries where effective antiretroviral therapies are available. ART do not eliminate HIV infection, requiring individuals to remain on such drugs for their entire lives. Uptake and successful long-term adherence to therapy is also limited. Only 30% of those infected with HIV in the US ultimately remain in HIV care with their viral load sufficiently suppressed to prevent spread of HIV. Furthermore, the financial burden to the U.S. taxpayer for HIV education, prevention, and treatment costs is borne through multiple federal agencies, totaling over \$25 billion annually.

According to the International AIDS Vaccine Initiative (IAVI), the cost and complexity of new treatment advances for HIV/AIDS puts them out of reach for most people in the countries where treatment is most needed. In industrialized nations, where drugs are more readily available, side effects and increased rates of viral resistance have raised concerns about their long-term use. Vaccines are seen by many as the most promising way to end the HIV/AIDS pandemic. We expect that vaccines, once developed, will be used universally and administered worldwide by organizations that provide healthcare services, including hospitals, medical clinics, the military, prisons and schools.

### **Our Preventive HIV Vaccine Program**

<u>Clade B Preventive HIV Vaccine Program.</u> Our most clinically advanced vaccine is GOVX-B11, designed to protect against the clade B subtype of the HIV virus prevalent in the Americas, Western Europe, Japan and Australia. GOVX-B11 consists of a recombinant DNA vaccine used to prime immune responses and a recombinant MVA vaccine (MVA62B) used to boost the primed responses. Both the DNA and MVA vaccines induce the production of non-infectious VLPs by the cells of the vaccinated person.

Phase 1 and Phase 2a human clinical trials of GOVX-B11 were conducted by the HVTN. The HVTN is the largest worldwide clinical trials network dedicated to the development and testing of HIV/AIDS vaccines. Support for the HVTN comes from the NIAID, part of the NIH. The HVTN's HIV Vaccine Trial Units are located at leading research institutions in 27 cities on four continents. In these trials, totaling approximately 500 participants, GOVX-B11 was tested at various doses and regimens. The vaccine was demonstrated to be safe, well-tolerated and immunogenic, inducing both antibody and cellular immune responses.

In January 2017 HVTN began the next human clinical trial (HVTN 114) in the path toward pivotal efficacy trials. HVTN 114 enrolled individuals who previously participated in the HVTN 205 Phase 2a trial of the GOVX-B11 vaccine, which concluded in 2012. HVTN 114 tested the ability of late booster vaccines (additional vaccinations) to increase the antibody responses elicited by the GOVX B11 vaccine regimen. These "late booster vaccines" consisted of the GeoVax MVA62B vaccine with or without a recombinantly produced HIV envelope glycoprotein (gp120) protein vaccine. The gp120 protein, AIDSVAX® B/E, is the same protein used to boost immune responses in the partially protective RV144 trial completed in Thailand and publicly reported in 2009. Participants in HVTN 114 received either (a) a MVA62B booster, (b) a combined booster of MVA62B and AIDSVAX® B/E, or (c) AIDSVAX® B/E alone. HVTN 114 was completed during 2018 and results were presented during the HIV Research for Prevention (HIVR4P) conference in Madrid, Spain in October 2018. The study demonstrated the most effective booster vaccine to be the combination of MVA62B live vector and AIDSVAX B/E proteins, which increased titers of antibodies to the HIV envelope gp120 by more than 600-fold.

Following completion of HVTN 114, the HVTN is moving forward with plans for an additional Phase 1 trial, designated HVTN 132, which will be a multi-center, randomized, double-blind trial, enrolling up to 70 healthy adults. The primary objectives of HVTN 132 will be to further assess the safety, tolerability and immunogenicity (elicited antibody responses) of a prime-boost regimen of GOVX-B11, in combination with gp120 booster vaccines. The protein booster vaccines are being tested for their ability to enhance the antibody response elicited by GOVX-B11 to gp120. The gp120 proteins to be evaluated in the trial were developed by Duke University and by the Institute of Human Virology of the University of Maryland School of Medicine. HVTN 132 will be conducted by the HVTN with support from NIAID and is expected to commence patient enrollment in late 2021.

<u>Clade C Preventive HIV Vaccine Program</u>. We also are developing DNA/MVA vaccines designed for use against the clade C subtype of HIV that predominates in South Africa and India. NIAID has previously awarded GeoVax SBIR grants in support of this effort, but further development of these vaccines will be dependent upon additional funding support.

### **Our HIV Immunotherapy Program – Seeking a Cure**

Finding a cure for HIV/AIDS remains an elusive goal. Current ART, though highly effective at suppressing HIV viral load, are unable to eliminate latent forms of HIV that are invisible to the immune system and inaccessible to antiretroviral drugs. Long-term use of ART can lead to loss of drug effectiveness and can come with severe, debilitating side effects. The lifetime medical costs saved by preventing (or curing) a single HIV infection in the U.S. are estimated to approach \$400,000. Therefore, any new treatment regimen that allows patients to reduce, modify, or discontinue their antiretroviral therapy could offer measurable quality of life benefits to the patient and tremendous value to the marketplace.

Collaboration with AGT – In March 2017, we entered into collaboration with American Gene Technologies International, Inc. (AGT) whereby AGT intends to conduct a Phase 1 human clinical trial with our combined technologies, with the ultimate goal of developing a functional cure for HIV infection. In the AGT trial, the GeoVax vaccine will be used to stimulate virus specific CD4+ T cells *in vivo*, which will then be harvested from the patient, genetically modified *ex vivo* using AGT's technology, and reinfused to the patient. The primary objectives of the trial will be to assess the safety of the therapy, with secondary objectives to assess the immune responses as a measure of efficacy. In a previous Phase 1 clinical trial (GV-TH-01), we demonstrated that our vaccine can stimulate production of CD4+ T cells in HIV infected patients– the intended use of the GV-MVA-VLP<sup>TM</sup> HIV vaccine in the AGT study. AGT began patient enrollment for their Phase 1 in September 2020. We expect our vaccine to be added to the AGT trial in 2021.

*Collaboration with UCSF* – In November 2019, we entered into an agreement with the University of California, San Francisco (UCSF), whereby we will participate in a collaborative effort led by researchers at UCSF to develop a combinational therapy aimed at inducing remission in HIV-positive individuals (a "functional cure"). The studies will be conducted with funding from amfAR, The Foundation for AIDS Research. The proposed clinical trial will enroll 20 HIV-infected adults who are on stable and effective ART. The therapeutic regimen to be tested involves a combination of vaccines, drugs and biologics. GeoVax will provide the MVA62B vaccine for use in the studies. The primary objectives of the trial will be to assess the safety and tolerability of the combinational therapy and to determine the viral load "set-point" during ART interruption. Secondary objectives will be to assess immune responses and changes in viral reservoir status. Patient enrollment for the clinical trial commenced in August 2020.

#### Our Filovirus (Ebola, Sudan, Marburg) Vaccine Program

Ebola (EBOV, formerly designated as Zaire ebolavirus), Sudan (SUDV), and Marburg viruses (MARV) are the most virulent species of the *Filoviridae* family. They can cause up to a 90% fatality rate in humans and are epizootic in Central and West Africa with 29 outbreaks since 1976. The most severe Ebola outbreak (2013-16 in Western Africa) caused 28,616 cases and 11,310 deaths (case fatality rate of 40%). During 2018-20, an outbreak in the Democratic Republic of the Congo caused 3,470 cases and 2,280 deaths (66% fatality rate). Additional outbreaks are certain in future due to indigenous reservoirs of the virus (e.g. fruit bats), the zoonotic nature of the virus, weak local infrastructure for healthcare systems, high population mobility, political unrest, cultural beliefs and burial practices, and for those not at natural risk, the risk of intentional release by a bioterrorist.

We believe an ideal vaccine against major filoviruses must activate both humoral and cellular arms of the immune system. It should include the induction of antibodies to slow the initial rate of infection and a cellular immune response to help clear the infection. Moreover, it should address strain variations by providing broad coverage against potential epizootic filovirus strains, and it should be safe not only in healthy individuals (e.g. travelers or health care workers), but also in immunocompromised persons (e.g., HIV infected) and those with other underlying health concerns.

In December 2019, FDA approved the first live recombinant Ebola vaccine for prevention of Ebola disease by Zaire virus. This rVSV-ZEBOV showed safety concerns in Phase 1 trials and by virtue of being replication competent could pose threats to immunocompromised individuals, such as those infected with HIV living in West Africa where recent Ebola epidemics started. The less advanced adeno-vectored vaccine candidates require relatively cumbersome heterologous prime/boost regimens, for example with MVA, to elicit durable protective immunity. The use of Ad5 vectors also has been associated with concerns over increased susceptibility to HIV infection in areas with high HIV incidence. Even with rVSV-ZEBOV showing promise in the 2013-2015 epidemic, the world would benefit by being prepared with a safer and effective vaccine, to prevent or alleviate the effects of the current and future epidemics.

To address the unmet need for a product that can respond to future filovirus epidemics we are developing innovative vaccines utilizing our GV-MVA-VLP<sup>TM</sup> platform. We are addressing strain variations, and induction of broad humoral and cellular response through development of monovalent vaccines, which we may also investigate blending together as a single vaccine to provide broad coverage, potentially with a single dose. The MVA vector itself is considered safe, having originally been developed for use in immunocompromised individuals as a smallpox vaccine. We expect our vaccines to not only protect at-risk individuals against EBOV, SUDV and MARV, but also potentially reduce or modify the severity of other re-emerging filovirus pathogens such as Bundibugyo, Ivory Coast, and Reston viruses, based on antigenic cross reactivity and the elicitation of T cells to the more conserved matrix proteins (e.g. VP40 or Z) in addition to standard GP proteins used by us and other manufacturers. Thus, the GeoVax GV-MVA-VLP<sup>TM</sup> approach could offer a unique combination of advantages to achieve breadth and safety of a panfilo vaccine. In addition to protecting people in Africa, it is intended to prevent the spread of disease to the US, and for preparedness against terrorist release of any of bio-threat pathogens.

Our initial preclinical studies in rodents and nonhuman primates for our EBOV vaccine candidate have shown 100% protection against a lethal dose of EBOV upon a single immunization. These studies were conducted with support from NIAID and USAMRIID. We have also designed and constructed vaccine candidates for SUDV and MARV. In an independent, peer-reviewed paper published by Lazaro Frias et al (J Virol. 2018 June 1; 92(11): e00363-18), the authors concluded that the MVA-VLP-Ebola and MVA-VLP-Sudan vaccines are the best-in class vaccine in development.

In July 2019, we reported positive results (100% protection) from preclinical challenge studies of our MARV vaccine candidate. In this study, our MARV vaccine was administered by intramuscular (IM) inoculations to guinea pigs, with a control group receiving saline injections. Eight weeks after inoculation, animals in each group were exposed to a lethal dose of MARV. Within 8 days post-challenge, all animals in the control group had developed moribund conditions and had to be euthanized. At the conclusion of the study (21 days post-challenge), all vaccinated animals survived, with no weight loss or other health issues. The study was conducted in collaboration with researchers at UTMB. Similar to MARV vaccine, our Sudan vaccine provided 100% protection in guinea pig challenge studies with near sterile immunity which is unprecedented for a replication deficient MVA virus.

Further development of our filovirus vaccines will be dependent upon additional funding support.

### **Our Lassa Fever Vaccine Program**

Lassa fever virus (LASV), a member of the *Arenaviridae* family, causes severe and often fatal hemorrhagic illnesses in an overlapping region with Ebola. Lassa Fever is an acute viral hemorrhagic illness caused by LASV. In contrast to the unpredictable epidemics of filoviruses, LASV is endemic in West Africa with an annual incidence of >300,000 infections, resulting in 5,000-10,000 deaths. Data from a recent independent study suggest that the number of annual Lassa Fever cases may be much higher, reaching 3 million infections and 67,000 deaths, putting as many as 200 million persons at risk.

Our initial preclinical studies in rodents for our LASV vaccine candidate have shown 100% single-dose protection against a lethal dose of LASV challenge composed of multiple strains delivered directly into the brain. The study was conducted at the Institute of Human Virology at the University of Maryland School of Medicine in Baltimore. Multiple repeats of the study confirmed the findings.

Subsequent to these initial findings, in April 2018 NIAID awarded GeoVax a SBIR grant in support of further advancing our Lassa vaccine development program. The work was performed in collaboration with the Institute of Human Virology at the University of Maryland, The Scripps Research Institute, and the University of Texas Medical Branch.

In September 2018, the U.S. Department of Defense (DoD) awarded GeoVax a \$2,442,307 cooperative agreement in support of our LASV vaccine development program. The grant was awarded by the U.S. Army Medical Research Acquisition Activity pursuant to the Peer Reviewed Medical Research Program (PRMRP), part of the Congressionally Directed Medical Research Programs (CDMRP). In addition to the grant funds provided directly to GeoVax, DoD will also fund testing of the GeoVax vaccine by U.S. Army scientists at the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), under a separate subaward. The project award is supporting generation of immunogenicity and efficacy data for our vaccine candidate in both rodent and nonhuman primate models, as well as manufacturing process development and cGMP production of vaccine seed stock in preparation for human clinical trials. The work is ongoing and is being performed in collaboration with USAMRIID and the Geneva Foundation.

Further development of our Lassa Fever vaccine beyond the work being funded by the U.S. DoD will be dependent upon additional funding and/or partnering support.

#### Our Zika Vaccine Program

Zika disease is an emerging infectious disease caused by the Zika virus (ZIKV) and has been linked to an increase in microcephaly in infants and Guillain-Barre syndrome (a neurodegenerative disease) in adults. ZIKV is a member of the *Flaviviridae* family, which includes medically important pathogens such as dengue fever, yellow fever, Japanese encephalitis, tick-borne encephalitis, and West Nile viruses. ZIKV, which was first discovered in 1947 in the Zika forest of Uganda, was considered only a minor public health concern for 60 years. During 2015 and 2016, with its appearance and rapid spread in the Americas, it has emerged as a serious threat with pandemic potential. Symptoms of Zika infection have historically been mild. In the recent epidemic, however, an alarming association between ZIKV infection and fetal brain abnormalities including microcephaly has been observed. No approved preventive or therapeutic products are currently available to fight the Zika epidemic. Public health officials recommend avoiding exposure to ZIKV, delaying pregnancy, and following basic supportive care (fluids, rest, and acetaminophen) after infection. A vaccine is needed to prevent a Zika pandemic.

To address the unmet need for a ZIKV vaccine, we are developing novel vaccine candidates constructed using our MVA-VLP platform. MVA has an outstanding safety record, which is particularly important given the need to include women of child-bearing age and newborns among those being vaccinated. Our Zika vaccine is designed based on the NS1 gene product to eliminate the risk of Antibody Dependent Enhancement (ADE), which is a serious side effect observed when a vaccinated individual doesn't have a fully protective immune response which actually causes a more virulent reaction if infected.

Our initial preclinical studies in rodents using our MVA-NS1 vaccine candidate demonstrated 100% singledose protection against a lethal dose of ZIKV delivered directly into the brain. The study was conducted and funded by the US Centers for Disease Control and Prevention (CDC), which also provided technical assistance. In June 2017 NIAID awarded GeoVax a SBIR grant in support of preclinical testing of our MVA-NS1 vaccine in nonhuman primates in preparation for human clinical trials. In rhesus macaques vaccination with MVA-NS1 induced immune responses that effectively controlled the virus replication despite the fact the vaccine is not designed to induce ZIKV neutralizing antibodies.

Further development of our ZIKV vaccine will be dependent upon partnering support.

#### **Our Malaria Vaccine Programs**

Malaria is a mosquito-borne disease caused by *Plasmodium* parasites. Symptoms are fever, chills, sweating, vomiting and flu-like illness. If untreated, severe complications (severe anemia, cerebral malaria and organ failure) will lead to death. Over 3 billion people in 106 countries and territories live at risk of malaria infection. According to the World Health Organization (WHO), an estimated 229 million new cases of malaria were recorded worldwide in 2019, resulting in 409,000 deaths. Current treatments include bed net distributions, drug treatment and mosquito spraying. Malaria parasites develop resistance to drugs and insecticides. Vaccines have shown to be the most cost-effective ways to fight and eliminate infectious diseases (Smallpox, polio, etc.), but after many decades of research and development, there is only one commercial malaria vaccine, known as "RTS, S" or by the tradename "Mosquirix". It requires four injections and has low efficacy (approximately 30%) which wanes over time. Current experimental vaccine candidates have limitations such as poor immunogenicity, based on limited number of antigens (generally 1-5 antigens), do not target multiple stages of the parasite life cycle, and do not induce strong durable functional antibodies and T cell responses. Therefore, identification of appropriate antigens and vaccine technologies remains critical for development of an effective malaria vaccine.

An ideal malaria vaccine candidate should contain antigens from multiple stages of the malaria parasite's life cycle, and should induce both functional antibodies (predominantly IgG1 and IgG3 subtypes shown to be associated with protection) and strong cell mediated immunity (e.g. Th1 biased CD4+ ad CD8+) to reduce parasitemia by clearing infected cells (liver cells or erythrocytes). We have shown (in animal models and humans) that GV-MVA-VLP<sup>TM</sup> vaccines for non-malarial disease targets induces a Th1 biased response with both durable functional antibodies and CD4+ and CD8+ T cell responses and that multiple antigens can be included in a single vaccine. As such, we believe the GeoVax MVA-VLP platform is well-suited for use in the malaria vaccine field.

*Collaboration with Burnet Institute* – During 2017 we established a collaboration with the Burnet Institute, a leading infectious diseases research institute in Australia, for the development of a vaccine to prevent malaria infection. The project includes the design, construction, and characterization of multiple malaria vaccine candidates using GeoVax's GV-MVA-VLP<sup>TM</sup> vaccine platform combined with malaria *Plasmodium falciparum* and *Plasmodium vivax* sequences identified by the Burnet Institute. The vaccine design, construction, and characterization is being performed at GeoVax with immunogenicity and challenge studies in animal models conducted at Burnet Institute using their unique functional assays that provide key information on vaccine efficacy. This project is ongoing.

*Collaboration with Leidos* – In February 2019, we began a collaboration with Leidos, Inc. to develop malaria vaccine candidates. The work is supported under a contract to Leidos from the United States Agency for International Development (USAID) Malaria Vaccine Development Program (MVDP). Leidos has been tasked by USAID to advance promising vaccine candidates against P. falciparum malaria and selected the GeoVax GV-MVA-VLP<sup>TM</sup> platform as part of this development effort. The collaboration with Leidos complements our ongoing malaria vaccine development project with Burnet Institute and offers a separate opportunity for success. This project is ongoing.

#### Support from the United States Government

#### Grants and Contracts.

We have been the recipient of multiple federal grants and contracts in support of our vaccine development programs. Our most recent awards are as follows:

Lassa DoD Grant. In September 2018, the U.S. Department of Defense (DoD) awarded us a \$2,442,307 cooperative agreement in support of our LASV vaccine development program. The grant was awarded by the U.S. Army Medical Research Acquisition Activity pursuant to the Peer Reviewed Medical Research Program (PRMRP), part of the Congressionally Directed Medical Research Programs (CDMRP). In addition to the grant funds provided directly to GeoVax, DoD will also fund testing of our vaccine by U.S. Army scientists under a separate subaward. The award, entitled "Advanced Preclinical Development and Production of Master Seed Virus of GEO-LM01, a Novel MVA-VLP Vaccine Against Lassa Fever", will support generation of immunogenicity and efficacy data for our vaccine candidate in both rodent and nonhuman primate models, as well as manufacturing process development and cGMP production of vaccine seed stock in preparation for human clinical trials.

Lassa SBIR Grant. In April 2018, NIAID awarded us a \$300,000 SBIR grant entitled "Construction and efficacy testing of novel recombinant vaccine designs for eliciting both broadly neutralizing antibodies and T cells against Lassa virus."

COVID-19 SBIR Grant. In January 2021, NIAID awarded us a \$299,927 Phase I SBIR grant in support of our development of a vaccine against SARS-CoV-2, the virus that causes COVID-19. The grant, titled, "*Preclinical Development of GV-MVA-VLP* Vaccines *Against COVID-19*," will support the ongoing design, construction and preclinical testing of our vaccine candidates in preparation for human clinical trials. The efficacy testing will be performed in collaboration with UTMB.

Malaria Contract with Leidos – In March 2019, we entered into a \$196,126 subcontract with Leidos, Inc., supported by a contract to Leidos from the United States Agency for International Development (USAID) Malaria Vaccine Development Program (MVDP). Leidos has been tasked by USAID to advance promising vaccine candidates against *P*. falciparum malaria and selected the GeoVax GV-MVA-VLP<sup>TM</sup> platform as part of this development effort. In January 2020, the work was extended through an additional subcontract for \$385,193.

Zika SBIR Grant. In June 2017, NIAID awarded us a SBIR grant entitled "Advanced Preclinical Testing of a Novel Recombinant Vaccine Against Zika Virus." The initial grant award was \$300,000 for the first year of a twoyear project period beginning June 24, 2017, with a total project budget of \$600,000. In May 2018, the second-year grant of \$300,000 was awarded to us.

HIV Staged Vaccine Development Contract. In August 2016, NIAID awarded us a *Staged Vaccine Development* contract to produce our preventive HIV vaccine for use in future clinical trials. The award included a base contract of \$199,442 for the initial period from August 1, 2016 to December 31, 2017 (the "base period") to support process development, as well as \$7.6 million in additional development options that can be exercised by NIAID. Prior to the end of the base period NIAID notified us that it did not plan to exercise the additional development option under the contract due to funds availability and NIAID's programmatic needs. We do not expect this to have an impact on the human clinical trials of our preventive HIV vaccine currently being conducted by the HVTN, or future trials being planned.

HIV SBIR Grant. In April 2016, NIAID awarded us a SBIR grant entitled "*Enhancing Protective Antibody Responses for a DNA/MVA HIV Vaccine*." The initial grant award was \$740,456 for the first year of a two-year project period beginning April 15, 2016, with a total project budget of \$1,398,615. In March 2017, NIAID awarded us \$658,159 for the second year of the project period to test the effects of adding two proteins to our vaccine regimen, and we subsequently received a one-year no-cost extension of the project period, which was completed during 2019.

#### Clinical Trial Support.

All our human clinical trials to date for our preventive HIV vaccines, including the recently completed HVTN 114 trial and the HVTN 132 trial currently planned, have been or will be conducted by the HVTN and funded by NIAID. This financial support has been provided by NIAID directly to the HVTN, so has not been recognized in our financial statements, and we do not know the cost of these trials. See "Our Preventive HIV Vaccine Program" above for the current status of our human clinical trials.

#### Other Federal Support.

We have been the recipient of additional in-kind federal support through collaborative and intramural arrangements with CDC for our Zika vaccine program, the Rocky Mountain Laboratory facility of NIAID for our hemorrhagic fever virus vaccine program, and the United States Army Medical Research Institute of Infectious Diseases (USAMRIID) for our hemorrhagic fever virus vaccine program. This support generally has been for the conduct or support of preclinical animal studies on our behalf.

#### **Government Regulation**

Regulation by governmental authorities in the United States and other countries is a significant factor in our ongoing research and development activities and in the manufacture of our products. Complying with these regulations involves considerable expertise, time and expense.

In the United States, drugs and biologics are subject to rigorous federal and state regulation. Our products are regulated under the Federal Food, Drug and Cosmetic Act (FD&C Act), the Public Health Service Act, and the regulations promulgated under these statutes, and other federal and state statutes and regulations. These laws govern, among other things, the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of medications and medical devices. Product development and approval within this regulatory framework is difficult to predict, takes several years and involves great expense. The steps required before a human vaccine may be marketed in the United States include:

- Preclinical laboratory tests, in vivo preclinical studies and formulation studies;
- Manufacturing and testing of the product under strict compliance with current Good Manufacturing Practice (cGMP) regulations;
- Submission to the FDA of an Investigational New Drug application for human clinical testing which must become effective before human clinical trials can commence;
- Adequate and well-controlled human clinical trials to establish the safety and efficacy of the product;
- The submission of a Biologics License Application to the FDA, along with the required user fees; and
- FDA approval of the BLA prior to any commercial sale or shipment of the product

Before marketing any drug or biologic for human use in the United States, the product sponsor must obtain FDA approval. In addition, each manufacturing establishment must be registered with the FDA and must pass a preapproval inspection before introducing any new drug or biologic into commercial distribution.

The Emergency Use Authorization (EUA) authority granted to the FDA allows the FDA to help strengthen the nation's public health protections against certain threats by facilitating the availability and use of medical countermeasures needed during public health emergencies. Under section 564 of the FD&C Act, the FDA Commissioner may allow unapproved medical products or unapproved uses of approved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by threat agents when there are no adequate, approved, and available alternatives. This potentially may provide a faster pathway to market for our COVID-19 or other infectious disease vaccine candidates. This was the approval pathway followed by Pfizer-BioNTech and Moderna for their respective COVID-19 vaccines.

Because GeoVax does not manufacture vaccines for human use within our own facilities, we must ensure compliance both in our own operations and in the outsourced manufacturing operations. All FDA-regulated manufacturing establishments (both domestic establishments and foreign establishments that export products to the United States) are subject to inspections by the FDA and must comply with the FDA's cGMP regulations for products, drugs and devices.

The FDA determines compliance with applicable statutes and regulations through documentation review, investigations, and inspections. Several enforcement mechanisms are available to the FDA, ranging from a simple

demand to correct a minor deficiency to mandatory recalls, closure of facilities, and even criminal charges for the most serious violations.

Even if FDA regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions.

Whether or not the FDA has approved the drug, approval of a product by regulatory authorities in foreign countries must be obtained prior to the commencement of commercial sales of the drug in such countries. The requirements governing the conduct of clinical trials and drug approvals vary widely from country to country, and the time required for approval may be longer or shorter than that required for FDA approval.

We also are subject to various federal, state and local laws, regulations, and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals, and the use and disposal of hazardous or potentially hazardous substances used in connection with our research. The extent of government regulation that might result from any future legislation or administrative action cannot be accurately predicted.

#### FDA Tropical Disease Priority Review Voucher Program

Section 524 of the FD&C Act authorizes the FDA to award priority review vouchers (PRVs) to sponsors of approved tropical disease product applications that meet certain criteria. To qualify for a PRV, a sponsor's application must be for a drug or biological product for the prevention or treatment of a "tropical disease," must otherwise qualify for priority review, and must contain no active ingredient (including any salt or ester of an active ingredient) that has been approved in any other application under Section 505(b)(1) of the FD&C Act or section 351 of the Public Health Services Act. Priority review means that the FDA aims to render a decision in 6 months.

The PRV may be sold. For example, a small company might win a voucher for developing a drug for a neglected disease and sell the voucher to a large company for use on a commercial disease. The price of the voucher depends on supply and demand. The voucher's value derives from three factors: shifting sales earlier, longer effective patent life due to earlier entry, and competitive benefits from earlier entry relative to competitors. Top-selling treatments can yield billions in sales each year, so being approved months earlier can be worth hundreds of millions of dollars to the voucher. Since the first voucher sale in 2014, the price of the vouchers has ranged from \$68 million to \$350 million.

GeoVax believes that its vaccine programs in Ebola, Sudan, Marburg, Lassa Fever, Malaria and Zika may each be eligible for a PRV and we intend to apply for a PRV at the appropriate time. There can be no assurance, however, that we will qualify or be approved for a PRV.

#### Manufacturing

We do not have the facilities or expertise to manufacture any of the clinical or commercial supplies of any of our products. To be successful, our products must be manufactured in commercial quantities in compliance with regulatory requirements and at an acceptable cost. To date, we have not commercialized any products, nor have we demonstrated that we can manufacture commercial quantities of our product candidates in accordance with regulatory requirements. If we cannot manufacture products in suitable quantities and in accordance with regulatory standards, either on our own or through contracts with third parties, it may delay clinical trials, regulatory approvals and marketing efforts for such products. Such delays could adversely affect our competitive position and our chances of achieving profitability. We cannot be sure that we can manufacture, either on our own or through contracts with third parties, such products at a cost or in quantities that are commercially viable.

We currently rely and intend to continue to rely on third-party contract manufacturers to produce vaccines needed for research and clinical trials. We have arrangements with third party manufacturers for the supply of our DNA and MVA vaccines for use in our planned clinical trials. These suppliers operate under the FDA's Good Manufacturing Practices and (in the case of European manufacturers) similar regulations of the European Medicines Agency. We anticipate that these suppliers will be able to provide sufficient vaccine supplies to complete our currently planned clinical trials. Various contractors are generally available in the United States and Europe for manufacture of

vaccines for clinical trial evaluation, however, it may be difficult to replace existing contractors for certain manufacturing and testing activities and costs for contracted services may increase substantially if we switch to other contractors. Furthermore, there is currently a shortage of vaccine manufacturing capability due to demand for potential COVID-19 vaccines, which could affect our ability to have our vaccine candidates manufactured.

The MVA component of our vaccine is currently manufactured in cells that are cultured from embryonated eggs. We are exploring a number of approaches to growing MVA in continuous cell lines that can be grown in bioreactors more suitable for commercial-scale manufacturing.

The raw materials and other supplies that are used in the production process for our vaccines and that we use in our research activities are generally available from a number of commercial suppliers and we believe we will be able to obtain sufficient quantities of such materials and supplies for all foreseeable clinical investigations.

#### Competition

The biotechnology and pharmaceutical industries are highly competitive. There are many pharmaceutical companies, biotechnology companies, public and private universities and research organizations actively engaged in the research and development of products that may be competitive with our products. As we develop and seek to ultimately commercialize our product candidates, we face and will continue to encounter competition with an array of existing or development-stage drug and immunotherapy approaches targeting diseases we are pursuing. We are aware of various established enterprises, including major pharmaceutical companies, broadly engaged in vaccine/immunotherapy research and development. These include Janssen Pharmaceuticals, Sanofi-Aventis, GlaxoSmithKline, Merck, Pfizer, and MedImmune. There are also various development-stage biotechnology companies involved in different vaccine and immunotherapy technologies including Aduro Biotech, Advaxis, BioNTech, Curevac, Dynavax, Juno, Moderna, and Novavax. If these companies are successful in developing their technologies, it could materially and adversely affect our business and our future growth prospects. The number of companies seeking to develop products and therapies for the treatment of unmet needs in these indications is likely to increase. Some of these competitive products and therapies are based on scientific approaches that are similar to our approaches, and others are based on entirely different approaches.

Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Our competitors' products may be more effective, or more effectively marketed and sold, than any drug we may commercialize and may render our product candidates obsolete or non-competitive. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. We expect any products that we develop and commercialize to compete based on, among other things, efficacy, safety, convenience of administration and delivery, price, the level of generic competition and the availability of reimbursement from government and other third-party payers.

There are currently three COVID-19 vaccines approved for use in the United States under emergency use authorizations (EUA) from the FDA -- from Pfizer-BioNTech, Moderna and Janssen (Johnson & Johnson). Vaccines from AstraZeneca and Novavax are in late-stage development, and many others are in earlier stages of development. There are currently no FDA licensed and commercialized HIV vaccines, Zika vaccines, or hemorrhagic fever virus vaccines (other than for Ebola) available in the world market. We are aware of several development-stage and established enterprises, including major pharmaceutical and biotechnology firms, which are actively engaged in vaccine research and development in these areas. For hemorrhagic fever viruses, these include NewLink Genetics and Merck, Johnson & Johnson, Novavax, Inovio and GlaxoSmithKline. For HIV, these include Sanofi, GlaxoSmithKline, and Johnson & Johnson. Other HIV vaccines are in varying stages of research, testing and clinical trials including those supported by the NIH Vaccine Research Center, the U.S. Military, IAVI, the European Vaccine Initiative, and the South African AIDS Vaccine Initiative. For Zika, these include NewLink Genetics, Inovio, Merck, Butantan Institute and NIH (NIAID). In December 2019, the FDA approved the first vaccine (ERVEBO®) for prevention of Ebola, developed by Merck.

There are numerous FDA-approved treatments for HIV, primarily antiretroviral therapies, marketed by large pharmaceutical companies. Currently, there are no approved therapies for the eradication of HIV. We expect that

major pharmaceutical companies that currently market antiretroviral therapy products or other companies that are developing HIV product candidates may seek to develop products for the eradication of HIV.

There are currently no commercialized vaccines to prevent malaria infection. A first-generation infectionblocking malaria vaccine, RTS, S, is under regulatory review. 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.

A number of companies are developing various types of therapeutic vaccines or other immunotherapy approaches to treat cancer including Advaxis, Immune Design, Oncothyreon, Bavarian Nordic, Roche Pharmaceuticals, Merck & Co, Bristol Myers Squibb, and AstraZeneca plc.

#### **Our Intellectual Property**

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our vaccines, including our Modified Vaccinia Ankara-Virus-Like Particle (MVA-VLP) based vaccines, and methods of treatment using our vaccines.

We seek patent protection on each of our product and developmental candidates and, where applicable, on combinations with other therapeutic and/or antigenic agents and dosing schedules. Our success also depends on our ability to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing U.S. patent applications and, where appropriate, foreign patent applications covering our proprietary technology, inventions, and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our proprietary position. Additionally, we expect to benefit, where appropriate, from statutory frameworks in the United States, Europe, and other countries that provide a period of clinical data exclusivity to compensate for the time required for regulatory approval of our vaccine candidates.

We continually assess and refine our intellectual property strategies as we develop new technologies and product candidates. We plan to file additional patent applications based on our intellectual property strategies where appropriate, including where we seek to improve our basic technology, adapt to competition, or to improve business opportunities. Further, we plan to file patent applications, as we consider appropriate under the circumstances, to protect new technologies that we develop. Our patent filing strategy typically includes seeking patent protection in the United States and, wherein appropriate, in additional countries where we believe such protection is likely to be useful.

As of December 31, 2020, our owned and in-licensed patent estate, on a worldwide basis, includes 14 granted U.S. patents, 16 pending U.S. patent applications; 43 granted foreign patents, 13 pending foreign patent applications, and I Patent Cooperation Treaty (PCT) application spread over 19 patent families. The term of individual patents depends upon the laws of the countries in which they are obtained. In the countries in which we currently file, the patent term is 20 years from the earliest date of filing of a non-provisional patent application which serves as a priority application. In addition, we plan to seek patent term adjustments, restorations, and/or patent term extensions where applicable in the United States and other jurisdictions. For example, depending upon the timing, duration, and specifics of FDA approval of our vaccine products, some of our U.S. patents may be eligible for a patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the "Hatch-Waxman Amendments," and codified as 35 U.S.C. § 156. 35 U.S.C. § 156 permits restoration of the patent term of up to five years as compensation for patent term lost during product development and FDA regulatory review process. Patent term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one half the time between the effective date of an IND and the submission date of a Biologics License Application (BLA), plus the time between the submission date of a BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved vaccine product is eligible for such an extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. A similar kind of patent extension, referred to as a Supplementary Protection Certificate, is available in

Europe. Legal frameworks are also available in certain other jurisdictions to extend the term of a patent. We currently intend to seek patent term extensions on any of our, or our exclusively licensed, issued patents in any jurisdiction where we have a qualifying patent and the extension is available; however, there is no guarantee that the applicable regulatory authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions. Further, even if our patent is extended, the patent, including the extended portion of the patent, may be held invalid or unenforceable by a court of final jurisdiction in the United States or a foreign country.

Our current patent portfolio includes 5 patent families directed to various aspects of our DNA and MVAbased HIV vaccines, their genetic inserts expressing multiple HIV protein components, composition, structure, claim of immunization against multiple subtypes of HIV, routes of administration, safety and other related factors and methods of therapeutic and prophylactic use thereof including administration regimes. We have in-licensed patents from Emory University and the U.S. National Institutes of Health (NIH) relevant to our HIV-vaccine program. These patents will expire between 2022 and 2028, exclusive of any patent term adjustments or extensions. We wholly own one patent family directed to specific vaccine administration methods, if issued, valid, and enforceable, will expire in 2037, exclusive of any patent term adjustments or extensions.

We wholly own one U.S. patent application directed to preventive vaccines against hemorrhagic fever viruses (Ebola, Sudan, Marburg and Lassa), and uses thereof. This application, if issued, valid, and enforceable, will expire in 2036, exclusive of any patent term adjustments or extensions.

We wholly own one U.S. patent application directed to preventive vaccines against Zika virus, and uses thereof. This application, if issued, valid, and enforceable, will expire in 2037, exclusive of any patent term adjustments or extensions.

We co-own one patent family with Georgia State University directed to preventive vaccines against human papilloma virus (HPV), and uses thereof. These applications, if issued, valid, and enforceable, will expire in 2037, exclusive of any patent term adjustments or extensions.

We wholly own one U.S. patent application directed to preventive vaccines against malaria, and use thereof. This application, if issued, valid, and enforceable, will expire in 2038, exclusive of any patent term adjustments or extensions.

We wholly own 3 patent families directed to our immuno-oncology vaccine compositions and methods of use thereof. The patent applications of these families, if issued, valid, and enforceable, will expire between 2037-2040, exclusive of any patent term adjustments or extensions.

We have a pending U.S. application directed to our virus-like particle (VLP) platform technology. This patent application, if issued, valid, and enforceable, will expire in 2037, exclusive of any patent term adjustments or extensions.

We wholly own one pending patent family directed to various MVA-based vaccines for the treatment of SARS CoV-2. The patent applications in this family, if issued, valid, and enforceable, will expire in 2041, exclusive of any patent term adjustments or extensions. We have non-exclusively in-licensed from the U.S. National Institutes of Health (NIH) 3 patent families directed to certain aspects of our MVA-viral backbone used in our SARS-CoV2 vaccine, which will expire between 2023 and 2032, exclusive of any patent term adjustments or extensions. We have non-exclusively in-licensed from the NIH 2 patent families relating to coronavirus spike protein compositions relevant to our MVA SARS-CoV2 vaccine candidates. The patent applications for these families, if issued, valid, and enforceable, will expire between 2037 and 2041, exclusive of any patent term adjustments or extensions.

We are the exclusive, worldwide licensee of several patents and patent applications, which we refer to as the Emory Technology, owned, licensed or otherwise controlled by Emory University for HIV or smallpox vaccines pursuant to a license agreement originally entered into on August 23, 2002 and restated on June 23, 2004 (the "Emory License"). The in-licensed Emory University patents will expire between 2022 and 2028, exclusive of any patent term extensions. Through the Emory License we are also a non-exclusive licensee of four issued United States patents owned by the NIH related to the ability of our MVA vector vaccine to operate as a vehicle to deliver HIV virus

antigens, and to induce an immune response in humans. These in-licensed NIH patents will expire in 2023, exclusive of any patent term extensions.

The MVA backbone that we have been using in our vaccines was provided to us by the laboratory of Dr. Bernard Moss of the NIAID, Laboratory of Viral Diseases (LVD). We have a non-exclusive commercial license to the NIH MVA backbone for our SARS CoV-2 vaccine with the NIAID of the National Institutes of Health NIH on behalf of the United States, which includes the use of certain patents and patent applications arising from the Moss laboratory and the provided materials. We also have a non-exclusive research and development license to use the MVA backbone for our other vaccine candidates. If we later decide to commercialize vaccine candidates that are under the research and development license, we will need to negotiate appropriate commercialization licenses. These in-licensed NIH patents and patent applications, if and where issued, valid, and enforceable, will expire between 2023 and 2032, exclusive of any patent term adjustments or extensions.

We cannot be certain that any of the current pending patent applications we have or have licensed, or any new patent applications we may file or license, will ever be issued in the United States or any other country. Even if issued, there can be no assurance that those patents will be sufficiently broad to prevent others from using our products or processes. Furthermore, our patents, as well as those we have licensed or may license in the future, may be held invalid or unenforceable by a court, or third parties could obtain patents that we would need to either license or to design around, which we may be unable to do. Current and future competitors may have licensed or filed patent applications or received patents and may acquire additional patents or proprietary rights relating to products or processes competitive to ours. In addition, any claims relating to the infringement of third-party proprietary rights, or earlier date of invention, even if not meritorious, could result in costly litigation, lengthy governmental proceedings, divert management's attention and resources and require us to enter royalty or license agreements which are not advantageous to us, if available at all.

We also expect to benefit, where appropriate, from statutory frameworks in the United States, Europe, and other countries that provide a period of regulatory exclusivity to compensate for the time and cost required in securing regulatory approval of our vaccine products. For example, in 2010, the United States enacted the Biologics Price Competition and Innovation Act (BPCIA). Under the BPCIA, innovator manufacturers of vaccine products may be granted 12 years of exclusive use before biosimilar versions of such products can be licensed for marketing in the U.S. This means that the FDA may not approve an application for a biosimilar version of our vaccine product until 12 years after the date our vaccine product is approved for sale (with a potential six-month extension of exclusivity if certain pediatric studies are conducted and the results accepted by the FDA), although a biosimilar application may be submitted four years after the date we receive approval from the FDA to sell our vaccine product. Additionally, the BPCIA establishes procedures by which potentially relevant patents may be shared and litigation over patents may proceed in advance of approval. The BPCIA also provides incentives to biosimilar applicants by providing a period of exclusivity to the first biosimilar of a product approved by the FDA. The 12-year data exclusivity provision of the BPCIA does not prevent a competitor from seeking marketing approval of one of our vaccine products, or a product similar thereto, by submitting its own, original Biologics License Application (BLA).

We intend to benefit, where applicable, from additional market exclusivity provisions in various jurisdiction that reward the treatments of rare diseases. For example, in the United States under the Orphan Drug Act of 1983, the FDA may grant orphan designation to a vaccine product intended to prevent or treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting a BLA. After the FDA grants orphan designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. If a product that has orphan designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety, or providing a major contribution to patient care, or in instances of drug supply issues. Competitors, however, may receive approval of either a different product for the same indication or the same product for a different indication; in the latter case, because health care professionals are free to prescribe products for off-label uses, the competitor's product could be used for the orphan indication despite our orphan exclusivity.

We are not a party to any litigation, opposition, interference, or other potentially adverse proceeding with regard to our patent positions. However, if we become involved in litigation, interference proceedings, oppositions or other intellectual property proceedings, for example as a result of an alleged infringement or a third-party alleging an earlier date of invention, we may have to spend significant amounts of money and time and, in the event of an adverse ruling, we could be subject to liability for damages, invalidation of our intellectual property and injunctive relief that could prevent us from using technologies or developing products, any of which could have a significant adverse effect on our business, financial conditions or results of operations. In addition, any claims relating to the infringement of third-party proprietary rights, or earlier date of invention, even if not meritorious, could result in costly litigation, lengthy governmental proceedings, divert management's attention and resources and require us to enter royalty or license agreements which are not advantageous if available at all.

In addition to patents, we rely upon unpatented, proprietarytrade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees, and consultants, and invention assignment agreements with our employees. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our commercial partners, collaborators, employees, and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

#### **Research and Development**

Our expenditures for research and development activities were \$2,444,459 and \$1,910,715 during the years ended December 31, 2020 and 2019, respectively. As our vaccines continue to go through the process to obtain regulatory approval, we expect our research and development costs to increase. We have not yet formulated any plans for marketing and sales of any vaccine candidate we may successfully develop. Compliance with environmental protection laws and regulations has not had a material effect on our capital expenditures, earnings or competitive position to date.

## Scientific Advisors

We seek advice from our Scientific Advisory Board, which consists of a number of leading scientists, on scientific and medical matters. The current members of our Scientific Advisory Board are:

Name	Position/Institutional Affiliation
Harriet L. Robinson, PhD.	Chief Scientific Officer Emeritus, GeoVax
Stanley A. Plotkin, MD	Professor Emeritus, University of Pennsylvania, Adjunct Professor, Johns Hopkins University
Barney S. Graham, MD, PhD	Senior Investigator, Vaccine Research Center, NIAID
Scott C. Weaver, PhD	Director, University of Texas Medical Branch Institute for Human Infections and Immunity Scientific Director, Galveston National Laboratory
Olivera J. Finn, PhD	Distinguished Professor of Immunology and Surgery, University of Pittsburgh

#### **Properties**

We lease approximately 8,400 square feet of office and laboratory space located at 1900 Lake Park Drive, Suite 380, Smyrna, Georgia under a lease agreement which expires on December 31, 2022. We believe this space is adequate for our current needs.

#### Human Capital Resources

We currently have seven full-time and two part-time employees. None of our employees are covered by collective bargaining agreements and we believe that our employee relations are good.

We believe that our future success largely depends upon our continued ability to attract and retain highly skilled employees. We provide our employees with competitive compensation, opportunity for equity ownership, and a robust employment package that promotes wellness across all aspects of their lives, including healthcare, retirement planning, and paid time off.

## **Corporate Background**

Our primary business is conducted by our wholly owned subsidiary, GeoVax, Inc., which was incorporated under the laws of Georgia in June 2001. Our address is 1900 Lake Park Drive, Smyrna, Georgia 30080, and our telephone number at that address is 678-384-7220. The predecessor of our parent company, GeoVax Labs, Inc. (the reporting entity) was originally incorporated in June 1988 under the laws of Illinois as Dauphin Technology, Inc. ("Dauphin"). In September 2006, Dauphin completed a merger with GeoVax, Inc. As a result of the merger, GeoVax, Inc. became a wholly owned subsidiary of Dauphin, and Dauphin changed its name to GeoVax Labs, Inc. In June 2008, the Company was reincorporated under the laws of Delaware. We currently do not conduct any business other than GeoVax, Inc.'s business of developing new products for the treatment or prevention of human diseases. Our principal offices are in Smyrna, Georgia (metropolitan Atlanta).

#### **AVAILABLE INFORMATION**

Our website address is www.geovax.com. We make available on this website under "Investors – SEC Reports," free of charge, our proxy statements, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. We also make available our Code of Ethics on this website under the heading "Investors – Corporate Governance". Information contained on our website is not incorporated into this prospectus.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with "Selected Financial Data" and our consolidated financial statements and the related notes beginning on page F-1. This discussion contains forward-looking statements that involve risks and uncertainties because they are based on current expectations and relate to future events and our future financial performance. Our actual results may differ materially from those anticipated in these forward-looking statements because of many important factors, including those set forth under "Risk Factors" and elsewhere in this prospectus.

#### Overview

GeoVax is a clinical-stage biotechnology company developing immunotherapies and vaccines against cancers and infectious diseases using a novel vector vaccine platform (Modified Vaccinia Ankara-Virus Like Particle or "GV-MVA-VLP<sup>TM</sup>"). During January 2020, we began a program to develop a vaccine for prevention of novel coronavirus (COVID-19) infection. That effort has resulted in four COVID-19 vaccine candidates. These COVID-19 vaccine candidates have been designed and constructed and are being tested using relevant experimental animal challenge models. Additional development programs are focused on preventive and therapeutic vaccines against Human Immunodeficiency Virus (HIV); preventive vaccines against hemorrhagic fever viruses (Ebola, Sudan, Marburg, and Lassa fever), Zika virus and malaria; as well as immunotherapies for solid tumor cancers.

For our infectious disease vaccines, our recombinant MVA vector expresses target proteins on highly immunogenic VLPs in the person being vaccinated, with the intended result of producing durable immune responses with the safety characteristics of the replication deficient MVA vector and cost-effective manufacturing.

In cancer immunotherapy, we believe that stimulating the immune system to treat or prevent cancers is a compelling concept and that the opportunity for immune-activating technologies is promising, especially in light of advancements such as checkpoint inhibitors leading the way in oncology. Despite drug approvals in limited indications and promising results in clinical trials, there remains a significant need and opportunity for further advancements. We believe our GV-MVA-VLP<sup>TM</sup> platform is well-suited for delivery of tumor-associated antigens and we plan to pursue development of our platform in this space.

Our most advanced vaccine program is focused on prevention of the clade B subtype of HIV prevalent in the regions of the Americas, Western Europe, Japan and Australia; our HIV vaccine candidate, GOVX-B11, will be included in an upcoming clinical trial (HVTN 132) managed by the HIV Vaccine Clinical Trials Network (HVTN) with support from the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH), which is targeted to begin in late 2021. Additionally, during August 2020 a consortium led by researchers at the University of California, San Francisco (UCSF) began a clinical trial using our vaccine as part of a combinational therapy to induce remission in HIV-positive individuals. Through the efforts of our collaborator, American Gene Technologies International, Inc. (AGT), we expect that our HIV vaccine will also enter clinical trials during 2021 in combination with AGT's gene therapy technology to seek a functional cure for HIV. Our other vaccine and immunotherapy programs are at various other stages of development.

Our corporate strategy is to advance, protect and exploit our differentiated vaccine/immunotherapy platform leading to the successful development of preventive and therapeutic vaccines against infectious diseases and various cancers. With our design and development capabilities, we are progressing and validating an array of cancer and infectious disease immunotherapy and vaccine product candidates. Our goal is to advance products through to human clinical testing, and to seek partnership or licensing arrangements for achieving regulatory approval and commercialization. We also leverage third party resources through collaborations and partnerships for preclinical and clinical testing with multiple government, academic and corporate entities.

We have not generated any revenues from the sale of the products we are developing, and we do not expect to generate any such revenues for at least the next several years. Our product candidates will require significant additional research and development efforts, including extensive preclinical and clinical testing. All product candidates that we advance to clinical testing will require regulatory approval prior to commercial use and will require significant costs for commercialization. We may not be successful in our research and development efforts, and we may never generate sufficient product revenue to be profitable.

#### **Critical Accounting Policies and Estimates**

This discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, management evaluates its estimates and adjusts them as necessary. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates under different assumptions or conditions.

Our significant accounting policies are summarized in Note 2 to our consolidated financial statements for the year ended December 31, 2020, which are included in this Form 10-K. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

#### Revenue Recognition

We recognize revenue in accordance with FASB Accounting Standards Update 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which created a new Topic, Accounting Standards Codification Topic 606. The standard is principle-based and provides a five-step model to determine when and how revenue is recognized. The core principle is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

*Grant revenue* – We receive payments from government entities under non-refundable grants in support of our vaccine development programs. We record revenue associated with these grants when the reimbursable costs are incurred and we have complied with all conditions necessary to receive the grant funds.

*Research collaborations* – From time to time, we may enter into collaborative research and development agreements for specific vaccine development approaches and/or disease indications whereby we receive third-party funding for preclinical research under certain of these arrangements. Each agreement is evaluated in accordance with the process defined by ASU 2014-09 and revenue is recognized accordingly.

#### Stock-Based Compensation

We account for stock-based transactions in which the Company receives services from employees, directors or others in exchange for equity instruments based on the fair value of the award at the grant date. Stock-based compensation cost for awards of common stock is estimated based on the price of the underlying common stock on the date of issuance. Stock-based compensation cost for stock options or warrants is estimated at the grant date based on each instrument's fair value as calculated by the Black-Scholes option pricing model. We recognize stock-based compensation cost as expense ratably on a straight-line basis over the requisite service period for the award. See Note 8 to our financial statements for additional stock-based compensation information.

## Liquidity and Capital Resources

Our principal uses of cash are to finance our research and development activities. Since inception, we have funded these activities primarily from government grants and clinical trial assistance, and from sales of our equity and debt securities. At December 31, 2020, we had cash and cash equivalents of \$9,883,796 and total assets of \$10,393,899, as compared to \$283,341 and \$468,880, respectively, at December 31, 2019. At December 31, 2020, we had working capital of \$9,424,839, compared to a working capital deficit of \$1,568,929 at December 31, 2019.

Net cash used in operating activities was \$2,750,570 and \$1,398,497 for the years ended December 31, 2020 and 2019, respectively. Generally, the variances between periods are due to fluctuations in our net losses, offset by non-cash charges such as depreciation and stock-based compensation expense, and by net changes in our assets and liabilities. Our net losses generally fluctuate based on expenditures for our research activities, partially offset by government grant revenues. See "Results of Operations – Grant and Collaboration Revenues" below for additional details concerning our government grants.

NIAID has funded the costs of conducting all of our human clinical trials (Phase 1 and Phase 2a) to date for our preventive HIV vaccines, with GeoVax incurring certain costs associated with manufacturing the clinical vaccine supplies and other study support. We expect that NIAID will also fund the cost of the planned Phase 1 trial (HVTN 132) to further evaluate the safety and immunogenicity of adding "protein boost" components to our vaccine, GOVX-B11. We expect HVTN 132 to commence patient enrollment during 2021. Additionally, we are party to a collaboration with American Gene Technologies International, Inc. (AGT) whereby AGT intends to conduct a Phase 1 human clinical trial with our combined technologies, with the ultimate goal of developing a functional cure for HIV infection. AGT began the Phase 1 trial in late 2020, and we expect the addition of our vaccine into the trial during 2021. A similar effort is underway with a consortium led by researchers at the University of California, San Francisco (UCSF), using our vaccine as part of a combinational therapy to induce remission in HIV-positive individuals; this program entered clinical trials during August 2020. Each of these programs could experience delays as a result of the ongoing COVID-19 pandemic. Net cash used in investing activities was \$156,791 and \$7,606 for the years ended December 31, 2020 and 2019, respectively. Our investing activities have consisted predominantly of capital expenditures for laboratory equipment.

Net cash provided by financing activities was \$12,507,816 and \$1,429,743 for the years ended December 31, 2020 and 2019, respectively. Net cash provided by financing activities during 2020 relates to (i) the sale in January 2020 of shares of our Series J Preferred Stock for net proceeds of \$300,000, (ii) \$170,200 of PPP loan proceeds received in April 2020 (see discussion below), (iii) \$888,500 of net proceeds received in June 2020 from our issuance of Convertible Debentures (see discussion below) (iv) net proceeds of approximately \$11.2 million received in September 2020 from the public offering of our equity securities (see discussion below), (v) \$2,500 of net proceeds from the exercise of warrants, and (vi) \$11,880 in principal repayments toward the GRA Note. Net cash provided by financing activities during 2019 relates to the sale of shares of our Series G and Series I convertible preferred stock for aggregate net proceeds of \$1,440,000 and \$10,257 in principal repayments toward the GRA Note.

*PPP Loan.* On April 17, 2020, we received a \$170,200 bank loan backed by the United States Small Business Administration pursuant to the Paycheck Protection Program (PPP) provisions of the CARES Act. The loan bears an annual interest rate of one percent and is due April 17, 2022. In October 2020, we applied to the lender to have the loan forgiven, based upon our submission of qualifying information regarding eligible expenses; as of the date of this report our forgiveness application has not been processed.

*Issuance of Convertible Debenture and Subsequent Conversion to Equity.* On June 26 2020, we entered into a securities purchase agreement with two institutional investors, pursuant to which we received gross proceeds of \$1,050,000 in exchange for the issuance of: (i) 5% Original Issue Discount Senior Secured Convertible Debentures (the "Convertible Debentures") in the aggregate principal amount of \$1,200,000; and (ii) five-year warrants (the "June 2020 Warrants") to purchase an aggregate of 120,000 shares of our common stock at an initial exercise price of \$10.00 per share. Net proceeds after deducting the original issue discount, finder's fee and other debt issuance costs were \$888,500.

The Convertible Debentures were mandatorily convertible upon our consummation of a public offering of common stock with gross proceeds of \$6,000,000 or more, and which resulted in the listing of our common stock on a national securities exchange (a "Qualified Offering"). The conversion price upon the occurrence of a Qualified Offering was equal to the lower of (i) \$10.00 per share or (ii) 80% of the offering price. The conversion provisions of the Convertible Debentures were subject to a "conversion blocker" such that each of the purchasers could not convert the Convertible Debentures to the extent that the conversion would result in the purchaser and its affiliates holding more than 4.99% of our outstanding common stock.

Upon our consummation of the public offering discussed below, the \$1,200,000 maturity value of the Convertible Debentures and \$14,667 of accrued interest were automatically converted at \$4.00, the Qualified Offering discounted price, resulting in the issuance of 303,668 conversion units. Of the 303,668 conversion units: (a) 177,626 consisted of one share of common stock and a warrant to purchase one share of common stock (a "Conversion Warrant"), and (b) 126,042 consisted of one pre-funded warrant to purchase one share of common stock (a "Pre-Funded Warrant") and a Conversion Warrant. The Pre-Funded Warrants provided the holder the right to purchase one share of Common Stock at an exercise price of \$0.01 per share and were exercised in full in January 2021. The Conversion Warrants provide the holder the right to purchase one share of common stock, are immediately exercisable at an exercise price of \$5.00 per share and expire five years after the issuance date. As a result of the public offering the exercise price of the June 2020 Warrants was reduced to \$5.00.

*Public Offerings* – On September 29, 2020, we closed an underwritten public offering (the "September Offering") of an aggregate of 2,560,000 units of our equity securities (the "Units"), with gross proceeds to us of approximately \$12.8 million. Net proceeds after deducting underwriting discounts and commissions and other offering expenses were approximately \$11.2 million.

Of the 2,560,000 Units sold in the September Offering: (a) 2,310,000 Units consisting of one share of our common stock, and a Warrant to purchase one share of common stock (each, a "Unit Warrant"); and (b) 250,000 Units consisting of a Pre-Funded Warrant to purchase one share of common stock and a Unit Warrant. The Pre-Funded Warrants provided the holder the right to purchase one share of common stock at an exercise price of \$0.01 per share and were exercised in full during October 2020. The Unit Warrants provide the holder the right to purchase one share of common stock at an exercise price of \$0.01 per share and were exercised in full during October 2020.

of common stock, are immediately exercisable at an exercise price of \$5.00 per share and expire five years after the issuance date. The public offering price was \$5.00 per Unit (\$4.99 for each Unit including a Pre-Funded Warrant).

Pursuant to the Underwriting Agreement, we issued to the representative of the underwriters, as a portion of the underwriting compensation, warrants to purchase up to a total of 128,000 shares of common stock (the "Representative Warrants"). The Representative Warrants have an exercise price of \$5.50 per share, are initially exercisable 180 days after the effective date of the Offering and have a term of three years from their initial exercise date.

On February 11, 2021, we closed an underwritten bought deal public offering of 1,644,000 shares of our common stock, including 204,000 shares sold pursuant to the full exercise of the underwriter's option to purchase additional shares, at a price to the public of \$6.25 per share. Net proceeds after deducting underwriting discounts and commissions and other offering expenses were approximately \$9.4 million

2021 Warrant Exercises – During January and February 2021, holders of our warrants exercised 62,626 Series I Warrants, 126,042 Pre-Funded Warrants and 690,034 Unit Warrants, resulting in the issuance of 835,900 shares of our common stock for aggregate net proceeds to us of \$3,174,156.

*Conversion of Deferred Compensation to Equity* – From 2016 through August 2020, to help conserve the Company's cash resources, our executive officers and non-employee directors agreed to defer receipt of all or a portion (at varying levels) of their respective cash compensation. On September 29, 2020, upon our consummation of the Offering, \$1,500,000 of the accumulated deferrals were converted at the \$5.00 offering price, resulting in the issuance of 300,001 units substantially similar to the units sold in the public offering, with each unit consisting of one share of our common stock and one warrant substantially similar to a Unit Warrant (a "Management Warrant"). The Company also paid the executive officers and non-employee directors \$525,198 of the deferred compensation in cash.

As of December 31, 2020, we had an accumulated deficit of \$45.8 million. We expect for the foreseeable future we will continue to operate at a loss. The amount of the accumulated deficit will continue to increase, as it will be expensive to continue our research and development efforts. We will continue to require substantial funds to continue our activities and cannot predict the outcome of our efforts. We believe that our existing cash resources, combined with funding from existing government grants and clinical trial support, will be sufficient to fund our planned operations into 2023. We may require additional funds to continue our planned operations beyond that date. We are currently seeking sources of capital through additional government grant programs and clinical trial support, and we plan to conduct additional offerings of our equity securities. Additional funding may not be available on favorable terms or at all and if we fail to obtain additional capital when needed, we may be required to delay, scale back, or eliminate some or all of our research and development programs as well as reduce our general and administrative expenses.

#### Net Operating Loss Carryforwards

At December 31, 2020, we had consolidated net operating loss carryforwards for income tax purposes of \$61.8 million, of which approximately \$53.6 million will expire in 2021 through 2037 if not utilized. We also have research and development tax credits of approximately \$1.2 million available to reduce income taxes, if any, which will expire in 2022 through 2040 if not utilized. Section 382 of the Internal Revenue Code contains provisions that may limit our utilization of net operating loss and research tax credit carryforwards in any given year as a result of significant changes in ownership interests that have occurred in past periods or may occur in future periods.

#### **Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements that are likely or reasonably likely to have a material effect on our financial condition or results of operations, other than the operating lease for our office and laboratory space.

## **Results of Operations**

We recorded net losses of \$2,958,068 and \$2,370,629 for the years ended December 31, 2020 and 2019, respectively. Our operating results typically fluctuate due to the timing of activities and related costs associated with our research and development activities and our general and administrative costs, as described below.

#### Grant and Collaboration Revenues

We recorded grant and collaboration revenues of \$1,823,658 and \$1,175,896 for the years ended December 31, 2020 and 2019, respectively.

<u>Grant Revenues</u> – Our grant revenues relate to grants and contracts from agencies of the U.S. government in support of our vaccine development activities, and such revenues were 79% and 84% of our total revenues for 2020 and 2019, respectively. We record revenue associated with these grants as the related costs and expenses are incurred. The variance in our grant revenues from period to period relates to the timing and amount of our expenditures for activities supported by the grants. Additional detail concerning our grant revenues and the remaining funds available for use as of December 31, 2020 is presented in the table below.

	Grant Reve D	enue I uring			used Funds vailable at
					ecember 31,
Grant/Contract No.	2020		2019		2020
Lassa Fever – U.S. Army Grant	\$ 1,438,465	\$	674,179	\$	165,500
Lassa Fever – SBIR Grant	-		147,042		-
Zika – NIH SBIR Grant	-		162,461		-
Total	\$ 1,438,465	\$	983,682	\$	165,500

<u>Collaboration Revenues</u> – In addition to the grant revenues above, during the years ended December 31, 2020 and 2019, we recorded revenues of \$385,193 and \$192,214 associated with several research collaborations with third parties. These were 21% and 16% of our revenues for 2020 and 2019, respectively.

## Research and Development Expenses

Our research and development expenses were \$2,444,459 and \$1,910,715 for the years ended December 31, 2020 and 2019, respectively. Research and development expense for these periods includes stock-based compensation expense of \$7,156 and \$43,801 for 2020 and 2019, respectively (see discussion under "Stock-Based Compensation Expense" below).

Our research and development expenses can fluctuate considerably on a period-to-period basis, depending on the timing of expenditures related to our government grants and other research projects, and other factors. Research and development expenses increased by \$533,744, or 28% from 2019 to 2020. The fluctuation is primarily due to the timing of expenditures related to our government grants. Our research and development costs do not include costs incurred by the HVTN in conducting clinical trials of our preventive HIV vaccines; those costs are funded directly to the HVTN by NIAID.

We do not disclose our research and development expenses by project, since our employees' time is spread across multiple programs and our laboratory facility is used for multiple vaccine candidates. We track the direct cost of research and development expenses related to government grant revenue by the percentage of assigned employees' time spent on each grant and other direct costs associated with each grant. Indirect costs associated with grants are not tracked separately but are applied based on a contracted overhead rate negotiated with the NIH. Therefore, the recorded revenues associated with government grants approximate the costs incurred.

We expect our research and development costs to increase as we continue development of our various programs and as we move toward later stages of development, especially with regard to clinical trials. We do not provide forward-looking estimates of costs and time to complete our research programs due to the many uncertainties associated with vaccine development. Due to these uncertainties, our future expenditures are likely to be highly volatile in future periods depending on the outcomes of the trials and studies. As we obtain data from pre-clinical studies and clinical trials, we may elect to discontinue or delay vaccine development programs to focus our resources on more promising vaccine candidates. Completion of preclinical studies and human clinical trials may take several years or more, but the length of time can vary substantially depending upon several factors. The duration and the cost of future clinical trials may vary significantly over the life of the project because of differences arising during development of the human clinical trial protocols, including the number of patients that ultimately participate in the

clinical trial; the duration of patient follow-up that seems appropriate in view of the results; the number of clinical sites included in the clinical trials; and the length of time required to enroll suitable patient subjects.

#### General and Administrative Expenses

Our general and administrative expenses were \$2,196,014 and \$1,637,674 for the years ended December 31, 2020 and 2019, respectively. General and administrative costs include officers' salaries, legal and accounting costs, patent costs, and other general corporate expenses. General and administrative expense includes stock-based compensation expense of \$57,307 and \$283,699 for 2020 and 2019, respectively (see discussion under "Stock-Based Compensation Expense" below). Excluding stock-based compensation expense, general and administrative expenses were \$2,138,707 and \$1,353,975 for 2020 and 2019, respectively, representing an increase of \$784,732 or 58%. The increase from 2019 to 2020 is primarily related to higher legal fees, patent costs, investor relations consulting, and personnel costs. We expect that our general and administrative costs will increase in the future in support of expanded research and development activities and other general corporate activities.

#### Stock-Based Compensation Expense

For the two years ended December 31, 2020, the components of stock-based compensation expense were as follows:

	2020	2019
Stock option expense	\$ 18,730	\$ 104,420
Stock issued for non-employee services	45,733	223,080
Total stock-based compensation expense	\$ 64,463	\$ 327,500

As a result of the reverse stock splits enacted in April 2019 and in January 2020, we made adjustments and retroactive restatements to all of our outstanding stock options such that the balances in January 2020 were negligible. We therefore recorded no stock-based compensation expense related to our stock option plan for the majority of 2020. We re-initiated employee stock option grants in December 2020 and recorded a proportionate amount of expense for the year ended December 31, 2020.

In general, stock-based compensation expense is allocated to research and development expense or general and administrative expense according to the classification of cash compensation paid to the employee, consultant or director to whom the stock compensation was granted. For the two years ended December 31, 2020, stock-based compensation expense was allocated as follows:

	 2020	2019
General and administrative expense	\$ 57,307	\$ 283,699
Research and development expense	 7,156	43,801
Total stock-based compensation expense	\$ 64,463	\$ 327,500

### Other Income (Expense)

Interest income was \$2,271 and \$6,359 for the years ended December 31, 2020 and 2019, respectively. The variances between years are primarily attributable to the cash available for investment and to interest rate fluctuations.

Interest expense was \$143,524 and \$4,495 for the years ended December 31, 2020 and 2019, respectively. Interest expense relates to the Convertible Debentures, GRA Note, PPP Loan, and financing costs associated with insurance premiums. For 2020, interest expense included \$14,667 of accrued interest payable and \$124,185 of amortized debt discount related to the Convertible Debentures. Subsequent to the full conversion of the Convertible Debentures into our equity securities on September 29, 2020, there will be no more interest expense associated with the Convertible Debentures, and we expect other interest expense will be minimal.

#### Impact of Inflation

For the two-year period ended December 31, 2020, we do not believe that inflation and changing prices had a material impact on our operations or on our financial results.

#### **Quantitative and Qualitative Disclosure About Market Risk**

Our exposure to market risk is limited primarily to interest income sensitivity, which is affected by changes in the general level of United States interest rates, particularly because a significant portion of our investments are in institutional money market funds. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income received without significantly increasing risk. Due to the nature of our shortterm investments, we believe that we are not subject to any material market risk exposure. We do not have any derivative financial instruments or foreign currency instruments.

## SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS, DIRECTORS AND OFFICERS

Based solely upon information made available to us, the following table sets forth information with respect to the beneficial ownership of our Common Stock as of March 23, 2021 by (i) each director; (ii) each of the executive officers named in the summary compensation table; and (iii) all executive officers and directors as a group. We do not know of any person who beneficially owns more than 5% of our Common Stock. Except as otherwise indicated in footnotes to this table or, where applicable, to the extent authority is shared by spouses under community property laws, to our knowledge, the holders listed below have sole voting and investment power with respect to all shares of Common Stock beneficially owned by them.

	Common Stock				
Name of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class (1)			
Directors and Executive Officers: (2)					
Randal Chase (3)	33,226	*			
David A. Dodd (4)	163,740	2.6%			
Dean G. Kollintzas (5)	23,974	*			
Robert T. McNally (6)	107,850	1.7%			
Mark J. Newman	-	*			
Mark W. Reynolds (7)	120,368	1.9%			
John N. Spencer, Jr. (8)	42,048	*			
All executive officers and directors as a group (7 persons) (9)	545,994	8.3%			

\* Less than 1%

<sup>(1)</sup> This table is based upon information supplied by officers and directors, and with respect to principal stockholders, any Schedules 13D and 13G filed with the SEC. Beneficial ownership is determined in accordance with the rules of the SEC. Applicable percentage ownership is based on 6,315,467 shares of Common Stock outstanding as of March 23, 2021. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of Common Stock subject to options or warrants currently exercisable, or exercisable within 60 days after March 23, 2021 (subject to specified limits), at any time at the option of the holder, are deemed outstanding.

<sup>(2)</sup> Except as otherwise indicated, the business address of each director and executive officer listed is c/o GeoVax Labs, Inc., 1900 Lake Park Drive, Suite 380, Smyrna, Georgia 30080.

<sup>(3)</sup> Includes 16,613 shares of Common Stock and warrants to purchase 16,613 shares of common stock.

<sup>(4)</sup> Includes 81,870 shares of Common Stock and warrants to purchase 81,870 shares of common stock.

<sup>(5)</sup> Includes 11,987 shares of Common Stock and warrants to purchase 11,987 shares of common stock.

<sup>(6)</sup> Includes 53,925 shares of Common Stock and warrants to purchase 53,925 shares of common stock.

<sup>(7)</sup> Includes 60,184 shares of Common Stock and warrants to purchase 60,184 shares of common stock.

<sup>(8)</sup> Includes 21,024 shares of Common Stock and warrants to purchase 21,024 shares of common stock.

<sup>(9)</sup> Includes 245,603 shares of Common Stock and warrants to purchase 245,603 shares of common stock.

## MANAGEMENT

### **Directors and Executive Officers**

The following table sets forth certain information with respect to our directors and executive officers as of March 22, 2021:

Name	Age	Current Position
David A. Dodd	71	Chairman of the Board of Directors, President and Chief Executive
		Officer
Mark W. Reynolds, CPA	59	Chief Financial Officer and Corporate Secretary
Mark J. Newman, Ph.D.	66	Chief Scientific Officer
Robert T. McNally Ph.D.	73	Director
Randal D. Chase, Ph.D.	71	Independent Director
(1)(2)(3)		
Dean G. Kollintzas (1)(2)(3)	48	Independent Director
John N. Spencer, Jr. (1)(2)(3)	80	Independent Director

(1) Member of the Compensation Committee of the Board of Directors.

(2) Member of the Nominating and Governance Committee of the Board of Directors.

(3) Member of the Audit Committee of the Board of Directors.

David A. Dodd. Mr. Dodd joined the Board of Directors in March 2010, becoming Chairman of our Board of Directors on January 1, 2011. Effective September 5, 2018, Mr. Dodd became our President and Chief Executive Officer, following Dr. McNally's retirement. His executive management experience in the pharmaceutical and biotechnology industries spans more than 40 years. From September 2017 to April 2018, he served as Chief Executive Officer, and as a member of the Board of Directors of Medizone International, Inc. ("Medizone"), a developer and manufacturer of disinfectant systems. On April 20, 2018, Medizone announced that certain of its creditors had commenced an involuntary bankruptcy proceeding under Chapter 11 of the United States Bankruptcy Code against Medizone. The creditors included Medizone's former Chairman and Chief Executive Officer and its former Director of Operations. From April 2013 to July 2017, Mr. Dodd served as President and Chief Executive Officer, and as a member of the Board of Directors, of Aeterna Zentaris Inc., a drug development company. He was Chairman of the Board of Directors of Aeterna Zentaris, Inc. from May 2014 to May 2016, and continued to serve as a member of its Board of Directors until May 2018. From December 2007 to June 2009, Mr. Dodd was President, Chief Executive officer and Chairman of BioReliance Corporation, a leading provider of biological safety and related testing services. From October 2006 to April 2009, he served as non-executive Chairman of Stem Cell Sciences Plc., where he oversaw the development and implementation of a strategic growth plan, implementation of an experienced executive team, and the sale of the company to Stem Cells, Inc. in April 2009. Before that, Mr. Dodd served as President, Chief Executive Officer and Director of Serologicals Corporation before it was sold to Millipore Corporation in July 2006 for \$1.5 billion. For five years prior to his employment by Serologicals Corporation, Mr. Dodd served as President and Chief Executive Officer of Solvay Pharmaceuticals, Inc. and Chairman of its subsidiary Unimed Pharmaceuticals, Inc. He is also the Chief Executive Officer of RiversEdge BioVentures, an investment and advisory firm focused on the life sciences and pharmaceuticals industries, which he founded in 2009. The Board of Directors has concluded that Mr. Dodd should serve on the Board of Directors due to his experience in the pharmaceutical industry and his involvement as an officer and director of the Company, as well as his background in general management, business transformation, corporate partnering, and mergers and acquisitions.

*Mark W. Reynolds, CPA.* Mr. Reynolds joined the Company in October 2006 as Chief Financial Officer and Corporate Secretary. From 2004 to 2008, Mr. Reynolds served as Chief Financial Officer for HealthWatchSystems, Inc. a privately-held company in the consumer healthcare industry. From 2004 to 2006, he served as Chief Financial

Officer for Duska Therapeutics, Inc., a publicly-held biotechnology company. From 1988 to 2002, Mr. Reynolds worked for CytRx Corporation, a publicly-held biopharmaceutical company, where he first served as Controller and then as Chief Financial Officer. Mr. Reynolds began his career as an auditor with Arthur Andersen & Co. from 1985 to 1988. He is a certified public accountant and earned a Master of Accountancy degree from the University of Georgia.

*Mark J. Newman, Ph.D.* Dr. Newman became employed as our Chief Scientific Officer on August 25, 2020. Dr. Newman, who previously served the Company as vice president of research and development from 2010 to 2013, works for the Company on a half-time basis. The other portion of his working time is devoted primarily to his work at NewMark Diagnostics LLC, a diagnostics development company, which he founded in 2016. Prior, he served senior management positions at PaxVax, Pharmexa A/S, Epimmune, Vaxcel, Apollon, and Cambridge Biotech. During his 30-year career he shepherded the development of experimental vaccine and adjuvant products through preclinical research and into Phase 1 & 2 clinical testing. He is widely published in peer review publications and holds 10 U.S. patents. He holds a dual B.Sc/M.Sc. degree in Agriculture and Pre-Veterinary Medicine from the Ohio State University and earned his Ph.D. in Immunology at the John Curtin School for Medical Research, The Australian National University, Canberra.

**Robert T. McNally, Ph.D.** Dr. McNally joined the Board of Directors in December 2006 and was appointed as our President and Chief Executive Officer effective April 1, 2008, a position he held until his retirement in September 2018. From 2000 to March 2008, Dr. McNally served as Chief Executive Officer of Cell Dynamics LLC, a cGMP laboratory services company. Previously, Dr. McNally was a co-founder and Senior Vice President of Clinical Research for CryoLife, Inc., a pioneering company in transplantable human tissues. He has over 35 years of experience in academic and corporate clinical investigations, management, research, business, quality and regulatory affairs. Dr. McNally is a Fellow of the American Institute for Medical and Biological Engineering, served on the advisory boards of the Petit Institute for Bioengineering and Dupree College of Management at the Georgia Institute of Technology, and is a former Chairman of Georgia Bio, a state trade association. Dr. McNally graduated with a Ph.D. in biomedical engineering from the University of Pennsylvania. The Board of Directors has concluded that Dr. McNally should serve on its Board of Directors by virtue of his prior business and scientific experience, including his experience as Chief Executive Officer of Cell Dynamics, LLC and as Senior Vice President of Clinical Research for CryoLife, Inc., and due to his involvement with the Company as its former President and Chief Executive Officer.

Randal D. Chase, Ph.D. Dr. Chase joined the Board of Directors in March 2015. Dr. Chase is an experienced pharmaceutical and biotechnology executive who currently serves as a business advisor and consultant to companies in the life science sector. He also serves as a director for Mirexus Biotechnologies, Inc., a biomaterials company, and as Chairman of the Board for Glysantis, Inc. a biotechnology company. From February 2017 to April 2018, Dr. Chase was President and Chief Executive Officer of Advanced Proteome Therapeutics Corporation, a publicly-held biopharmaceutical company; he served as a member of that company's board of directors from 2015 to April 2018. He served as Chairman of the Board for Medicago, Inc. until its sale to Mitsubishi Tanabe Pharma Corporation in 2013. From 2006 to 2011, he served as President and Chief Executive Officer of Immunovaccine, Inc., a clinical-stage biotechnology company developing vaccines against cancer and infectious diseases. Dr. Chase is also a former president of Shire Biologics, North American Vaccine, Pasteur Merieux Connaught, and Quadra Logic Technologies, Inc. His early career was at Bristol Myers and Glaxo Pharmaceuticals. Dr. Chase attended the Senior Executive Program of the London Business School in the United Kingdom, holds a Bachelor of Sciences degree in biochemistry from Bishop's University and a Ph.D. in biochemistry from the University of British Columbia. Dr. Chase completed a post-doctoral fellowship at the McArdle Cancer Institute of the University of Wisconsin. The Board of Directors has concluded that Dr. Chase should serve on the Board of Directors due to his extensive leadership experience in the pharmaceutical industry, and the vaccine industry in particular.

*Dean G. Kollintzas.* Mr. Kollintzas joined the Board of Directors in September 2006. Since 2001 Mr. Kollintzas has been an intellectual property attorney specializing in biotechnology and pharmaceutical licensing, FDA regulation, and corporate/international transactions. He is a member of the Wisconsin and American Bar Associations. Since 2004, Mr. Kollintzas has been in private practice. In 2014, he founded Procare Clinical, LLC, a clinical trial management company headquartered in Naperville, IL. Mr. Kollintzas received a microbiology degree from the University of Illinois and a J.D. from the University of New Hampshire School of Law. The Board of Directors has concluded that Mr. Kollintzas should serve on the Board of Directors by virtue of his experience with intellectual property matters, biotechnology and pharmaceutical licensing, and FDA regulation.

John N. (Jack) Spencer, Jr., CPA. Mr. Spencer joined the Board of Directors in September 2006. Mr. Spencer is a certified public accountant and was a partner of Ernst & Young LLP where he spent more than 38 years until he retired in 2000. Mr. Spencer serves as a director of ClearPoint Neuro, Inc., a medical device company, where he also chairs the audit committee. He also serves on the board of one privately held company and as a consultant to various companies primarily relating to financial accounting and reporting matters. Mr. Spencer received a Bachelor of Science degree from Syracuse University, and he earned an M.B.A. degree from Babson College. He also attended the Harvard Business School Advanced Management Program. The Board of Directors has concluded that Mr. Spencer should serve on the Board of Directors by virtue of his experience at Ernst & Young LLP where he was the partner in charge of that firm's life sciences practice for the southeastern United States, and his clients included a large number of publicly-owned and privately-held medical technology companies, together with his continuing expertise as a director of, and a consultant to, other publicly owned and privately held companies.

#### **Family Relationships**

There are no family relationships among any of our directors or executive officers.

## **Director Independence**

The Board of Directors has determined that Messrs. Chase, Kollintzas, and Spencer are the members of our Board of Directors who are "independent," as that term is defined by Section 301(3)(B) of the Sarbanes-Oxley Act of 2002. The Board of Directors has also determined that these individuals meet the definition of "independent director" set forth in Rule 5605(a)(2) of the Nasdaq Listing Rules and that Mr. Spencer is the qualified "financial expert" on the Audit Committee. As independent directors, Messrs. Chase, Kollintzas and Spencer serve as the members of our Audit Committee, our Compensation Committee, and our Nominating and Governance Committee.

## **EXECUTIVE COMPENSATION**

#### **Payment of Deferred Compensation**

Beginning in 2016 and 2017, to help conserve the Company's cash resources, each of our executive officers and non-employee directors, who we refer to as the "Management Creditors," agreed to defer receipt of all or a portion (at varying levels) of their respective cash compensation earned. Beginning in January 2017 and continuing through August 2020, all non-employee directors deferred 100% of their cash compensation. Since that time, both Dr. Harriet Robinson, who was our Chief Scientific Officer Emeritus and a former director, and Dr. Farshad Guirakhoo, our Chief Scientific Officer, resigned from their respective positions. As of September 29, 2020, the aggregate accumulated deferrals were \$2,025,198. The Company did not accrue or pay interest on these amounts.

After careful consideration, the Compensation Committee of the Board determined, and the Board agreed, that, concurrently with the September Offering, the Company would offer \$1,500,000 of units substantially similar to the units sold in the September Offering, with each unit consisting of one share of our common stock and one fiveyear warrant to purchase one share of our common stock at an exercise price of \$5.00 per share, to the Management Creditors as partial payment of the deferred compensation owed. Approximately \$525,000 of the remaining deferred compensation owed was paid in cash for the purpose of assisting the Management Creditors in paying the income taxes that will be imposed on both the common stock and cash received. The Compensation Committee and the Board also considered that the Management Creditors previously owned shares or options to purchase shares of the Company's common stock, which had decreased in value, and that the Compensation Committee and the Board believed it to be in the best interests of the Company and its stockholders for the Company's executive officers and directors to have a financial interest in the success of the Company.

The units offered to the Management Creditors were valued at the offering price for the Units sold in the September Offering. The following table provides details of the payments:

	A	mour	ts Owed a	as of			
		Septen	nber 29, 2	.020	 Payout		
			Board		Units (1)		
	Salary		Fees	Total	 Value/Number	Cash	
David Dodd	\$ 450,0	00 \$	102,675	\$ 552,675	\$ 409,349/81,870 \$	143,326	
Mark Reynolds	406,2	79	-	406,279	\$ 300,918/60,184	105,361	
Farshad Guirakhoo	182,2	92	-	182,292	\$ 135,018/27,004	47,274	
Harriet Robinson	184,9	25	-	184,925	\$ 136,968/27,394	47,957	
Robert McNally	338,5	32	25,500	364,033	\$ 269,627/53,925	94,405	
Jack Spencer		-	141,925	141,925	\$ 105,120/21,024	36,806	
Dean Kollintzas		-	80,919	80,919	\$ 59,934/11,987	20,985	
Randal Chase		-	112,150	112,150	\$ 83,066/16,613	29,084	
Total	\$1,562,0	28 \$	463,169	\$2,025,198	\$ 1,500,000/300,001 \$	525,198	

(1) These units were valued at the same price as the offering price for Units sold in the September Offering. The computation of the number of units was based on the public offering price of \$5.00 per Unit. Number of units is rounded to nearest whole number.

## **Summary Compensation Table**

The following table sets forth all compensation awarded or earned for employment services during 2020 and 2019 by (i) each person who served as our chief executive officer during 2020, and (ii) our two other most highly compensated executive officers (collectively referred to as the "Named Executive Officers").

				Option	All Other	
Name and		Salary	Bonus	Awards (1)	Compensation	Total
Principal Position	Year	(\$)	(\$)	(\$)	(\$)	(\$)
David A. Dodd	2020	\$250,000(3)	\$162,500	\$ 305,760 (6)	\$ 8,483	\$726,743
President and CEO	2019	250,000(3)	-	-	(9)	250,914
					917 (9)	
Mark W. Reynolds	2020	234,392(4)	117,196	143,360 (7)	5,803 (9)	500,751
Chief Financial Officer	2019	234,392(4)	-	-	5,625 (9)	240,017
Mark J. Newman, PhD (2)	2020	41,667	18,750	39,200 (8)	-	99,617
Chief Scientific Officer	2019	-	-	-	-	-
Farshad Guirakhoo, PhD (2)	2020	152,083(5)	-	-	11,238 (10)	163,321
Former Chief Scientific	2019	250,000(5)	-	-	21,648 (10)	271,648
Officer						

- (1) Represents the grant date fair value of the stock options for financial statement reporting purposes. See footnotes 2 and 8 to our consolidated financial statements for the year ended December 31, 2020 for a discussion of the assumptions made and methods used for determining stock compensation values.
- (2) Dr. Newman became our Chief Scientific Officer effective August 25, 2020, following the termination of Dr. Guirakhoo's employment effective August 10, 2020.
- (3) The amount for 2020 includes \$150,000 of cash compensation which was deferred at Mr. Dodd's election. The amount for 2019 includes \$225,000 of such deferred cash compensation. The deferred compensation was paid in the form of common stock, warrants and cash in 2020. See "Payment of Deferred Compensation" above.
- (4) The amount for 2020 includes \$62,504 of cash compensation which was deferred at Mr. Reynolds's election. The amount for 2019 includes \$93,757 of such deferred cash compensation. The deferred compensation was paid in the form of common stock, warrants and cash in 2020. See "Payment of Deferred Compensation" above.
- (5) Amount for 2020 includes \$26,042 of cash compensation which was deferred at Dr. Guirakhoo's election. The amount for 2019 includes \$62,500 of such deferred cash compensation. The deferred compensation was paid to Dr. Guirakhoo in the form of common stock, warrants and cash during 2020. See "Payment of Deferred Compensation" above.
- (6) Represents the grant date fair value for stock options granted on December 2, 2020 for 273,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan.

- (7) Represents the grant date fair value for stock options granted on December 2, 2020 for 128,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan.
- (8) Represents the grant date fair value for stock options granted on December 2, 2020 for 35,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan.
- (9) Represents employer matching contributions to the Company's 401(k) retirement plan.
- (10) Represents \$3,738 and \$3,648 of employer matching contributions to the Company's 401(k) retirement plan for 2020 and 2019, respectively, and \$7,500 and \$18,000 in housing expense allowances for each year, respectively.

### **Employment Agreements**

*David A. Dodd.* Mr. Dodd serves as our President and Chief Executive Officer under an employment agreement dated September 1, 2018. The employment agreement has no specified term. The employment agreement provides for an initial annual salary of \$250,000 to Mr. Dodd, subject to periodic increases as determined by the Board. Mr. Dodd is also eligible for an annual bonus, as determined by the Board, with an initial target of 65% of his base salary. In December 2020, the Board awarded Mr. Dodd a bonus of \$162,500 which was paid in January 2021. No bonus was awarded to Mr. Dodd for 2019. Mr. Dodd is eligible for annual grants of additional awards from our equity incentives plans as determined by the Board. On December 2, 2020, the Board awarded to Mr. Dodd a stock option grant for 273,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan. Mr. Dodd also is eligible for health insurance and 401(k) benefits at the same level and subject to the same conditions as provided to all other employees.

In September 2018, to help conserve the Company's cash resources, as part of his employment agreement, Mr. Dodd agreed to defer a portion of his base salary, effectively reducing his current annualized salary to \$25,000, until August 31, 2020 when his full salary was restored. Of the \$450,000 accumulated salary deferral owed to Mr. Dodd at that date, approximately 74% was paid in the form of the Company's equity securities, with the remainder paid in cash. See "Payment of Deferred Compensation".

*Mark W. Reynolds.* Mr. Reynolds serves as our Chief Financial Officer under an employment agreement dated January 1, 2010 and amended on October 22, 2013. The employment agreement has no specified term. The employment agreement provided for an initial annual salary of \$212,600 to Mr. Reynolds, subject to periodic increases as determined by the Compensation Committee. Mr. Reynolds' current annualized base salary is \$234,392. The Board of Directors may also approve the payment of a discretionary bonus annually. In December 2020, the Board awarded Mr. Reynolds a bonus of \$117,196 which was paid in January 2021. No bonus was awarded to Mr. Reynolds for 2019. Mr. Reynolds is eligible for annual grants of additional awards from our equity incentives plans as determined by the Board. On December 2, 2020, the Board awarded to Mr. Reynolds a stock option grant for 128,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan. Mr. Reynolds is eligible for health insurance and 401(k) benefits at the same level and subject to the same conditions as provided to all other employees.

In April 2016, to help conserve the Company's cash resources, Mr. Reynolds agreed to defer a portion of his base salary, effectively reducing his annualized salary from \$234,392 to \$140,635, until August 31, 2020 when his full salary was restored. Of the \$406,279 accumulated salary deferral owed to Mr. Reynolds at that date, approximately 74% was paid in the form of the Company's equity securities, with the remainder paid in cash. See "Payment of Deferred Compensation".

*Mark J. Newman, PhD.* Dr. Newman serves as our Chief Scientific Officer under an employment agreement dated August 25, 2020. The employment agreement has no specified term. The employment agreement provides for an initial annual salary of \$250,000 on a full-time annualized basis, or \$125,000 per year on a 50% prorated basis to Dr. Newman, subject to periodic increases as determined by the Compensation Committee. The Board of Directors may also approve the payment of a discretionary bonus annually. In December 2020, the Board awarded Dr. Newman a bonus of \$18,750. Dr. Newman is eligible for grants of awards from our equity incentive plans at the same level and

subject to the same conditions as provided to all other employees. On December 2, 2020, the Board awarded to Dr. Newman a stock option grant for 35,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan. Dr. Newman is not eligible for health insurance and 401(k) benefits due to his part-time employment status.

## **Potential Payments Upon Termination or Change-in-Control**

Our employment agreement with Mr. Dodd provides that we will pay severance compensation to Mr. Dodd in the event his employment is terminated by the Company without cause or by Mr. Dodd with good reason (as defined in the agreement). If we terminate Mr. Dodd's employment not for cause or he resigns for good reason, then we would pay (a) an amount in cash equal to three times his then base salary and target annual bonus and (b) all stock option grants held by Mr. Dodd will be fully vested. The agreement also addresses his compensation upon termination if there is a change in control (as defined). If we terminate Mr. Dodd's employment not for cause or he resigns for good reason at any time during the three month period which immediately precedes a change in control (as defined) or during the one year period following a change in control, then we would also pay Mr. Dodd an amount in cash equal to (x) three times the cost to provide 401(k) or other deferred compensation or health and welfare benefits to him, and (y) a tax gross-up payment (if an excise tax is imposed by § 4999 of the Internal Revenue Code or any related interest or penalties are incurred by him).

Our employment agreement with Mr. Reynolds provides that, if we terminate his employment without cause, we will pay a severance payment in the form of monthly payments of base salary for a period equal to one week for each full year of service (14 weeks as of December 31, 2020). Additionally if we terminate Mr. Reynolds' employment at any time during the three month period which immediately precedes a change in control (as defined in the amended employment agreement) or during the one year period following a change in control, then we would pay an amount in cash equal to (a) two times his then base salary and target annual bonus, (b) two times the cost to provide 401(k) or other deferred compensation or health and welfare benefits to him, (c) full, complete vesting of all stock options, restricted stock grants or other equity or equity-type grants, and (d) a tax gross-up payment (if an excise tax is imposed by §4999 of the Internal Revenue Code or any related interest or penalties are incurred by him). The change of control provision also provides for full and complete vesting of all stock option grants held by him.

Our employment agreement with Dr. Newman provides that, if we terminate his employment without cause, we will pay a severance payment in the form of monthly payments of base salary for a period equal to one week for each full year of service.

## **Outstanding Equity Awards**

GeoVax has awarded stock options to its senior management and other employees, pursuant to the GeoVax Labs, Inc. 2020 Stock Incentive Plan (the "2020 Plan"). The 2020 Plan was adopted by the Board on June 19, 2020 to provide equity-based and/or incentive awards to selected employees, directors, and independent contractors of the Company or its affiliates. The terms of these awards typically provide for vesting over a defined period of time, generally three years. The options expire if not exercised within ten years from the date of grant. The Company does not have a formula for determining stock option awards. Awards are generally based on the subjective judgment of the President and Chief Executive Officer and on the Compensation Committee's subjective judgment. The following table sets forth certain information with respect to unexercised options previously awarded to our Named Executive Officers that were outstanding as of December 31, 2020. The table also includes warrants, if any, granted to our Named Executive Officers upon payment of the deferred compensation to the Management Creditors.

Option Awards							
	Number o	f Securities					
	Underlying Une	xercised Options					
			Option Exercise	<b>Option Expiration</b>			
Name	(#) Exercisable	(#) Unexercisable	Price (\$)	Date			
David Dodd	-	273,000 (1)	\$ 2.79	12/02/30			
	81,870 (2)		5.00	9/29/25			
Mark Reynolds	-	128,000 (1)	2.79	12/02/30			
	60,184 (2)		5.00	9/29/25			
Mark Newman, PhD	-)	35,000	2.79	12/2/30			

Farshad Guirakhoo, PhD      27,004(2)      5.00      9/29/25
--

- (1) These stock options were granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan. Assuming such approval, these stock options vest and become exercisable in three equal installments on December 2, 2021, 2022 and 2023.
- (2) Warrants granted as payment of deferred compensation occurring on September 29, 2020. A portion of these warrants reflected deferred compensation accrued in 2020. See "Summary Compensation Table." These warrants are immediately exercisable and have a five-year term. See "Payment of Deferred Compensation."

The 2020 Plan contains provisions that could lead to an accelerated vesting of options or other awards. In the event of certain change-in-control transactions described in the 2020 Plan, (i) outstanding options or other awards may be assumed, converted or replaced; (ii) the successor corporation may substitute equivalent options or other awards or provide substantially similar consideration to 2020 Plan participants as were provided to stockholders (after taking into account the existing provisions of the options or other awards); or (iii) the successor corporation may replace options or awards with substantially similar shares or other property. In the event the successor corporation (if any) refuses to assume or substitute options or other awards as described (i) the vesting of any or all options or awards granted pursuant to the 2020 Plan will accelerate upon the change-in-control transaction, and (ii) any or all options granted pursuant to the Plans will become exercisable in full prior to the consummation of the change-in-control transaction, they shall terminate at such time as determined by the Compensation Committee. Subject to any greater rights granted to 2020 Plan participants under the 2020 Plan, in the event of the occurrence of a change-in-control transaction any outstanding options or other awards will be treated as provided in the applicable agreement or plan of merger, consolidation, dissolution, liquidation, or sale of assets.

If the Company had experienced a change-in-control event as described in the 2020 Plan on December 31, 2020, the value of accelerated options the Named Executive Officers, based on the difference between the closing price of our common stock on the Nasdaq Stock Market on December 31, 2020, and, if lower, the exercise price per share of each option for which vesting would be accelerated for each Named Executive Officer, would be an aggregate of \$355,180.

## DIRECTOR COMPENSATION

The following table sets forth information concerning the compensation earned for service on our Board of Directors during the fiscal year ending December 31, 2020 by each individual who served as a director at any time during the fiscal year.

Name	Fees Earned or Paid in Cash (\$) (2)	Option Awards (\$) (3)(4)	Non-Equity Incentive Plan Compensation (\$)	Non-qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Randal D. Chase	31,350	28,000				59,350
David A. Dodd (1)	-	-	-	-	-	-
Dean G. Kollintzas	26,100	28,000	-	-	-	54,100
Robert T. McNally	10,500	28,000	-	-	-	38,500
Harriet L. Robinson (1)	-	-	-	-	-	-
John N. Spencer, Jr.	37,550	28,000	-	-	-	65,550

(1) As discussed below under "Director Compensation Plan" directors who are employees of the Company receive no compensation for their service as directors. As President and CEO, Mr. Dodd therefore receives no compensation for his service as a director; his compensation for service as President and CEO is shown in the "Summary Compensation" table above. Dr. Robinson, whose term as a director ended on August 7, 2020, was also an employee of the Company during the entirety of 2020 and received no compensation for her service as a director.

- (2) See "Payment of Deferred Compensation" above and "Cash Fees" below for information regarding deferrals of payment of these fees.
- (3) Represents the grant date fair value of stock options granted on December 2, 2020 to each non-employee director for 25,000 shares with an exercise price of \$2.79 per share, vesting over a three-year period. These stock options are granted subject to stockholder approval of an amendment to the 2020 Stock Incentive Plan increasing the maximum aggregate number of shares of common stock that may be issued pursuant to the 2020 Plan.
- (4) The table below shows the aggregate numbers of warrants and option awards outstanding for each non-employee director as of December 31, 2020.

Name	Aggregate Option Awards Outstanding as of December 31, 2020 (#)
Randal D. Chase (1)	41,613
Dean G. Kollintzas (2)	36,987
Robert T. McNally (3)	78,925
John N. Spencer, Jr. (4)	46,024

- (1) Includes 16,613 warrants issued in lieu of deferred cash compensation. See "Payment of Deferred Compensation." A portion of these warrants reflected deferred compensation accrued in 2020.
- (2) Includes 11,987 warrants issued in lieu of deferred cash compensation. See "Payment of Deferred Compensation." A portion of these warrants reflected deferred compensation accrued in 2020.
- (3) Includes 53,925 warrants issued in lieu of deferred cash compensation. See "Payment of Deferred Compensation." A portion of these warrants reflected deferred compensation accrued in 2020.
- (4) Includes 21,024 warrants issued in lieu of deferred cash compensation. See "Payment of Deferred Compensation." A portion of these warrants reflected deferred compensation accrued in 2020.

*Director Compensation Plan.* In March 2007, the Board of Directors approved a recommendation from the Compensation Committee for director compensation, which we refer to as the "Director Compensation Plan." It was subsequently amended in March 2008, December 2009, December 2010, and in December 2020. The Director Compensation Plan applies only to non-employee directors. Directors who are employees of the Company receive no compensation for their service as directors or as members of committees.

*Cash Fees* – For 2020, each non-employee director earned an annual retainer (paid quarterly) of \$5,000 for service as a member of the Audit Committee and \$3,300 for service as a member of the Compensation Committee or the Nominating and Corporate Governance Committee. The Chairman of the Audit Committee earned an annual retainer of \$9,000, and the Chairman of each of the Compensation Committee and the Nominating and Corporate Governance Committee earned an annual retainer of \$6,000. These retainers were also paid quarterly. Non-employee directors also earned fees for each Board of Directors or Committee meeting attended as follows: \$3,000 for in person Board of Directors meetings), \$1,000 for in person Committee meeting chaired (\$750 for telephonic meetings), and \$500 for in person Committee meeting attended as a non-chair member (\$400 for telephonic meetings). A non-employee Chairman of the Board earns an annual retainer of \$30,000 and is not be entitled to receive additional fees for Board meetings attended, but would be entitled to receive additional fees for committees on which he/she serves.

In December 2020, the Board of Directors amended the Director Compensation Plan such that, effective January 1, 2021, each non-employee director will earn an annual retainer (paid quarterly) of \$10,000 (\$30,000 for a non-employee Chairperson) for service as a member of the Board, \$5,000 (\$9,000 for the Chairperson) for service as a member of the Audit Committee. and \$3,300 (\$6,000 for the Chairperson) for service as a member of the Compensation Committee or the Nominating and Corporate Governance Committee. Non-employee directors will also earn fees for each Board of Directors or Committee meeting attended as follows: \$3,000 for in person Board of Directors meetings (\$1,500 for telephonic meetings), \$1,000 for in person Committee meeting chaired (\$750 for telephonic meetings), and \$500 for in person Committee meeting attended as a non-chair member (\$400 for telephonic

meetings). A non-employee Chairman of the Board will earn a fee of \$5,000 for each Board meeting attended (\$2,500 for telephonic meetings).

Stock Option Grants –We currently do not have a formula for determining stock option grants to directors (upon their election to the Board of Directors, or otherwise). Such option grants are currently determined by the Board of Directors, upon recommendation by the Compensation Committee based on the Compensation Committee's annual deliberations and review of the director compensation structure of similar companies. At its meeting in December 2020, upon a recommendation of the Compensation Committee, the Board of Directors approved an annual stock option grant of 25,000 shares to each of its non-employee members for ongoing service as members of the Board of Directors.

*Expense Reimbursement* – All directors are reimbursed for expenses incurred in connection with attending meetings of the Board of Directors and committees.

## CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Other than compensation arrangements for our Named Executive Officers and directors, we describe below each transaction since January 1, 2019, to which we were a party or will be a party, in which the amount exceeds \$120,000 (or, if less, 1% of the average of our total assets amount at December 31, 2020 and 2019) and in which any "related person" (as defined in paragraph (a) of Item 404 of Regulation S-K) had or will have a direct or indirect material interest. Compensation arrangements for our named executive officers and directors are described above under "Executive Compensation."

#### Series E Convertible Preferred Stock and Series G Warrants

On March 5, 2018, we entered into a Securities Purchase Agreement (the "2018 Securities Purchase Agreement") with Sabby Healthcare Master Fund, Ltd. and Sabby Volatility Warrant Master Fund, Ltd. (collectively, the "Purchasers"), each of which beneficially owned more than 5% of our Common Stock, providing for the issuance and sale to the Purchasers of an aggregate of 600 shares of our Series E Convertible Preferred Stock (the "Series E Preferred Shares") for gross proceeds to the Company of \$600,000. On September 5, 2018, the Company and the Purchasers agreed that the Company would issue the Purchasers an additional 600 Series E Preferred Shares for gross proceeds of \$600,000. On February 18, 2019 all outstanding Series E Preferred Shares (1,200 shares) were exchanged for our Series F Convertible Preferred Stock, as described below.

Pursuant to the 2018 Securities Purchase Agreement, on September 5, 2018 the Purchasers were also issued Series G Common Stock Purchase Warrants (the "Series G Warrants"), to purchase shares of our Common Stock. The Series G Warrants were terminated by agreement between the Company and the Purchasers on August 4, 2020.

#### Term Promissory Notes and Series H Warrants

On December 27, 2018, we entered into an agreement with the Purchasers, each of which beneficially owned more than 5% of our Common Stock pursuant to which we issued two Term Promissory Notes ("Notes") and Series H Common Stock Purchase Warrants ("Series H Warrants") to the Purchasers in exchange for aggregate gross proceeds of \$250,000. The non-interest-bearing Notes were initially due on January 22, 2019 but were subsequently extended and then cancelled pursuant to our issuance of Series F and Series G Convertible Preferred Stock as described below.

The Series H Warrants were originally issued for the purchase of up to 10,000,000 shares of our Common Stock in the aggregate with an exercise price of \$0.025 per share. During July 2020, all of the Series H Warrants were converted into 7,147 shares of our Common Stock pursuant to the cashless exercise provisions of the warrants.

## Series F Convertible Preferred Stock

On February 18, 2019, we entered into Exchange Agreements (the "February Exchange Agreements") with the Purchasers pursuant to which the Purchasers exchanged an aggregate of 1,563.146 shares of our Series C Convertible Preferred Stock ("Series C Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 shares of our Series E Convertible Preferred Stock ("Series E Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 shares of our Series E Convertible Preferred Stock ("Series E Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 shares of our Series E Convertible Preferred Stock ("Series E Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 shares of our Series E Convertible Preferred Stock ("Series E Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 shares of our Series E Convertible Preferred Stock ("Series E Preferred Shares"), for which the Purchasers paid \$1,000 per share, and 1,200 per shares paid \$1,000 per shares

per share, held by them for an aggregate of 2,763.146 shares of our Series F Convertible Preferred Stock ("Series F Preferred Shares" and such transaction, the "February Exchange"). Upon consummation of the February Exchange, the shares of Series C Preferred Shares and Series E Preferred Shares subject to the February Exchange were cancelled and no Series C Preferred Shares or Series E Preferred Shares remain outstanding. The February Exchange Agreements also extended the maturity date of the Notes, dated December 27, 2018, made by the Company in favor of the Purchasers to June 22, 2019.

Between March 19 and July 10, 2019, the Purchasers converted 506.6122 Series F Preferred Shares into an aggregate of 10 shares of our Common Stock, and on July 17, 2019, all remaining outstanding Series F Preferred Shares (2,256.5338 shares) were exchanged for our Series H Convertible Preferred Stock, as described below.

## Series G Convertible Preferred Stock and Series I Warrants

On February 25, 2019, we entered into a Securities Purchase Agreement (the "February Securities Purchase Agreement") with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of up to 1,000 shares of our Series G Convertible Preferred Stock (the "Series G Preferred Shares") and related warrants for gross proceeds of up to \$1.0 million, to be funded at up to three different closings. At the first closing on February 25, 2019, we issued 500 Series G Preferred Shares and related warrants in exchange for the payment by the Purchasers of \$250,000 in the aggregate, plus the cancellation by them of Term Notes due to them from the Company in the aggregate amount of \$250,000. At the second and third closings, which occurred on April 26 and June 19, 2019, we issued an aggregate of 500 additional shares of Series G Preferred Stock and related warrants in exchange for the payment by the Purchasers of the payment by the Purchasers of Series G Preferred Stock and related warrants in exchange for the payment by the Purchasers of the payment by the Purchasers of Series G Preferred Stock and related warrants in exchange for the payment by the Purchasers of the payment by the Purchasers of Series G Preferred Stock and related warrants in exchange for the payment by the Purchasers of a total of \$500,000.

On July 17, 2019, all outstanding Series G Preferred Shares (1,000 shares) were exchanged for our Series H Convertible Preferred Stock, as described below.

Pursuant to the February Securities Purchase Agreement, at each closing each Purchaser was issued a Series I Common Stock Purchase Warrant ("Series I Warrants"), to purchase up to a number of shares of the Company's Common Stock equal to 100% of the Series G Conversion Shares underlying the Series G Preferred Shares issued to such Purchaser for cash. During July 2020, 43,687 of the Series I Warrants were converted into 29,756 shares of our Common Stock pursuant to the cashless exercise provisions of the warrants, leaving 31,313 Series I Warrants remaining. Upon consummation of our 2020 underwritten public offering the number of shares subject to the Series I Warrants increased to 62,626 and the exercise price was reduced to \$5.00. In January 2021, all of the remaining Series I Warrants were converted into 20,196 shares of our Common Stock pursuant to the cashless exercise provisions of the warrants.

#### Series H Convertible Preferred Stock

On July 17, 2019, we entered into Exchange Agreements (the "July Exchange Agreements") with the Purchasers pursuant to which the Purchasers exchanged an aggregate of 2,256.5338 Series F Preferred Shares, for which the Purchasers paid \$1,000 per share, and 1,000 Series G Preferred Shares, for which the Purchasers paid \$1,000 per share, and 1,000 Series G Preferred Shares, for which the Purchasers paid \$1,000 per share, and 1,000 Series G Preferred Shares, for which the Purchasers paid \$1,000 per share, held by them for an aggregate of 3,256.5338 shares of our Series H Convertible Preferred Stock ("Series H Preferred Shares" and such transaction, the "July Exchange"). Upon consummation of the July Exchange, the Series F Preferred Shares and Series G Preferred Shares subject to the July Exchange were cancelled and no Series F Preferred Shares or Series G Preferred Shares remain outstanding.

Between July 18, 2019 and March 6, 2020, the Purchasers converted 3,256.5338 Series H Preferred Shares into an aggregate of 484,505 shares of our Common Stock, and there are no Series H Preferred Shares remaining outstanding.

## Series I Convertible Preferred Stock

On July 24, 2019, we entered into a Securities Purchase Agreement (the "July Securities Purchase Agreement") with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of 700 shares of our Series I Convertible Preferred Stock (the "Series I Preferred Shares") for gross proceeds of \$700,000.

Between March 6, 2020 and March 18, 2020, the Purchasers converted 700 Series I Preferred Shares into an aggregate of 204,371 shares of our Common Stock, and there are no Series I Preferred Shares remaining outstanding.

#### Series J Convertible Preferred Stock

On January 24, 2020, we entered into a Securities Purchase Agreement (the "January Securities Purchase Agreement") with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of 300 shares of our Series J Convertible Preferred Stock (the "Series J Preferred Stock") for gross proceeds of \$300,000. On July 23, 2020, the Purchasers converted 300 Series J Preferred Shares into an aggregate of 42,723 shares of our Common Stock, and there are no Series J Preferred Shares remaining outstanding.

## June 2020 Bridge Financing

On June 26, 2020, we entered into a Securities Purchase Agreement with Cavalry Fund I LP and Cavalry Special Ops Fund, LLC, pursuant to which the Company received aggregate gross proceeds of \$1,050,000 in exchange for the issuance of 5% Original Issue Senior Secured Convertible Debentures in the aggregate principal amount of \$1,200,000 and five-year warrants to purchase an aggregate of 2,400,000 shares of our common stock at an exercise price of \$0.50 per share, subject to adjustment. On September 29, 2020, the June 26, 2020 5% Original Issue Senior Secured Convertible Debentures mandatorily converted into 303,667 conversion units, of which 177,625 include shares of common stock and 126,042 include pre-funded warrants (the "Conversion Units"). The Conversion Units provide substantially the same terms as the Units issued in September 2020. The pre-funded warrants provide the holder the right to purchase one share of common stock at an exercise price of \$0.01 per share, are immediately exercisable and will not expire until exercised in full. These pre-funded warrants were exercised on January 13, 2021. The Company also issued these investors five-year warrants to acquire an additional 303,668 shares of common stock, in the aggregate, at \$5.00 per share.

#### **DESCRIPTION OF SECURITIES**

## **Capital Stock**

The following description of our capital stock is summarized from, and qualified in its entirety by reference to, our certificate of incorporation, as amended, including the certificates of designation, as amended, setting forth the terms of our Series B Preferred Stock. This summary is not intended to give full effect to provisions of statutory or common law. We urge you to review the following documents because they, and not this summary, define the rights of a holder of shares of common stock and Series B Preferred Stock:

- the General Corporation Law of the State of Delaware, or the "DGCL", as it may be amended from time to time;
- our certificate of incorporation, as it may be amended or restated from time to time; and
- our bylaws, as they may be amended or restated from time to time.

#### General

Our authorized capital stock currently consists of 610,000,000 shares, which are divided into two classes consisting of 600,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share.

As of March 23, 2021, there were 6,315,467 shares of common stock outstanding and 100 shares of Series B Convertible Preferred Stock outstanding (convertible into a de minimis number of shares of common stock). As of March 23, 2021, there were outstanding warrants to purchase:

- 1,869,966 shares at an exercise price of \$5.00 per share subject to the September Warrants;
- 128,000 shares at an exercise price of \$5.50 per share granted to the underwriters who underwrote our September 2020 public offering ("Underwriters Warrants");

- 300,001 shares at an exercise price of \$5.00 per share that were granted to certain Management Creditors in September 2020 ("Management Creditors Warrants");
- 120,000 shares at an exercise price of \$5.00 per share issued to investors who provided us with bridge financing in June 2020 ("June 2020 Warrants");
- 303,668 shares at an exercise price of \$5.00 per share issued to investors who provided us with bridge financing in June 2020 in connection with the conversion of such bridge financing into our equity securities ("Debenture Conversion Warrants"); and
- 72,000 shares at an exercise price of \$6.875 per share issued to the underwriter in connection with our February 8, 2021 underwritten public offering the ("February 2021 Warrants").

Certain provisions of the September Warrants, Underwriter Warrants, Management Creditors Warrants, June 2020 Warrants, Debenture Conversion Warrants, and February 2021 Warrants (collectively, the "Warrants") are set forth below but are only a summary and are qualified in their entirety by the relevant provisions of the form of such Warrant, each of which are filed as exhibits to the registration statement of which this prospectus is a part.

An additional 980,000 shares of our common stock are reserved for issuance under our 2020 Stock Incentive Plan. The issuance of 750,000 of those shares is contingent upon receipt of stockholder approval of their inclusion in the 2020 Stock Incentive Plan. On December 2, 2020, we granted options to purchase 602,000 shares under the plan at an exercise price of \$2.79 per share. Of those, 536,000 are contingent upon receipt of stockholder approval. The options contingent upon stockholder approval include options granted to Mr. Dodd, our President and Chief Executive Officer (273,000 shares), Mr. Reynolds, our Chief Financial Officer (128,000 shares), and Dr. Newman, our Chief Scientific Officer (35,000 shares), as well our four non-employee directors (25,000 shares each).

#### **Common Stock**

Our common stock is listed and traded on the Nasdaq Capital Market under the symbol "GOVX." Holders of our common stock are entitled to one vote for each share held in the election of directors and in all other matters to be voted on by the stockholders. There is no cumulative voting in the election of directors. Holders of common stock are entitled to receive dividends as may be declared from time to time by our Board of Directors out of funds legally available therefor, and subject to the rights of holders of our Series B Preferred Stock. In the event of liquidation, dissolution or winding up of the Company, holders of common stock are to share in all assets remaining after the payment of liabilities, and satisfaction of the liquidation preference of our outstanding Series B Preferred Stock. Holders of common stock have no pre-emptive or conversion rights and are not subject to further calls or assessments. There are no redemption or sinking fund provisions applicable to the common stock. The rights of the holders of the common stock are subject to any rights that may be fixed in the future for holders of preferred stock. All of the outstanding shares of common stock are fully paid and non-assessable.

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC, 6201 15th Avenue, Brooklyn, NY 11219, telephone (718) 921-8200.

#### **The September Warrants**

Overview. The September Warrants are listed and traded on the Nasdaq Capital Market under the symbol "GOVXW."

The September Warrants were issued in September 2020 pursuant to a Warrant Agent Agreement dated as of September 24, 2020 (the "Warrant Agent Agreement"), between us and American Stock Transfer & Trust Company, LLC, as the warrant agent (the "Warrant Agent") as part of our September 2020 public offering. Certain provisions of the September Warrants are set forth herein but are only a summary and are qualified in their entirety by the relevant provisions of the Warrant Agent Agreement which is filed as an exhibit to the registration statement of which this prospectus is a part.

The September Warrants entitle the registered holder to purchase one share of our common stock at a price equal to \$5.00 per share subject to adjustment as discussed below, immediately following the issuance of such warrant and terminating at 5:00 p.m., New York City time, five years from the date of issuance, or September 29, 2025.

*Exercisability.* The September Warrants are exercisable at any time after their original issuance and at any time up to the date that is five (5) years after their original issuance. The September Warrants may be exercised by delivering a duly executed exercise notice on or prior to the expiration date at the offices of the Warrant Agent, accompanied by full payment of the exercise price, by certified or official bank check payable to the Warrant Agent, for the number of warrants being exercised. Under the terms of the Warrant Agreement, we must use our best efforts to maintain the effectiveness of the related registration statement and current prospectus relating to common stock issuable upon exercise of the September Warrants until the expiration of the warrants. If we fail to maintain the effectiveness of the registration statement and current released prospectus relating to the common stock issuable upon exercise of the September Warrants, until such time as there is an effective registration statement and current prospectus.

*Exercise Limitation.* A holder may not exercise any portion of a September Warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would own more than 4.99% of the outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the warrant, except that upon at least 61 days' prior notice from the holder to us, the holder may waive such limitation up to a percentage not in excess of 9.99%.

*Exercise Price.* The exercise price per whole share of common stock purchasable upon exercise of the September Warrants is \$5.00 per share. The exercise price is subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders. However, the September Warrants will not be adjusted for issuances of common stock at prices below the exercise price.

*Fractional Shares*. No fractional shares of common stock will be issued upon exercise of the September Warrants. If, upon exercise of the September Warrant, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, pay a cash adjustment in respect of such fraction in an amount equal to such fraction multiplied by the exercise price. If multiple September Warrants are exercised by the holder at the same time, we shall pay a cash adjustment in respect of such fraction multiplied by the exercise price.

*Transferability.* Subject to applicable laws, the September Warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* Our September Warrants are listed on the Nasdaq Capital Market under the symbol "GOVXW."

*Warrant Agent Agreement.* The September Warrants are represented only by one or more global warrants deposited with the Warrant Agent, as custodian on behalf of The Depository Trust Company (DTC) and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC. The Warrant Agent is American Stock Transfer & Trust Company, LLC, 6201 15th Avenue, Brooklyn, NY 11219, telephone (718) 921-8200.

*Fundamental Transactions*. In the event of a fundamental transaction, as described in the September Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, upon any subsequent exercise of the September Warrants, the holders will be entitled to receive the kind and amount of securities, cash or other property that the holders would have received had they exercised the September Warrants immediately prior to such fundamental transaction.

*Rights as a Stockholder.* The holders of September Warrants do not have the rights or privileges of holders of common stock or any voting rights until they exercise their warrants and receive shares of common stock. After the

issuance of shares of common stock upon exercise of the September Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Governing Law. The September Warrants and the Warrant Agent Agreement are governed by New York law.

## The Underwriters Warrants

The underwriters who conducted our public offering in September 2020 received warrants granted to them to purchase 128,000 shares of common (equal to five percent (5%) of the total number of shares of common stock sold in that offering) at an exercise price equal to \$5.50 (110% of the public offering price in that offering), as a portion of the underwriting compensation payable to the Representative in connection with this offering. The Underwriters Warrants will be non-exercisable until March 29, 2021 and will expire three years thereafter.

## **The Management Creditors Warrants**

On September 29, 2020, concurrently with the closing of our public offering, we issued warrants to purchase 300,001 shares of common stock to our Management Creditors on terms which are substantially the same as the September Warrants.

## June 2020 Warrants

The June 2020 Warrants were issued, together with convertible debentures, pursuant to a Securities Purchase Agreement dated June 26, 2020, which provided the Company with bridge financing. The June 2020 Warrants are five-year warrants to purchase 120,000 shares of the Company's common stock at an exercise price of \$5.00 per share, subject to adjustment.

The June 2020 Warrants were exercisable immediately and expire on June 26, 2025. The June 2020 Warrants may be called by us if our common stock trades at \$25.00 for ten straight trading days, subject to certain conditions.

The June 2020 Warrants contain anti-dilution and price adjustment provisions, which may, under certain circumstances, reduce the exercise price on several future dates, but the number of shares subject to the June 2020 Warrants will not change. There is a provision which reduces the exercise price to match if we sell or grant certain options to purchase, including rights to reprice, our Common Stock or Common Stock Equivalents (as defined) at a price lower than the exercise price of the warrants, or if we announce plans to do so.

Upon exercise of the warrants, the warrant holders will be entitled to receive any securities or rights to acquire securities or property granted or issued by us pro rata to the holders of our common stock to the same extent as if such holders had then exercised the warrants. In the event of a fundamental transaction, such as a merger, consolidation, sale of substantially all assets and similar reorganizations or recapitalizations, the warrant holders will be entitled to receive, upon exercise of their warrants, any securities or other consideration received by the holders of common stock pursuant to the fundamental transaction. Under certain circumstances, after a fundamental transaction, holders may be entitled to receive a cash payment equal to the value of the warrants, computed as provided in those warrants. Any successor to us or surviving entity shall assume the obligations under the warrants.

The warrant holders must surrender payment in cash of the aggregate exercise price of the shares being acquired upon exercise of the warrant. If there is no effective registration statement registering, there are insufficient authorized shares of our common stock available, or there is no current prospectus available for the resale of the shares issuable upon exercise of the warrant, then the warrant may be exercised on a "net" or "cashless" basis. No fractional shares of common stock will be issued in connection with the exercise of the warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price.

The June 2020 Warrants contain conversion limitations providing that a holder thereof may not convert the warrant to the extent (but only to the extent) that, if after giving effect to such conversion, the holder or any of its affiliates would beneficially own in excess of 4.99% of the outstanding shares of our common stock immediately after giving effect to such conversion or exercise. A holder may increase or decrease its beneficial ownership limitation

upon notice to the Company provided that in no event such limitation exceeds 9.99%, and that any increase shall not be effective until the 61st day after such notice.

### The Debenture Conversion Warrants

On September 29, 2020, concurrently with the closing of our public offering, we issued warrants to purchase 303,668 shares of common stock to the investors who provided us with bridge financing in June 2020 on terms which are substantially the same as the September Warrants.

## **The February 2021 Warrants**

The underwriters who conducted our public offering in February 2021 received warrants granted to them to purchase 72,000 shares of common stock (equal to five percent (5%) of the total number of shares of common stock sold in that offering) at an exercise price equal to \$6.875 (110% of the public offering price in that offering) (the "February 2021 Underwriters Warrants"), as a portion of the underwriting compensation payable in connection with this offering. The February 2021 Underwriters Warrants will be non-exercisable until August 11, 2021 and will expire three years thereafter.

## Series B Convertible Preferred Stock

We were authorized to issue up to 1,650 shares of our Series B Preferred Stock, \$0.01 par value, which we refer to as the "Series B Preferred Stock." As of March 23, 2021, 100 shares of our Series B Preferred Stock remain outstanding.

The Series B Preferred Stock is convertible at the option of the holder at any time into shares of common stock at a conversion ratio determined by dividing the \$1,000 stated value of the Series B Preferred Stock by a conversion price of \$7,000,000 per share. As of January 25, 2021, the number shares of our common stock issuable upon conversion of the 100 outstanding shares of Series B Preferred Stock is de minimis. The conversion price of the Series B Preferred Stock is subject to adjustment in the case of stock splits, stock dividends, combinations of shares, similar recapitalization transactions and certain pro-rata distributions to common stockholders.

Subject to limited exceptions, a holder of the Series B Preferred Stock will not have the right to convert any portion of its Series B Preferred Stock if the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

The holders of Series B Preferred Stock are entitled to receive any securities or rights to acquire securities or property granted or issued by us pro rata to the holders of our common stock to the same extent as if such holders had converted all of their shares of Series B Preferred Stock. No distribution may be made on the common stock so long as any dividend due on the Series B Preferred Stock remains unpaid. In the event of a fundamental transaction, such as a merger, consolidation, sale of substantially all assets and similar reorganizations or recapitalizations, the holders of Series B Preferred Stock will be entitled to receive, upon conversion of their shares, any securities or other consideration received by the holders of our common stock pursuant to the fundamental transaction.

Except as required by law, holders of the Series B Preferred Stock are not entitled to voting rights; provided, however, that the affirmative vote of the holders of a majority of the outstanding shares of Series B Preferred Stock is required to take certain actions that may alter or change adversely the rights or preferences of the holders of Series B Preferred Stock, increase the number of shares of Series B Preferred Stock, or authorize a new class ranking senior or pari passu to the Series B Preferred Stock. The Series B Preferred Stock has a liquidation preference equal to \$1,000 per share.

The securities purchase agreement and related registration rights agreement, as well as the certificate of designation authorizing the Series B Preferred Stock include certain other agreements and covenants for the benefit of the holders of the Series B Preferred Stock, including several restrictions that have now expired, and a requirement to use our best efforts to maintain the listing or trading of our common stock on one or more specified United States securities exchanges or regulated quotation services.

Once shares of Series B Preferred Stock have been converted, those shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series B Preferred Stock.

### **Undesignated Preferred Stock**

Subject to the restrictions set forth in the certificate of designation for our Series B Preferred Stock, as of March 23, 2021, our Board of Directors has the authority to issue up to 9,999,900 additional shares of preferred stock in one or more series and fix the number of shares constituting any such series, the voting powers, designations, preferences and relative, participating, optional or other special rights and qualifications, limitations or restrictions thereof, including the dividend rights, dividend rate, terms of redemption (including sinking fund provisions), redemption price or prices, conversion rights and liquidation preferences of the shares constituting any series, without any further vote or action by the stockholders. For example, the Board of Directors is authorized to issue preferred stock that would have the right to vote, separately or with any other stockholder of preferred stock, on any proposed amendment to our certificate of incorporation, or on any other proposed corporate action, including business combinations and other transactions.

We will not offer preferred stock unless the offering is approved by a majority of our independent directors. The independent directors will have access, at our expense, to our counsel or independent counsel.

### **Delaware Anti-Takeover Law**

We have elected not to be subject to certain provisions of Delaware law that could make it more difficult to acquire us by means of a tender offer, a proxy contest, open market purchases, removal of incumbent directors and otherwise. These provisions, summarized below, are expected to discourage types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors.

In general, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in various "business combination" transactions with any interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- the transaction is approved by the corporation's board of directors prior to the date the interested stockholder obtained interested stockholder status;
- upon consummation of the transaction that resulted in the stockholder's becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by (a) persons who are directors and also officers and (b) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date the business combination is approved by the corporation's board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

A "business combination" is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an "interested stockholder" is a person who, together with affiliates and associates, owns or within three years, did own, 15% or more of a corporation's voting stock.

Section 203 applies to Delaware corporations that have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders; provided, however, the restrictions of this statute will not apply to a corporation if:

• the corporation's original charter contains a provision expressly electing not to be governed by the statute;

- the corporation's board of directors adopts an amendment to the corporation's bylaws within 90 days of the effective date of the statute expressly electing not to be governed by it;
- the stockholders of the corporation adopt an amendment to its charter or bylaws expressly electing not to be governed by the statute (so long as such amendment is approved by the affirmative vote of a majority of the shares entitled to vote);
- a stockholder becomes an interested stockholder inadvertently and as soon as practicable divests himself of ownership of a sufficient number of shares so that he ceases to be an interested stockholder, and during the three-year period immediately prior to a business combination, would not have been an interested stockholder but for the inadvertent acquisition;
- the business combination is proposed prior to the consummation or abandonment of a merger or consolidation, a sale, lease, exchange, mortgage, pledge, transfer or other disposition of assets of the corporation or a proposed tender or exchange offer for 50% or more of the outstanding voting shares of the corporation; or
- the business combination is with an interested stockholder who became an interested stockholder at a time when the restrictions contained in the statutes did not apply.

Our certificate of incorporation includes a provision electing not to be governed by Section 203 of the DCGL. Accordingly, our board of directors does not have the power to reject certain business combinations with interested stockholders based on Section 203 of the DCGL.

## Indemnification

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our bylaws provide that we may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that the person is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. Our bylaws also provide that we may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Company and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Company unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

Under our bylaws, expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the Company in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Company. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as we deem appropriate.

The indemnification and advancement of expenses provided by our bylaws is not exclusive, both as to action in such person's official capacity and as to action in another capacity while holding such office.

Our bylaws also provide that we may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Company would have the power to indemnify such person against such liability under our bylaws. The Company maintains an insurance policy providing for indemnification of its officers, directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions.

In October 2006, GeoVax and our subsidiary, GeoVax, Inc. entered into indemnification agreements with Messrs. McNally, Reynolds, Kollintzas and Spencer. Pursuant to these agreements, we have agreed to hold harmless and indemnify these directors and officers to the full extent authorized or permitted by applicable Illinois and Georgia law against certain expenses and other liabilities actually and reasonably incurred by these individuals in connection with certain proceedings if they acted in a manner they believed in good faith to be in or not opposed to the best interests of the Company and, with respect to any criminal proceeding, had no reasonable cause to believe that such conduct was unlawful. The agreements also provide for the advancement of expenses to these individuals subject to specified conditions. Under these agreements, we will not indemnify these individuals for expenses or other amounts for which applicable Illinois and Georgia law prohibit indemnification. The obligations under these agreements continue during the period in which these individuals are our directors or officers and continue thereafter so long as these individuals shall be subject to any proceeding by reason of their service to the Company, whether or not they are serving in any such capacity at the time the liability or expense incurred for which indemnification can be provided under the agreements.

## DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

In the event that a claims for indemnification against such liabilities (other than our payment of expenses incurred or paid by a director, officer or controlling person in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

#### PLAN OF DISTRIBUTION

The 1,869,966 shares of common stock offered by this prospectus will be issued and sold upon the exercise of the outstanding September Warrants. Holders who exercise September Warrants must deliver a notice and payment of the purchase price, or a notice upon cashless exercise thereof, in accordance with the terms of the September Warrants. The terms of the September Warrants are described under "Description of Securities—The September Warrants." The form of the September Warrants is an exhibit to the registration statement of which this prospectus is a part.

The shares of common stock issuable upon exercise of the September Warrants are listed on The Nasdaq Capital Market under the symbol "GOVX."

The common stock issuable upon the exercise of the September Warrants will not be offered by us through underwriters, or brokers or dealers. Pursuant to the Underwriting Agreement ("Underwriting Agreement") dated September 24, 2020, between the Company and Maxim Group LLC we agreed to pay the underwriters an aggregate cash fee of eight percent (8%) in the event investors previously directly introduced to the Company by such parties provide capital, including, but not limited to, via any exercise of the September Warrants during the period commencing 91 days following the closing of the offering on September 29, 2020, and continuing for a period of fifteen (15) months thereafter. Therefore, if September Warrants are exercised between the date hereof and March 29, 2022, the Company will pay 8% of the proceeds thereof to the underwriters named in the Underwriting Agreement.

#### LEGAL MATTERS

The validity of any of the common stock offered by this prospectus will be passed upon for us by Womble Bond Dickinson (US) LLP.

## EXPERTS

Our consolidated financial statements as of and for the years ended December 31, 2020 and 2019 included in this prospectus and elsewhere in the registration statement have been audited by Wipfli LLP, an independent registered public accounting firm, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in auditing and accounting in giving said report.

## INTERESTS OF NAMED EXPERTS AND COUNSEL

No named expert or counsel was hired on a contingent basis, will receive a direct or indirect interest in the issuer, or was a promoter, underwriter, voting trustee, director, officer, or employee of GeoVax.

### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement and any document we file with the SEC. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of the SEC's website is www.sec.gov. The information on the SEC's website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

This prospectus is part of a registration statement on Form S-1 that we filed with the SEC to register the securities to be offered hereby. This prospectus does not contain all of the information included in the registration statement, including certain exhibits and schedules. In addition to the foregoing, we maintain a website at www.geovax.com. Our website content is made available for informational purposes only. It should neither be relied upon for investment purposes nor is it incorporated by reference into this prospectus. We make available at www.geovax.com copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports

on Form 8-K and any amendments to such document as soon as practicable after we electronically file such material with or furnish such documents to the SEC.

# GEOVAX LABS, INC.

## INDEX TO FINANCIAL STATEMENTS

[Note: to be copied from 10-K]

# PROSPECTUS

1,869,966 Shares of Common Stock



# GEOVAX LABS, INC.

## PART II

#### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses payable by us in connection with the offer of the common stock being registered. All amounts are estimates except the SEC registration fee, the Nasdaq listing fee and the FINRA filing fee.

SEC registration fee	\$ 4,395
Nasdaq listing fee	50,000
FINRA filing fee	4,822
Legal fees and expenses	460,000
Accounting fees and expenses	45,000
Transfer agent and registrar fees and	
expenses	23,000
Miscellaneous fees and expenses	20,000
Total	\$ 607,217

## Item 14. Indemnification of Directors and Officers

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our bylaws provide that we may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that the person is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. Our bylaws also provide that we may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Company and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Company unless and only to the extent that the Delaware Court of Chancery or the court in which such action or

suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

Under our bylaws, expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the Company in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Company. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as we deem appropriate.

The indemnification and advancement of expenses provided by our bylaws is not exclusive, both as to action in such person's official capacity and as to action in another capacity while holding such office.

Our bylaws also provide that we may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Company would have the power to indemnify such person against such liability under our bylaws. The Company maintains an insurance policy providing for indemnification of its officers, directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions.

In October 2006, GeoVax and our subsidiary, GeoVax, Inc. entered into indemnification agreements with Messrs. McNally, Reynolds, Kollintzas and Spencer. Pursuant to these agreements, we have agreed to hold harmless and indemnify these directors and officers to the full extent authorized or permitted by applicable Illinois and Georgia law against certain expenses and other liabilities actually and reasonably incurred by these individuals in connection with certain proceedings if they acted in a manner they believed in good faith to be in or not opposed to the best interests of the Company and, with respect to any criminal proceeding, had no reasonable cause to believe that such conduct was unlawful. The agreements also provide for the advancement of expenses to these individuals subject to specified conditions. Under these agreements, we will not indemnify these individuals for expenses or other amounts for which applicable Illinois and Georgia law prohibit indemnification. The obligations under these agreements continue during the period in which these individuals are our directors or officers and continue thereafter so long as these individuals shall be subject to any proceeding by reason of their service to the Company, whether or not they are serving in any such capacity at the time the liability or expense incurred for which indemnification can be provided under the agreements.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

## Item 15. Recent Sales of Unregistered Securities

The information provided below has been updated as noted to retroactively reflect the effect of the Company's 1:500,1:2000, and 1:20 reverse stock splits effected in April 2019, January 2020, and September 2020 respectively.

On December 27, 2018, we entered into an agreement with Sabby Volatility Warrant Master Fund, Ltd. and Sabby Healthcare Master Fund, Ltd. (together, the "Purchasers"), each of which beneficially owned more than 5% of our common stock pursuant to which we issued two Term Promissory Notes and Series H Common Stock Purchase Warrants to purchase up to 10,000,000 shares (1,000 shares post-split) of our common stock at \$0.025 per share (\$25,000 per share post-split) in exchange for aggregate gross proceeds of \$250,000. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On February 18, 2019, we entered into Exchange Agreements with the Purchasers pursuant to which the Purchasers exchanged an aggregate of 1,563.146 shares of our Series C Convertible Preferred Stock and 1,200 shares of our Series E Preferred Shares, held by them for an aggregate of 2,763.146 shares of our Series F Convertible Preferred Stock ("Series F Preferred Shares"). The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On February 25, 2019, we entered into a Securities Purchase Agreement with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of up to 1,000 shares of our Series G Convertible Preferred Stock (the "Series G Preferred Shares") and Series I Warrants to purchase up to 16,666,666 shares (16.67 shares post-split) of our common stock at \$0.015 per share (\$15,000 per share post-split) at an initial aggregate exercise price of \$250,000 for gross proceeds of up to \$1.0 million, to be funded at up to three different closings. At the first closing on February 25, 2019, we issued 500 Series G Preferred Shares and Series I Warrants to purchase up to 16,666,666, shares (16.67 shares post-split) of our common stock in exchange for the payment by the Purchasers of \$250,000 in the aggregate, plus the cancellation by them of Term Notes due to them from the Company in the aggregate amount of \$250,000. At the second and third closings, which occurred on April 26 and June 19, 2019, we issued an aggregate of 500 additional shares of Series G Preferred Stock and Series I Warrants to purchase up to 33,333,333 shares (33.33 shares post-split) in exchange for the payment by the Purchasers of a total of \$500,000. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On July 17, 2019, we entered into Exchange Agreements with the Purchasers pursuant to which the Purchasers exchanged an aggregate of 2,256.5338 Series F Preferred Shares and 1,000 Series G Preferred Shares held by them for an aggregate of 3,256.5338 shares of our Series H Convertible Preferred Stock, for aggregate gross proceeds of \$3,256,534. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On July 24, 2019, we entered into a Securities Purchase Agreement with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of 700 shares of our Series I Convertible Preferred Stock for gross proceeds of 700,000. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On January 24, 2020, we entered into a Securities Purchase Agreement (the "January Securities Purchase Agreement") with the Purchasers providing for the issuance and sale to the Purchasers of an aggregate of 300 shares of our Series J Convertible Preferred Stock (the "Series J Preferred Shares") for gross proceeds of \$300,000. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

Effective as of May 1, 2020, we entered into a Customer Agreement and Subscription Agreement with Content Carnivores, LLC, pursuant to which the Company received services related to the management of our social media accounts in exchange for the monthly issuance of shares of our common stock valued at \$3,000, from May 1, 2020 through April 30, 2021. As of the date hereof, we have issued 25,309 shares of our common stock to Content Carnivores, LLC at an aggregate value of \$12,000 pursuant to this agreement. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D.

On June 26, 2020, we entered into a Securities Purchase Agreement with Cavalry Fund I LP and Cavalry Special Ops Fund, LLC, pursuant to which the Company received aggregate gross proceeds of \$1,050,000 in exchange for the issuance of 5% Original Issue Senior Secured Convertible Debentures in the aggregate principal amount of \$1,200,000 and five-year warrants to purchase an aggregate of 2,400,000 shares of our common stock at an exercise price of \$0.50 per share, subject to adjustment. On September 29, 2020, the June 26, 2020 5% Original Issue Senior Secured Convertible Debentures mandatorily converted into 303,667 conversion units, of which 177,625 include

shares of common stock and 126,042 include pre-funded warrants (the "Conversion Units"). The Conversion Units provide substantially the same terms as the Units issued in September 2020. The pre-funded warrants provide the holder the right to purchase one share of common stock at an exercise price of \$0.01 per share, are immediately exercisable and will not expire until exercised in full. These pre-funded warrants were fully exercised on January 13, 2021. The Company also issued the Debenture Conversion Warrants. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D. The accredited investors acquired the shares for investment for their own accounts in a transaction that did not involve a general solicitation.

On September 29, 2020, the underwriters who conducted our public offering in September 2020 received warrants granted to them to purchase 128,000 shares of common (equal to five percent (5%) of the total number of shares of common stock sold in that offering) at an exercise price equal to \$5.50 (110% of the public offering price in that offering), as a portion of the underwriting compensation payable to the Representative in connection with this offering. The Underwriters Warrants will be non-exercisable until March 29, 2021 and will expire three years thereafter.

On February 11, 2021, the Company issued to the Maxim Group LLC, as a portion of the underwriting compensation, warrants to purchase up to a total of 72,000 shares (equal to five percent (5%) of the shares of common stock sold in that offering) of common stock (the "Underwriter's Warrant Agreement"). The shares subject to the Underwriter's Warrant Agreement are exercisable at \$6.875 per share, are initially exercisable August 10, 2021, and have a term of three years from their initial exercise date. The Company relied on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D.

#### Item 16. Exhibits and Financial Statement Schedules

#### a) *Exhibits*.

The following exhibits are being filed herewith:

Exhibit	
<u>Number</u>	Description
1.1	Underwriting Agreement dated September 24, 2020 between the Company and Maxim Group LLC, as representative of the underwriters (36)
1.2	Underwriting Agreement, dated February 8, 2021, between GeoVax Labs, Inc. and Maxim Group LLC (40)
3.1	Certificate of Incorporation (2)
3.1.1	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed April 13, 2010 (4)
3.1.2	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed April 27, 2010 (5)
3.1.3	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed August 2, 2013 (6)
3.1.4	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed May 13, 2015 (9)
3.1.5	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed June 14, 2016 (11)
3.1.6	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed August 4, 2017 (14)
3.1.7	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed April 30, 2019 (20)
3.1.8	Certificate of Amendment to the Certificate of Incorporation of GeoVax Labs, Inc. filed January 21, 2020 (24)

3.1.9	Certificate of Amendment to the Certification of Incorporation of GeoVax Labs, Inc. filed September 24, 2020 (36)
3.2	Bylaws (2)
4.1	Form of Stock Certificate representing the Company's Common Stock, par value \$0.001 per share (33)
4.1.1	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (8)
4.1.2	Form of Stock Certificate for the Series B Convertible Preferred Stock (8)
4.2.1	Certificate of Designation of Preferences, Rights and Limitations of Series I Convertible Preferred Stock (21)
4.2.2	Form of Stock Certificate for the Series I Convertible Preferred Stock (21)
4.3.1	Certificate of Designation of Preferences, Rights and Limitations of Series J Convertible Preferred Stock (25)
4.3.2	Form of Stock Certificate for the Series J Convertible Preferred Stock (25)
4.4	Form of Common Stock Purchase Warrant (35)
4.4.1	Form of Pre-funded Warrant (36)
4.4.2	Form of Pre-funded Warrant to be issued to holders of Convertible Debentures (37)
4.5	Form of Representative's Warrant Agreement (34)
4.6	Warrant Agent Agreement dated September 29, 2020 between the Company and American Stock
	Transfer and Trust Company, LLC (37)
4.7**	Form of Warrant issued to certain Management Creditors (34)
4.8**	Form of Subscription Agreement executed by certain Management Creditors (34)
4.10	Form of Warrant issued to holders of Convertible Debentures (37)
5.1	Opinion of Womble Bond Dickinson (US) LLP
10.1 **	Employment Agreement between GeoVax Labs, Inc. and David A. Dodd (16)
10.2 **	Employment Agreement between GeoVax, Inc. and Mark W. Reynolds (3)
10.2.1 **	Amendment No. 1 to Employment Agreement between GeoVax Labs, Inc. and Mark W. Reynolds (7)
10.2.2 **	Salary Deferral Agreement between GeoVax, Inc. and Mark W. Reynolds (16)
10.2.3 **	Amendment to Salary Deferral Agreement between GeoVax, Inc. and Mark W. Reynolds (16)
10.3 **	Employment Agreement between GeoVax, Inc. and Harriet Robinson (3)
10.3.1 **	Amendment No. 1 to Employment Agreement between GeoVax Labs, Inc. and Harriet Robinson (7)
10.3.2 **	Salary Deferral Agreement between GeoVax, Inc. and Harriet Robinson (16)
10.3.3 **	Amendment to Salary Deferral Agreement between GeoVax, Inc. and Harriet Robinson (16)
10.4 **	Employment Agreement between GeoVax, Inc. and Farshad Guirakhoo (10)
10.4.1 **	Amendment No. 1 to Employment Agreement between GeoVax Labs, Inc. and Farshad Guirakhoo (12)
10.4.2 **	Salary Deferral Agreement between GeoVax, Inc. and Farshad Guirakhoo (15)
10.4.3 **	Letter Amendment to Employment Agreement with Farshad Guirakhoo dated May 18, 2020 (28)
10.5 **	GeoVax Labs, Inc. 2020 Stock Incentive Plan (27)
10.5.1 **	Form of Employee Stock Option Agreement (13)
10.5.2 **	Form of Non-Qualified Stock Option Agreement (13)
10.6	License Agreement (as amended and restated) between GeoVax, Inc. and Emory University (1)
10.7	Office and Laboratory Lease between UCB, Inc. and GeoVax, Inc. (29)
10.8	Summary of the GeoVax Labs, Inc. Director Compensation Plan (3)
10.9	Senior Note Purchase Agreement between Georgia Research Alliance, Inc. and GeoVax Labs, Inc. (16)

10.10	Form of Series G Common Stock Purchase Warrant (17)
10.11	Form of Series H Common Stock Purchase Warrant (18)
10.12	Form of Series I Common Stock Purchase Warrant (19)
10.13	Form of Securities Purchase Agreement dated January 24, 2020 (25)
10.14	Form of Note dated April 17, 2020 (30)
10.15	Securities Purchase Agreement dated June 26, 2020 (26)
10.16	Form of 5% Original Issue Discount Serious Secured Convertible Debenture dated June 26, 2020 (26)
10.17	Form of Common Stock Purchase Warrant dated June 26, 2020 (26)
10.18	Form of Security Agreement dated June 26, 2020 (26)
10.19	Form of Subsidiary Guarantee dated June 26, 2020 (26)
10.20	Agreement Regarding Outstanding Convertible Preferred Stock and Warrants dated June 26, 2020 (26)
10.21	Patent and Biological Materials License Agreement with the National Institute of Allergy and Infectious Diseases, dated October 22, 2020 (38)
10.22	Patent and Biological Materials License Agreement for Internal Research Use with the National Institute of Allergy and Infectious Diseases, dated November 25, 2020 (39)
10.23	Form of Underwriter's Warrant Agreement (40)
10.24**	Employment Agreement between GeoVax, Inc. and Dr. Mark J. Newman dated August 25, 2020 (41)
21.1	Subsidiaries of the Registrant (23)
23.1*	Consent of Wipfli LLP
23.3	Consent of Womble Bond Dickinson (US) LLP (included in Exhibit 5.1)
24.1	Power of Attorney (Included on the Signature Page of the Company's Registration Statement on Form S-1 (File No. 333-239958) filed July 20, 2020.
101.INS***	XBRL Taxonomy Document
101.SCH***	XBRL Extension Schema Document
101.CAL***	XBRL Extension Calculation Linkbase Document
101.DEF***	XBRL Extension Definition Linkbase Document
101.LAB***	XBRL Extension Label Linkbase Document
101.PRE***	XBRL Extension Presentation Linkbase Document

\* Filed herewith.

\*\* Indicates a management contract or compensatory plan or arrangement.

\*\*\* XBRL (Extensible Business Reporting Language) information furnished hereto are deemed not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

(1) Incorporated by reference from the registrant's Current Report on Form 8-K filed October 4, 2006.

(2) Incorporated by reference from the registrant's Current Report on Form 8-K filed June 23, 2008.

<sup>(3)</sup> Incorporated by reference from the registrant's Annual Report on Form 10-K filed March 8, 2010.

<sup>(4)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed April 14, 2010.

<sup>(5)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed April 28, 2010.

<sup>(6)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed August 2, 2013.

<sup>(7)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed October 23, 2013.

<sup>(8)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed December 17, 2013.

<sup>(9)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed May 14, 2015.

<sup>(10)</sup> Incorporated by reference from the registrant's Quarterly Report on Form 10-Q filed November 12, 2015.

<sup>(11)</sup> Incorporated by reference from the registrant's Current Report on Form 8-K filed June 16, 2016.

<sup>(12)</sup> Incorporated by reference from the registrant's Annual Report on Form 10-K filed March 16, 2016.

- (13) Incorporated by reference from the registrant's Quarterly Report on Form 10-Q filed August 5, 2016.
- (14) Incorporated by reference from the registrant's Current Report on Form 8-K filed August 4, 2017.
- (15) Incorporated by reference from the registrant's Annual Report on Form 10-K filed March 23, 2018.
- (16) Incorporated by reference from the registrant's Current Report on Form 8-K filed September 7, 2018.
  (17) Incorporated by reference from the registrant's Ouarterly Report on Form 10-O filed November 8, 2018.
- (17) Incorporated by reference from the registrant's Quarterly Report on Form 10-Q filed November 8, 2015
  (18) Incorporated by reference from the registrant's Current Report on Form 8-K filed December 28, 2018.
- (19) Incorporated by reference from the registrant's Current Report on Form 8-K filed February 26, 2019
- (20) Incorporated by reference from the registrant's Current Report on Form 8-K filed April 30, 2019
- (21) Incorporated by reference from the registrant's Current Report on Form 8-K filed July 24, 2019.
- (22) Incorporated by reference from the registrant's Annual Report on Form 10-K filed March 26, 2019.
- (23) Incorporated by reference from the registrant's Quarterly Report on Form 10-Q filed November 7, 2019.
- (24) Incorporated by reference from the registrant's Current Report on Form 8-K filed January 21, 2020.
- (25) Incorporated by reference from the registrant's Current Report on Form 8-K filed January 24, 2020.
- Incorporated by reference from the registrant's Current Report on Form 8-K filed June 26, 2020.
  Incorporated by reference from the registrant's Current Report on Form 8-K filed June 25, 2020.
- (28) Incorporated by reference from the registrant's Current Report on Form 8-K filed May 22, 2020.
- (29) Incorporated by reference from the registrant's Annual Report on Form 10-K filed March 24, 2020.
- (30) Incorporated by reference from the registrant's Current Report on Form 8-K filed April 20, 2020.
- (31) Incorporated by reference from the registrant's Registration Statement on Form S-1 (File No. 333-239958) filed July 20, 2020.
- (32) Incorporated by reference from the Amendment No. 1 to registrant's Registration Statement on Form S-1 (File No. 333-239958) filed August 18, 2020.
- (33) Incorporated by reference from the Amendment No. 2 to registrant's Registration Statement on Form S-1 (File No. 333-239958) filed August 26, 2020.
- (34) Incorporated by reference from the Amendment No. 3 to registrant's Registration Statement on Form S-1 (File No. 333-239958) filed September 8, 2020.
- (35) Incorporated by reference from the Amendment No. 4 to registrant's Registration Statement on Form S-1 (File No. 333-239958) filed September 23, 2020.
- (36) Incorporated by reference from the registrant's Current Report on Form 8-K filed September 25, 2020.
- (37) Incorporated by reference from the registrant's Current Report on Form 8-K filed September 29, 2020.
- (38) Incorporated by reference from the registrant's Current Report on Form 8-K filed October 26, 2020.
- (39) Incorporated by reference from the registrant's Current Report on Form 8-K filed November 30, 2020.
- (40) Incorporated by reference from the registrant's Current Report on Form 8-K filed February 11, 2020.
- (41) Incorporated by reference from the registrant's Current Report on Form 8-K filed August 26, 2020.

(b) Financial Statement Schedules.

Schedule II — Valuation and Qualifying Accounts for the years ended December 31, 2019 and 2018 is included in the accompanying prospectus on page F-18.

All other financial statement schedules have been omitted because they are not applicable or not required or because the information is included elsewhere in the Consolidated Financial Statements or the Notes thereto.

# Item 17. Undertakings

The undersigned registrant hereby undertakes to:

(1) File, during any period in which it offers or sells securities, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the

changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

*Provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such posteffective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability

purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or mode in any such document immediately prior to such effective date.

#### (7) If the registrant is subject to Rule 430C:

Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or prospectus that is part of the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(8) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(9) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(10) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Smyrna, State of Georgia, on March 23, 2021.

GEOVAX LABS, INC.

By: <u>/s/ David A. Dodd</u> David A. Dodd President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature / Name	<u>Title</u>	Date
/s/ David A. Dodd David A. Dodd	Director President and Chief Executive Off (Principal Executive Officer)	March 23, 2021 icer
/s/ Mark W. Reynolds Mark W. Reynolds	Chief Financial Officer (Principal Financial and	March 23, 2021
	Accounting Officer)	
*	Director	March 23, 2021
Randal D. Chase		March 23, 2021
* Dean G. Kollintzas	Director	
		March 23, 2021
*	Director	
Robert T. McNally		March 23, 2021
*	Director	
John N. Spencer, Jr.		March 23, 2021
*By: <u>/s/Mark W. Reynolds</u> Mark W. Reynolds Attorney-in-Fact		

# GEOVAX LABS, INC. INDEX TO 2020 CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2020 and 2019	F-4
Consolidated Statements of Operations for the years ended December 31, 2020 and 2019	F-5
Consolidated Statements of Stockholders' Equity (Deficiency) for the years ended December 31, 2020 and 2019	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2020 and 2019	F-7
Notes to Consolidated Financial Statements	F-8
Financial Statement Schedule: Schedule II – Valuation and Qualifying Accounts for the years ended December 31, 2020 and 2019	F-18



#### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders and the Board of Directors of GeoVax Labs, Inc.

#### **Opinion on the Consolidated Financial Statements**

We have audited the accompanying consolidated balance sheets of GeoVax Labs, Inc. and subsidiary (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations, stockholders' equity (deficiency) and cash flows for the years then ended and the related notes to the consolidated financial statements and schedule (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

# **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

# **Critical Audit Matter**

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

# Equity Transactions

As described in Notes 6 and 8 to the consolidated financial statements, the Company has multiple equity instruments with various levels of complexity and volumes including convertible debentures, convertible preferred stock, preferred stock, warrants and stock options.

The principal considerations for our determination that the complexity of the Company's equity structure should be a critical audit matter were based on the accounting for certain equity instruments including convertible debentures, convertible preferred stock and stock options requiring significant judgment and estimates as well as the volume of equity transactions, including conversions to common stock, common stock issuance activity and warrant activity making it challenging to ensure adequate disclosure of all equity transactions. Auditing such estimates and activity required extensive audit effort due to the volume and complexity of these transactions and a high degree of auditor judgment when performing the requisite audit procedures and evaluating the results of those procedures.

The primary audit procedures we performed to address this critical audit matter included:

- We evaluated the design effectiveness of controls over the Company's process for accounting for and recording equity transactions
- We evaluated management's judgments related to the application of U.S. GAAP by reviewing management's accounting analysis for convertible debentures and convertible preferred stock
- We tested the assumptions used within the Black-Scholes model calculation to estimate the value of stock options granted, which included key assumptions such as the estimated life of the stock options and volatility of the Company's stock price

Wippei LLP

We have served as the Company's auditor since 2005.

Atlanta, Georgia March 23, 2021

# GEOVAX LABS, INC. CONSOLIDATED BALANCE SHEETS

December 31,December 31,Current assets:Cash and cash equivalents\$ 9,883,796\$ 283,3Grant funds and other receivables182,66368,6Prepaid expenses and other current assets168,68995,3Total current assets10,235,148447,2Property and equipment, net (Note 3)147,74110,6Deposits11,010111,01Total assets\$ 10,393,899\$ 468,8LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)\$ 267,702\$ 152,6Current liabilities:\$ 267,702\$ 152,6Accounts payable\$ 267,702\$ 152,6Accrued expenses (Note 4)359,2811.851,0Current portion of notes payable181,332612,2Total iabilities810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)Stockholders' equity (deficiency):\$ 2020	
Current assets: Cash and cash equivalents Grant funds and other receivables\$ 9,883,796\$ 283,3Grant funds and other receivables Prepaid expenses and other current assets $182,663$ $68,6$ Prepaid expenses and other current assets $10,235,148$ $447,2$ Property and equipment, net (Note 3) $147,741$ $10,6$ Deposits $11,010$ $11,010$ $11,010$ Total assets $$ 10,393,899$ $$ 468,8$ LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) Current liabilities: Accounts payable Accrued expenses (Note 4) Current portion of notes payable $$ 267,702$ $$ 152,6$ Total current liabilities $$ 359,281$ $1,851,0$ Note payable, net of current portion $14,738$ $27,2$ Total liabilities $810,309$ $2,016,1$ Note payable, net of current portion $14,738$ $27,2$ Commitments (Note 7)Commitments (Note 7) $825,047$ $2,043,4$	
Cash and cash equivalents\$ 9,883,796\$ 283,3Grant funds and other receivables $182,663$ $68,6$ Prepaid expenses and other current assets $168,689$ $95,3$ Total current assets $10,235,148$ $447,2$ Property and equipment, net (Note 3) $147,741$ $10,6$ Deposits $11,010$ $11,00$ $11,00$ Total assets\$ 10,393,899\$ 468,8LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) $10,393,899$ \$ 468,8Current liabilities:Accounts payable $359,281$ $1,851,0$ Accounts payable $183,326$ $12,5$ Total current portion of notes payable $810,309$ $2,016,1$ Note payable, net of current portion $14,738$ $27,2$ Total liabilities $825,047$ $2,043,4$ Commitments (Note 7) $200,16,1$ $20,043,4$	
Grant funds and other receivables182,66368,6Prepaid expenses and other current assets168,68995,3Total current assets10,235,148447,2Property and equipment, net (Note 3)147,74110,6Deposits11,01011,01Total assets\$ 10,393,899\$ 468,8LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)\$ 267,702\$ 152,6Current liabilities:Accounts payable\$ 267,702\$ 152,6Accounts payable\$ 267,702\$ 152,6Accrued expenses (Note 4)359,2811,851,0Current portion of notes payable810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)825,0472,043,4	
Prepaid expenses and other current assets $168,689$ $95,3$ Total current assets $10,235,148$ $447,2$ Property and equipment, net (Note 3) $147,741$ $10,6$ Deposits $11,010$ $11,010$ $11,010$ Total assets $$10,393,899$ $$$468,8$ LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) $$$267,702$ $$$152,6$ Current liabilities: $$$267,702$ $$$152,6$ Accounts payable $$$359,281$ $1,851,0$ Current portion of notes payable $183,326$ $12,5$ Total current liabilities $$$10,309$ $$2,016,1$ Note payable, net of current portion $14,738$ $27,2$ Total liabilities $$$25,047$ $$2,043,4$ Commitments (Note 7) $$$10,009$ $$2,043,4$	
Total current assets $10,235,148$ $447,2$ Property and equipment, net (Note 3) $147,741$ $10,6$ Deposits $11,010$ $11,010$ $11,010$ Total assets $$10,393,899$ $$468,8$ LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) $$267,702$ $$152,6$ Current liabilities: $$267,702$ $$152,6$ Accounts payable $$359,281$ $1,851,0$ Current portion of notes payable $183,326$ $12,5$ Total current liabilities $$810,309$ $$2,016,1$ Note payable, net of current portion $14,738$ $27,2$ Total liabilities $$825,047$ $$2,043,4$ Commitments (Note 7) $$12,9043,4$ $$12,9043,4$	
Property and equipment, net (Note 3) $147,741$ $10,6$ Deposits $11,010$ $11,01$ Total assets $$10,393,899$ $$468,8$ LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) $$267,702$ $$152,6$ Current liabilities: Accrued expenses (Note 4) Current portion of notes payable $$267,702$ $$152,6$ Total current liabilities $$10,309$ $$2,016,1$ Note payable, net of current portion $$147,741$ $$10,66$ Note payable, net of current portion $$147,741$ $$10,66$ Total liabilities $$810,309$ $$2,016,1$ Note payable, net of current portion $$147,788$ $$27,2$ Total liabilities $$825,047$ $$2,043,4$ Commitments (Note 7) $$147,781$ $$27,2$	
Deposits11,01011,010Total assets\$ 10,393,899\$ 468,8LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) Current liabilities: Accrued expenses (Note 4) Current portion of notes payable\$ 267,702\$ 152,6Accrued expenses (Note 4) Current portion of notes payable183,32612,5Total current liabilities810,3092,016,1Note payable, net of current portion Total liabilities14,73827,2Commitments (Note 7)Commitments (Note 7)2,043,4	
Total assets\$ 10,393,899\$ 468,8LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) Current liabilities: Accounts payable Accrued expenses (Note 4) Current portion of notes payable\$ 267,702 359,281\$ 152,6 1,851,0Current portion of notes payable Current liabilities183,326 12,512,5 12,5Total current liabilities Note payable, net of current portion Total liabilities810,309 14,738 27,22,016,1 2,043,4Commitments (Note 7)Commitments (Note 7)10,393,89910,393,899	
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY) Current liabilities: Accounts payable Accrued expenses (Note 4) Current portion of notes payable Total current liabilities Note payable, net of current portion Total liabilities Note payable, net of current portion Total liabilities Commitments (Note 7)	10
Current liabilities: Accounts payable\$ 267,702\$ 152,6Accrued expenses (Note 4)359,2811,851,0Current portion of notes payable183,32612,5Total current liabilities810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)14,73827,2	80
Accounts payable    \$ 267,702    \$ 152,6      Accrued expenses (Note 4)    359,281    1,851,0      Current portion of notes payable    183,326    12,5      Total current liabilities    810,309    2,016,1      Note payable, net of current portion    14,738    27,2      Total liabilities    825,047    2,043,4      Commitments (Note 7)    14,738    27,2	
Accrued expenses (Note 4)359,2811,851,0Current portion of notes payable183,32612,5Total current liabilities810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)1414	
Current portion of notes payable183,32612,5Total current liabilities810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)14,73827,2	
Total current liabilities810,3092,016,1Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)11	
Note payable, net of current portion14,73827,2Total liabilities825,0472,043,4Commitments (Note 7)	00
Total liabilities825,0472,043,4Commitments (Note 7)	
Commitments (Note 7)	
	36
Stockholders' equity (deficiency):	
Preferred stock, \$.01 par value (Note 8):	
Authorized shares – 10,000,000	
Issued and outstanding shares – 100 and 2,486 at	22
December 31, 2020 and 2019, respectively 76,095 1,932,4	33
Common stock, \$.001 par value:	
Authorized shares $-600,000,000$	
Issued and outstanding shares – 3,834,095 and 14,992 at	15
December 31, 2020 and 2019, respectively 3,834	15
Additional paid-in capital      55,294,504      39,340,5        Accumulated deficit      (45,805,581)      (42,847,5)	
	,
Total stockholders' equity (deficiency)9,568,852(1,574,5)	30)
Total liabilities and stockholders' equity (deficiency)\$ 10,393,899\$ 468,8	80

# GEOVAX LABS. INC. CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2020		2019
Grant and collaboration revenue	\$ 1,823,658	\$	1,175,896
Operating expenses:			
Research and development	2,444,459		1,910,715
General and administrative	2,196,014		1,637,674
Total operating expenses	4,640,473		3,548,389
Loss from operations	(2,816,815)		(2,372,493)
Other income (expense):			
Interest income	2,271		6,359
Interest expense	(143,524)		(4,495)
Total other income (expense)	(141,253)		1,864
Net loss	\$ (2,958,068)	\$	(2,370,629)
Basic and diluted:			
Loss per common share	\$ (2.14)	\$	(781.87)
Weighted average shares outstanding	1,383,829		3,032

# GEOVAX LABS, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIENCY)

							Total
	Preferred St	ock (Note 8)	Commo	n Stock	Additional	Accumulated	Stockholders'
	Shares	Amount	Shares	Amount	Paid-in Capital	Deficit	Equity (Deficiency)
Balance at December 31, 2018	3,450	\$1,971,333	11	\$ -	\$ 37,483,204	\$ (40,476,884)	\$ (1,022,347)
Sale of convertible preferred stock for cash							
and cancellation of note payable	1,700	1,542,950	-	-	147,050	-	1,690,000
Conversion of preferred stock to common stock	(2,664)	(1,581,850)	14,819	15	1,581,835	-	-
Issuance of common stock for services	-	-	162	-	24,000	-	24,000
Stock option expense	-	-	-	-	104,420	-	104,420
Net loss for the year ended December 31, 2019	-	-	-	-	-	(2,370,629)	(2,370,629)
Balance at December 31, 2019	2,486	1,932,433	14,992	15	39,340,509	(42,847,513)	(1,574,556)
Sale of convertible preferred stock for cash	300	300,000	-	-	-	-	300,000
Conversion of preferred stock to common stock	(2,686)	(2,156,338)	716,790	717	2,155,621	-	-
Warrants issued in bridge financing	-	-	-	-	457,833	-	457,833
Issuance of common stock upon warrant exercise	-	-	286,902	287	2,213	-	2,500
Issuance of common stock upon debenture							
conversion	-	-	177,626	177	569,340	-	569,517
Issuance of common stock upon cancellation							
of accrued compensation	-	-	300,001	300	1,499,700	-	1,500,000
Sale of common stock for cash	-	-	2,310,000	2,310	11,156,186	-	11,158,496
Issuance of common stock for services	-	-	26,581	27	94,373	-	94,400
Stock option expense	-	-	-	-	18,730	-	18,730
Roundup of shares following reverse stock split	-	-	1,203	1	(1)	-	-
Net loss for the year ended December 31, 2020	-	-	-	-	-	(2,958,068)	(2,958,068)
Balance at December 31, 2020	100	\$ 76,095	3,834,095	\$ 3,834	\$ 55,294,504	\$ (45,805,581)	\$ 9,568,852

# GEOVAX LABS. INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2020	2019	
Cash flows from operating activities:			
Net loss	\$(2,958,068)	\$(2,370,629)	
Adjustments to reconcile net loss to net cash			
used in operating activities:			
Depreciation and amortization	19,656	8,350	
Amortization of debt discount	124,185	-	
Stock-based compensation expense	64,463	327,500	
Changes in assets and liabilities:			
Grant funds and other receivables	(114,060)	53,211	
Prepaid expenses and other current assets	(24,702)	(56,211)	
Accounts payable and accrued expenses	137,956	639,282	
Total adjustments	207,498	972,132	
Net cash used in operating activities	(2,750,570)	(1,398,497)	
Cash flows from investing activities:			
Purchase of property and equipment	(156,791)	(7,606)	
Net cash used in investing activities	(156,791)	(7,606)	
Cash flows from financing activities:			
Net proceeds from sale of preferred stock	300,000	1,440,000	
Net proceeds from issuance of note payable	170,200	-	
Net proceeds from bridge financing	888,500	-	
Net proceeds from sale of common stock and warrants	11,158,496	-	
Net proceeds from warrant exercises	2,500	-	
Principal repayment of notes payable	(11,880)	(10,257)	
Net cash provided by financing activities	12,507,816	1,429,743	
Net increase in cash and cash equivalents	9,600,455	23,640	
Cash and cash equivalents at beginning of period	283,341	259,701	
Cash and cash equivalents at end of period	\$ 9,883,796	\$ 283,341	

Supplemental disclosure of non-cash financing activities:

During the year ended December 31, 2020, 2,686 shares of preferred stock were converted into 716,790 shares of common stock and 36,902 shares of common stock were issued upon the "cashless" exercise of stock purchase warrants. During the year ended December 31, 2019, 2,664 shares of preferred stock were converted into 14,819 shares of common stock and \$250,000 of notes payable were cancelled in exchange for shares of our preferred stock.

# GEOVAX LABS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Years Ended December 31, 2020 and 2019

# 1. Description of Business

GeoVax Labs, Inc. ("GeoVax" or the "Company"), is a clinical-stage biotechnology company developing immunotherapies and vaccines against infectious diseases and cancers using a novel vector vaccine platform (Modified Vaccinia Ankara (MVA) Virus-Like Particle, or "GV-MVA-VLP<sup>TM</sup>"). In this platform, MVA, a large virus capable of carrying several vaccine antigens, expresses proteins that assemble into highly effective VLP immunogens in the person being vaccinated. The MVA-VLP virus replicates to high titers in approved avian cells for manufacturing but cannot productively replicate in mammalian cells. Therefore, the MVA-VLP derived vaccines can elicit durable immune responses in the host similar to a live attenuated virus, while providing the safety characteristics of a replication-defective vector.

Our current development programs are focused on preventive vaccines against novel coronavirus (COVID-19), Human Immunodeficiency Virus (HIV), Zika Virus, hemorrhagic fever viruses (Ebola, Sudan, Marburg, Lassa), and malaria, as well as immunotherapies for HIV and solid tumor cancers.

Our corporate strategy is to advance, protect and exploit our differentiated vaccine immunotherapy platform leading to the successful development of preventive and therapeutic vaccines against infectious diseases and various cancers. With our design and development capabilities, we are progressing and validating an array of cancer and infectious disease immunotherapy and vaccine product candidates. Our goal is to advance products through to human clinical testing, and to seek partnership or licensing arrangements for achieving regulatory approval and commercialization. We also leverage third party resources through collaborations and partnerships for preclinical and clinical testing with multiple government, academic and corporate entities.

Certain of our vaccine development activities have been, and continue to be, financially supported by the U.S. Government. This support has been both in the form of research grants and contracts awarded directly to us, as well as indirect support for the conduct of preclinical animal studies and human clinical trials.

We operate in a highly regulated and competitive environment. The manufacturing and marketing of pharmaceutical products require approval from, and are subject to, ongoing oversight by the Food and Drug Administration (FDA) in the United States, by the European Medicines Agency (EMA) in the European Union, and by comparable agencies in other countries. Obtaining approval for a new pharmaceutical product is never certain, may take many years and often involves expenditure of substantial resources. Our goal is to build a profitable company by generating income from products we develop and commercialize, either alone or with one or more potential strategic partners.

GeoVax is incorporated under the laws of the State of Delaware and our principal offices are located in the metropolitan Atlanta, Georgia area.

#### 2. Summary of Significant Accounting Policies

#### Principles of Consolidation

The accompanying consolidated financial statements include the accounts of GeoVax Labs, Inc. together with those of our wholly-owned subsidiary, GeoVax, Inc. All intercompany transactions have been eliminated in consolidation.

#### Basis of Presentation

Unless otherwise noted, the accompanying consolidated financial statements, and all share and per share information contained herein, have been retroactively restated to reflect the reverse stock splits described in Note 8.

The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern, which contemplates realization of assets and the satisfaction of liabilities in the normal course of business for the twelve-month period following the issue date of these consolidated financial statements.

We are devoting substantially all of our present efforts to research and development of our vaccine and immunotherapy candidates. We have funded our activities to date from government grants and clinical trial assistance, corporate and academic collaborations, and from sales of our equity securities. We believe that our existing cash resources together with current government funding commitments, will be sufficient to continue our planned operations into 2023.

We expect to incur future net losses and require substantial funds as we continue our research and development activities. Our transition to profitability will be dependent upon, among other things, the successful development and commercialization of our product candidates. We may never achieve profitability or positive cash flows, and unless and until we do, we will continue to need to raise additional funding. We intend to fund future operations through additional private and/or public offerings of debt or equity securities. In addition, we may seek additional capital through arrangements with strategic partners or from other sources. There can be no assurance that we will be able to raise additional funds or achieve or sustain profitability or positive cash flows from operations.

# Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles (GAAP) requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

# Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Our cash and cash equivalents consist primarily of bank deposits and money market accounts. The recorded values approximate fair market values due to the short maturities.

# Fair Value of Financial Instruments and Concentration of Credit Risk

Financial instruments that subject us to concentration of credit risk consist primarily of cash and cash equivalents, which are maintained by a high credit quality financial institution. The carrying values reported in the balance sheets for cash and cash equivalents approximate fair values.

# Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Expenditures for maintenance and repairs are charged to operations as incurred, while additions and improvements are capitalized. We calculate depreciation using the straight-line method over the estimated useful lives of the assets which range from three to five years. We amortize leasehold improvements using the straight-line method over the term of the related lease.

We recognize leases in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2016-02, *Leases* (ASU 2016-02), which requires lessees to classify leases as either financing or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification determines whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. In the case of our facility lease agreement which has an effective term of less than 12 months, we made an accounting policy election to not recognize lease assets and liabilities and record lease expense on a straight-line basis over the lease term.

# Impairment of Long-Lived Assets

We review long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the assets to the future net cash flows expected to be generated by such assets. If we consider such assets to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the expected future net cash flows from the assets.

#### Accrued Expenses

As part of the process of preparing our financial statements, we estimate expenses that we believe we have incurred, but have not yet been billed by our third-party vendors. This process involves identifying services and activities that have been performed by such vendors on our behalf and estimating the level to which they have been performed and the associated cost incurred for such service as of each balance sheet date.

#### Net Loss Per Share

Basic and diluted loss per common share are computed based on the weighted average number of common shares outstanding. Common share equivalents consist of common shares issuable upon conversion of convertible preferred stock, and upon exercise of stock options and stock purchase warrants. All common share equivalents are excluded from the computation of diluted loss per share since the effect would be anti-dilutive. The weighted average number of common shares at performance equivalents which were excluded from the computation of diluted loss per share stock and 558 shares at December 31, 2020 and 2019, respectively.

#### **Revenue Recognition**

We recognize revenue in accordance with FASB Accounting Standards Update 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which created a new Topic, Accounting Standards Codification Topic 606. The standard is principle-based and provides a five-step model to determine when and how revenue is recognized. The core principle is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

*Grant revenue* – We receive payments from government entities under non-refundable grants in support of our vaccine development programs. We record revenue associated with these grants when the reimbursable costs are incurred and we have complied with all conditions necessary to receive the grant funds.

*Research collaborations* – From time to time, we may enter into collaborative research and development agreements for specific vaccine development approaches and/or disease indications whereby we receive third-party funding for preclinical research under certain of these arrangements. Each agreement is evaluated in accordance with the process defined by ASU 2014-09 and revenue is recognized accordingly.

# Research and Development Expense

Research and development expense primarily consists of costs incurred in the discovery, development, testing and manufacturing of our product candidates. These expenses consist primarily of (i) salaries, benefits, and stock-based compensation for personnel, (ii) laboratory supplies and facility-related expenses to conduct development, (iii) fees paid to third-party service providers to perform, monitor and accumulate data related to our preclinical studies and clinical trials, (iv) costs related to sponsored research agreements, and (v) costs to procure and manufacture materials used in clinical trials. These costs are charged to expense as incurred.

#### Patent Costs

Our expenditures relating to obtaining and protecting patents are charged to expense when incurred and are included in general and administrative expense.

#### Period-to-Period Comparisons

Our operating results are expected to fluctuate for the foreseeable future. Therefore, period-to-period comparisons should not be relied upon as predictive of the results for future periods.

# Income Taxes

We account for income taxes using the liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which temporary differences are expected to be recovered or settled. Deferred

tax assets are reduced by a valuation allowance unless, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will be realized.

#### Stock-Based Compensation

We account for stock-based transactions in which the Company receives services from employees, directors or others in exchange for equity instruments based on the fair value of the award at the grant date. Stock-based compensation cost for awards of common stock is estimated based on the price of the underlying common stock on the date of issuance. Stock-based compensation cost for stock options or warrants is estimated at the grant date based on each instrument's fair value as calculated by the Black-Scholes option pricing model. We recognize stock-based compensation cost as expense ratably on a straight-line basis over the requisite service period for the award. See Note 8 for additional stock-based compensation information.

#### Other Recent Accounting Pronouncements

Except as discussed above, there have been no recent accounting pronouncements or changes in accounting pronouncements which we expect to have a material impact on our financial statements, nor do we believe that any recently issued, but not yet effective, accounting standards if currently adopted would have a material effect on our financial statements.

# 3. Property and Equipment

Property and equipment as shown on the accompanying Consolidated Balance Sheets is composed of the following as of December 31, 2020 and 2019:

	2020	2019
Laboratory equipment	\$ 532,100	\$ 534,577
Leasehold improvements	115,605	115,605
Other furniture, fixtures & equipment	11,736	11,736
Total property and equipment	659,441	661,918
Accumulated depreciation and amortization	(511,700)	(651,312)
Property and equipment, net	\$ 147,741	\$ 10,606

Depreciation expense was \$19,656 and \$8,350 during the years ended December 31, 2020 and 2019, respectively.

# 4. Accrued Expenses

Accrued expenses as shown on the accompanying Consolidated Balance Sheets is composed of the following as of December 31, 2020 and 2019:

	2020	2019
Accrued salaries and directors' fees	\$ 279,696	\$1,732,702
Other accrued expenses	79,585	118,338
Total accrued expenses	\$ 359,281	\$ 1,851,040

# 5. Notes Payable

*GRA Note* – On February 28, 2018, we entered into a Senior Note Purchase Agreement with Georgia Research Alliance, Inc. (GRA) pursuant to which we issued a five-year Senior Promissory Note (the "GRA Note") to GRA in exchange for \$50,000. The GRA Note bears an annual interest rate of 5%, payable monthly, with principal repayments beginning in the second year. Future principal repayments are expected to be \$12,487 in 2021, \$13,126 in2022, and \$2,252 in 2023. Interest expense related to the GRA Note was \$1,727 and \$2,097 for the years ended December 31, 2020 and 2019, respectively.

*CARES Act Paycheck Protection Program Loan* – On April 17, 2020, we received a \$170,200 bank loan backed by the United States Small Business Administration pursuant to the Paycheck Protection Program (PPP) provisions of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The loan bears an annual interest rate of one percent and is due April 17, 2022. We have accrued interest expense associated with the PPP Loan of \$1,203. In October 2020, we applied to the lender to have the loan forgiven, based upon our submission of qualifying information regarding eligible expenses; as of the date of this report our forgiveness application has not been processed.

# 6. Convertible Debentures

On June 26 2020, we entered into a Securities Purchase Agreement with two institutional investors, pursuant to which we received gross proceeds of \$1,050,000 in exchange for the issuance of: (i) 5% Original Issue Discount Senior Secured Convertible Debentures (the "Convertible Debentures") in the aggregate principal amount of \$1,200,000; and (ii) five-year warrants (the "June 2020 Warrants") to purchase an aggregate of 120,000 shares of our common stock at an exercise price of \$10.00 per share. Net proceeds after deducting the original issue discount, finder's fee and other debt issuance costs were \$888,500. As a result of the public offering of our securities described in Note 8, on September 29, 2020 the exercise price of the June 2020 Warrants was reduced to \$5.00. The Convertible Debentures had an original maturity of twelve months, bore interest at a rate of 5% per annum, and were secured by substantially all of the Company's assets until such time as they were paid or converted in full.

The Convertible Debentures were mandatorily convertible upon our consummation of a public offering of common stock with gross proceeds of \$6,000,000 or more, and which resulted in the listing of our common stock on a national securities exchange (a "Qualified Offering"). The conversion price upon the occurrence of a Qualified Offering was equal to the lower of (i) \$10.00 per share or (ii) 80% of the offering price. The conversion provisions of the Convertible Debentures were subject to a "conversion blocker" such that each of the purchasers could not convert the Convertible Debentures to the extent that the conversion would result in the purchaser and its affiliates holding more than 4.99% of our outstanding common stock.

On September 29, 2020, upon our consummation of the public offering discussed in Note 8, the \$1,200,000 maturity value of the Convertible Debentures and \$14,667 of accrued interest were automatically converted at \$4.00, the Qualified Offering discounted price, resulting in the issuance of 303,668 conversion units. Of the 303,668 conversion units: (a) 177,626 consist of one share of common stock and a warrant to purchase one share of common stock (a "Conversion Warrant"), and (b) 126,042 consist of one pre-funded warrant to purchase one share of common stock (a "Pre-Funded Warrant") and a Conversion Warrant. The Pre-Funded Warrants provide the holder the right to purchase one share of Common Stock at an exercise price of \$0.01 per share, are immediately exercisable and will not expire until exercised in full. The Conversion Warrants provide the holder the right to purchase one stock, are immediately exercisable at an exercise price of \$5.00 per share and expire five years after the issuance date.

Upon the issuance of the Convertible Debentures, we recorded a debt discount of \$769,334, including the \$150,000 original issue discount, \$457,833 of fair value allocated to the warrants (recorded as Additional Paid-in Capital), and \$161,500 of direct transaction costs incurred. The debt discount was amortized to interest expense over the 12-month term of the Debentures using the effective interest rate method, up to the date of conversion. As a result of the mandatory conversion of the Convertible Debentures on September 29, 2020, the remaining unamortized debt discount (\$645,150) was recorded as Additional Paid-in Capital. Interest expense associated with the Convertible Debentures recorded during 2020 was \$138,851, including \$124,185 of debt discount amortization.

# 7. Commitments

#### Lease Agreement

We lease approximately 8,400 square feet of office and laboratory space pursuant to an operating lease which expires on December 31, 2022. Rent expense for the years ended December 31, 2020 and 2019 was \$166,577 and \$161,673, respectively. Future minimum lease payments total \$171,213 in 2021 and \$176,356 in 2022, although the lease may be terminated at any time by either party with ninety days written notice.

#### Other Commitments

In the normal course of business, we enter into various firm purchase commitments related to production and testing of our vaccine, conduct of research studies, and other activities. As of December 31, 2020, we had approximately \$190,000 of unrecorded outstanding purchase commitments to our vendors and subcontractors, all of which we expect will be due in 2021. We expect \$165,500 of this amount to be reimbursable to us pursuant to currently outstanding government grants.

# 8. Stockholders' Equity

#### Convertible Preferred Stock

We are authorized to issue up to 10,000,000 shares of our Preferred Stock, \$.01 par value, which may be issued in one or more series. The table below presents our issued and outstanding series of preferred stock as of December 31, 2020 and 2019. Each series of our outstanding preferred stock has a stated value of \$1,000 per share. Further details concerning each series of preferred stock, and the changes in each series during the years ended December 31, 2020 and 2019 are discussed in the sections that follow the table.

	December	31, 2020	December 31, 2019		
	Carrying		Carrying		
	Shares	Value	Shares Value		
Series B Convertible Preferred Stock	100	\$ 76,095	100 \$ 76,095		
Series H Convertible Preferred Stock	-	-	1,686 1,156,338		
Series I Convertible Preferred Stock	-	-	700 700,000		
Total	100	\$ 76,095	2,486 \$ 1,932,433		

*Series B Convertible Preferred Stock* – Our Series B Convertible Preferred Stock, \$1,000 stated value ("Series B Preferred Stock"), has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series B Preferred Stock has no voting rights and is not entitled to a dividend. As of December 31, 2020, there were 100 shares of Series B Preferred Stock outstanding, convertible at any time at the option of the holder into shares of common stock at a fixed conversion price of \$7,000,000 per common share.

*Series C Convertible Preferred Stock* – Our Series C Convertible Preferred Stock, \$1,000 stated value ("Series C Preferred Stock"), has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series C Preferred Stock has no voting rights and is not entitled to a dividend. During 2019, 587 shares of our Series C Preferred Stock were converted into 2 shares of our common stock and the remaining 1,563 shares of Series C Preferred Stock were exchanged for Series F Preferred Stock. As of December 31, 2020, there were no shares of Series C Preferred Stock outstanding.

*Series E Convertible Preferred Stock* – Our Series E Convertible Preferred Stock, \$1,000 stated value, ("Series E Preferred Stock") has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series E Preferred Stock has no voting rights and is not entitled to a dividend. During 2019, all outstanding shares of Series E Preferred Stock (1,200 shares) were exchanged for Series F Preferred Stock. As of December 31, 2020, there were no shares of Series E Preferred Stock outstanding.

*Series F Preferred Stock* – In February 2019, we entered into Exchange Agreements with holders of our Series C and Series E Preferred Stock, pursuant to which the holders exchanged all shares of Series C and Series E Preferred Stock held by them for an aggregate of 2,763 shares of Series F Convertible Preferred Stock ("Series F Preferred Stock"). Our Series F Preferred Stock has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series F Preferred Stock has no voting rights and is not entitled to a dividend. During 2019, 507 shares of Series F Preferred Stock (2,256 shares) were exchanged for Series H Preferred Stock. As of December 31, 2020, there were no shares of Series F Preferred Stock outstanding.

*Series G Preferred Stock* – In February 2019, we entered into a Securities Purchase Agreement with the purchasers identified therein (the "Purchasers") providing for sale to the Purchasers of an aggregate of up to 1,000 shares of our Series G Convertible Preferred Stock ("Series G Preferred Stock") and related warrants for gross proceeds of up to \$1.0 million, which was funded at three different closings. Our Series G Preferred Stock has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series G Preferred Stock has no voting rights and is not entitled to a dividend. At the first closing, which occurred in February 2019, we issued 500 shares of Series G Preferred Stock in exchange for the payment by the Purchasers of \$250,000 in the aggregate, plus the cancellation of Term Notes held by the Purchasers in the amount of \$250,000. At the second and third closings, which occurred in April and June 2019, we issued an aggregate of 500

additional shares of Series G Preferred Stock in exchange for the payment by the Purchasers of a total of \$500,000. During July 2019, all outstanding shares of Series G Preferred Stock (1,000 shares) were exchanged for Series H Preferred Stock. As of December 31, 2020, there were no shares of Series G Preferred Stock outstanding.

*Series H Preferred Stock* – In July 2019, we entered into Exchange Agreements with holders of our Series F and Series G Preferred Stock, pursuant to which the holders exchanged all shares of Series F and Series G Preferred Stock held by them for an aggregate of 3,256 shares of Series H Convertible Preferred Stock ("Series H Preferred Stock"). Our Series H Preferred Stock has rights and privileges as set forth in the pertinent Certificate of Designation of Preferred Stock has no voting rights and is not entitled to a dividend. During 2019, 1,570 shares of Series H Preferred Stock were converted into 14,808 shares of our common stock. During 2020, 1,686 shares of our Series H Convertible Preferred Stock were converted into 469,697 shares of our common stock. As of December 31, 2020, there were no shares of Series H Preferred Stock outstanding.

*Series I Preferred Stock* – In July 2019, we entered into a Securities Purchase Agreement with the purchasers identified therein (the "Purchasers") providing for sale to the Purchasers of an aggregate of 700 shares of our Series I Convertible Preferred Stock ("Series I Preferred Stock") for gross proceeds of \$700,000. Our Series I Preferred Stock has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series I Preferred Stock has no voting rights and is not entitled to a dividend. During 2020, 700 shares of our Series I Convertible Preferred Stock were converted into 204,371 shares of our common stock. As of December 31, 2020, there were no shares of Series I Preferred Stock outstanding.

*Series J Preferred Stock* – In January 2020, we entered into a Securities Purchase Agreement with the purchasers identified therein (the "Purchasers") providing for sale to the Purchasers of an aggregate of 300 shares of our Series J Convertible Preferred Stock ("Series J Preferred Stock") for gross proceeds of \$300,000. Our Series J Preferred Stock has rights and privileges as set forth in the pertinent Certificate of Designation of Preferences, Rights and Limitations, including a liquidation preference equal to the stated value per share. The Series J Preferred Stock has no voting rights and is not entitled to a dividend. During 2020, 300 shares of Series J Preferred Stock were converted into 42,723 shares of our common stock. As of December 31, 2020, there were no shares of Series J Preferred Stock outstanding

# Common Stock

*Reverse Stock Splits* – On April 30, 2019, we effected a 1-for-500 reverse stock split of our common stock, on January 21, 2020, we effected a 1-for-2000 reverse split of our common stock and on September 25, 2020, we effected a 1-for-20 reverse split of our common stock.

*Conversions of Preferred Stock* – During 2020 and 2019 we issued an aggregate of 716,790 and 14,819 shares of our common stock, respectively, pursuant to the conversion of several series of our convertible preferred stock as discussed above.

*Public Offering* – On September 24, 2020, we entered into an Underwriting Agreement (the "Underwriting Agreement") with Maxim Group LLC, as representative of the underwriters (the "Representative"), for an underwritten public offering (the "Offering") of an aggregate of 2,560,000 units of our equity securities (the "Units"). The Offering closed on September 29, 2020, with gross proceeds to us of approximately \$12.8 million; net proceeds after deducting underwriting discounts and commissions and other offering expenses were approximately \$11.2 million.

Of the 2,560,000 Units sold in the Offering: (a) 2,310,000 Units consist of one share of our common stock, and a Warrant to purchase one share of common stock (each, a "Unit Warrant"); and (b) 250,000 Units consisting of a Pre-Funded Warrant to purchase one share of common stock and a Unit Warrant. The Pre-Funded Warrants provided the holder the right to purchase one share of common stock at an exercise price of \$0.01 per share and were exercised in full during October 2020. The Unit Warrants provide the holder the right to purchase one share of \$5.00 per share and expire five years after the issuance date. The public offering price was \$5.00 per Unit (\$4.99 for each Unit including a Pre-Funded Warrant).

Pursuant to the Underwriting Agreement, we issued to the Representative, as a portion of the underwriting compensation, warrants to purchase up to a total of 128,000 shares of common stock (the "Representative Warrants"). The Representative Warrants have an exercise price of \$5.50 per share, are initially exercisable 180 days after the effective date of the Offering and have a term of three years from their initial exercise date.

*Conversion of Deferred Compensation to Equity* – From 2016 through August 2020, to help conserve the Company's cash resources, our executive officers and non-employee directors agreed to defer receipt of all or a portion (at varying levels) of their respective cash compensation. On September 29, 2020, upon our consummation of the Offering, \$1,500,000 of the accumulated deferrals were converted at the \$5.00 offering price, resulting in the issuance of 300,001 units substantially similar to the units sold in the public offering, with each unit consisting of one share of our common stock and one warrant substantially similar to a Unit Warrant (a "Management Warrant").

*Conversion of Convertible Debentures to Equity* – As discussed in Note 6, upon our consummation of the Offering, we issued an aggregate of 177,626 shares of our common stock, 126,042 Pre-Funded Warrants and 303,668 Conversion Warrants upon the mandatory conversion of \$1,214,667 of Convertible Debentures and accrued interest.

*Other Common Stock Transactions* – During 2020 and 2019 we issued 26,581 and 162 shares, respectively, of our common stock pursuant to consulting agreements. During 2020, certain warrants were exercised using the "cashless" exercise feature of the warrants, resulting in the issuance of an aggregate of 36,902 shares of our common stock.

#### Stock Options

We have a stock-based incentive plan (the "2020 Plan") pursuant to which our Board of Directors may grant stock options to our employees. A total of 1,000,000 shares of our common stock are reserved for issuance pursuant to the 2020 Plan. The exercise price for any option granted may not be less than fair value (110% of fair value for ISO's granted to certain employees). Options have a maximum ten-year term and generally vest over three years.

We use the Black-Scholes model for determining the grant date fair value of our stock option grants. This model utilizes certain information, such as the interest rate on a risk-free security with a term generally equivalent to the expected life of the option being valued and requires certain other assumptions, such as the expected amount of time an option will be outstanding until it is exercised or expired, to calculate the fair value of stock options granted. The significant assumptions we used in our fair value calculations were as follows:

	2020	2019
Weighted average risk-free interest rates	0.69%	N/A
Expected dividend yield	0.0%	N/A
Expected life of option	7.0 yrs	N/A
Expected volatility	38.16%	N/A

A summary of stock option activity under the 2020 Plan as of December 31, 2020, and changes during the year then ended is presented below.

	Number of Shares	Weigh Avera Exerc Pric	ige ise	Weighted- Average Remaining Contractual Term (yrs)	Aggregate Intrinsic Value
Outstanding at December 31, 2019	_	\$	-		
Granted	602,000	,	2.79		
Exercised	-		-		
Forfeited or expired	-		-		
Outstanding at December 31, 2020	602,000	\$	2.79	9.9	\$ 355,180
Exercisable at December 31, 2020	-0-	\$	-	-	\$ -

The weighted-average grant date fair value of options granted during 2020 was \$1.12. No stock options were granted during 2019. Total employee and director stock-based compensation expense recognized in the consolidated statement of operations for the years ended December 31, 2020 and 2019 was \$18,730 and \$104,420, respectively. As of December 31, 2020, there is \$655,510 of unrecognized compensation expense related to employee and director stock-based compensation arrangements that will be recognized over a weighted-average period of 2.9 years.

#### Stock Purchase Warrants

*Summary of Warrants Outstanding* – The table below presents summary information about our warrants outstanding as of December 31, 2020. Additional information concerning the warrants follows the table.

	Number	Exercise	
Warrant Description	of Shares	Price	Expiration
Series I Warrants	62,626	\$ 5.00	Oct-Dec 2024
June 2020 Warrants	120,000	5.00	Jun 2025
Pre-Funded Warrants	126,042	0.01	Perpetual
Unit, Conversion and Management Warrants	3,163,669	5.00	Sep 2025
Representative Warrants	128,000	5.50	Mar 2024
Total Warrants Outstanding at December 31, 2020	3,600,337		
Weighted-Average Exercise Price Weighted-Average Remaining Life (excluding Pre-Funded Warrants)	\$ 4.84 4.7 yrs		

*Series I Warrants* – During July 2020, Series I Warrants were exercised using the "cashless" exercise feature of the warrants, resulting in the issuance of 29,755 shares of our common stock. As of December 31, 2020, there were 62,626 Series I Warrants outstanding, with an exercise price of \$5.00 per share, reflective of anti-dilution adjustments resulting from the Offering.

*June 2020 Warrants* – As discussed in Note 6, on June 26, 2020, in connection with the issuance of the Convertible Debentures, we issued warrants to purchase 120,000 shares of common stock, with a five-year term and an exercise price of \$10.00. As a result of the Offering, on September 29, 2020 the exercise price was reduced to \$5.00.

*Warrants Issued Upon Conversion of Convertible Debentures* – As discussed in Note 6, on September 29, 2020, upon the conversion of the Convertible Debentures into our equity securities, we issued 126,042 Pre-Funded Warrants and 303,668 Conversion Warrants to purchase our common stock.

*Warrants Issued Upon Conversion of Deferred Compensation* – As discussed above under "*Common Stock* – *Conversion of Deferred Compensation to Equity*", on September 29, 2020, upon the conversion of amounts owed to current and former executive officers and directors, we issued Management Warrants to purchase 300,001 shares of common stock.

*Warrants Issued in Connection with Public Offering* – As discussed above under "*Common Stock* – *Public Offering*", on September 29, 2020, in connection with the Offering, we issued Unit Warrants to purchase 2,560,000 shares of common stock, Pre-Funded Warrants to purchase 250,000 shares of common stock (fully exercised in October 2020), and Representative Warrants to purchase 128,000 shares of common stock.

# Additional Stock-Based Compensation Expense

In addition to stock-based compensation expense related to the 2020 Plan (see *Stock Options* above), during the years ended December 31, 2020 and 2019, we recognized \$45,733 and \$223,080, respectively, of expense related to the issuance of our common stock pursuant to consulting and investment banking agreements. As of December 31, 2020, there is \$48,667 recorded as a prepaid expense for one of these arrangements, which will be recognized as expense during 2021 over the term of the related agreement.

# 9. Retirement Plan

We participate in a multi-employer defined contribution retirement plan (the "401k Plan") administered by a third-party service provider, and the Company contributes to the 401k Plan on behalf of its employees based upon a matching formula. During the years ended December 31, 2020 and 2019 our contributions to the 401k Plan were \$27,511 and \$25,876, respectively.

#### **10.** Income Taxes

At December 31, 2020, we have a consolidated federal net operating loss ("NOL") carryforward of approximately \$61.8 million available to offset against future taxable income of which approximately \$53.6 million expires in varying amounts in

2021 through 2037. Additionally, we have approximately \$1.2 million in research and development ("R&D") tax credits that expire in 2022 through 2040 unless utilized earlier. No income taxes have been paid to date. Section 382 of the Internal Revenue Code contains provisions that may limit our utilization of our NOL and R&D tax credit carryforwards in any given year as a result of significant changes in ownership interests that have occurred in past periods or may occur in future periods.

Deferred income taxes reflect the net effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities included the following at December 31, 2020 and 2019:

	2020			2019		
Deferred tax assets:						
Net operating loss carryforward	\$ 14,	737,240	\$	15,328,336		
Research and development tax credit carryforward	1,	189,110		1,122,536		
Stock-based compensation expense		4,870		1,877,284		
Accrued salaries and directors' fees		72,721		450,503		
Depreciation		-		8,571		
Total deferred tax assets	16,0	003,941		18,787,230		
Deferred tax liabilities						
Depreciation		28,274		-		
Net deferred tax assets	15,9	975,667		18,787,230		
Valuation allowance	(15,9	975,667)		(18,787,230)		
Net deferred tax asset after reduction for valuation allowance	\$	-0-	\$	-0-		

We have established a full valuation allowance equal to the amount of our net deferred tax assets due to uncertainties with respect to our ability to generate sufficient taxable income to realize these assets in the future. A reconciliation of the income tax benefit on losses at the U.S. federal statutory rate to the reported income tax expense is as follows:

	 2020	2019
U.S. federal statutory rate applied to pretax loss	\$ (621,194)	\$ (497,833)
Permanent differences	65	278
Research and development credits	(66,574)	(47,053)
Change in valuation allowance, net of expired items and other adjustments	 687,703	544,308
Reported income tax expense	\$ -0-	\$ -0-

# 11. Grants and Collaboration Revenue

We receive payments from government entities under our grants from the National Institute of Allergy and Infectious Diseases (NIAID) and from the U.S. Department of Defense in support of our vaccine research and development efforts. We record revenue associated with government grants as the reimbursable costs are incurred. During 2020 and 2019, we recorded \$1,438,465 and \$983,682, respectively, of revenue associated with these grants. As of December 31, 2020, there is an aggregate of \$165,500 in remaining grant funds available for use during 2021. During 2020 and 2019, we recorded \$385,193 and \$192,214, respectively, of revenues associated with research collaboration agreements with several third parties.

# 12. Subsequent Events

*SBIR Grant* – In January 2021, NIAID awarded us a Small Business Innovative Research (SBIR) grant in support of our development of a vaccine against SARS-CoV-2, the virus that causes COVID-19. The \$299,927 Phase 1 grant, titled, *"Preclinical Development of GV-MVA-VLP Vaccines Against COVID-19,"* will support the ongoing design, construction and preclinical testing of our vaccine candidates in preparation for human clinical trials.

*Warrant Exercises* – During January and February 2021, holders of our warrants exercised 62,626 Series I Warrants, 126,042 Pre-Funded Warrants and 690,034 Unit Warrants, resulting in the issuance of 835,900 shares of our common stock for aggregate net proceeds to us of \$3,174,156.

*Bought Deal Public Offering* -- On February 11, 2021, we closed an underwritten bought deal public offering of 1,644,000 shares of our common stock, including 204,000 shares sold pursuant to the full exercise of the underwriter's option to purchase additional shares, at a price to the public of \$6.25 per share. Net proceeds after deducting underwriting discounts and commissions and other offering expenses were approximately \$9.4 million.

# GEOVAX LABS, INC. SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

# For the Years Ended December 31, 2020 and 2019

		Additions (I	_		
	Balance at	Charged to	Charged to		Balance at
	Beginning	Costs and	Other		End
Description	Of Period	Expenses	Accounts	Deductions	Of Period
Reserve Deducted in the Balance					
Sheet From the Asset to Which it Applies:					
Applies.					
Allowance for Deferred Tax Assets					
Year ended December 31, 2020	\$ 18,787,230	\$ (2,811,563)	\$ -0-	\$ -0-	\$ 15,975,667
Year ended December 31, 2019	19,879,954	(1,092,724)	-0-	-0-	18,787,230