September 21, 2023

Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

Tom Kerr
312-265-9417
tkerr@zacks.com

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

Virax Biolabs (NASDAQ:VRAX)

VRAX: Virax Biolabs announces early access program for research-use-only ("RUO") for its proprietary SARS-Cov-2 ViraxImmune T-cell-based test.

Utilizing a DCF valuation process containing conservative estimates combined with other valuation methodologies, we believe VRAX could be worth $2.00 per share.

Current Price (9/20/23)	$0.36
Valuation	**$2.00**

OUTLOOK

Virax Biolabs is a biotechnology company focused on the detection of immune responses and the diagnosis of viral diseases within the in-vitro diagnostic (IVD) market. The company is developing an immunology platform based around their proprietary T-Cell testing technology which could be effective at predicting the adaptive immune response to COVID-19 and other viral threats. The company raised $13.6 million in fiscal year 2023 through an IPO and two PIPE offerings. We believe the company is funded to support its planned operations through the fiscal year ending March 2024.

SUMMARY DATA

52-Week High	**$3.64**
52-Week Low	**$0.32**
One-Year Return (%)	**-89.7**
Beta	**N/A**
Average Daily Volume (sh)	**185,895**
Shares Outstanding (mil)	**15.5**
Market Capitalization ($mil)	**$6.4**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**29.5**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2022 Estimate	**N/A**
P/E using 2023 Estimate	**N/A**

Risk Level	**High**
Type of Stock	**Small Growth**
Industry	**Biotechnology**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1	H1 (Sep)	Q3	H2 (Mar)	Year (Mar)
2022		0.0 A		0.0 A	0.0 A
2023		0.0 A		0.0 A	0.0 A
2024		0.4 E		1.0 E	1.4 E
2025		3.0 E		5.0 E	8.0 E

EPS / Loss Per Share

	Q1	H1 (Sep)	Q3	H2 (Mar)	Year (Mar)
2022					(0.18) A
2023					(0.51) A
2024					(0.19) E
2025					(0.06) E

Quarterly revenues may not equal annual revenues due to rounding. Quarterly EPS may not equal annual EPS due to rounding, dilution, or intangibles.

© Copyright 2023, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

Early Access Program

On September 12, 2023, Virax Biolabs announced the launch of an early access program for research-use-only ("RUO") of its proprietary SARS-Cov-2 ViraxImmune T-cell-based test.

The early access program offers select research groups an opportunity to be at the forefront of immune assessment advancements. The RUO form of Virax's T-cell-based test is designed to assess the activation of memory T-cells specific to the SARS-Cov-2 by combining an ELISpot assay with a peptide pool covering specific protein parts of the virus.

The test requires the isolation of peripheral blood mononuclear cells ("PBMCs") from blood samples that are then seeded onto the company's pre-coated ELISpot plate. The cytokines secreted by the cells upon stimulation with the peptide pool are immediately captured by the antibodies bound to the plate and detected through a series of reactions with antibodies and enzyme-substrate interactions, resulting in visible spots. Each spot represents a single cytokine-secreting cell, allowing for high-resolution analysis of immune responses at the cellular level.

This test provides a quantitative assessment of immune response, which will help to develop a deeper understanding of an individual's immune profile. The Company's tests are compatible with a wide range of ELISpot readers, ensuring ease of use without requiring additional costly laboratory equipment.

Interested participants in this program can reach out to the company through the contact information on their website, https://www.viraxbiolabs.com.

Company Chief Executive Officer James Foster stated, *"We are thrilled to launch this early access program for the RUO of our proprietary ViraxImmune T-cell based test. We look forward to working with early adopters who also share the vision to be at the frontier of cutting-edge diagnostics and bringing value to human immune health."*

The Chief Scientific Officer Dr. Tomasz George stated, *"We are excited to get our proprietary T-cell-based tests in the hands of researchers as demand is growing for T-cell tests due to its advantages when compared to antigen and antibody-based tests in the context of determining long-term immunity to viral threats. Although this initial iteration of our test targets specifically Sars-Cov-2, we believe that our tests are adaptable to a broad range of immunological threats in different settings, from personal use to utilization by governments and the pharmaceutical industry."*

Leadership Change

On September 1, 2023, the company announced the appointment of Dr. Nigel McCracken as the new Chief Operating Officer ("COO"). Dr. McCracken will succeed Mr. Cameron Shaw, who is moving to Virax's Advisory Board, and will lead the Company's various growth initiatives, including the company's recently announced research-use-only launch of ViraxImmune. As COO, Dr. McCracken will lead Virax's research and clinical teams as well as the execution of the company's go-to-market strategy for ViraxImmune.

Prior to joining Virax, Dr. McCracken was the Chief Scientific Officer at OTC traded BerGenBio AsA where he drove the plan for BerGenBio AsA's companion diagnostics and assay development. Prior to that role, he served as COO at Nasdaq listed NuCana PLC, a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for patients with cancer, where he provided oversight and direction to the operations of the business, research and development, and execution of corporate strategy.

Recent Business Update – ViraxImmune

The company believes the ViraxImmune platform will shift the way individuals are able to manage aspects of their immune health by moving testing and diagnostics from event-driven to a proactive and preventative approach. The ViraxImmune platform will allow patients to take control of their health and make informed decisions on how to respond to current and future viral threats.

ViraxImmune assesses susceptibility to viral threats by measuring an individuals' specific T-Cell response to viruses. T-Cells are responsible for long-term immunity and the level of T-Cell response typically correlates with the level of immune protection an individual may already have due to prior exposure to the disease.

Consumers will be able to order ViraxImmune kits and have blood drawn at a local phlebotomy site and then sent to a laboratory for analysis using the company's proprietary technology. Results will then be delivered directly to an individual through the ViraxImmune Mobile Application providing them with an individualized immune profile covering a wide number of viruses.

The company is using COVID-19 as the first target for the in-vitro diagnostic T-Cell tests to prove the technology's effectiveness. This will then allow them to adapt to additional pathogens, whether variants of existing pathogens or new ones. A subscription can be purchased through the mobile application which will allow the community of ViraxImmune customers to test their immune responses to the most prevalent viral threats annually before they come into contact with the viruses. This will allow customers to make informed decisions on their current immune risk and provide them with actionable results with convenience, high accuracy, and affordability.

The company also intends to pursue partnerships with academic labs engaged in viral studies, as well as pharmaceutical companies and Clinical Research Organizations (CRO) who may need T-Cell tests as a pre-screening tool for clinical trials. By leveraging both business-to-business and direct-to-consumer platforms, the company feels it can maximize the potential opportunities for ViraxImmune.

In terms of the timeline for commercialization, the clinical protocol for the clinical performance study will soon be reviewed during the FDA pre-submission to satisfy the 501(k) requirements. The FDA 510(k) program provides medical device manufacturers with a voluntary alternative review process where accredited Third Party Review Organizations are allowed to review certain low-to-moderate risk medical devices.

This clinical performance study is intended to take place in multiple sites located in the U.S., E.U., and the U.K. in order to facilitate access to U.S and E.U. markets through the FDA and the E.U. *In Vitro Diagnostic Regulation* (IVDR) pathways. Regular announcements will be made as the study progresses and the company expects to announce full results in the 4th quarter of 2023.

Once the clinical performance study is complete with satisfactory results, the company can immediately start applications in the 1st quarter of 2024 to seek compliance with U.S. (FDA 501(k)), E.U. (IVDR), U.K. (MHRA) and Canadian (HC) regulations. In parallel with the 510(k) application, the company is also working toward obtaining the FDA's Clinical Laboratory Improvement Amendments (CLIA) approval for the 1st quarter of 2024.

While commercialization entirely relies on approval by various regulatory bodies, the company is confident many markets would be commercially accessible in the 2nd quarter of 2024. The company did note that due to the lack of European IVDR notified bodies, delays in the review of technical documentation can be expected. This means obtaining the European CE marking may not occur until the 4th quarter of 2024.

The company also expects that ViraxImmune will be initially available for Research Use Only (RUO) in the 4th quarter of 2023 before the launch as a commercially available in-vitro diagnostic (IVD) product in

2024. This approach will allow the company to market and commercialize the products before they have gone through the regulatory approval process. The company provided details of the early access program on September 20, 2023.

In terms of the consumer facing Mobile Application, the app is being designed to provide tailored wellness advice and practical steps that can be taken to improve an individual's immune profile and lower their risks of infection. Lifestyle questions have been incorporated into the application to capture additional relevant information.

Users will have the option to answer lifestyle questions and provide details about any relevant tests they may have completed, such as Vitamin C, Vitamin D, Iron, and Zinc as well as other lifestyle questions that are relevant to an individual's immune profile. This supplementary data will help paint a more well-rounded picture of their immune profile at a specific point in time. These lifestyle questions and additional tests are optional as users can still generate a report using only the ViraxImmune IVD results or any of our additional partner tests. The ViraxImmune mobile application is expected to be launched in the 4th quarter of 2023.

Recent Business Update – ViraxClear

In the 1st half of 2023, the company continued to expand the range of ViraxClear tests and distribution partners. The company signed a purchase order with Cosmos Health to launch and market ViraxClear COVID-19 and Influenza A+B Antigen Combo Rapid Detection Kits. Cosmos has exclusive distribution rights for Greece and Cyprus, with the opportunity to distribute ViraxClear branded test kits across Europe on a non-exclusive basis.

The company also announced an agreement for the distribution of an Avian Influenza A Virus real-time PCR test kit to markets accepting the EU CE mark, and an agreement for the distribution of Marburg Virus PCR testing kits with plans to launch in areas accepting the CE mark.

The ViraxClear business is intended to act as a supporting vertical and additional revenue stream to assist in the funding and development of the company's primary company focus, the ViraxImmune platform. The ViraxClear segment has been further augmented through the addition of ViraxVet, a veterinary diagnostics platform that is focused on multiplex test kits. By offering a disruptive diagnostic portfolio through the soon to be implemented direct-to-consumer Polymerase Chain Reaction (PCR) & Antigen platform that is inclusive of new multiplex assays and competitively priced, Virax intends to further disrupt the IVD sector.

Financial Results

For the fiscal year ended March 31, 2023, cash and equivalents totaled approximately $9.35 million. The company has no long-term debt other than a note payable with a remaining balance of $146,250, which is offset by an approximate amount included in prepaid expenses and deposits on the balance sheet. The remainder of the liabilities, which are all current, represent trade payables and accrued expenses.

Current assets total approximately $9.6 million while total current liabilities are less than $1.0 million. During the fiscal year, the company was able to extinguish a large portion of payables that resulted in a one-time gain on debt extinguishment of approximately $290,000.

Research and development expense associated with the ViraxImmune platform was approximately $397,000 and the company anticipates additional research and development expenditures to bring ViraxImmune to the market to be approximately $1.1 million. Research and development expenses consist of clinical protocol and performance studies from third party laboratory partners. We believe the company likely has enough capital currently to bring ViraxImmune to commercialization.

General and administrative expenses were $5.3 million and $1.3 million for the years ending March 31, 2023 and 2022, respectively. The large increase in general and administrative costs was primarily due to the increase in costs relating to the preparation for the IPO which occurred in July 2022. Stock compensation for the year was approximately $1.7 million representing approximately 32% of G&A expenses and which was reversed with the cancellation of certain stock options subsequent to the end of the fiscal year.

The company's burn rate for the year was approximately $4.3 million. The company was able to raise approximately $13.6 million in equity capital from its IPO and two follow up PIPE transactions.

Valuation and Estimates

Virax Biolabs is positioning itself for strong profitable growth and we believe the stock is worth **$2.00** based on our discounted cash flow calculation which incorporates conservative estimates and a high discount rate.

CEO James Foster stated, *"We continue to focus heavily on piecing together a comprehensive preventative diagnostics platform. By combining cutting-edge technology, strategic partnerships, and a strong infrastructure, we strive to create a unified system that enables early detection and proactive prevention of diseases worldwide."*

OTHER RECENT NEWS

The company has made recent announcements regarding business operations and capital financing as well as provided an updated investor presentation.

New Regional Headquarters

On May 4th, 2023, the company announced that it established a regional headquarters at Dubai Science Park, a member of TECOM Group PJSC. TECOM Group is an organization that has been developing strategic, sector-focused business districts across the emirate of Dubai since 1999. Founded in 2005, Dubai Science Park is a thriving holistic community dedicated to supporting customers in the sciences, energy, and environmental sectors. With ample office and lab space as well as robust infrastructure, Dubai Science Park has created an enabling science-focused ecosystem that is home to major international, regional, and local companies.

By entering the region, Virax hopes to increase its distribution reach of high-quality in-vitro diagnostics, innovative products and proprietary T-Cell tests while creating logistical regional efficiencies. The new headquarters will create new jobs and drive investment and talent to the UAE in line with the Dubai Economic Agenda 'D33'.

Virax CEO James Foster stated, *"The addition of a regional headquarters in Dubai Science Park aligns perfectly with our mission to bring world-class testing solutions for viral threats to additional geographies. The new headquarters will strengthen the distribution network we have developed for ViraxClear and enable further development of our innovative technology behind Virax Immune, while tapping into an esteemed science and business community established at Dubai Science Park."*

Distribution of Marburg Virus PCR Testing Kits

On April 19th, 2023, the company announced that it has entered into an agreement for the distribution of Marburg Virus PCR testing kits. The Marburg Virus Real Time PCR Kit is an in-vitro diagnostic test based on real-time PCR technology for the detection of ribonucleic acid (RNA) from the Marburg Virus. The company intends to launch the kit into areas accepting a CE mark.

The Marburg Virus Disease is a highly virulent disease that causes hemorrhagic fever and requires assessment under the International Health Regulations by the World Health Organization (WHO). The use of accurate and reliable test kits is critical to ensure the best possible outcomes for individuals affected by the disease, as well as for safeguarding public health on a global basis.

Company CEO James Foster commented, *"We are committed to developing and distributing innovative diagnostic tools to combat infectious diseases. Our Marburg Virus PCR testing kit is a significant step forward in our mission to improve global health."*

$4 Million Private Placement

On March 10th, 2023, the announced the closing of its private placement of 3,843,309 ordinary shares, Series A preferred investment options to purchase up to an aggregate of 3,497,412 ordinary shares and Series B preferred investment options to purchase up to an aggregate of 3,843,309 ordinary shares at a purchase price of $1.04077 per ordinary share.

Both the Series A preferred investment options and Series B preferred investment options have an exercise price of $0.80202 per ordinary share and are exercisable immediately for a period of five and a half years.

Gross proceeds from the private placement were approximately $4 million before deducting placement agent fees and other offering expenses. Virax intends to use the net proceeds from the private placement for the development and commercialization of its proprietary T-Cell Test technology (ViraxImmune) as well as for working capital and other general corporate purposes.

Avian Influenza A Virus Real-Time PCR Test Kit

On March 7th, 2023, the company announced that it has entered into an agreement for the distribution of an Avian Influenza A Virus (AIV) real-time PCR test kit to markets accepting the CE mark, primarily in the European Union. The test kit is for the detection and differentiation of ribonucleic acid from AIV and the H5, H7 and H9 subtypes, including the H5N1 strain currently spreading in Europe.

The test kit is for use in laboratory settings and can help healthcare professionals accurately identify an AIV infection. It also serves as an important initial screening test for individuals that have been exposed to AIV infected livestock or a related high-risk environment.

Company CEO James Foster stated, *"We continue to expand our ViraxClear distribution platform to bring test solutions to a widening range of viral threats. With a real-time PCR test kit poised to accurately and reliably detect AIV, including the deadly H5N1 strain, we expect to facilitate rapid and potentially life-saving interventions especially in vulnerable jurisdictions."*

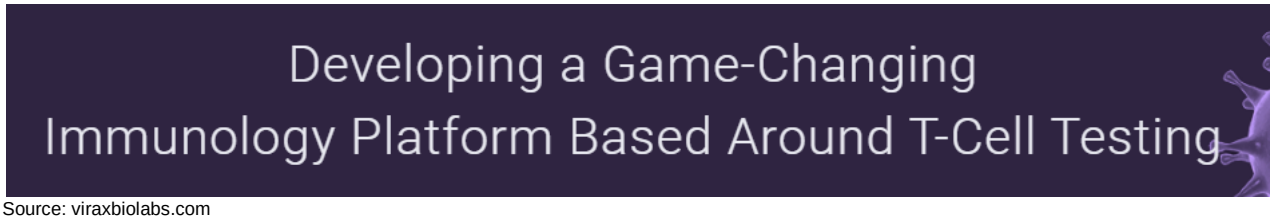
New Investor Presentation

In early May 2023, the company posted an updated investor presentation on its website which contained additional information on the company's products and strategies. We have incorporated some of the newer graphics in this report. The presentation can be found here.

KEY POINTS

Source: viraxbiolabs.com

- Virax Biolabs (NASDAQ:VRAX) is an innovative biotechnology company focused on the detection of immune responses and the diagnosis of viral diseases within the in-vitro diagnostic (IVD) market.
- Virax Biolabs is developing a potentially game-changing immunology platform based around their proprietary T-Cell testing technology, which is currently undergoing development studies and trials to show effectiveness at predicting the adaptive immune response to COVID-19. Subsequently, the company also intends to look at responses to Hepatitis B, Epstein-Barr virus, Human Papillomavirus, and other viral threats.
- The development of the ViraxImmune platform intends to be partially funded by revenues from its other distribution related business, ViraxClear.
- Virax Biolabs is positioned to be a growth-oriented biotechnology company with the launch of Virax Immune. We believe the product suite is disruptive, innovative and will gain market share rapidly.
- The company has applied for patent protection over their T-Cell IVD testing and continues to develop its IP portfolio regularly.
- The company went public in July 2022 raising approximately $7.8 million in gross proceeds. A PIPE offering in November 2022 raised an additional $3.8 million in capital.
- The company is led by a seasoned management team with expertise in the areas of medical devices, technology and corporate finance.
- As of March 31, 2023, the company had approximately $9.3 million in cash and no long-term debt.
- Assuming no revenue generation going forward, we believe the company is funded to support its clinical trials and commercial launch of the Virax Immune platform.
- We believe Virax Biolabs is poised for strong profitable growth and believe the stock is worth **$2.00** based on our discounted cash flow calculation which incorporates conservative estimates and a high discount rate.



Source: viraxbiolabs.com

OVERVIEW

Virax Biolabs is an innovative biotechnology company focused on the detection and diagnosis of viral diseases. Virax Biolabs believes it is developing a game-changing immunology platform called Virax Immune that is based around proprietary T-Cell testing technology which is anticipated to be effective in the diagnosis of COVID-19, Monkeypox, Hepatitis B, Epstein-Barr virus, Human Papillomavirus, and other viral threats. This platform intends to assess each individual's immune risk profile against major global viral diseases. Currently, the company has developed a functioning prototype of T-Cell IVD Test under the ViraxImmune brand but is still in the process of conducting further tests. This platform is expected to be particularly useful in the assessment of personal protection from, and threat analysis of the major virus's people are facing globally.

The company also operates one other distribution platform called ViraxClear. ViraxClear distributes diagnostic testing kits developed by other manufacturers on a global scale. These include tests for Covid-19, HPV, RSV and Monkeypox. The company does not manufacture or produce products sold through ViraxClear. However, it is the company's goal to maximize consumers' access to these products and services through competitive pricing and efficient distribution. Revenue streams from this distribution platform should help fund the research & development and commercialization of the company's key Virax Immune platform.

The company's mission is to focus on the immunology markets. Immunology is the study of the human immune system and is an important branch of the medical and biological sciences. The immune system protects people from infection through various lines of defense. If the immune system is not functioning as it should, it can result in diseases such as autoimmunity, allergies, and cancer. Research has also shown that immune responses contribute to the development of many common disorders not traditionally viewed as immunologic, including metabolic, cardiovascular, and neurodegenerative conditions such as Alzheimer's.

The company went public in July 2022 selling 1,350,000 shares of common stock at a price of $5.00 per share. Gross proceeds raised was approximately $7.8 million. In November 2022, the company completed a PIPE offering selling 2,330,000 shares at a price of $1.65 per share raising approximately $3.8 million in gross proceeds.

Assuming no meaningful revenue generation over the next 12 months, we believe the company is funded to support planned operations through the 1st calendar quarter of 2024. This time frame will likely allow for the development and commercial launch of the Virax Immune platform.

BUSINESS DESCRIPTION

1. Virax Immune



Source: viraxbiolabs.com

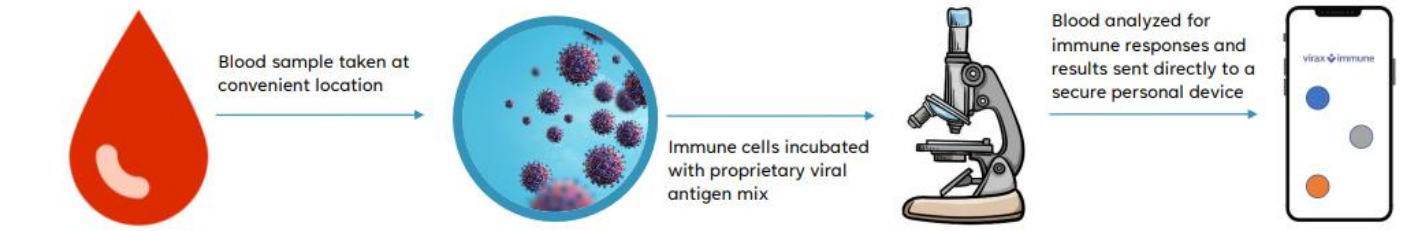
Virax Immune is the company's primary focus. Virax Biolabs is developing proprietary T-Cell test technology with the intention of providing an immunology profiling platform that assesses each individual's immune risk profile against major global viral threats.

Virax Immune T-Cell Test

Virax Immune first application is a new Covid-19 test seeking detection of T-Cell immune responses to the SARS-Cov-2 virus. Unlike antibodies, T-Cells coordinate the immune system against viral attack. Their detection can indicate inherent protection from disease for those yet to be infected and may be useful to determine the degree of long-term protection an individual has after recovering from Covid-19. Virax Immune is intended to detect T-cells present in the body long after the initial antibody-related immune response to vaccination or infection has faded. This will give a more accurate understanding of the human body's immunity as opposed to simple antibody levels.

The test will be submitted for regulatory approval in Canada, Europe, U. K. and the U.S. initially and could be an important tool to identify immune protection from diseases including, but not limited to Human Papillomavirus (HPV), Malaria, Hepatitis B, and Herpes (HSV-1). This T-Cell IVD test will eventually be linked to the company's mobile immunology software application (described below).

Ethical Approval in The Netherlands was received in the 1st quarter of 2022 with Virax Immune entering into clinical trials in Europe in the 4th quarter of 2022. Commercialization and sales are anticipated to commence the fiscal year ending March 31, 2024.

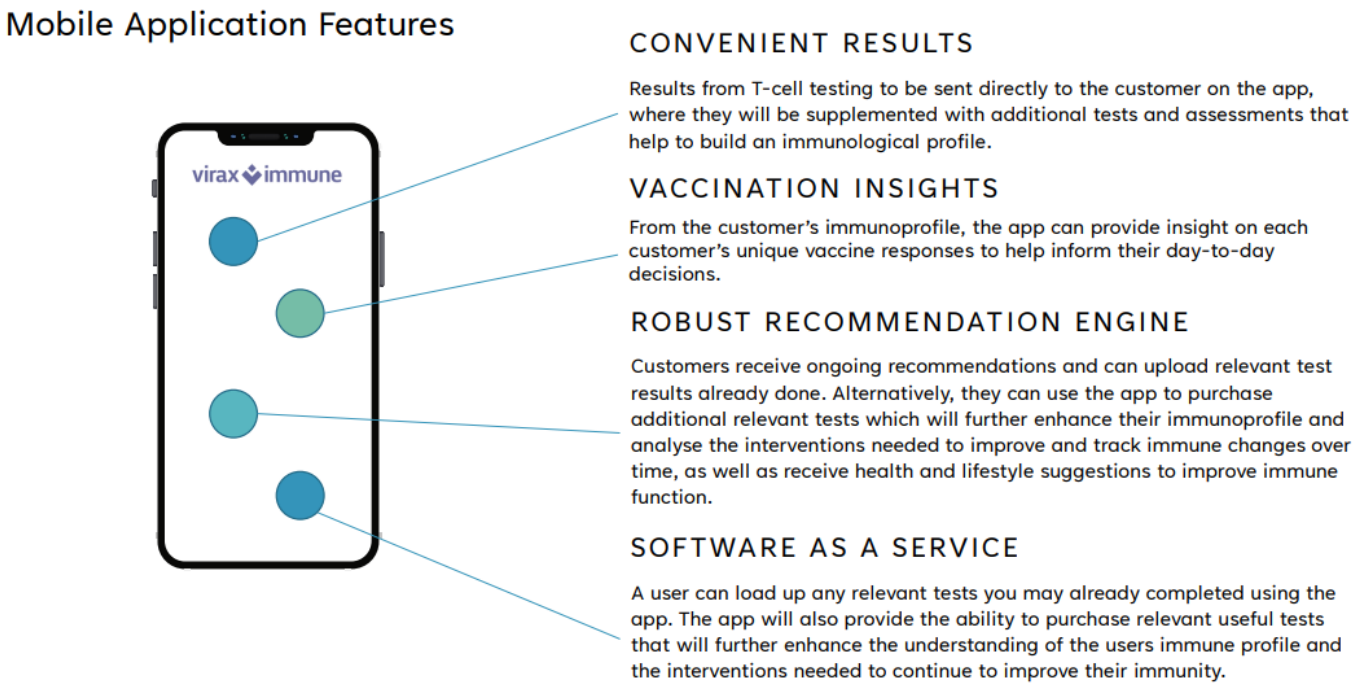


Source: viraxbiolabs.com

Virax Immunity Mobile App

The Virax Immune mobile app, currently under development, is planned to provide a total immunological picture of the body's ability to respond to a variety of viruses. It is expected to highlight the body's innate or inherited ability to cope with certain dangerous viruses. It is intended to also show if vaccines have been successful in producing the necessary antibodies to cope with a viral threat and if further vaccines are required.

Users are intended to receive an initial immunological overview and then subscribe to ongoing advice and regular tests to track improvements. The app plans to advise on health, medical and lifestyle measures to improve the body's immune responses.



Source: viraxbiolabs.com

This product is currently in development and expected to be rolled out in the 2024 fiscal year. Approvals and sales are anticipated to commence to coincide with the Virax Immune T-Cell Test planned for the 3rd quarter of 2023.

2. ViraxClear

Source: viraxbiolabs.com

ViraxClear is a diagnostics distributor which distributes the following test kits that are sourced from third-party suppliers:

1) Influenza A/B + COVID-19 + RSV Combo Ag Test (self-testing)
2) Monkeypox Real Time PCR Detection Kit
3) Monkeypox Virus Antigen Rapid Test Kit
4) SARS-CoV Rapid Antibody IgC/IgM Test
5) SARS-CoV Antigen Test Kit
6) SARS-CoV Fluorescence PCR Detection Kit
7) SARS-CoV Neutralizing Antibody Test
8) Human Papillomavirus Test (HPV) PCR Detection Kit

The company has previously distributed these products in Europe, South America, Africa and Asia and is hoping to penetrate new markets such as North America by working with strategic distribution partners.

On December 6th, 2022, the company announced that the over-the-counter COVID-19 Rapid Antigen Test to be distributed by ViraxClear received Emergency Use Authorization (EUA) in U.S. In addition, another Point of Care SARS -CoV Rapid Antigen test distributed by ViraxClear is seeking an approval with Health Canada for Canadian distribution.

On February 7th, 2023, the company announced that it has signed a purchase order with Cosmos Health (COSM) to launch and market COVID-19 & Influenza A+B Antigen Combo Rapid Detection Kits. Pursuant to a previously signed distribution agreement in September 2022, Cosmos will have exclusive distribution rights for Greece and Cyprus, with the opportunity to distribute the ViraxClear branded test kits across Europe on a non-exclusive basis. The COVID-19 & Influenza A+B antigen combo rapid test is a single-use test kit intended for qualitative detection of nucleocapsid protein antigen of Influenza A and B viral antigens and COVID-19 antigen from nasal swab specimens.

T-CELL TESTING

T-cells are a key part of the human adaptive immune system. They are activated in response to infection and act to coordinate cytokines and immune cells to fight foreign antigens in the body. A proportion of these T-cells remain in the body after recovery from an infection. The effectiveness of immune function is influenced by age, nutrition status, exercise and your immunological profile. This profile is influenced by prior exposure to viruses or immune threats during your life or your mother's exposure during pregnancy.

Each exposure in the past creates a specific type of immune cell (memory T-cells). These are specific to the antigen the body was exposed to and mounted a T-cell response to Virus antibodies can decline after months, however memory T-cells remain in the body for many years after initial infection and contribute to an individual's unique immunological profile. It may be the only way to assess long-term immunity. The test can detect if you have previously had COVID-19 long after the initial antibody response has disappeared. If the body is exposed to the same antigen again, or even an antigen with a similar profile to the original, memory T-cells can recognize that antigen and help the body to rapidly respond to the threat when secondary exposure happens.

T-cell testing has become a valuable method to detect prior or recent infection for COVID-19 and other infectious diseases. Further, the presence of T-cells in an immunized person can be used to check vaccine efficacy. In addition, people who recovered from SARS-Cov (the original Covid virus) 17 years ago still have protection through their T-Cells against SARS. These memory T-cells have been shown to protect against COVID-19, through cross-reactivity with the current SARS-Cov-2 coronavirus.

Virax is focused on measuring T-cell responses to viral threats. Using this approach, the company can build an individual's immune profile. This can prove useful information about which viruses an individual would be expected to mount a rapid immunological response to if infected. And concurrently, viruses they have not been exposed to in the past may be less protected against by their immune system in its current state.

The more knowledge people can get about their unique immune profiles, the more they can make informed decisions on viral avoidance, shielding, vaccinations and boosters. This is also useful for governments and hospital groups to determine public health policy and vaccination priority and assess population risks as viral threats are ever more prevalent in society.

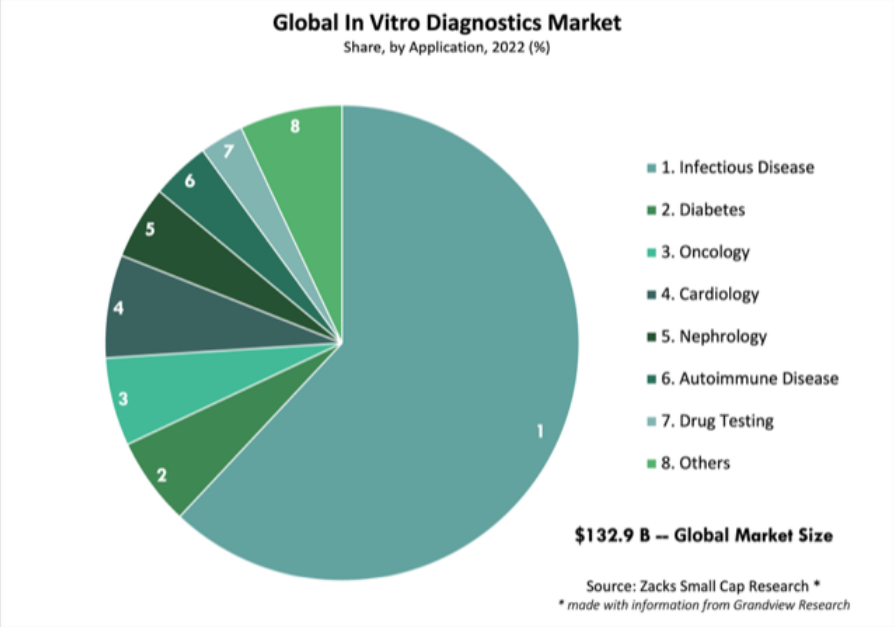
In addition, this test will be useful to pharmaceutical companies and clinical research organizations as they will be able to use this test to pre-screen potential trial populations for adaptive immunity to a virus that is being studied. This will allow for more optimal selection of control and treatment groups, decreasing the chance of seeing any masking of the effects within a study due to pre-existing adaptive immune responses.

ADDRESSABLE MARKET

The company operates in the global immunology market and the in-vitro diagnostic (IVD) market. The IVD tests are defined as medical devices and reagents that are used to analyze specimens derived from the human body (including blood, tissues, and other body fluids) to detect diseases, conditions, and infections. IVD tests are usually performed at either stand-alone laboratory, hospital-based laboratory, or point-of-care (POC) centers. The technologies used for test sample preparation majorly include polymerase chain reaction (PCR), microarray techniques, sequencing technology, and mass spectrometry. Based on the key technologies involved, the global IVD market is fragmented into sub-segments including Immunoassay, Hematology, Clinical Chemistry, Molecular Diagnostics, Microbiology, Haemostasias, and Flow Cytometry.

The global IVD market is estimated to be valued at around $132.9 billion in 2022. This has the potential to experience mid-single digit growth rates in coming years expanding at a CAGR of around 5.2%. The overall global immunology addressable market is expected to expand to almost $150 billion by 2026.

In light of the COVID-19 pandemic and healthcare being a perennial necessity for human beings, the IVD sector is ever-expanding and is expected to experience above average growth rates due to factors such as aging global population, increase in the occurrence of complex infectious diseases, and an increase in awareness among the global urban populations. However, lack of proper reimbursement policies in the developing nations and skepticism among patients to get regular healthcare consulting are still hindrances in some regions which impedes the growth of the IVD market.



Source: Zacks SCR

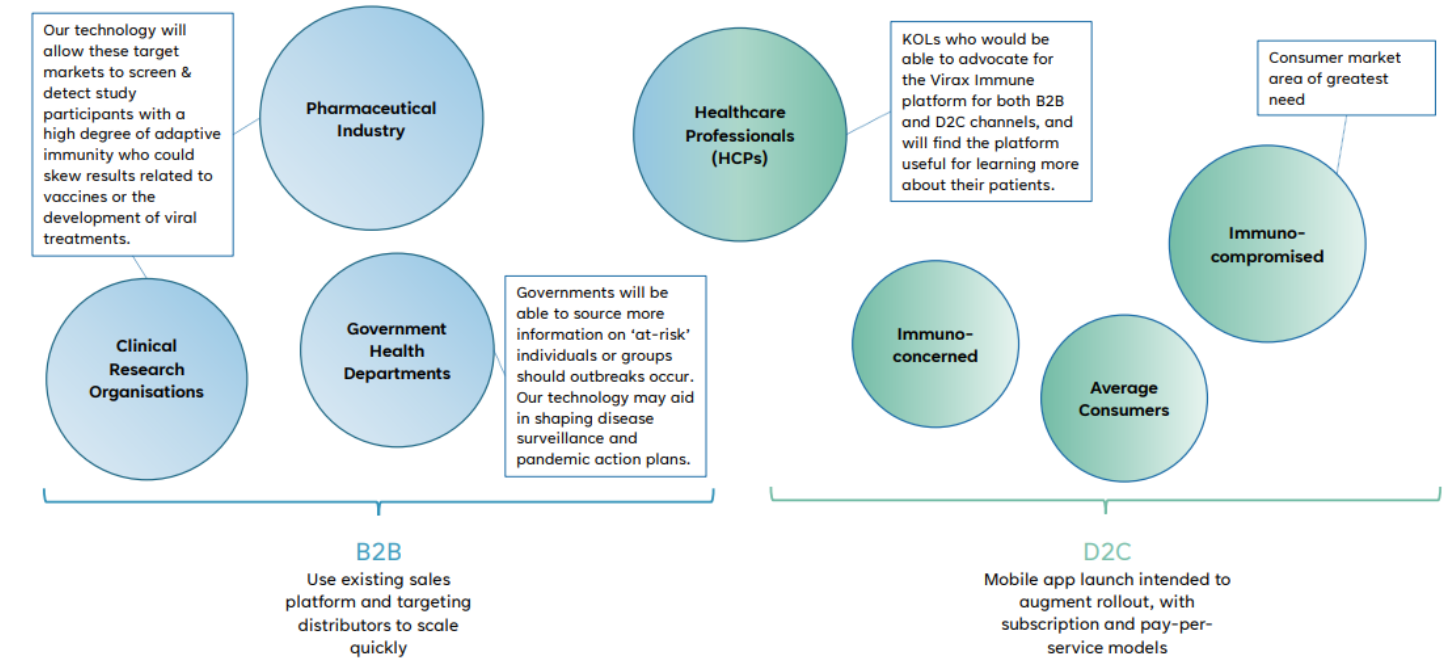
COMPETITION

We believe the company currently has limited competition in the T-cell testing space. The Virax Immune's tests are being developed to maximize the chance of detecting activated T-cells, therefore, sensitivity of the test is expected to be at a high level. In addition, the company's core processes and technology should require less specialized lab equipment than some competitors. Further, Virax focuses on diagnostic population health management, immune profiling and lifestyle recommendations as compared to T-cell therapeutics like some competitors.

COMPETITOR	DETAILS	VALUATION	VIRAX IMMUNE POINT OF DIFFERENCE
Oxford Immunotec	Oxford Immunotec is a diagnostics company that currently offers a T-Cell Test for COVID, Cytomegalovirus and Tuberculosis.	Acquired by Perkin Elmer in January 2021 for $591 million.	• We believe that our sensitivity will be higher. • Expected to increase the number of detectable T-cells over the presence of just one cytokine in isolation.
Adaptive biotechnologies	Adaptive Biotechnologies is a clinical diagnostics company that operates under the premise that data from the immune system is the key to diagnosing and treating diseases.	The Company listed on NASDAQ in 2020 and has a market cap of $1.12 billion[1].	• Virax Immune flow cytometry-based test should require less specialized laboratory equipment and reagents than Adaptive Biotech's testing kits. • Virax's test kits are being developed with the intent to cost significantly less than those offered by Adaptive.
TSCAN THERAPEUTICS	TScan Therapeutics is a biopharmaceutical company focused on the development of T-cell receptor (TCR)-engineered T cell therapies in oncology.	The Company recently partnered with Qiagen, a NYSE-listed company with a market cap of $68.49 million[1].	• Virax focuses on diagnosis and tailored lifestyle recommendations while TScan is more focused on T-Cell therapeutics.

Source: viraxbiolabs.com

AVENUES FOR COMMERCIALIZATION



Source: viraxbiolabs.com

CAPITAL FINANCING

On July 25, 2022, the company completed its IPO of 1,350,000 shares of common stock at a price of $5.00 per share raising approximately $7.8 million when warrants and options are included.

In November 2022 the company raised approximately $3.8 million in a private placement PIPE offering at a price of $1.65 per share. Warrants were also issued at an exercise price of $1.73 per share. In March 2023, the company raised $4 million in gross proceeds through a private placement transaction.

MANAGEMENT

James Foster
Chief Executive Officer

A co-founder of Virax Biolabs, James is an investment, product development, and distribution expert in the medical device sector. He started his career in London with the Royal Bank of Canada. Subsequently, he moved to Beijing in 2011 to co-found Emerging Asia Capital, a resource-focused Mergers & Acquisitions Boutique. He then co-founded Natural Source Group, a product development and distribution company, in 2013, which was subsequently merged with the Virax group of companies.

Dr. Tomasz George
Chief Scientific Officer

Tomasz has a Ph.D. in Applied Physiology and Ageing from King's College London. He has 12 years of experience developing digital healthcare systems focusing on diagnostics, physiological assessments, biochemistry, and laboratory analysis. Tomasz has held the position of Chief Scientific Officer for London-based Soza Health and Singapore-based Verita Healthcare Group. He has also worked in scientific research at Imperial College London and Liverpool John Moore's University.

Cameron Shaw
Chief Operations Officer

Cameron is a co-founder of Virax Biolabs and has a depth of experience in running successful companies and teams across Asia and the UK. Previous to Virax Biolabs, Cameron co-founded and served as the COO of Natural Source Group, a product development and distribution company before merging with our Group. Since June 2016, he has served as a board member and strategic advisor at Pent Developments Ltd, an award-winning airspace developer and innovator. He also served as the CEO of Merzura Ltd, a Hong Kong Investment advisory company, and CEO of Femme 500 Ltd, a luxury lifestyle membership tech startup.

Mark Ternouth
Chief Technical Officer

Mark is a graduate of Cambridge University and a Chartered Accountant (ACA -ICAEW). He specializes in transforming businesses through the use of technology and improved structure and process to improve their support system's performance. The industries he has worked across include telecoms, retail, and government and for companies including KPMG and the UK's Ministry of Justice. Mark has been based in Shanghai for the last two years.

Jason Davis
Chief Financial Officer

Jason previously acted as CFO for Hyperdynamics Corporation. He first joined the company in June 2009 as the Chief Financial Officer and subsequently held the position of Vice President of Finance and Treasurer from August 2010 to December 2014. Jason is a licensed certified public accountant and has served in various financial positions for several companies, including as the Chief Financial Officer of CASA Exploration from May 2015 to May 2017, Assistant Controller at Isolagen, Inc. from March 2004 to August 2005, the Manager of SEC Reporting at Texas Genco, LLC from August 2005 to June 2006, and the Controller at Particle Drilling Technologies, Inc. from June 2006 to June 2009. He also served as the interim Chief Financial Officer for Particle Drilling Technologies, Inc. from January 2009 to June 2009.

Richard Pallin
Vice President of In-Vitro Diagnostic Sales

Richard is an experienced and successful commercial leader with a demonstrated history of working in the global diagnostics and biotechnology industries. Before joining Virax, he was the Vice President of Global Commercial Operations of Omixon, a global transplantation diagnostic company dedicated to transitioning the human leukocyte antigen community to Next Generation Sequencing (NGS) technologies. Prior to that, he was the Director of Commercial Operations for Singulex, the developer and leading provider of single molecule counting technology for clinical diagnostics and scientific discovery. Richard also held senior commercial roles at Genmark Diagnostics UK, Vela Diagnostics GmbH, Luminex B.V., Affymetrix and Roche Diagnostics.

RISKS

- The company has a limited operating history and has incurred operating losses throughout most of its history. The company expects to incur significant losses for the foreseeable future. Biotechnology product development is a highly speculative undertaking and involves a substantial degree of risk. The company is a clinical-stage biopharmaceutical company with a limited operating history.

- The company plans to make significant investments in research and development of new products and services which may not be successful. The company is seeking to build upon existing R&D to develop a pipeline of T-Cell testing IVD kits and medical devices that are effective in the assessment of immune responses to, and diagnosis of major viral threats, including, but not limited to COVID-19.

- A key element of the company's strategy is to leverage the Virax Immune platform to discover, develop and potentially commercialize additional products and services through synergy with the T-Cell testing kits and Virax Immune Mobile App. If the company is unable to generate compelling evidence supporting these T-Cell test results, the platform may face a broader obstacle to using diagnostics data for commercially viable products and services.

- A downturn in the Hong Kong, China or global economy, and economic and political policies of China could materially and adversely affect business and financial conditions. Part of the company's operations are located in Hong Kong and China. Accordingly, business, prospects, financial condition and results of operations may be influenced to a significant degree by political, economic and social conditions in Hong Kong and China.

- The company may need to access the capital markets to support ongoing operations or to make acquisitions. Capital financing through equity or debt markets may not be readily available based on prevailing economic conditions at the time.

INSIDER TRADING AND OWNERSHIP

James Foster, the co-founder, director and Chief Executive Officer of the company beneficially owns 16.1% of the ordinary shares of the company and Mr. Cameron Shaw, co-founder, director and Chief Operating Officer beneficially owns 11.6% of the ordinary shares of the company. Executive officers and directors collectively own 29.5% of the ordinary shares of the company.

Names of beneficial owners[1]	Number of Ordinary Shares		Percentage of class (%)
James Foster	2,879,865	(2)	16.1 %
Cameron Shaw	2,080,943	(2)	11.6 %
Dr. Tomasz George	254,658	(2)	1.4 %
Mark Ternouth	59,551	(2)	*
Jason Davis	—		*
Nelson Haight	—		*
Yair Erez	—		*
Evan Norton	—		*
All officers and directors as a group (eight (8) persons)	5,275,017		29.5 %
Other 5% or greater shareholders:			
Patrick Henry Cunliffe Foster	1,053,878	(2)	5.9 %

Source: Virax SEC filings

VALUATION

The addressable market that Virax is focused on is expected to produce above industry average growth rates for an extended period of time. We expect the company to generate limited levels of revenue in the fiscal years ending March 2023 and March 2024. Meaningful revenues could occur fiscal 2025.

We expect revenues to grow at a compound annual growth rate (CAGR) of approximately 25% over the next 10 years. Sales for the Virax Immune platform could reach $15 million in the fiscal year 2027. We expect company gross margins to grow from 10% in fiscal year 2024 to 30% by fiscal year 2027.

Our primary valuation tool utilizes a Discounted Cash Flow process. Our base case includes revenues growing at a CAGR of 25% and cash flow breakeven and net profitability in the fiscal year 2026. Under this scenario, our DCF based valuation target is approximately **$2.00**. We believe this to be conservative as the discount rate utilized is 15%.

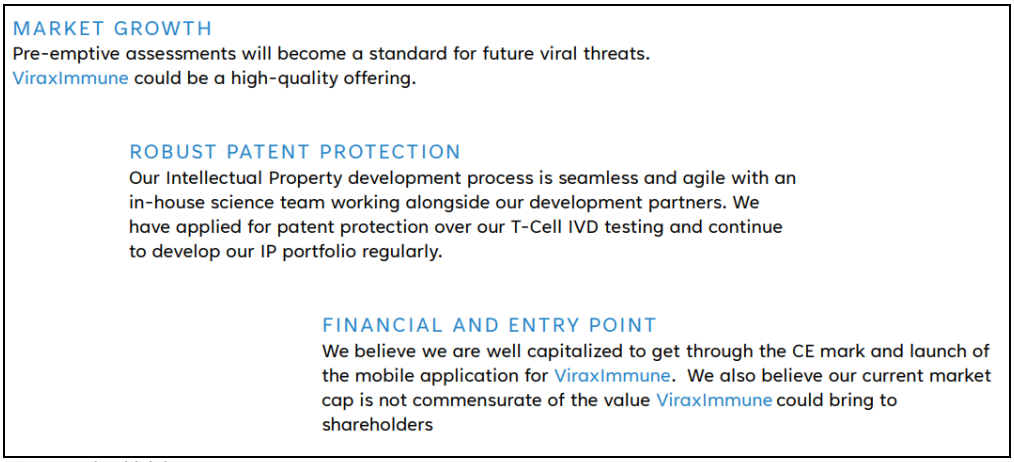
We also believe this to be a conservative estimate based on a scenario where revenue growth rates could greatly exceed our estimates as a result of new product commercialization being achieved sooner than expected and future sales of Virax Immune could greatly exceed our estimates. Lastly, it's possible that the increasing operating efficiencies of the company would shorten the timeline to when meaningful profits or generated which would increase our valuation target.

SUMMARY

We believe Virax Biolabs transformative T-cell based testing technology will provide substantial opportunities for profitable revenue growth over a mid-to-long term time frame. The in vitro diagnostic market could exceed $100 billion in market value in coming years and even minuscule market share gains in that market would generate substantial revenues for the company.

In addition, profitable growth in the Virax Clear distribution business is now possible as the company is well capitalized to support that business. It's possible that the growth in that business will support the development of the ViraxImmune platform and may eliminate the need for any additional equity or debt capital support if necessary.

Virax has the potential to grow both revenues and earnings at very robust double-digit growth rates starting in 2024 if it is able to execute on the commercialization of its ViraxImmune platform. The company's current stock price does not likely reflect that potential level of profitable growth going forward and we believe the stock to be significantly undervalued at this time.



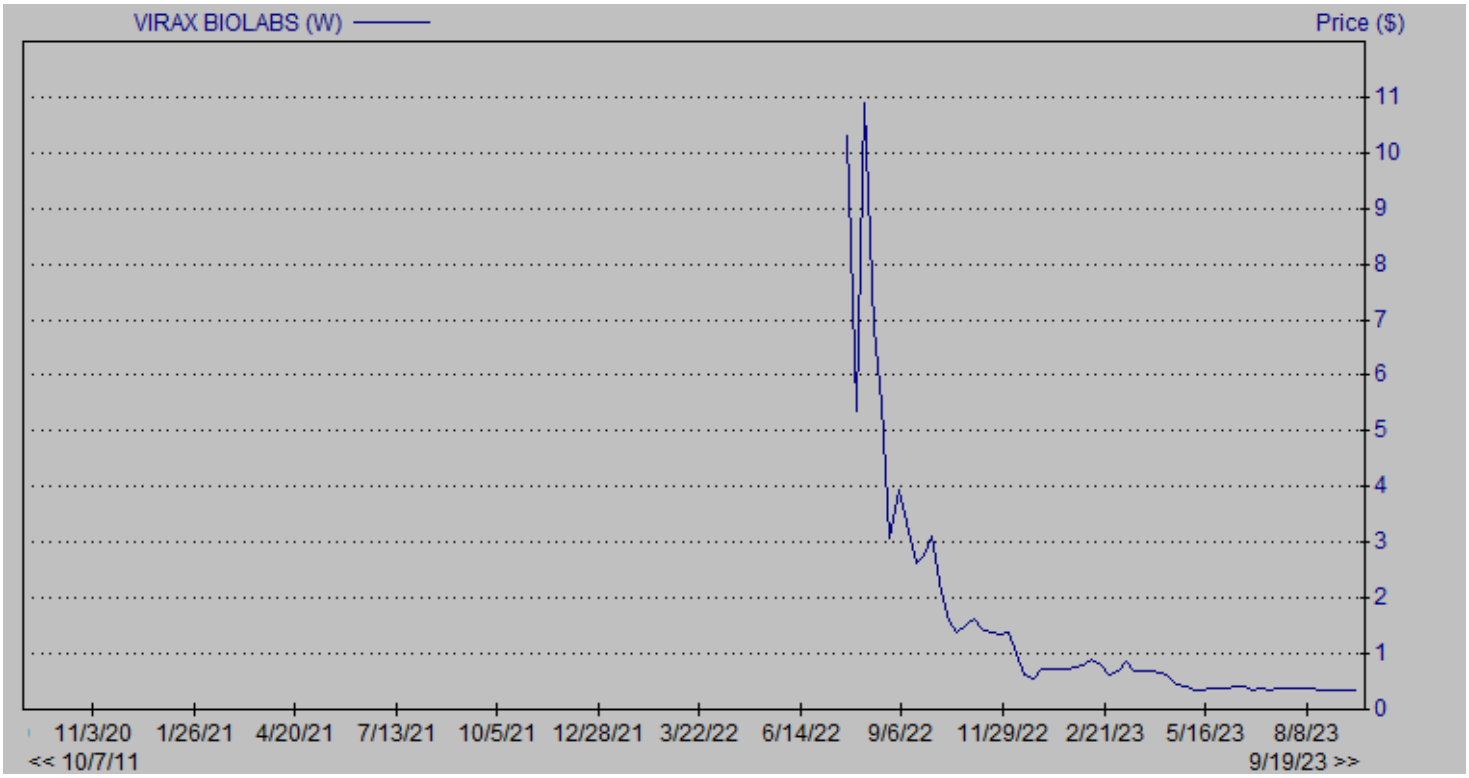
Source: viraxbiolabs.com

PROJECTED INCOME STATEMENT

Income Statement		Mar-22	Mar-23	Mar-24	Mar-25	Mar-26
Net Sales		**0**	**8,561**	**1,400,000**	**8,080,000**	**13,492,000**
Growth		*-100.0%*	*#DIV/0!*	*16253.2%*	*477.1%*	*67.0%*
Cost of Goods Sold		**0**	**9,926**	**1,260,000**	**6,464,000**	**10,253,920**
%		*N/A*	*115.9%*	*90.0%*	*80.0%*	*76.0%*
Depreciation & Amort		**0**	**0**	**0**	**0**	**0**
Gross Profit		**0**	**(1,365)**	**140,000**	**1,616,000**	**3,238,080**
Margin		*N/A*	*-15.9%*	*10.0%*	*20.0%*	*24.0%*
Sales & Marketing		**13,818**	**26,616**	**300,000**	**315,000**	**330,750**
% of sales		*N/A*	*310.9%*	*21.4%*	*3.9%*	*2.5%*
Research & Development		**433,743**	**397,109**	**1,100,000**	**550,000**	**555,500**
% of sales		*#DIV/0!*	*4638.6%*	*78.6%*	*6.8%*	*4.1%*
General & Administrative		**1,286,118**	**5,307,671**	**1,700,000**	**1,734,000**	**1,751,340**
% of sales		*14`%*	*61998.3%*	*121.4%*	*21.5%*	*13.0%*
Other Operating Income & Loss Provision		**0**	**0**	**0**	**0**	**0**
% of sales		*N/A*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Operating Income		**(1,733,679)**	**(5,732,761)**	**(2,960,000)**	**(983,000)**	**600,490**
Margin		*#DIV/0!*	*-66963.7%*	*-211.4%*	*-12.2%*	*4.5%*
EBITDA		**(1,733,679)**	**(5,732,761)**	**(2,960,000)**	**(983,000)**	**600,490**
Margin		*N/A*	*-66963.7%*	*-211.4%*	*-12.2%*	*4.5%*
Other Expenses/(Income)		**753**	**(290,466)**	**0**	**(28,054)**	**(26,100)**
%		*N/A*	*-3392.9%*	*0.0%*	*-0.3%*	*-0.2%*
EBIT		**(1,734,432)**	**(5,442,295)**	**(2,960,000)**	**(954,946)**	**626,590**
%		*N/A*	*-63570.8%*	*-211.4%*	*-11.8%*	*4.6%*
Total Interest Exp (net)		**15,438**	**15,468**	**0**	**0**	**0**
%		*N/A*	*180.7%*	*0.0%*	*0.0%*	*0.0%*
Net Profit Before Tax		**(1,749,870)**	**(5,457,763)**	**(2,960,000)**	**(954,946)**	**626,590**
%		*N/A*	*-63751.5%*	*-211.4%*	*-11.8%*	*4.6%*
Income Tax		**0**	**0**	**0**	**0**	**0**
% Effective Rate		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
% Cash Tax Rate		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Minority Interests or Preferred Stock		**(37,022)**	**(269)**	**0**	**0**	**0**
Net Profit		**(1,712,848)**	**(5,457,494)**	**(2,960,000)**	**(954,946)**	**626,590**
%		*N/A*	*-63748.3%*	*-211.4%*	*-11.8%*	*4.6%*
Non-recurring income (expense)		-				
Average Diluted Shares Outstanding		9,563,260	10,629,835	15,547,089	15,547,089	15,547,089
Reported FD EPS						
Zacks Cash EPS						
Zacks EPS		**(0.18)**	**(0.51)**	**(0.19)**	**(0.06)**	**0.04**

Source: Zacks analyst

HISTORICAL STOCK PRICE



DISCLOSURES

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

ANALYST DISCLOSURES

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

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.
Zacks SCR has received compensation from the issuer directly, from an investment manager, or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business.
SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover. SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

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

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer. Therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.