Initiation Report

PROPHASE LABS INC.

DIAMOND
EQUITY RESEARCH

ProPhase Labs Inc. – Innovating Within Large Healthcare Markets with a Diversified Product Pipeline

ProPhase Labs Inc. (NASDAQ: PRPH)

Share Price: $7.50	Valuation: $20.00

Key Statistics

52 Week Range	$6.31 – $15.25
Avg. Volume (3 months)	41.57K
Shares Outstanding	17.18M
Market Capitalization	$131.25M
EV/Revenue	1.0x
Cash Balance*	$9.10M
Analyst Coverage	3

***Cash balance as of December 2022**

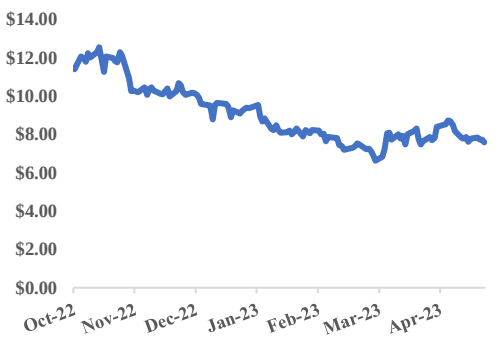
Revenue (in $mm)

Dec - FY	2022A	2023E	2024E
1Q	47.53	13.95	20.75
2Q	29.09	13.67	21.37
3Q	24.20	14.15	22.23
4Q	21.82	20.30	26.47
FY	122.65	62.07	90.82

EPS (in $)

Dec – FY	2022A	2023E	2024E
1Q	0.81	(0.11)	0.02
2Q	0.48	(0.15)	0.07
3Q	0.06	(0.16)	0.08
4Q	(0.15)	0.00	0.14
FY	1.17	(0.42)	0.31

Stock Price Chart



Investment Highlights

- **Diagnostics Business Enabling Pivot Toward Niche and Emerging Business Segments:** ProPhase's strategic evolution from a predominantly diagnostics-centric company to a multifaceted healthcare organization is underscored by its ability to capitalize on the success and cash generation of its diagnostics division. By investing in and growing healthcare companies such as genomics and biopharma, the company expands its market presence and fosters revenue diversification. The company's management is ambitiously striving to transform ProPhase Labs into an all-encompassing healthcare powerhouse, with diagnostics and genomics pinpointing disease origins, contract manufacturing delivering top-tier production capabilities, and the biopharma division driving the development of cutting-edge therapies and treatments.

- **Solid Financial Performance Showcasing Substantial Progress:** The company reported strong growth across all its major business divisions for the year ended 2022. In 2022, ProPhase Labs reported revenue of $122.64 million, a significant increase from the $79.04 million recorded in 2021. This translates to a year-over-year (y-o-y) growth rate of 55.16%. In 2022, the diagnostics business itself experienced a 63.3% revenue growth, mainly due to increased COVID-19 testing volumes in response to the spread of the Omicron variant. Other divisions, such as contract manufacturing and genomics, have also reported impressive growth numbers. We anticipate a contraction in diagnostics revenue for 2023 and 2024 due to changing market dynamics. To offset this, ProPhase is focusing on growth in BioPharma, Contract Manufacturing, and Genomics divisions. The BioPharma division aims to fully commercialize its esophageal cancer test by H1 2024, while Contract Manufacturing and Genomics divisions are expanding their client base and distribution channels.

- **Valuation:** The market has been conservative in valuing ProPhase, possibly undervaluing its potential and expertise across multiple segments due to a lack of understanding of the unique strengths and synergies between divisions. The genomics business and esophageal pre-cancer test operate in promising markets with billion-dollar opportunities. The management remains strongly optimistic about its genomics business and expects over 100% growth in 2023. These businesses are regarded as somewhat de-risked, given their exceptional value proposition and the overall market undervaluation of the company. With its impressive competitive positioning, exceptional product offerings, and tremendous growth potential within the genomics market, it can be reasonably argued that Nebula, as an independent entity, has the potential to command a valuation in the range of $80-$120 million. Furthermore, the company's Equivir and Linebacker portfolios are supported by a strong sound scientific background and present high upside optionality in terms of shareholder value creation. We assessed the company's value at around $344 million or $20.00 per share using a combination of DCF and SOTP valuation methodologies, allocating equal weightage to both approaches. The DCF assumptions include a discount rate of 12.5% and a terminal growth rate of 1.5%. By using the median 2024e EV/Revenue multiple for each business division and their forecasted revenue numbers, we have determined the value of each segment. Subsequently, we aggregated these values to derive the overall SOTP valuation for the company, providing a detailed and nuanced perspective on the company's worth. However, the valuation is contingent on the company's successful execution and is subject to change with new information or progress in development and commercialization processes.

Company Description

ProPhase Labs, Inc. (Nasdaq: PRPH) is a diversified diagnostic, genomics, and biotech company seeking to leverage its CLIA lab services to provide whole genome sequencing and research directly to consumers and build a genomics database to be used for further research. The company also operates a contract manufacturing subsidiary and offers the TK Supplements line of dietary supplements, which are distributed in food, drug, and retailer stores.

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- **Significant Momentum Across Nascent Business Domains:** ProPhase is strategically positioned to capitalize on emerging opportunities across its contract manufacturing, genomics, dietary supplements, and biopharma divisions. The contract manufacturing division, PMI, has experienced significant revenue growth due to an expanding client base, an extended manufacturing agreement with Mylan, and facility improvements. Management expects a 200% increase in production capacity over the next two years, projecting to triple the division's revenue from $8 million to $25 million by 2024. The genomics division, Nebula, is set to benefit from the growing demand for direct-to-consumer genetic testing, driven by factors such as customized healthcare solutions, precision medicine, and a decrease in whole genome sequencing costs. Nebula excels as the price and quality leader in the industry, providing valuable DNA testing insights and maintaining a competitive position among low-cost genotyping service providers. An extended distribution network and partnerships with research-focused universities will likely fuel further expansion in this field. The dietary supplements segment targets the growing health and wellness market, while the biopharma division develops innovative products, such as the BE-Smart esophageal cancer test, addressing urgent medical needs within a multi-billion-dollar market. It is being developed in collaboration with the Mayo Clinic and may be commercialized as early as Q1 2024. The biopharma division is also developing Linebacker, a cancer co-therapy with excellent pre-clinical results being developed in collaboration with Dana Farber Cancer Institute and Harvard University scientists. Additionally, ProPhase has displayed a remarkable ability to identify and execute value-enhancing acquisitions at highly favorable market valuations.

- **Executives With a Proven Track Record of Execution and Adaptability:** The leadership of ProPhase Labs, under Ted Karkus' supervision, has skillfully navigated the company's growth by organically developing the diagnostics business and swiftly growing it into a $100 million business. The management team has accomplished remarkable growth and profitability by prudently allocating resources and investing in advanced genomic sequencing tools and innovative drug-development projects. This adept approach to managing growth and resources highlights the team's ability to deliver sustained success while continuously exploring new avenues in healthcare innovation. The team has also exhibited exceptional adaptability in modifying strategies, as demonstrated by their swift response to the discontinuation of the HRSA uninsured program for COVID-19 testing. Moreover, the company is capitalizing on its vast biopharma experience and utilizing genomics as a strategic advantage to create synergies across diagnostics, genomics, and biopharma business divisions. The management led by Ted Karkus' successfully turned around the flagship Cold-EEZE brand, significantly growing revenues before selling the brand to Mylan for $50 million in 2017. Notably, Ted Karkus previously forced the restructuring, turnaround, and new direction for ID Biomedical, a Canadian biotech company, ultimately leading to its acquisition by GlaxoSmithKline for over $1.4 billion.

Company Overview

ProPhase Labs, Inc. (NASDAQ: PRPH), based in Long Island, NY, USA, has been working on developing and providing varied healthcare products and services to the broad public and other institutions. Founded in 1989, the company offers a vast array of clinical diagnostics and testing services at its Clinical Laboratory Improvement Amendments (CLIA) certified laboratories, including polymerase chain reaction (PCR) testing for SARS-CoV-2 (COVID-19), Influenza A, Influenza B and Respiratory syncytial virus (RSV). It also possesses advanced technologies for genomics sequencing and testing; and specializes in the development, manufacturing, and marketing of over-the-counter (OTC) health and wellness products. Cold-EEZE, its flagship product, sold to Mylan Pharma in 2017, helped bring in liquidity amounting to $50 million, and the company still continues to contract-manufacture the lozenges in its Pharmaloz (PMI) manufacturing facility. The company's manufacturing facility is located in Pennsylvania, and its testing facilities are located in New Jersey and New York. It distributes its products to major retailers across the United States, including Walmart, Walgreens, CVS Health Corporation, and Amazon, among others.

ProPhase Labs provides diverse clinical diagnostics and testing services at its CLIA-certified labs, including PCR testing for COVID-19 and Influenza A/B. It also features cutting-edge genomics technologies and specializes in producing and marketing OTC health products

Exhibit 1: The Five Divisions of ProPhase Labs. Source: Company Presentation

ProPhase Labs began with a focus on developing, manufacturing and marketing innovative pharmaceutical products. In its early years, the company primarily focused on developing drugs for the treatment of common health conditions, such as allergies and respiratory diseases. However, in the late 1990s, the company shifted its focus to over-the-counter (OTC) health and wellness products, recognizing the growing demand for convenient and accessible health solutions. Of late, the company has acquired many companies from diverse domains, thus expanding its presence in the healthcare industry. Nebula Genomics, ProPhase Diagnostics, Inc., ProPhase BioPharma, Inc., and TK Supplements, among others, are some of the better-known names in the respective industries and have helped ProPhase Labs expand its product portfolio. Nebula Genomics, Inc's acquisition brought a whole array of genome sequencing and related technology into the company's portfolio of offerings. It comprises a comprehensive methodology for analyzing entire genomes, including the genes and chromosomes in DNA whose data can help in identifying, analyzing, and taking preventive measures for breaking the progression of various inherited disorders. Eventually, the data acquired from sequencing can be adapted to develop targeted therapeutics.

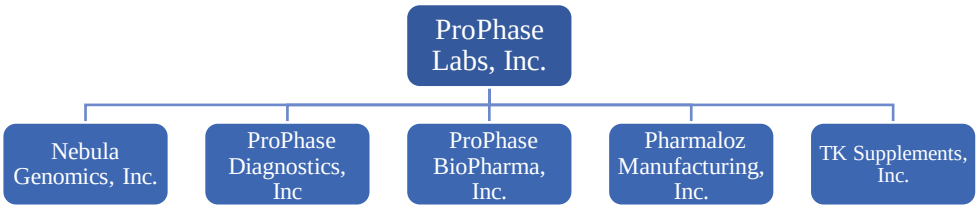

Exhibit 2: Company Structure. Source: Company Filings, Diamond Equity Research

Foraying into biotechnology, the company formed a wholly-owned subsidiary, ProPhase BioPharma, Inc, which focuses on creating and formulating new compounds. The IP of the company includes Equivir and Linebacker, of which it possesses exclusive worldwide development and commercialization rights. Equivir, a dietary supplement available OTC and Equivir G, available by prescription, has shown potential against various serious viral outbreak-associated viruses. The company is conducting a large multi-center trial to show its efficacy The trial is set to conclude in Q3 2023, with an anticipated Q4 2023 OTC dietary supplement launch. The Linebacker portfolio features proprietary compounds LB1 and LB2, which, in initial in-vitro tests, have shown promise for cancer co-therapy, bacterial and viral infections, and neurological and pain modulation.

ProPhase Diagnostics provides a wide range of clinical diagnostic and testing services at its CLIA-certified labs. The company is also validating various tests, such as respiratory, viral, bacterial panels, and monkeypox, targeting becoming a leading diagnostic business

ProPhase Diagnostics - Diversifying Portfolio with Swift Expansion

Established on October 9, 2020, ProPhase Diagnostics, Inc., a wholly owned subsidiary of ProPhase Labs Inc., furnishes an extensive array of clinical diagnostic and testing services at its Clinical Laboratory Improvement Amendments (CLIA) certified laboratories, focused on providing a fully integrated diagnostic laboratory service with a complete clinical lab offering. The company recently expanded from upper respiratory testing to include other traditional clinical testing and genomics sequencing: Chemistry, Immunoassay, Hematology, Hemostasis, Urinalysis, and an array of genetic tests, including whole genome sequencing. On October 23, 2020, ProPhase Diagnostics procured Confucius Plaza Medical Laboratory Corp. (CPM), which included a non-operational yet accredited, 4,000-square-foot CLIA-certified laboratory situated in Old Bridge, New Jersey. In December 2020, the company broadened its diagnostic service offerings with the establishment of a second, more expansive 25,000-square-foot CLIA-accredited laboratory in Garden City, New York, commencing operations in January 2021. From establishing its laboratory diagnostic business and expediently ramping up both facilities, the management developed a strong foothold in the diagnostic business. It is crucial to highlight the trust the labs have garnered from government agencies by securing highly sought-after government contracts. This notable achievement is a clear indication of the laboratory's capabilities and positively reflects on its level of expertise. The company is expected to continue to leverage its capabilities in providing high-quality laboratory diagnostic services and is currently validating multiple diagnostic/testing areas, including a Respiratory panel, Viral panel, Bacteria panel, and Monkeypox, potentially transforming it into a mainstream diagnostics company.

Upper Respiratory Laboratory Diagnostics Business: Managing Transition

From a Macro perspective, multiple mainstream diagnostic companies such as Laboratory Corp of America Holdings and Quest Diagnostics have forecasted up to a 90% drop in COVID testing revenues. Furthermore, the government has been easing restrictions in relation to COVID testing and has planned to terminate the public health emergency declared with respect to COVID-19 on May 11. This is likely to negatively impact the rate of COVID testing and increase the cost of new co-pays for COVID testing.

Over the past couple of years, the company's upper respiratory laboratory diagnostic business has contributed a majority of its total revenue. Although we believe the revenue peaked in Q1 2022, the company still generates considerable revenue from the underlying business segment. The diagnostic testing volume was 600,000 tests for the year ended December 31, 2021, and approximately 1,000,000 tests for the year ended December 31, 2022. The termination of the Health Resources & Services Administration (HRSA) uninsured program in March 2022 that funded the claims for COVID-19 testing for an uninsured individual was a significant blow to the company as government agencies (primary HRSA) formed approximately 60% of its total requisitions in 2021. Navigating through these headwinds, the company held its foothold within the diagnostic business while strategically and swiftly pivoting toward insured and client-payer segments. Considering the company's long-term strategy and strong management, we can also reasonably anticipate further potential strategic lab acquisitions that will expand the company's range of product offerings.

ProPhase BioPharma – Developing Novel Diagnostic and Therapeutic Products

The wholly-owned subsidiary was created to diversify the company's portfolio, tap into the growing potential of these industries, and leverage existing resources and expertise to develop innovative solutions for various medical conditions, such as viral infections and cancer. This strategic decision to create the biopharma division is expected fosters synergies with other business divisions by leveraging existing resources, expertise, and infrastructure. The company unveiled two licensing agreements for Equivir (dietary supplement) and Equivir G (Rx), both broad-spectrum antivirals and Linebacker LB-1 and LB-2, small-molecule PIM kinase inhibitors which also encompasses the current portfolio of licensed compounds under development. Additionally, the company acquired the exclusive global rights to BE-Smart Esophageal Pre-Cancer diagnostic screening test.

The biopharma division aims to enhance synergies with other divisions, utilizing existing resources and expertise.

Smart Esophageal Pre-Cancer Diagnostic Screening Test: Targeting a Niche

Seeking to acquire proprietary diagnostic technology that is synergistic with its laboratory diagnostic business, ProPhase Labs Inc. signed an asset purchase agreement to acquire exclusive global rights to BE-Smart Esophageal Pre-Cancer diagnostic screening test and related intellectual property assets. The transaction, which closed in January 2023, had an approximate value of $4.5 million, comprising $3.5 million in cash and $1 million in ProPhase common stock. Moreover, contingent payments amounting to an additional $2 million in stock are to be executed upon the

successful commercialization of the test. The BE-Smart test is a diagnostic screening tool aimed at the early detection of esophageal cancer, particularly for patients with Barrett's Esophagus (BE), a condition where the esophageal lining becomes damaged by acid reflux, leading to thickening and redness which increases the risk of developing esophageal adenocarcinoma.

Esophageal cancer (EC) is marked by high mortality, unfavorable prognosis at diagnosis, and substantial histopathological differences depending on the geographic region. EC ranks as the eighth most prevalent cancer globally and the sixth leading cause of cancer-related fatalities, with a 5-year survival rate below 25%.[1] Early-stage EC typically does not present specific symptoms. The two main histological subtypes, esophageal squamous cell carcinoma (ESCC) and esophageal adenocarcinoma (EAC) make up over 90% of EC cases. A retrospective study examining the epidemiology and outcomes of 23,804 EAC and 13,919 ESCC patients found that the majority were diagnosed at stage IV (classified as distant and metastatic), resulting in the worst outcomes.[1] The 5-year survival rate for distant esophageal cancer is a mere 6%. This late-stage diagnosis leading to poor prognosis and significantly reduced survival rates highlights the urgent need for effective screening strategies to enable early detection of ESCC and EAC, ultimately reducing morbidity and mortality. The BE-Smart Test has the potential to be a standard and effective screening test while drastically improving patient outcomes and survival rates.

The BE-Smart test has been tested on over 200 human samples by mProbe, in collaboration with Dr. Christopher Hartley and Mayo Clinic. The test has shown more than 99% accuracy in identifying critical differences in cell abnormalities related to esophageal cancer.[2] This accuracy was also confirmed in a separate study using RNA sequencing data. In addition, the test was 100% accurate in detecting invasive cancer in biopsy samples that did not show clear signs of cancer when analyzed using traditional methods.[2] The accuracy of the test was later verified through follow-up testing using other methods, like surgery or endoscopic ultrasound.

BE-Smart When Compared to The Gold Standard

The BE-Smart Test currently being developed by ProPhase Labs could transform the process of screening and pre-screening patients for esophageal cancer by providing a more accurate and minimally invasive diagnostic method. The current gold standard for detecting esophageal cancer involves esophagogastroduodenoscopy (EGDS) and biopsy, which can be uncomfortable for patients and may necessitate multiple procedures.[3] In contrast, the BE-Smart Test employs liquid chromatography-mass spectrometry (LC/MS) to examine protein expressions in formalin-fixed, paraffin-embedded forceps biopsies at high risk of turning cancerous, boasting an accuracy rate of over 99%. Biomarkers such as DAD1, ISG15, S100P, and UBE2N, which have been associated with the progression of Barrett's esophagus to esophageal adenocarcinoma (EAC), can be analyzed

[1] Then EO, Lopez M, Saleem S, Gayam V, Sunkara T, Culliford A, Gaduputi V. Esophageal Cancer: An Updated Surveillance Epidemiology and End Results Database Analysis. World J Oncol. 2020 Apr
[2] Company Press Release
[3] Visaggi P, Barberio B, Ghisa M, Ribolsi M, Savarino V, Fassan M, Valmasoni M, Marchi S, de Bortoli N, Savarino E. Modern Diagnosis of Early Esophageal Cancer: From Blood Biomarkers to Advanced Endoscopy and Artificial Intelligence. Cancers (Basel). 2021 Jun 24

through this test.[4] One of the main benefits of the BE-Smart Test is its ability to identify potentially cancerous cells with high sensitivity and specificity potentially years earlier than the current gold standard diagnostic methods. Early detection enables prompt intervention through ablation procedures to eliminate these cells before they progress into cancer. This also allows healthcare providers to make better-informed decisions regarding treatment options and monitoring for patients who may not be at immediate risk for esophageal cancer. In turn, this can reduce the number of unnecessary endoscopies, saving time and resources and providing peace of mind to patients suffering from Barrett's Esophagus, who are at greater risk of developing esophageal cancer. Furthermore, the BE-Smart Test may contribute to the development of new therapeutic drugs for esophageal cancer by identifying potential biomarkers. By detecting invasive carcinoma in biopsy specimens that might otherwise be uninformative, the test could help in the early diagnosis of esophageal cancer, allowing for timely intervention and improved patient outcomes.

Currently, the Seattle protocol is used for monitoring Barrett's Esophagus (BE) patients for dysplasia and cancer. This method involves taking random biopsies every 2 cm but has limitations, such as being expensive, time-consuming, and having a sensitivity of 28% to 85% for detecting EAC.[3] These drawbacks lead to less than 50% of doctors following the protocol in clinical practice. For ESCC screening, random sampling is impractical because the entire esophageal lining can be affected. Detecting early ESCC using standard endoscopic techniques is difficult as lesions often pass unrecognized with standard endoscopy, which may miss up to 40% of early ESCC, even in high-risk populations. Consequently, the sensitivity of targeted biopsies for early-stage squamous cell carcinoma detection can be as low as 7.7%.[3]

BE-Smart offers a more targeted and efficient approach to esophageal cancer screening, focusing on patients with Barrett's esophagus who are at a higher risk for developing EAC. It provides a reliable and non-invasive method of screening, requiring only a small biopsy specimen from an endoscopic examination.

The company is targeting a multi-billion-dollar market with an initial focus on patients diagnosed with Barret's Esophagus (BE), a precursor to esophageal adenocarcinoma (EAC)

A Multi-Billion Dollar Addressable Market

The company is targeting a multi-billion-dollar market with an initial focus on patients diagnosed with Barret's Esophagus (BE), a precursor to esophageal adenocarcinoma (EAC). Affecting an estimated 25%-35% of the US population, gastroesophageal reflux disease (GERD) is a prevalent condition.[5] Chronic GERD symptoms are present in 10%-20% of patients who then develop Barrett's Esophagus.[5] These individuals face a significantly higher risk of developing esophageal cancer, with their risk being 30-125 times greater than those without Barrett's Esophagus.[5] Approximately 3.3 million people in the United States suffer from Barrett's Esophagus. This underscores the importance of understanding and addressing this condition to prevent the further spread of esophageal cancer.

Approximately 22 million endoscopies are performed each year in the United States, of which 7.45 million are upper endoscopic procedures, an important tool for diagnosing esophageal

[4] Rai, V., Abdo, J., & Agrawal, D. K. (2023). Biomarkers for Early Detection, Prognosis, and Therapeutics of Esophageal Cancers. International Journal of Molecular Sciences, 24(4), 3316.
[5] thompsoncancer.com/barretts/barretts-esophagus-facts/

cancer.[6] The company's immediately addressable market includes BE patients undergoing endoscopic surveillance, which forms approximately 2 million endoscopic procedures every year.[7] The company anticipates seeking reimbursement rates between $1,000 and $2,000 per test, drawing from the Current Procedural Terminology (CPT) codes for tests of comparable complexity which translates to a potential market of $2 billion - $4 billion in just the U.S.

Commercialization Pathway and Future Course of Action

The company aims to initially commercialize the BE-Smart diagnostic tool as an LDT (laboratory-developed test) and for RUO (research use only) for non-insurance payers by Q3 2023 after the completion of necessary clinical validation. BE-Smart will be subsequently available for insured patients post obtaining CPT codes for the reimbursement strategy and completion of additional clinical validation. As an LDT BE-Smart test would primarily be regulated by the Centers for Medicare & Medicaid Services (CMS) under the Clinical Laboratory Improvement Amendments (CLIA) of 1988. While the FDA has the authority to regulate LDTs, it has traditionally exercised enforcement discretion and has not actively regulated them. Primarily addressing patients diagnosed with BE, the company's long-term goal is to refine the test, enabling sample collection in a doctor's office without requiring an endoscopy for all patients with GERD, a condition affecting approximately 70 million people in the U.S.

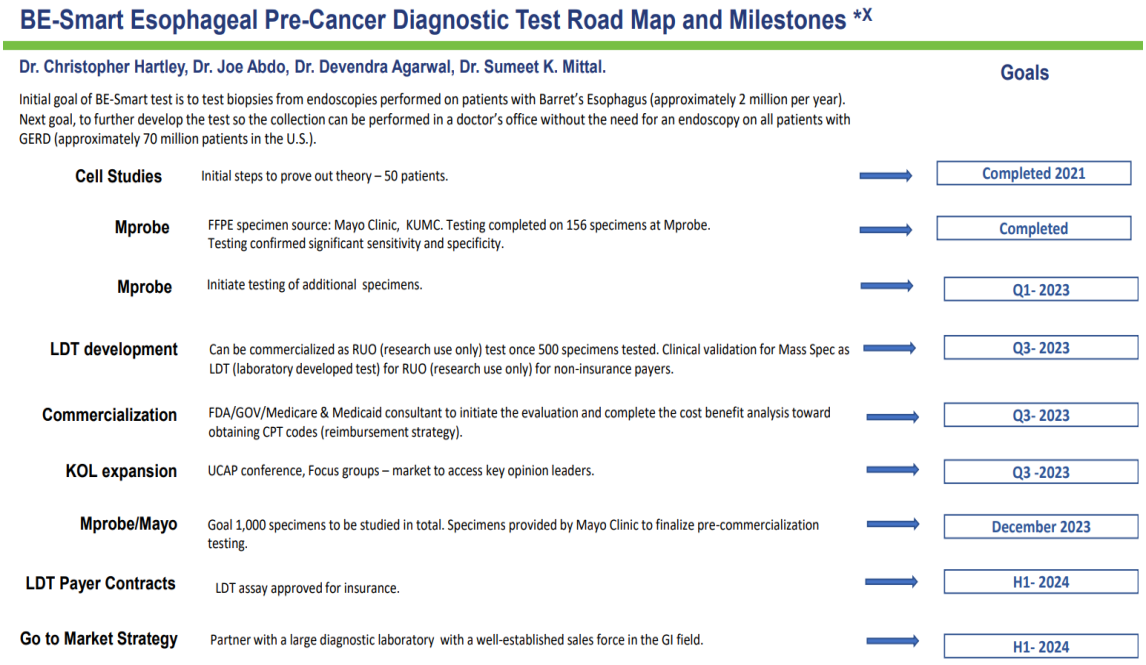

Exhibit 3: Commercialization Pathway. Source: Company Presentation

[6] Douglas K. Rex, MD, MASGE reviewing Peery AF, et al. Gastroenterology 2021 Oct 19.
[7] Company Press Release

Equivir Line of Products

Equivir is a blend of FDA-approved polyphenols (Myricetin, Hesperidin, and Piperine), designated as Generally Recognized as Safe (GRAS), designed to be taken in capsule form, either as a multivitamin or at the onset of symptoms. It has been hypothesized and is currently being evaluated in a multi-center trial that the composition is believed to block the entry of viruses, such as influenza, rhinovirus, Ebola, and SARS-COV2, into host cells, thus preventing infection and replication. While Equivir is under assessment as an over-the-counter (OTC) product, Equivir G, a blend of polyphenols akin to Equivir with the addition of Gallic acid, is being investigated as a prescription-based antiviral treatment.

Equivir, a blend of FDA-approved, GRAS-designated polyphenols (Myricetin, Hesperidin, Piperine), is a capsule taken as a multivitamin or when symptoms begin

Exhibit 4: Polyphenols Found in Equivir and Equivir G. Source: Company Presentation

Polyphenols and their Anti-viral Properties

Polyphenols are a varied group of natural compounds found in a range of plants, including fruits, vegetables, nuts, and herbs. They possess antioxidant, anti-inflammatory, and other health-enhancing properties that contribute to the numerous health advantages of a plant-rich diet. Various polyphenol classes, such as flavonoids, phenolic acids, lignans, and stilbenes, provide unique health benefits. These compounds are recognized for their antiviral capabilities, as they can interfere with multiple phases of the viral infection process. For example, polyphenols can impede virus entry by preventing the attachment of viruses to host cells, blocking viral receptors, and disrupting the merging of viral and host cell membranes. Furthermore, they can obstruct the replication of viral genetic material by targeting essential enzymes like RNA polymerase and reverse transcriptase. Additionally, polyphenols can hinder the assembly of new viral particles and their release from host cells, reducing the spread of infection. They also modulate the host's immune response, enhancing immune cell activity and stimulating the production of antiviral cytokines. Due to their capacity to target multiple viral pathways and stages of the virus life cycle, polyphenols are considered promising candidates for the development of antiviral therapies and dietary supplements.

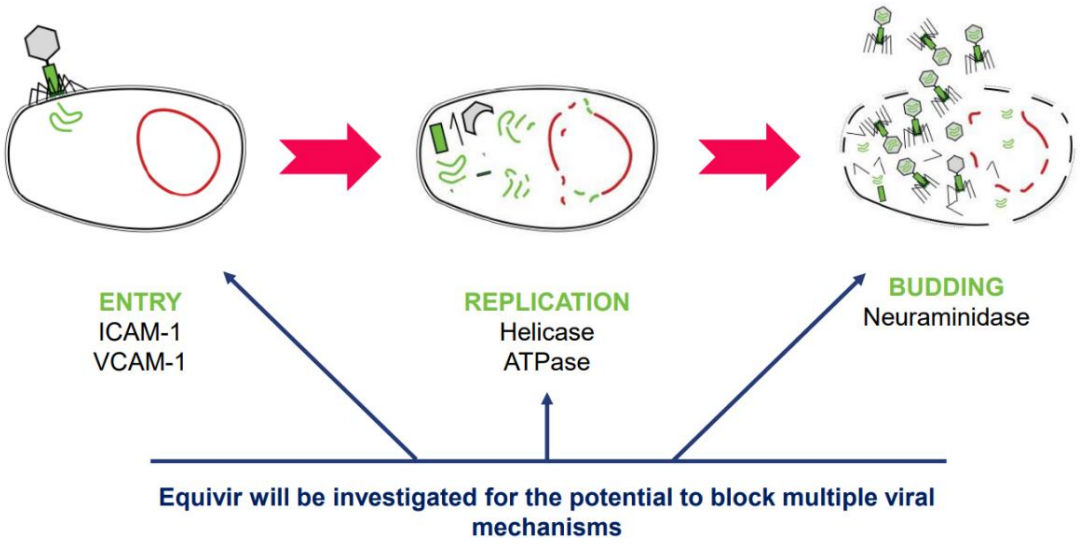

Exhibit 5: Vius's Mechanism of Action. Source: Company Presentation

Polyphenols, especially flavonoids, have been identified to strengthen the body's defense mechanisms and alleviate inflammation. They achieve this by regulating immune responses, preventing cytokine storms, and suppressing proinflammatory cytokines. Equivir is composed of three naturally occurring flavonoids, namely Myricetin, Hesperidin, and Piperine. Myricetin and Hesperidin account for 60% and 38% of Equivir, respectively, while the rest 2% is accounted for by Piperine. Multiple studies have been published depicting the anti-viral properties of these naturally occurring flavonoids. Myricetin was found to inhibit SARS-CoV helicase protein by affecting ATPase activity.[8] On the other hand, Hesperidin has the potential to alleviate H1N1-induced impairment of pulmonary function by inhibiting cytokine production in pulmonary microvascular endothelial cells through MAPK signaling pathways.[9] Additionally, Hesperidin has recently demonstrated low binding energy to key SARS-CoV-2 proteins, such as the spike protein and main protease, suggesting potential antiviral activity.[10]

Equivir has shown potential in preliminary in-vitro studies to inhibit replication of various viruses, including Rhinovirus, Influenza, Ebola, Coronavirus, and bacterial strains like Cholera

Pre-Clinical Results and Future Course of Action

In numerous preliminary in-vitro investigations, Equivir has exhibited potential efficacy in suppressing the replication process of a diverse range of viruses, encompassing Rhinovirus, Influenza, Ebola, and Coronavirus, along with bacterial strains such as Cholera. Equivir has shown promising results in inhibiting viral replication of influenza when compared to Zanamivir. Equivir G, which also contains 10% Gallic acid in addition to the blend of polyphenols, has shown an ability to inhibit SARS-Cov-2 viral replication in in-vitro studies. During an in-vitro cell experiment, viral inhibition was observed at 48 and 72 hours after treatment, using concentrations ranging from 100 to 200 µg/mL. The incorporation of gallic acid, though, categorizes it as a prescription medication, rendering it unavailable for over-the-counter purchase.

[8] Yu MS, Lee J, Lee JM, Kim Y, Chin YW, Jee JG, Keum YS, Jeong YJ. Identification of myricetin and scutellarein as novel chemical inhibitors of the SARS coronavirus helicase, nsP13. Bioorg Med Chem Lett. 2012 Jun 15

[9] Ding Z, Sun G, Zhu Z. Hesperidin attenuates influenza A virus (H1N1) induced lung injury in rats through its anti-inflammatory effect. Antivir Ther. 2018

[10] Bellavite P, Donzelli A. Hesperidin and SARS-CoV-2: New Light on the Healthy Function of Citrus Fruits. Antioxidants (Basel). 2020 Aug 13

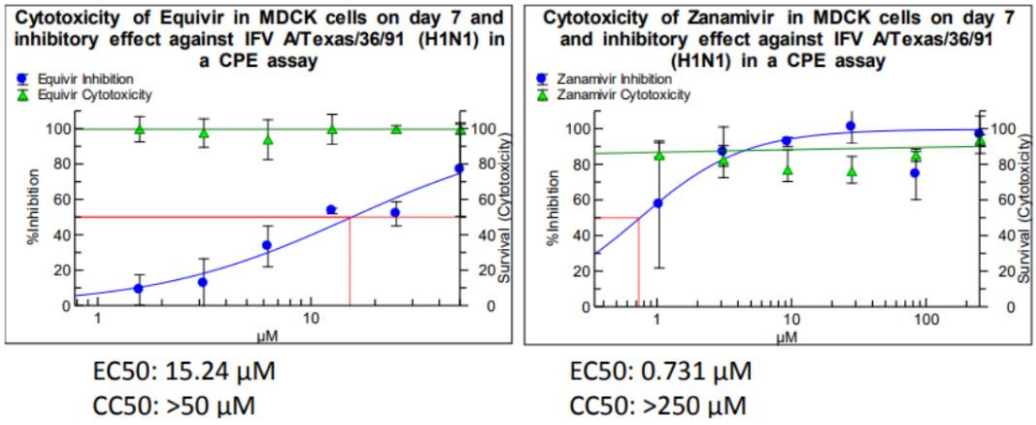

Exhibit 6: Inhibitory Effects and Cytotoxicity of Equivir Compared to Zanamivir Against the Influenza A Virus Strain. Source: Company Presentation

The company recently commenced a randomized, placebo-controlled clinical trial to assess Equivir's impact on upper respiratory tract infections, with an expected trial conclusion in the third quarter of 2023. A prominent clinical research organization, Vedic Lifesciences, has been engaged to oversee a combined prophylactic and therapeutic study at 12 different locations. Prophase expects to commercialize Equivir as a dietary supplement, leveraging its established distribution network of 40,000 food, drug, and mass (FDM) retail outlets and online sales directly to consumers. The product launch in the United States is anticipated by the end of 2023. On the other hand, Equivir G, a formulation similar to Equivir but with the addition of Gallic acid, is being pursued as a prescription antiviral treatment. This development is based on findings from Equivir's polyphenol composition, which has shown the potential to inhibit virus entry into host cells. The aim is to develop a formulation effective against various influenza serotypes, Rhinovirus, and potentially Ebola. The company plans to submit an Investigational New Drug Application (IND) for Equivir G, targeting antiviral applications such as SARS-COV2, Influenza, and Ebola, among others. Equivir has secured two U.S. patents for its potential as an antiviral treatment, and a favorable patentability assessment has paved the way for potential international patent opportunities.

ProPhase BioPharma, Inc. (PBIO) signed a licensing agreement for the Linebacker portfolio (LB-1 and LB-2), featuring two patented PIM kinase inhibitors with therapeutic potential in cancer, inflammation, and memory-related conditions like dementia and Alzheimer's disease

Linebacker Line of Products

ProPhase BioPharma, Inc. (PBIO) has entered into a licensing agreement for the Linebacker portfolio (LB-1 and LB-2), consisting of two patented small molecule PIM kinase inhibitors with substantial potential across various therapeutic areas, including cancer, inflammation-related conditions or symptoms, and memory-related syndromes, diseases, or symptoms such as dementia and Alzheimer's disease. Linebacker is a versatile therapeutic platform aimed at addressing metabolic, neurological, cancerous, and infectious diseases. This platform was inspired by the U.S. Defense Advanced Research Projects Agency (DARPA) Panacea Project, which focuses on providing innovative, multi-target therapeutics for unaddressed physiological needs. Linebacker is a modified polyphenol derived from Myricetin, a widespread plant-based flavonoid known for its potent antioxidant, anticancer, antidiabetic, and anti-inflammatory properties. A growing body of evidence has reported that myricetin supplementation displays therapeutic activities in a lot of nervous system disorders, such as cerebral ischemia, Alzheimer’s disease, Parkinson’s disease,

epilepsy, and glioblastoma.[11] Mechanistic studies have shown that inhibition of oxidative stress, cellular apoptosis, and neuroinflammatory response are common mechanisms for the neuroprotective actions of myricetin.[11]

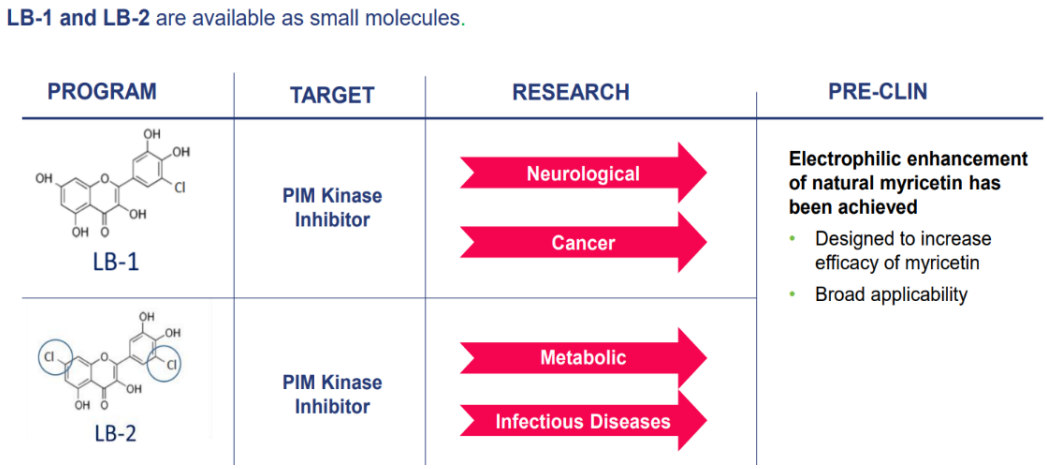

Exhibit 7: Linebacker Portfolio. Source: Company Presentation

PIM kinase inhibitors are a class of therapeutic agents that target the PIM kinases, a family of serine/threonine kinases. PIM kinases consist of three isoforms: PIM-1, PIM-2, and PIM-3. These kinases are involved in various cellular processes, including cell cycle progression, cell survival, and proliferation. PIM kinases are overexpressed in various types of cancers, such as hematological malignancies and solid tumors, and contribute to cancer cell survival, drug resistance, and tumor progression. Inhibition of PIM kinases has been recognized as a promising therapeutic strategy for the treatment of various cancers. PIM kinase inhibitors act by blocking the activity of PIM kinases, which in turn can lead to the suppression of cancer cell growth & survival and enhancement of the efficacy of other anticancer therapies. These inhibitors have shown potential in preclinical and clinical studies for the treatment of different cancer types and are being actively investigated for their role in cancer therapy.

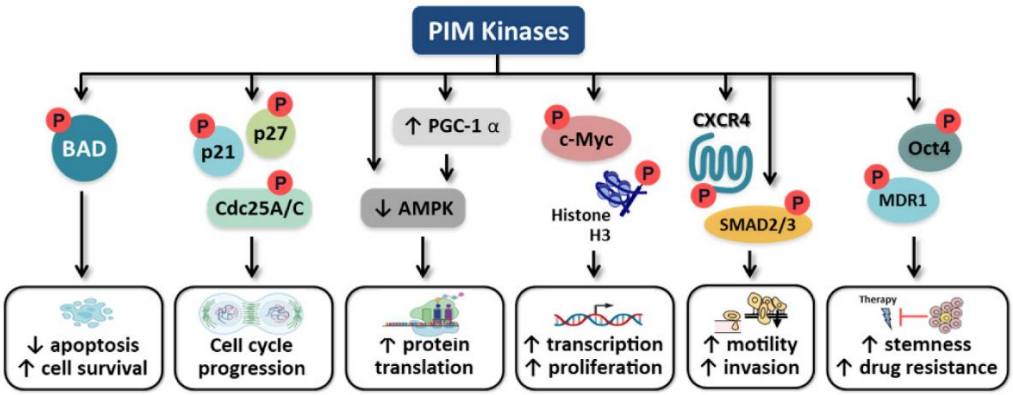

Exhibit 8: PIM Kinases Pathways of Carcinogenesis. Source: Julson JR et al.

[11] Li J, Xiang H, Huang C, Lu J. Pharmacological Actions of Myricetin in the Nervous System: A Comprehensive Review of Preclinical Studies in Animals and Cell Models. Front Pharmacol. 2021 Dec 16

LB-1 As a Co-Therapy with Known Cancer Treatments

The company is advancing LB-1, aimed at inhibiting PIM kinases as a combination therapy alongside four initial chemotherapy agents, including Taxol, Doxorubicin, Topotecan, and Cisplatin, targeting various solid malignancies such as myeloma, leukemia, prostate, and breast cancers. Combination therapies offer several benefits over monotherapy for cancer treatment, including enhanced efficacy, reduced drug resistance, and improved patient outcomes. By targeting multiple pathways or mechanisms, combination therapies can more effectively disrupt cancer cell growth and survival. Additionally, the use of multiple agents reduces the likelihood of developing resistance, as cancer cells are less likely to bypass multiple therapeutic targets simultaneously.

LB-1's active ingredient Myricetin has been part of various studies and findings, with conclusions pointing towards its potential as an effective anti-cancer agent and its role in modulating essential cellular pathways that are responsible for cancer proliferation. As a combination therapy, myricetin and radiotherapy have been shown to enhance the sensitivity of tumor cells (A549 and H1299) toward radiation.[12] Additionally, another study revealed that combining myricetin with chemotherapy (5-fluorouracil) effectively suppressed growth, invasion, and metastasis in esophageal cancer cell EC9706.[12]

LB-1: Evidence of Efficacy and Future Course of Action

In the initial pre-clinical trials of LB-1, in vitro studies with various chemotherapy agents demonstrated promising results. When combined with paclitaxel, doxorubicin, topotecan, and cisplatin, LB-1 showcased enhanced inhibitory effects on cell proliferation. The combination therapies showed a more substantial impact on reducing cell proliferation compared to the individual effects of LB-1 or the chemotherapy agents alone. These results suggest that LB-1 could be a potential co-therapy in the treatment of various cancers, enhancing the effectiveness of existing chemotherapy drugs.

	LB-1 & Taxol	LB-1 & Doxorubicin	LB-1 & Topotecan	LB-1 & Cisplatin
Chemoagents Alone	41.96% at 200nM	51.6% at 2000nM	58.27% at 2000nM	22.74% at 30uM
LB-1 Alone	69.94% at 100uM	69.66% at 100uM	69.54% at 100uM	72.33% at 100uM
Co-Therapy*	75.5%	86.95%	97.18%	82.48%

Exhibit 9: LB-1 and Chemoagents Combined Inhibition of Cancer Cell Proliferation in T47D in-vitro Studies. Source: Company Presentation
(*Combination therapy dosage was the combination of both the dosages as a monotherapy)

Following these promising findings; further preclinical studies of the Linebacker portfolio are currently underway in collaboration with a major U.S. university. The company has previously announced a two-year collaborative agreement with Dana-Farber Cancer Institute and Harvard Medical School to advance the research and development of LB-1. Cell culture studies pertaining to the agreement are ongoing with an aim to identify the most effective combination of cancer cell lines and agents with LB-1. Furthermore, In January 2023, REPROCELL completed an independent review of LB-1, confirming the early-stage potential efficacy of LB-1 on ovarian,

[12] Javed Z, Khan K, Herrera-Bravo J, Naeem S, Iqbal MJ, Raza Q, Sadia H, Raza S, Bhinder M, Calina D, Sharifi-Rad J, Cho WC. Myricetin: targeting signaling networks in cancer and its implication in chemotherapy. Cancer Cell Int. 2022 Jul 28

kidney, colon, and lung adenocarcinoma/small cells in 25 different cell lines. These results corroborate previous in vitro studies conducted by Charles River, providing further evidence of LB-1's potential as a co-therapy in cancer treatment.

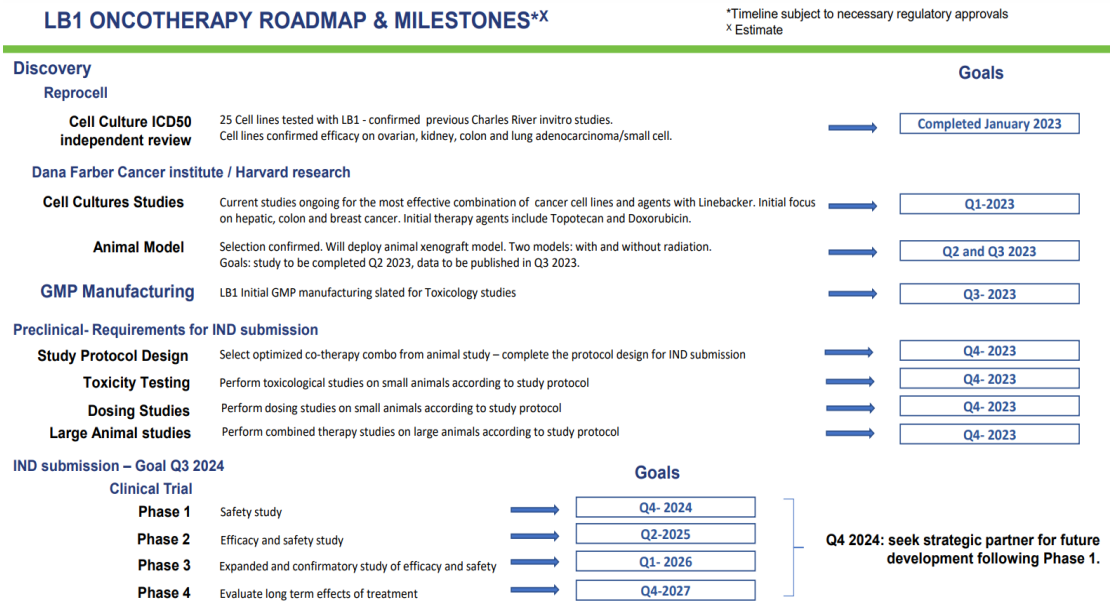

Exhibit 10: LB-1 Oncotherapy Roadmap. Source: Company Presentation

The transition from initial pre-clinical trial results towards IND enabling studies signifies a promising step forward in understanding LB-1's therapeutic potential. The company expects the animal studies to be completed by the end of Q2 2023, with data publication planned for Q3 2023. Preclinical requirements for an Investigational New Drug (IND) application submission for LB-1 are expected to be initiated in Q4 2023, with IND filing expected by mid-2024.

Nebula Genomics

ProPhase Labs' acquisition of Nebula Genomics marks a strategic move towards precision medicine and the integration of genomics in healthcare. This strategic acquisition took place on August 10, 2021, and is a part of ProPhase's goal to empower individuals in managing their health through DNA analysis. Nebula Genomics brings cutting-edge DNA sequencing technology and molecular laboratory prowess to the table. Their advanced whole genomics sequencing (WGS) and testing technologies enable in-depth exploration of human genes and chromosomes. Nebula, a company with significant brand equity, has gained recognition from major media outlets and is HIPAA and GDPR compliant. Successfully selling in over 130 countries, Nebula has achieved 67% global penetration in WGS market. Their robust B2B pipeline contributes to 30% of their whole genome sequencing volume, supplying clinical-grade data to research institutions, CROs, healthcare systems, and pharmaceutical offices. This strong global presence and B2B sales have helped create a digital biobank with over 250 trillion genomic data points. Additionally, Nebula Genomics is poised to significantly enhance its marketing and go-to-market (GTM) strategy by collaborating with best-in-class marketing and advertising partners known for their expertise in scaling digital health products. ProPhase Labs is set on a mission to make personal genome sequencing more accessible and affordable. They aim to provide clients with extensive genetic

Nebula Genomics offers advanced DNA sequencing and molecular lab expertise. Their whole genomics sequencing and testing technologies enable in-depth exploration of human genes and chromosomes

insights that could transform their lives, from detecting hereditary disorders to forecasting disease risk and even understanding the genetic mutations driving cancer progression.

The company aims to integrate Nebula's whole genome sequencing (WGS) services with ProPhase's clinical diagnostic testing services, including its CLIA-certified laboratories, in an effort to yield synergistic benefits, boost sales and reduce cost overlapping. Additionally, by utilizing its wide-reaching distribution network that encompasses over 40,000 food, drug, and mass retail stores, ProPhase endeavors to expand the availability of Nebula's genomic sequencing services to a larger audience. Initial retailers include the three largest pharmacy chains and two of the three largest mass retailers in the U.S. The company is also investigating research applications for its genomics testing services, establishing collaborations with universities, and providing them with more accessible, low-cost WGS options.

Genomic Solutions Providing Crucial Insights

Nebula Genomics' solution is driven by the innovations of George Church, Ph.D., a Professor of Genetics at Harvard Medical School and Chairman of the company's Scientific Advisory Board. Dr. Church has been at the forefront of developing various DNA sequencing methods, including molecular multiplexing approaches that enable next-generation sequencing (NGS) and nanopore sequencing. Nebula offers a comprehensive solution for whole genome sequencing, providing valuable insights to consumers and creating a robust data set for research purposes.

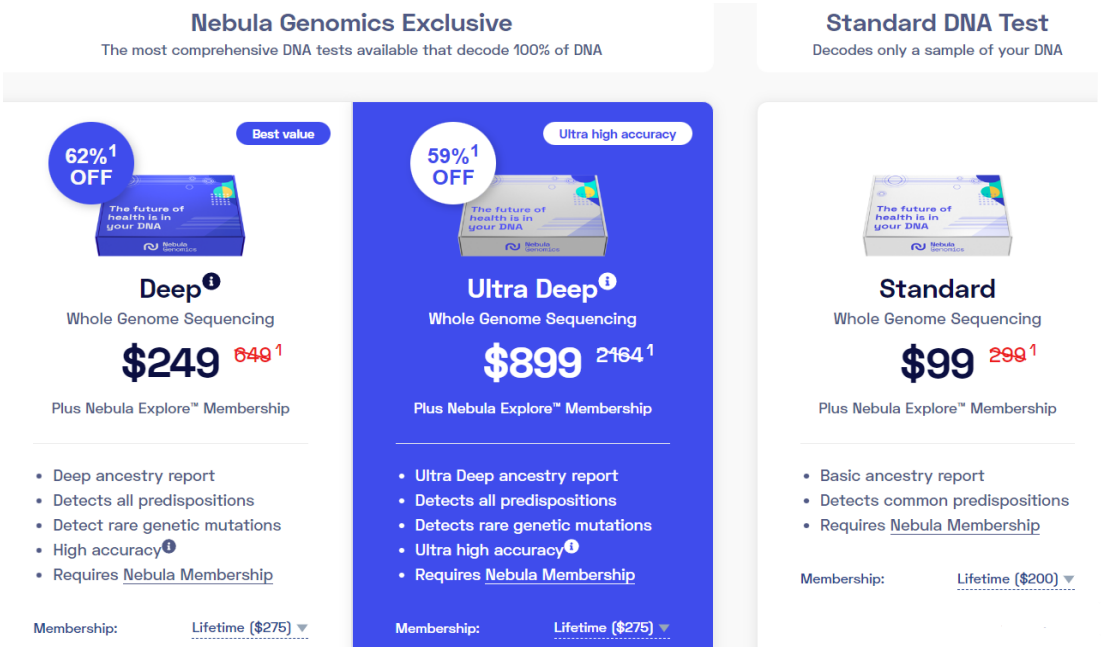

Exhibit 11: Nebula Genomics Solutions. Source: Company Website

- **Affordable direct-to-consumer WGS:** Nebula Genomics is the first company to bring the cost of whole genome sequencing below $300, making it more accessible to a broader range of consumers. The company's current cost for whole genome sequencing tests is priced at $249.

- **Comprehensive genetic data:** The company's whole genome sequencing test decodes approximately 6.4 billion base pairs of the human genome, generating high-quality data that surpasses most competing services. Nebula's tests sequences each position in the whole genome an average of 30 times which is the current gold standard for accuracy in genetic sequencing.

- **Personalized reports and exploration tool:** Nebula Genomics provides over 300 personalized reports based on an individual's genomic profile, accessible via a secure online portal. Additionally, the company offers exploration tools like a gene browser and gene analysis tool, enabling customers to further analyze and understand their genetic data.

Leveraging Ever-Expanding Nebula Library to Build a Subscription-Based Business Model

The company's whole genome sequencing test is just one aspect of its offering. Committed to making cutting-edge scientific discoveries easily accessible and comprehensible, Nebula Genomics has introduced the Nebula Research Library - a repository of research publications and genomic discoveries. Updated weekly, this library offers personalized reports based on the latest genetic findings and features over 300 genome-wide association studies (GWAS). The Nebula Research Library provides guidance on understanding the outcomes of genome-wide association studies, such as polygenic scores that represent the impact of identified genetic variants. Nebula Genomics provides customers with up-to-date genomic findings through a subscription model, offering updated reports and new insights based on the latest scientific research and adding these discoveries to the Nebula library for personalized information on genetic traits such as ancestry and health. Furthermore, the subscriber also enjoys unlimited use of genome exploration tools and premium support provided by geneticists.

Nebula Research Library is a regularly updated repository of research publications and genomic discoveries. It offers personalized reports from over 200 genome-wide association studies (GWAS) and guidance on understanding outcomes like polygenic scores, representing the impact of identified genetic variants

Although mandatory, the company's subscription cost is more than justifiable as it offers customers a dynamic and constantly evolving understanding of their genetic traits. By ensuring access to the latest research findings, cutting-edge features, and tools, the subscription model empowers individuals to make well-informed decisions based on up-to-date genetic insights. Furthermore, this approach supports ongoing research in the field, driving new discoveries and enhancing the value provided to customers over time.

Partnership With G42 HealthCare

Nebula Genomics, Inc., previously announced a collaboration with G42 Healthcare aimed at leveraging each company's strengths to create a synergistic effect on their genomic sequencing capabilities, global healthcare offerings, and market reach. G42 Healthcare is a prominent Abu Dhabi-based health-tech organization utilizing AI and advanced medical technologies with a focus on tapping into the possibilities of customized and preventive care to revolutionize the conventional healthcare framework. The combination of Nebula Genomics' expertise in direct-to-consumer whole genome sequencing and G42 Healthcare's advanced sequencing facilities and AI technologies is expected to result in a more efficient and accurate genetic testing process, giving both companies a possible edge over competitors. Additionally, the collaboration facilitates market expansion for Nebula Genomics into high-growth, underserved markets like the UAE and the Middle East. G42 Healthcare is a global leader in whole genome sequencing, particularly in

the UAE, with the goal of sequencing one million residents as mandated by the Emirati Genome Program. They have currently completed sequencing for about 200,000 individuals. This collaboration allows Nebula Genomics to benefit from G42 Healthcare's advantageous pricing on consumables due to their high volume of sequencing, resulting in more efficient and cost-effective processing of specimens. Furthermore, the partnership is expected to enable operational efficiencies and cost savings through the sharing of genomic data insights, best practices, and advanced certifications, which can be passed on to customers accelerating sales growth.

ProPhase Labs recently unveiled plans to substantially expand its headquarters in Garden City, New York, and establish a new genomics laboratory equipped with top-tier next-generation sequencing technology. This development will allow the company to conduct whole genome sequencing and provide an extensive range of genetic testing services for both clinical and research objectives. Moreover, the Memorandum of Understanding (MOU) with G42 Healthcare contemplates a strategic partnership to jointly develop this sophisticated genomics sequencing facility. In conclusion, the alliance between Nebula Genomics and G42 Healthcare represents a strategic step towards a future where genomic data plays a crucial role in shaping healthcare decisions. The companies' combined expertise in advanced sequencing technologies and diagnostics positions them to offer personalized and accurate genetic testing services to a wider audience. Additionally, by possessing the most advanced and sophisticated genome sequencing facility in the East Coast region, ProPhase has the potential to establish itself as the premier destination for genetic sample processing collected by all 'virtual' companies across the United States.

Decoding The Company's Industry Positioning

As an innovator in the fast-paced world of genomic sequencing, Nebula Genomics has successfully distinguished itself within the ever-changing market landscape. Utilizing state-of-the-art technology, emphasizing data privacy, and presenting competitive pricing, the company has managed to excel amidst the competition while carving out its positioning in the market. The company's whole genome sequencing offering is far superior and more comprehensive than some of the well-known industry players, such as 23andme and AncestryDNA, that provides genotyping services.

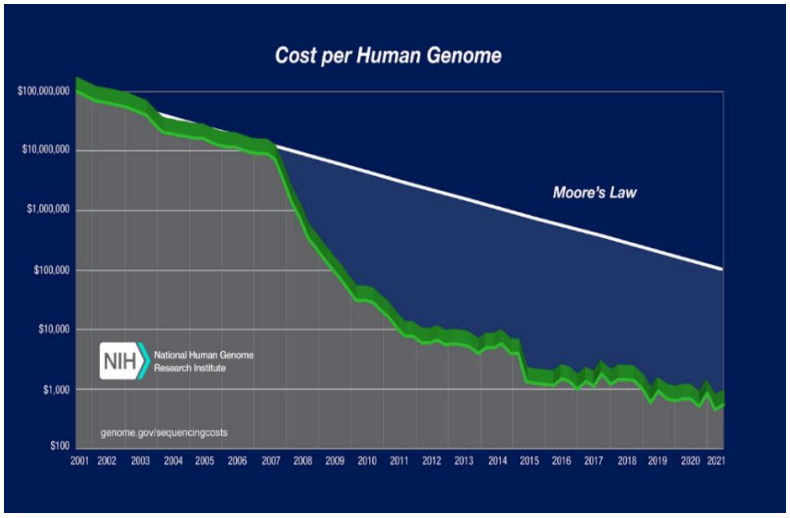

Exhibit 12: Cost of Genome Sequencing. Source: genome.gov

Whole Genome Sequencing (WGS) and genotyping are two distinct methods used to analyze an individual's genetic information. Each approach provides valuable insights into an individual's genetic makeup but differs in the scope, depth, and accuracy of the data generated. Whole Genome Sequencing analyzes all 6.4 billion base pairs of an individual's DNA, offering a comprehensive view of their genetic makeup. In contrast, most commercial DNA testing companies employ genotyping, which focuses on selecting genetic markers relevant to the traits under investigation. As a result, genotyping-based tests examine less than 1% of a person's genome (6.4 billion base pairs), providing a significantly less extensive analysis compared to Whole Genome Sequencing.

Major factors affecting a consumer's selection between WGS and genotyping remains the cost of test and turnaround time. Launched in October 1990 and completed in April 2003, The Human Genome Project, which cost approximately $2.7 billion, was instrumental in the development of next-generation sequencing technology.[13] This was followed by the early 2000s, wherein the cost of sequencing an individual's entire genome for disease diagnosis was greater than $10 million.[14] Since then, the cost of sequencing has plummeted with the introduction of next-generation sequencing (NGS) technologies. Illumina, a leader in the field, achieved a $1,000 genome with its HiSeq X Ten device in 2014, and by 2020, its NovaSeq 6000 could sequence entire genomes at the cost of $600.[13] During the 2023 AGBT General Meeting, Complete Genomics unveiled an expanded range of genetic sequencers, including the DNBSeq-T20, a ground breaking device said to achieve the first genome sequencing for under $100.[15] On the other hand, genotyping has always been relatively less expensive compared to WGS, as it involves the analysis of specific genetic markers rather than the entire genome. Companies like 23andMe and AncestryDNA have made genotyping-based ancestry and health risk tests available for prices ranging from $99 to $199. As the cost of WGS continues to decrease, the gap between the costs of WGS and genotyping narrows, making WGS a more viable option for various broad-based applications, such as personalized medicine, rare disease research, and large-scale population studies.

Particulars	Nebula	23andMe	Ancestry DNA	Dante Labs
Amount of Genome Tested	100%	<0.1%	<0.1%	100%
Genome Quality	30x (clinical grade)	Not WGS	Not WGS	30x (clinical grade)
Real-Time Data Updates	Yes	No	No	Yes
Ancestry	Yes	Yes	Yes	Yes
Health and Wellness	Yes	Yes (few)	Yes (very few)	Yes
Ready for Diagnostics	Yes	No	No	Yes
Focus on Privacy	Yes	No	No	Yes
Cost	$249 + Subscription Fee	$169	$99	$400 + Subscription Fee

Exhibit 13: Comparison of Select DTC Gene Sequencing Companies. Source: Company Website, Diamond Equity Research

The U.S. DTC Genetic Testing market is a huge market, estimated at $478.5 million in 2022, while the global market stands at $1.1 billion

The Direct-to-Consumer (DTC) Genetic Testing market in the U.S. is estimated at US$478.5 million in the year 2022, and the global market is estimated at US$1.1 billion. The U.S. market is characterized by the presence of multiple players indicating a fragmented market. The majority of the players, including the leading names such as 23andMe, Family Tree DNA, Ancestry DNA, and MyHeritage DNA, are engaged within the low-cost genotyping segment. The companies

[13] wired.com/story/the-era-of-fast-cheap-genome-sequencing-is-here
[14] genome.gov/about-genomics/fact-sheets/Sequencing-Human-Genome-cost
[15] genomeweb.com/sequencing/complete-genomics-promises-sub-100-genome-unveils-new-sequencers-agbt-2023

providing WGS services are limited in number and rather in a nascent stage when compared to their former counterparts. Furthermore, the benefits of genetic screening far outweigh the cost, as highlighted by the two studies wherein among healthy people undergoing genetic screening, 11.6% to 15% had a finding indicating an elevated risk for preventable or treatable diseases.[16] [17] The Direct-to-Consumer (DTC) Genetic Testing market is projected to experience significant growth in the coming years, driven by the increasing adoption of genetic testing as well as the declining cost of whole genome sequencing (WGS). While the market is currently dominated by low-cost genotyping services, the availability of affordable WGS is expected to change the market dynamics and propel market growth. In this context, Nebula Genomics is recognized as a strong player in the genomic sequencing market, offering a unique value proposition that prioritizes comprehensive genomic data, privacy, and security. With its focus on innovation, affordability, and consumer empowerment, Nebula Genomics is well-positioned for continued growth and success as the market for genetic testing evolves and expands.

Contract Manufacturing - Pharmaloz Manufacturing, Inc.

ProPhase Labs, Inc's wholly-owned subsidiary, Pharmaloz Manufacturing, Inc. (PMI), serves as a full-service contract manufacturer and private label developer specializing in non-GMO, organic, and natural-based cough drop lozenges, OTC drugs, and dietary supplement products. The company's 60,000 sq. ft. climate-controlled facility on 12 acres operating under FDA 21 CFR 210 & 211 guidelines provides the ability to offer products for diversified needs. The manufacturing agreement with Mylan Consumer Healthcare Inc. and Mylan Inc., which followed the sale of the Cold-EEZE business in March 2017, is a vital aspect of the company's operations. The agreement, extended until March 2024, provides a stable source of revenue, with Mylan purchasing products at market-competitive prices and an agreed-upon markup on costs. The acquisition of new equipment announced in February 2023 is a positive development, as it is projected to double the company's pouch packaging capacity by Q2 2023. The company also plans to expand its lozenge manufacturing business; Altogether, these expansion initiatives are expected to lead to a 200% increase in capacity for 2024 as compared to 2022. This increased capacity aligns with the growing demand for PMI's products and services, allowing for potential revenue growth.

Pharmaloz Manufacturing, Inc. (PMI), a wholly-owned subsidiary of ProPhase Labs, is a full-service contract manufacturer and private label developer for non-GMO, organic, and natural-based cough drops, OTC drugs, and dietary supplements

PMI's recent performance is also encouraging. The addition of two new customers and the launch of seven new products in 2022 resulted in a production increase of over 5.25 million units. Furthermore, PMI secured three new customers who are expected to enter full production in 2023, representing an estimated increase of additional 1.0 million units. With this, the company targets a manufacturing revenue of $25 million in the year 2024. In 2022, Pharmaloz brought micro-testing for its customers in-house, leading to the production of more than 50 R&D sample runs. The successful outcome of these sample runs has allowed the company to finalize a contract with a new customer that could result in the addition of more than 6.0 million units annually. Additionally, negotiations are underway with another potential customer that could add a similar

[16] Anderson JL et al., Clinically Actionable Findings Derived from Predictive Genomic Testing Offered in a Medical Practice Setting. Mayo Clin Proc. 2021 Jun
[17] Haverfield EV et al., Physician-directed genetic screening to evaluate personal risk for medically actionable disorders: a large multi-center cohort study. BMC Med. 2021 Aug 18

number of units per year or more. Pharmaloz is currently exploring options with four other potential new customers as well. The company is also in the initial stages of developing liquid-filled lozenges for its customers and plans to add more equipment to its current production line in 2023. It is also reported that many top lozenge brands are exploring the possibility of outsourcing their long-term product manufacturing to ProPhase, with some even expressing interest in having the company handle their global production. These brands are willing to invest not only in the products themselves but also in the equipment required to expand capacity. The company believes that this trust is attributed to the company's dependable, customer-focused approach within the industry. These developments indicate a strong growth trajectory for PMI, contributing positively to the overall company's financial outlook. Analogous to the potential for PRPH's genomics laboratory to emerge as the preferred location for sample processing, Pharmaloz stands as the principal beneficiary in North America of the burgeoning outsourcing trend, which is projected to experience sustained growth over the forthcoming 5-10 years.

In conclusion, the company's investment in expanding its capacity, securing new customers, and extending manufacturing agreements demonstrates a promising future. It would be reasonable to view these developments as indicators of potential growth and improved profitability for the company.

TK Supplements – Utilizing Core Competencies

The global dietary supplements market is expected to grow at a CAGR of 8.40% in the next decade, driven by factors such as rising health awareness, an aging population, and increasing disposable income in emerging markets

The TK Supplements product line of the company focuses on promoting better health, energy, and sexual vitality. The product line includes two key offerings: Legendz XL, a male sexual enhancement supplement, and Triple Edge XL, an energy and stamina booster.

The company's commitment to using high-quality, research-based ingredients demonstrates a dedication to product efficacy and customer satisfaction. This approach can contribute to a strong brand reputation, which may result in increased sales and customer loyalty. The distribution channels for Legendz XL are promising, with availability in major retailers like Rite Aid, Walgreens, CVS, and Walmart, as well as through e-commerce platforms. The recent expansion of distribution to CVS and Walmart indicates growing market acceptance and potential for increased sales. Triple Edge XL is also gaining retailer acceptance, with a recent restaging strategy at CVS. By reducing the package size from 56ct to 20ct, the retail price became more competitive, resulting in a double-digit increase in consumer sales and a 40% expansion in the number of stores carrying the product. Based on this performance, Triple Edge XL is under review for authorization in other major pharmacies, which may lead to further growth in distribution and sales.

Market Analysis: Trends, Opportunities, and Growth Prospects

According to Market.us, the global dietary supplements market size is projected to grow at a CAGR of 8.40% during the next decade. The major factors contributing to the growth include increasing health awareness & wellness, world’s aging population, increasing disposable income in emerging markets like China and India, continuous research and innovation in the dietary supplements sector, and various initiatives taken by the regulators across the world such as the

U.S. FDA and others has led to increased trust in the products, fostering consumer confidence and driving growth, among others.

All in all, the TK Supplements product line appears to have a positive trajectory in terms of distribution, retail acceptance, and sales performance. It is essential to monitor these developments and their potential impact on the company's overall financial performance. The ongoing success of this product line, along with potential expansion into additional pharmacies, may contribute to improved profitability and growth for the company. Furthermore, it is essential to highlight that the company's unparalleled retail distribution network establishes a formidable barrier between TK and its competitors. This advantage may potentially enable TK to acquire other supplement brands that grapple with insufficient distribution connections.

Management Overview

ProPhase Labs, Inc. is led by an experienced team with vast knowledge, deep expertise, and extensive experience in genomics, biotech, life sciences, healthcare, and other relevant domains. The company's management endeavors to enhance and broaden the availability of true diagnostics, WGS, and clinical laboratory testing to the broad public and research institutions with state-of-the-art labs intended to meaningfully improve the lives of people.

- **Ted Karkus - Chairman & CEO**

  Ted Karkus, CEO and Chairman of ProPhase Labs, drives the company's diverse and synergistic businesses with his successful track record in biomedical and health companies. He transformed ID Biomedical's strategy and valuation from $25 million to $1.4 billion sale to GlaxoSmithKline. As CEO of ProPhase Labs, he restructured the go-to-market strategy for the flagship product Cold-EEZE, turned around and significantly grew revenues, ultimately selling it for $50 million to Mylan. ProPhase Labs is a fast-growing biotech, genomics and diagnostics company due to its commitment to growth, innovation, and execution excellence outlined in Ted's high growth roadmap. He pivoted into industry leading CLIA labs, and then further diversified by acquiring genomics leader Nebula Genomics. Constantly innovating, Ted then created ProPhase BioPharma to deliver antivirals, cancer tests and therapeutic cancer compounds. The new acquisitions and legacy businesses work to drive synergistic growth with multi-billion-dollar potential.

  He holds a BS in Psychology from Tufts University with Magna Cum Laude Honors and an MBA in Finance from Columbia University School of Business with Beta Gamma Sigma Honors.

- **Robert A Morse, Chief Financial Officer**

  Mr. Morse joined ProPhase Labs as Corporate Controller, served as Principal Financial Officer and Principal Accounting Officer prior to being promoted to CFO. Prior to ProPhase Labs, Mr. Morse served as Global Controller and Chief Accounting Officer at multiple high-growth pre-IPO companies in the FinTech, EdTech and Asset Management sectors. Mr. Morse spent four years at MasterCard Worldwide and 10 years at The McGraw-Hill Companies and Standard & Poor's. Mr. Morse began his career with four years in public accounting including two years with Ernst & Young LLP.

- **Jason Karkus - President, ProPhase Diagnostics, Inc.**

  Jason drove explosive revenue growth at ProPhase Diagnostics, leading multiple areas including sales, business development, logistics operations, and account management. He oversaw the development of two CLIA-certified labs, generating approximately $200 million in revenues since 2021 and manages account managers and customer service reps who offer 24/7 service to exceed customer expectations. Jason now heads up business development for

the rapid build-out of ProPhase's clinical and genomic businesses. With a background in sales and development at top real estate firms, Jason is a graduate of the University of Maryland.

- **Alice Lioi - Executive Vice President/ COO, ProPhase Diagnostics, Inc. and ProPhase BioPharma**

  As head of all lab operations, Alice ensures high compliance standards, exemplary medical quality, service delivery, and client satisfaction with over 18 years of progressive laboratory leadership experience in both clinical and research. Prior to joining ProPhase, Alice was VP of Lab Operations at Quest Diagnostics, managed labs at Brookdale Hospital and Medical Center, and served as Administrative Director of Clinical and Anatomical Pathology Service at AdvantageCare Physicians, covering 36 medical facilities. She graduated from SUNY Stony Brook with a Bachelor of Science in Clinical Laboratory Science and holds a NY State License as a Clinical Laboratory Technologist.

- **Sergio Miralles - EVP/Chief Information Officer, ProPhase Diagnostics, Inc.**

  Sergio Miralles is an experienced IT Leader with over 12 years of experience in enterprise-level Cybersecurity, Infrastructure, and Architecture. Sergio is responsible for ensuring a complete end-to-end technology solution that links its lab customers' patient data via an interface to efficiently process and report results. Previously, Sergio founded and led a successful IT consulting firm overseeing 18 IT consultants. For the last five years, his primary focus has been on the medical, lab, and diagnostics business. Sergio holds several certifications from Cisco, ISC2, and CompTIA.

- **Sam A. Beeler - Chief Strategy Officer, Nebula Genomics**

  Sam is an accomplished healthcare executive with leadership experience spanning hospital-based medicine, multi-specialty private practice, clinical research, and community health. He has served in progressive enterprise leadership, strategy, and operations roles for The Advisory Board, Advantage Care Physicians, TeamHealth, PivotHealth and more. He is the co-founder of a disruptive clinical research and human performance lab with championship NFL, NHL, and MLB athletes, Olympic gold-medalists, Navy Seals, and high net-worth clientele. He was also appointed as Director of Health & Human Services for one of the most densely populated cities in the United States. Sam holds an MBA from Cornell SC Johnson Graduate School of Management, a Master of Science in Healthcare Policy & Research from Weill Cornell Graduate School of Medical Sciences, and a Bachelor's degree in Philosophy from Rutgers University.

- **Kamal Obbad, SVP, Director of Sales and Marketing, Nebula Genomics**

  Kamal is co-founder of Nebula Genomics. He received his undergraduate degree at Harvard University and did graduate studies in computer science as a Gates-Cambridge Fellow at the University of Cambridge. Prior to founding Nebula, Kamal led teams at Google. For his work, Kamal has received multiple honors including being named to the Forbes 30 under 30 list.

- **Dennis Grishin - Chief Scientific Officer, Nebula Genomics**

  Dennis is co-founder of Nebula Genomics. He received a Ph.D. in genetics from Harvard University. For his work, Dennis was awarded multiple fellowships, including German National Academic Foundation Fellowship, and named a Forbes 30 Under 30 in Healthcare.

- **Dr. George Church - Advisory Board, Nebula Genomics**

  Along with being a co-founder at Nebula Genomics, Dr. George Church is also Professor of Genetics at Harvard Medical School and Director of PersonalGenomes.org. His 1984 Harvard Ph.D. included the first methods for direct genome sequencing, molecular multiplexing & barcoding. This led to the first genome sequence (pathogen, Helicobacter pylori) in 1994. His innovations have contributed to nearly all "next-generation" DNA sequencing methods and companies (CGI-BGI, Life, Illumina, Nanopore). His honors include election to NAS & NAE & Franklin Bower Laureate for Achievement in Science. He has co-authored 590 papers, 155 patent publications and one book (Regenesis).

- **Russ Altman, M.D., Ph.D. - Advisory Board, Nebula Genomics**

  Dr. Altman holds an A.B. from Harvard College, an M.D. from Stanford Medical School, and a Ph.D. in medical information sciences from Stanford University. He is board certified in internal medicine and clinical informatics. He received the Presidential Early Career Award for Scientists and Engineers and a National Science Foundation Faculty Early Career Development (CAREER) Program award. Russ is a fellow of the American College of Physicians (ACP), the American College of Medical Informatics (ACMI), the American Institute for Medical and Biological Engineering (AIMBE), and the American Association for the Advancement of Science (AAAS). He is a member of the National Academy of Medicine. He is a past president, founding board member, and a fellow of the International Society for Computational Biology (ISCB) and a past president of the American Society for Clinical Pharmacology and Therapeutics (ASCPT). He has chaired the science board advising the FDA commissioner, served on the NIH Director's Advisory Committee, and co-chaired the IOM Drug Forum.

Financial Statement Analysis

- **Diagnostics Support as Other Divisions Accelerate Growth:** ProPhase Labs concluded the year 2022, reporting a revenue of $122.65 million compared to $79.04 million for the year ended 2021, indicating a y-o-y growth of 55.16%. Additionally, the company reported revenue growth of 63.3% in 2022 within its diagnostic business, which was majorly aided by increased COVID-19 testing volumes performed as a result of the spread of the Omicron variant, which emerged in early 2022. We believe the company's COVID revenue has peaked, and we model an 85% and 93% drawdown in 2023 and 2024 diagnostics revenue when compared to 2022. It is essential to note that these projections do not include any additional diagnostic services currently under development by the company. In the previous year, around 36 million COVID tests were administered, according to data from ny.gov. As of March 31, of the current year, approximately 4 million tests have been reported, we anticipate a significant contraction in demand for testing services. Our outlook remains cautiously optimistic for ProPhase Labs diagnostic subsidiary as it navigates the shifting dynamics of the diagnostics market in the coming years while diversifying to other business segments.

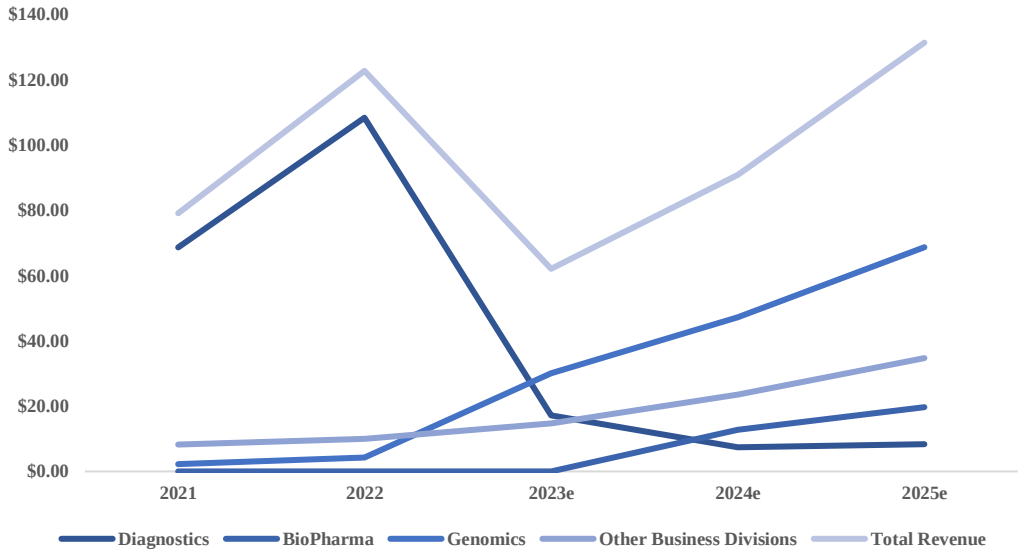

Exhibit 14: Actual and Expected Revenue (in $'mm) Source: Diamond Equity Research

We anticipate other divisions, such as BioPharma, Contract Manufacturing, and Genomics, to lead the company's growth in the coming years. The BioPharma division, with its BE-Smart esophageal cancer test, is targeting a multi-billion-dollar market with urgent, unaddressed needs. Full-scale commercialization, supported by appropriate CPT codes, is expected by H1 2024. Both Contract Manufacturing and Genomics divisions are already generating revenue, with reported growth rates of 51.1% and 91.6%, respectively, for the year ended 2022. The management remains optimistic about the future of both businesses. Management anticipates a 200% revenue growth in Contract Manufacturing over the next two years, primarily driven by the acquisition of new clients and expansion of existing facilities. As for the Genomics division, management remains highly optimistic and has guided over 100% growth for the year ended 2023. While the immediate momentum is likely fueled by the increasing visibility

of the company's low-cost WGS offering, however in the long run, expansion of the distribution channels to include food, drug, and mass (FDM) retail stores, as well as academic institutions involved in genomic research, are likely to be additional growth catalysts. Capitalizing on its collaboration with G42 Healthcare and integrating future technological advancements, the company aims to reduce costs and broaden its competitive edge further.

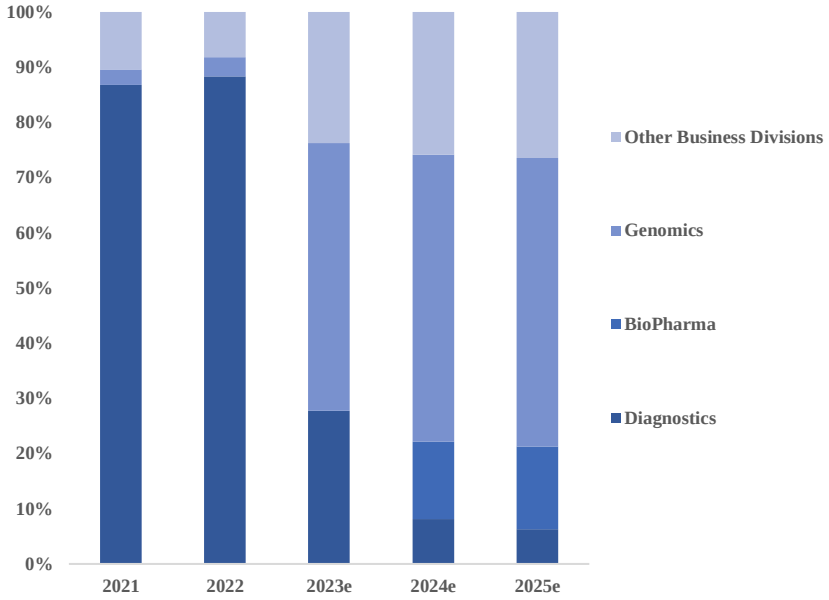

Exhibit 15: Revenue Break-up Source: Diamond Equity Research

- **Evolving Margin Profile:** The company's blended gross margins for 2021 and 2022 were 53.1% and 57.6%, respectively. The diagnostic division experienced a margin expansion of around 600 basis points in 2022, reaching 63.2%. However, the gross margins for the remaining businesses contracted to 15.5% in 2022, down from 27.7% in 2021. The increase in gross margins for diagnostics can be attributed to the realization of economies of scale. In contrast, the contraction in margins for other businesses may be explained by the rising revenue share of relatively lower-margin businesses, such as contract manufacturing and genomics, compared to the retail supplement business. The evolving product mix will likely lead to volatility in gross margins in the next few quarters. We have estimated the gross margins for 2023 and 2024 at 39.3% and 46.4%, respectively. The adjusted operating profit margin for the year ended 2021 and 2022 were 17.6% and 27.6%, respectively. The expansion in operating margins was majorly supported by improved business economics for its diagnostics business. While the company's diagnostics business supports its profitability, other businesses combined have reported operating losses in the past two years. With a significant drawdown in diagnostics revenue, we expect the company to report an operating loss in 2023. As contract manufacturing and genomics business scales and the company commercializes the BE-Smart diagnostic test, we expect the profitability to return in 2024. For the next three years, we forecast an operating profit margin of (11.2)%, 8.2%, and 9.7%.

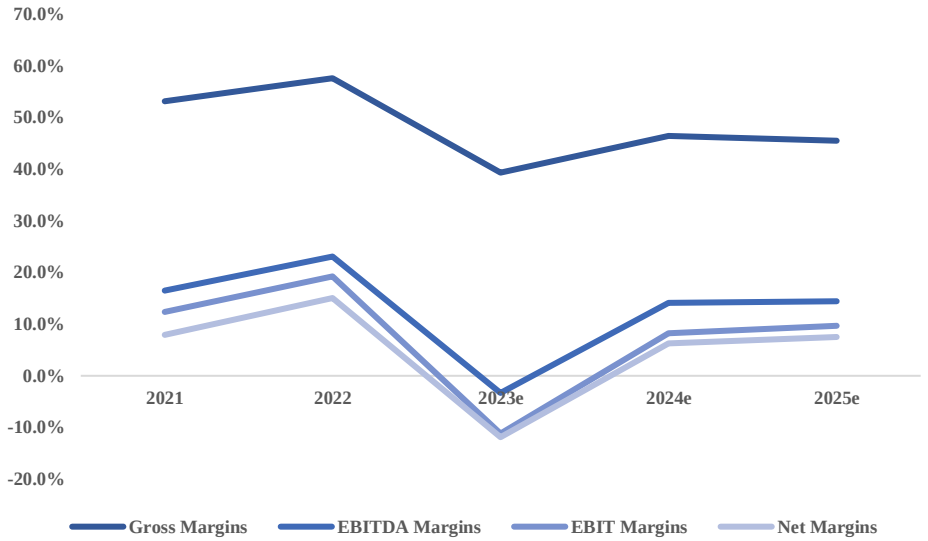

Exhibit 16: Margin Profile. Source: Diamond Equity Research

- **Robust Financial Position Enables Shareholder-Friendly Actions:** As of December 2022, the company reported a cash and cash equivalents balance, along with AFS marketable debt securities, of $17.43 million. Accounts receivable, primarily composed of amounts due from government agencies and healthcare insurers, totaled $37.0 million during the same period. The company's interest-bearing debt (excluding lease liabilities) stood at $2.4 million as of December 2022. Despite the possibility of a considerable decline in diagnostics revenue, we believe the company's financial foundation will remain solid, primarily due to its current cash position and expected negative working capital investment (cash inflow). We estimate operating cash flows of $14.74 million and $3.65 million for 2023 and 2024, respectively. The company's strong financial position and cash-generating diagnostics business have allowed management to proactively implement shareholder-friendly actions, such as distributing profits and cash through buybacks and dividends. Over the past two years, management has completed two buybacks and recently announced an additional stock repurchase program worth $6 million. Furthermore, the company declared three special dividends of $0.30 each in 2021 and 2022, amounting to $0.90 per share in total.

Year-end 31 Dec. (in $mm)	2021A	2022A	2023E	2024E	2025E
INCOME STATEMENT					
Revenue	$79.04	$122.65	$62.07	$90.82	$131.33
Gross Profit	$41.99	$70.65	$24.41	$42.17	$59.76
EBITDA	$13.04	$28.31	($2.06)	$12.83	$18.95
Depreciation & Amortization	($3.23)	($4.72)	($4.88)	($5.39)	($6.20)
EBIT	$9.80	$23.60	($6.94)	$7.44	$12.75
Interest Income/Expense	($0.75)	($0.69)	($0.43)	($0.25)	($0.25)
Profit Before Tax (PBT)	$5.31	$18.46	($7.38)	$7.19	$12.50
Profit After Tax (PAT)	$6.27	$18.46	($7.38)	$5.68	$9.87
Basic Shares Outstanding (M)	15.17	15.85	17.43	18.30	18.67
EPS - basic	$0.41	$1.17	($0.42)	$0.31	$0.53
BALANCE SHEET					
Cash and cash equivalents	$8.41	$9.11	$21.40	$21.33	$21.43
Other current assets	$52.91	$51.72	$37.71	$50.26	$68.96
Total current assets	$61.32	$60.83	$59.11	$71.58	$90.39
Non-current assets	$27.98	$26.82	$24.39	$22.72	$21.97
Total Assets	**$89.30**	**$87.65**	**$83.50**	**$94.30**	**$112.36**
Short-term borrowing	$0.00	$0.00	$0.00	$0.00	$0.00
Other current liabilities	$15.52	$16.08	$15.32	$17.84	$23.04
Total current liabilities	$15.52	$16.08	$15.32	$17.84	$23.04
Long-term borrowing	$10.04	$2.40	$2.40	$2.40	$2.40
Other non-current liabilities	$5.10	$5.54	$5.54	$5.54	$5.54
Total liabilities	$30.67	$24.02	$23.26	$25.78	$30.98
Total Equity	$58.63	$63.63	$60.24	$68.52	$81.38
Total Liabilities & Equity	**$89.30**	**$87.65**	**$83.50**	**$94.30**	**$112.36**

Exhibit 17: Financial Statement Snapshot. Source: Diamond Equity Research

Valuation

We have assessed the company's intrinsic value using a combination of Discounted Cash Flow and Sum of The Parts (SOTP) valuation methodologies, assigning a weightage of 50% to the DCF approach and 50% to the SOTP approach. For DCF, our assumptions primarily include a discount rate/weighted average cost of capital (WACC) of 12.5% and a terminal growth rate of 1.5%. Our forecasts include each of the five business divisions, namely diagnostics, genomics, biopharma, contract manufacturing, and dietary supplement business. In forecasting the revenue of the company's biopharma division, we have considered the revenue of the BE-Smart esophageal cancer test, Equivir, and LB-1 Co-Therapy. For each of these product candidates, we assumed a probability of success at 70%, 50%, and 5%, respectively. It is important to note that due to the lack of any published data for these specific types of products, these probabilities are educated estimates based on factors such as the product's stage of development, clinical trial outcomes, market potential, and competitive landscape. Additionally, we took into account the company's track record, expertise in the field, and regulatory environment. As these are assumptions, they are subject to change as new information becomes available or as the company advances in the development and commercialization process.

Our SOTP valuation methodology encompasses a separately derived value of each of the above-mentioned five businesses using a comparable company analysis approach. Our Sum of The Parts valuation method involves determining the value of each of the five mentioned business segments individually, utilizing a comparable company analysis approach. Our peer group includes companies with a similar business model that are in the same industry/sector or are targeting similar products as offered by the company. Based on the average 2024e EV/Revenue multiple for each of the five business divisions and their forecasted revenue numbers, we have valued the company using a SOTP approach. Combining both the above approaches, we have arrived at a valuation of approximately $344 million or $20.00 per share, contingent on successful execution by the company.

Business/Product	2025e Sales	Commercialization Year	EV/Sales*	SOTP Valuation*
Diagnostics	**$8.27**	**-**	**2.06x**	**$15.25**
BioPharma	**$19.68**	**-**	**2.13x**	**$27.13**
BE-Smart	**$13.33**	**2024**	**-**	**-**
Equivir	**$6.35**	**2024**	**-**	**-**
LB-1	**$0.00**	**2027**	**-**	**-**
Genomics	**$68.67**	**-**	**3.73x**	**$176.04**
Other Business Divisions	**$34.71**	**-**	**2.41x**	**$56.55**

Calculated Equity Value	
Enterprise Value	$408.24
- Debt and Preferred Stock	$6.66
+ Cash	$9.11
Net Debt	$2.45
Equity Value	$410.69

Approaches (in $'mm)	Value (USD)	Weight	Wtd. Value (USD)
DCF	$410.69	50%	$205.35
SOTP	$277.42	50%	$138.71
GTM		0%	$0.00
Wtd Avg. Equity Value (USD)			**$344.06**
No of Shares Outstanding			**17.18**
Intrinsic Value Per Share			**$20.00**

Company Name	Ticker	Price	Currency	Country	Mrkt Cap.	EV	EV/Sales*
Diagnostic Business Comparable							
Quest Diagnostics Incorporated	DGX	$143.9	USD	US	$16,094	$20,607	2.24x
Laboratory Corp. of America Holdings	LH	$231.5	USD	US	$20,492	$26,455	1.67x
Veracyte Inc.	VCYT	$22.7	USD	US	$1,645	$1,482	3.93x
RadNet Inc.	RDNT	$27.4	USD	US	$1,587	$3,131	1.89x
Genomics Business Comparable							
Exact Sciences Corporation	EXAS	$66.3	USD	US	$11,928	$13,754	5.25x
23andMe Holding Co.	ME	$2.0	USD	US	$928	$575	1.89x
Ionis Pharmaceuticals Inc.	IONS	$36.1	USD	US	$5,167	$4,532	7.08x
Myriad Genetics Inc.	MYGN	$21.9	USD	US	$1,784	$1,760	2.22x
BioPharma Business Comparable							
ANI Pharmaceuticals Inc.	ANIP	$39.6	USD	US	$710	$975	2.31x
Teva Pharmaceutical Industries Ltd.	TEVA	$8.4	USD	IL	$9,355	$29,002	1.90x
Viatris Inc.	VTRS	$9.7	USD	US	$11,585	$29,775	1.95x
Bausch Health Companies Inc.	BHC	$7.7	USD	CA	$2,796	$24,184	2.85x
Contract Manufacturing Business Comparable							
Catalent Inc.	CTLT	$44.4	USD	US	$7,996	$12,391	2.50x
Avid Bioservices Inc.	CDMO	$19.2	USD	US	$1,198	$1,320	7.30x
Siegfried Holding AG	SGFEF	$685.0	USD	CH	$3,175	$3,643	2.40x
Natural Alternatives International Inc.	NAII	$8.8	USD	US	$53	$71	n.a.
Retail and Other Business Comparable							
ChromaDex Corporation	CDXC	$1.4	USD	US	$106	$90	0.90x
Nature's Sunshine Products Inc.	NATR	$10.7	USD	US	$205	$168	0.40x
USANA Health Sciences Inc.	USNA	$64.6	USD	US	$1,246	$972	1.00x
Nu Skin Enterprises Inc.	NUS	$41.2	USD	US	$2,054	$2,289	1.10x

Exhibit 18: Valuation Snapshot. Source: Diamond Equity Research
(Values in $mm except per share data or otherwise stated. Median valuation multiple is based on 2024 figures) *

Risk Factors

The success of ProPhase Labs Inc's business is dependent on its ability to navigate a range of risks and uncertainties associated with the healthcare industry. Some of the key risks that could impact the company's financial performance and operations include the following:

- **Product Liability Risks:** ProPhase Labs Inc may face product liability claims if its products cause harm to consumers. While the company has product liability insurance in place, any successful claims against its branded products or third-party products exceeding the insurance coverage could result in increased expenses and impact its reputation with customers negatively. This would ultimately have a material adverse effect on its business, financial position, and top-line numbers.

- **Cybersecurity Risks:** ProPhase Labs, Inc. receives and stores substantial personal information and genetic data of both its customers and employees, which may be vulnerable to cyber threats, such as data breaches, hacking, and ransomware attacks. These threats could compromise the security of its data and systems, leading to financial losses and reputational damage.

- **Technological & Competitive Risks:** The healthcare technology market is highly competitive, and ProPhase Labs Inc must compete with other companies that are also developing and implementing new technologies. ProPhase Labs Inc's success may depend on its ability to develop and implement new technologies, such as digital health platforms and telemedicine, to improve healthcare outcomes and patient care. Any failure to adapt to changing technologies could harm the company's competitiveness and profitability. These challenges could delay the launch of new products or services, increase costs, or impact the quality of its products and services.

- **Acquisition and Integration Risks:** ProPhase Labs Inc pursues acquisitions as a means of growing its business and expanding its market share. It may face risks associated with acquisitions and integrations, such as the failure to integrate acquired businesses, the loss of key personnel, and the failure to achieve expected synergies. This could impact employee morale, productivity, and the ability to achieve expected results.

- **Regulatory Compliance Risks:** Being a pharmaceutical and diagnostic company, ProPhase Labs Inc. is subject to stringent regulations from the FDA and HIPAA. The company must comply with FDA regulations to ensure the safety and effectiveness of its products and to obtain regulatory approval for new products. The company, as a provider of healthcare products and services, must also comply with HIPAA regulations to protect the privacy and security of patient information. Failure to comply with these regulations or obtain necessary approvals can have significant impacts on business operations, the company’s reputation, and the ability to operate in the healthcare industry.

These risk factors are not comprehensive for full risk factors, please review ProPhase Labs Inc’s relevant SEC filings with risk factors.

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