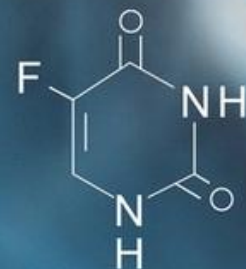
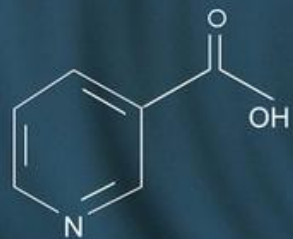
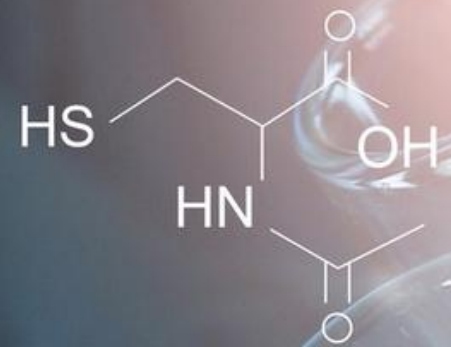
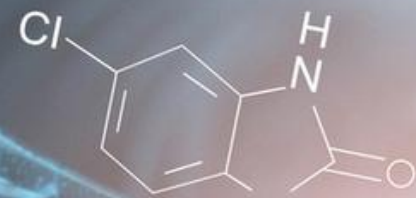


Investor Presentation

ProPhaseLabs.com

NASDAQ: PRPH



FORWARD LOOKING STATEMENTS

Except for the historical information contained herein, this document contains forward looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding our strategy, plans, objectives and initiatives, including our expectation to enter into new agreements for Pharmaloz, our expectations regarding the future revenue growth potential of each of our subsidiaries, our expectations regarding future liquidity events, the expected timeline for commercializing our BE-Smart Esophageal Cancer Test, our ability to enter into new domestic and international long-term contracts for our Nebula Genomics business and the financial impact of any such contracts, the anticipated timing for the receipt of new equipment and installation of additional lozenge lines and their ability to increase capacity and revenue, our anticipated expenses, ability to obtain funding for our operations and the sufficiency of our cash resources, and the expected timeline for the launch of Equivir capsules. Management believes that these forward-looking statements are reasonable as and when made. However, such forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those projected in the forward-looking statements. These risks and uncertainties include but are not limited to our ability to obtain and maintain necessary regulatory approvals, general economic conditions, consumer demand for our products and services, challenges relating to entering into and growing new business lines, the competitive environment, and the risk factors listed from time to time in our Annual Report on Form 10-K for the year ended December 31, 2023, our subsequent Quarterly Reports on Form 10-Q and any other filing with the Securities and Exchange Commission. These forward-looking statements are based on current expectations, estimates, forecasts and projections and are not guarantees of future performance or development. The Company undertakes no obligation to update forward-looking statements except as required by applicable securities laws. Readers are cautioned that forward-looking statements are not guarantees of future performance and are cautioned not to place undue reliance on any forward-looking statements.

MARKET AND INDUSTRY DATA

This presentation includes market and industry data and forecasts that the Company has derived from independent consultant reports, publicly available information, various industry publications, other published industry sources, and its internal data and estimates. Independent consultant reports, industry publications and other published industry sources generally indicate that the information contained therein was obtained from sources believed to be reliable. Although the Company believes that these third-party sources are reliable, it does not guarantee the accuracy or completeness of this information, and the Company has not independently verified this information. The Company's internal data and estimates are based upon information obtained from trade and business organizations and other contacts in the markets in which the Company operates and management's understanding of industry conditions. Although the Company believes that such information is reliable, it has not had this information verified by any independent sources.

PROPHASE LABS BUSINESS VERTICALS

DNA Complete, a world-class Whole Genome Sequencing and Bioinformatics DTC test offering. Launching a comprehensive marketing campaign in collaboration with a proven marketing leader, to include social media influencers, etc.

ProPhase Supplements, leveraging deep expertise in direct-to-consumer growth, subscription models, digital marketing, and audience monetization to position the company as a leader in science-backed health solutions.

Initial online focus: Legendz XL, which is in major food, drug and mass stores, Triple Edge XL, and soon to be introduced Equivir.

Strategic Opportunities to Leverage Its DTC Multi-Media Infrastructure with Telehealth Physician Networks for Prescription Drugs

ProPhase BioPharma includes BE-Smart investigational esophageal cancer test, a potentially ground-breaking early detection esophageal cancer diagnostic test, with a target market of \$7-14 billion¹. Collaborating with a world-class consultant to attain a potential strategic partnership with one of numerous, large cancer diagnostic companies in 2025 as well as commercialize either as a laboratory developed test (LDT) or in compliance with the applicable FDA requirements.

Committed to executional excellence, smart diversification, and a synergistic, omni-channel approach



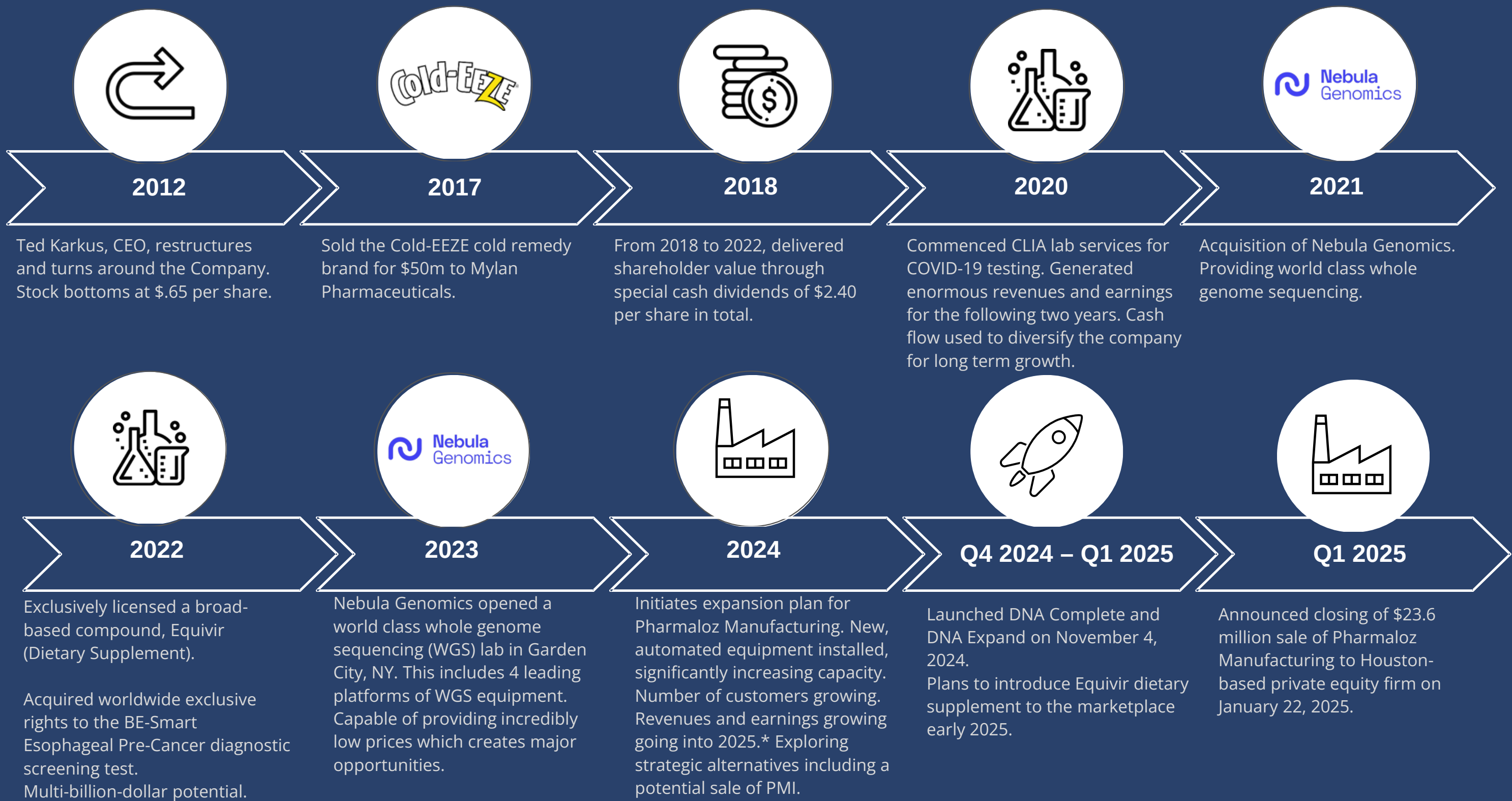
**ProPhase
Supplements**



¹Burden and Cost of Gastrointestinal, Liver, and Pancreatic Diseases in the United States: Update 2021 - Gastroenterology (gastrojournal.org)

OUR BEST IS YET TO COME!

PERFORMANCE TRACK RECORD





 **DNA Complete[®]**

 **Nebula
Genomics**

DNA COMPLETE® - LAUNCHED NOVEMBER 4, 2024

DNA Complete is a world-class Whole Genome Sequencing and Bioinformatics direct to consumer test offering.

Whole Genome Sequencing (“WGS”) Technology

Our WGS DNA technology analyzes virtually 100% of your DNA compared to typical DNA Ancestry tests that analyze less than 1% of your DNA, at a competitive price. This provides more accurate and in-depth health and ancestry reports.

Proprietary Bioinformatics Platform

340+ personalized health pre-disposition reports covering Longevity, Mental Health, Cancer & more.

New Advanced Ancestry platform

Comprehensive ancestry analysis that provides personalized ancestry reports, such as Regional ancestry, Ancestry timeline, Comparison with ancient populations & more.

Data Security

No Third-Party Access to Genomic Data:

DNA Complete ensures that no third parties have access to back-end raw genomic data. All genomic information is securely stored within our infrastructure and is not shared with external entities.

Data Storage and Encryption:

All genomic data is securely stored on AWS (Amazon Web Services) and is encrypted both at rest and in transit, using industry-leading encryption protocols to ensure the highest level of security and privacy.

No Data Sharing for Research or Monetization:

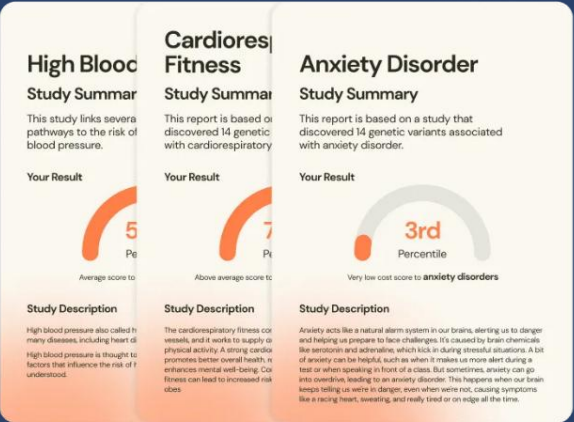
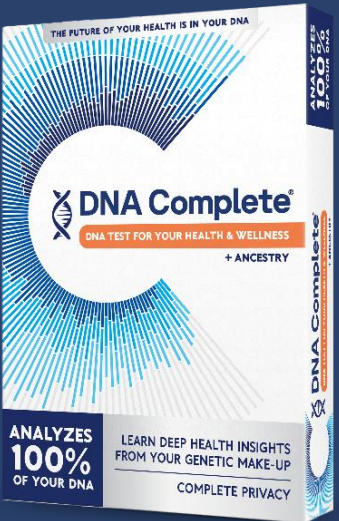
DNA Complete does not share raw genomic data with third parties research companies, for studies or any other purpose. We maintain full control of the data, ensuring it is used solely for the benefit of our users, with no external monetization or unauthorized access.

DNA COMPLETE®

Direct To Consumer Launch of DNA Complete

Shape The Future of Your Health and Explore Your Ancestry with DNA Complete


- Built a comprehensive marketing campaign featuring top influencers, managed by an experienced marketing leader with a proven track record in building global brands. Launched Q4 2024.
- The new offering is designed to deliver a robust genetic user platform, industry-leading pricing and faster turnaround times.
- This new product harnesses our cutting-edge bioinformatics platform and the launch of our proprietary advanced Ancestry platform, offering customers deep analysis of their genomic data.
- Offering genetic counseling services, enhancing the value proposition for customers.



	Essential DNA Test \$195	Pro DNA Test \$495	Elite DNA Test \$1,495
Amount of DNA Analyzed	1X WGS	30X WGS	100X WGS
Accuracy	High accuracy	Higher accuracy	Maximum accuracy
First year of membership included	✓	✓	✓
New Reports + Existing Report Updates	✓	✓	✓
Essential Ancestry Reports	✓	✓	✓
Advanced Ancestry Reports		✓	✓
New Reports Per Month	Up to 3	Up to 5	Up to 10
Total Personalized Health Reports Provided	175+ and counting	250+ and counting	Up to 350+ and counting

DNA Upload, Expansion and Analysis

- Consumers effortlessly upload their DNA data from other DNA Ancestry tests to unlock our proprietary reports and advanced features.
 - Low cost offering for consumers, makes it a highly attractive offer.
 - Significant gross profit margins presents enormous profit opportunity.
- Expands your DNA data: user’s file is boosted with 50x more data after upload, to provide them with significantly more in-depth health and wellness reports compared to typical DNA ancestry tests.
- No need to be tested again. Millions of consumers can easily upload their DNA Ancestry test data from their previous testing. No additional lab sequencing is required. Therefore, DNA Expand can offer low prices while still achieving highly attractive margins.

		Most Other DNA Data Upload Services
DNA data expansion. Expands raw DNA data more than 50 times to over 35 million genetic variants.	✓	✗ No DNA data expansion.
Superior trait reports. More comprehensive trait reports enabled by DNA data expansion.	✓	✗ Limited trait reports.
New Dynamic Reports. Receive frequent new reports that are based on the latest scientific discoveries.	✓	✗ Reports are updated very rarely.
Privacy First DNA Testing. Technology that enables users to have full ownership and control over their genomic data.	✓	✗ Sell customer genomic data.
Diverse, Extensive Database. Built over the last 6 years from whole genome sequencing tests spanning more than 130 countries, and equivalent to roughly 150 million ancestry SNP-based tests.	✓	✗ Not nearly as extensive.

MEET GEORGE CHURCH, FOUNDER OF NEBULA GENOMICS AND SCIENTIFIC ADVISOR

Mission: To usher in the era of personal genomics by providing access to affordable and secure Whole Genome Sequencing.

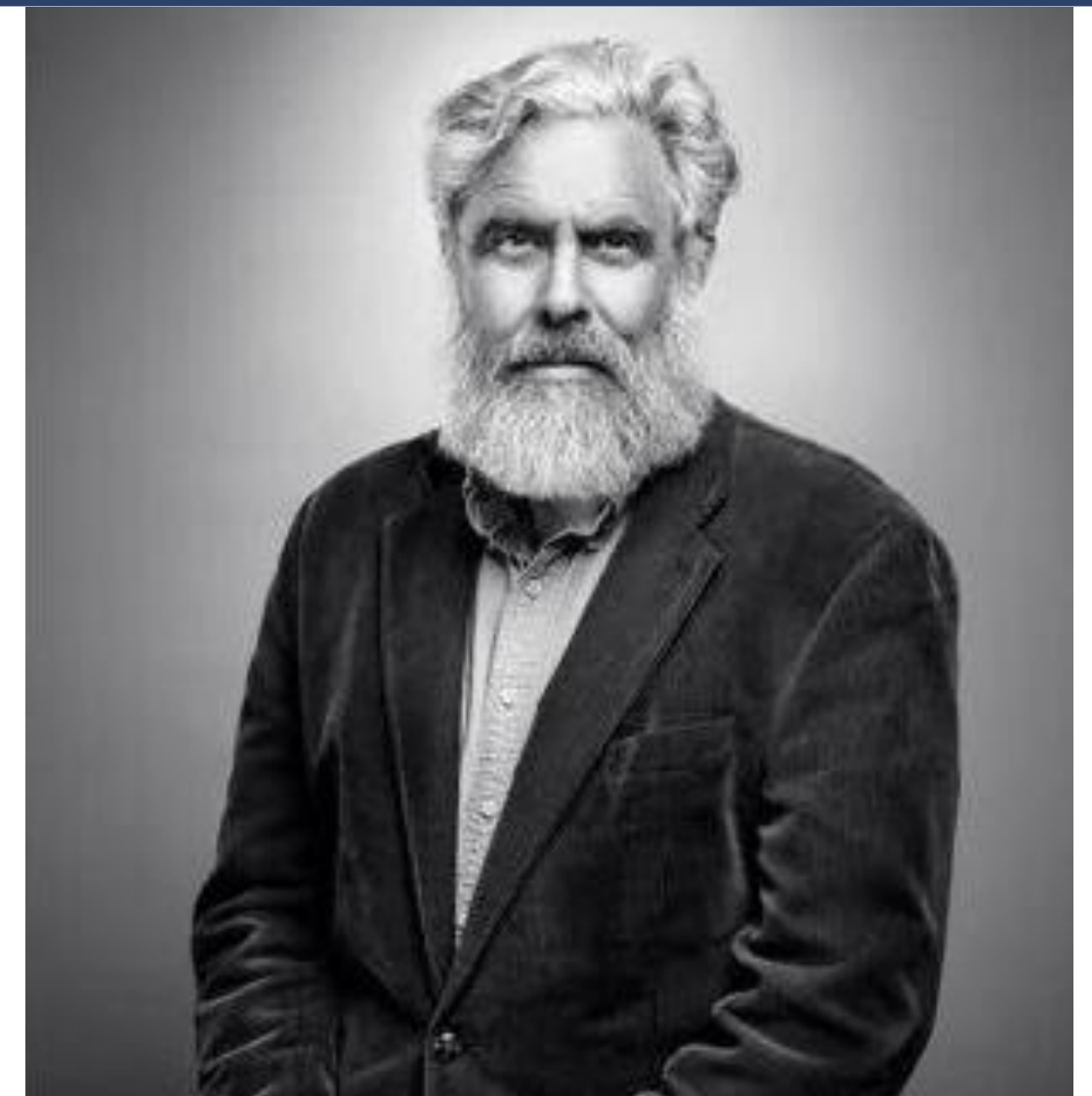
Nebula Genomics turns these breakthrough technologies into B2C and B2B products available around the globe.

Prof. George Church, co-founder of Nebula Genomics; Professor of Genetics at Harvard Medical School and Professor of Health Sciences and Technology at Harvard University and the Massachusetts Institute of Technology (MIT).

Contributed to the development of multiple DNA sequencing methods. In particular, molecular multiplexing approaches that enabled next-generation DNA sequencing as well as long-read nanopore sequencing.

Initiated the Personal Genome Project whose pioneering work contributed to the development of DNA sequencing and genome engineering technologies for which he received multiple awards including the 2011 Bower Award and Prize for Achievement in Science from the Franklin Institute and election to the National Academy of Sciences and Engineering.

Co-authored over 550 publications; more than 150 patents; authored the book, “Regenesis: How Synthetic Biology Will Reinvent Nature and Ourselves”; started over 20 companies.



"Genome sequencing is like the internet back in the late 1980s."

George M. Church
Professor - Harvard and MIT
Co-founder - Nebula Genomics



PROPHASE SUPPLEMENTS

A line of dietary supplements dedicated to providing clinically tested products that we develop and market. Initiating an aggressive online marketing launch in the coming months. Will leverage the comprehensive marketing campaign developed by DNA Complete, to include top influencers, etc.



LEGENDZ XL®
Male sexual health support.
Event based; clinically proven to promote healthy blood flow in < 60min with first use.



TRIPLE EDGE XL®
Daily energy and stamina support
Daily support; clinically proven to improve physical and mental energy while supporting healthy testosterone levels.

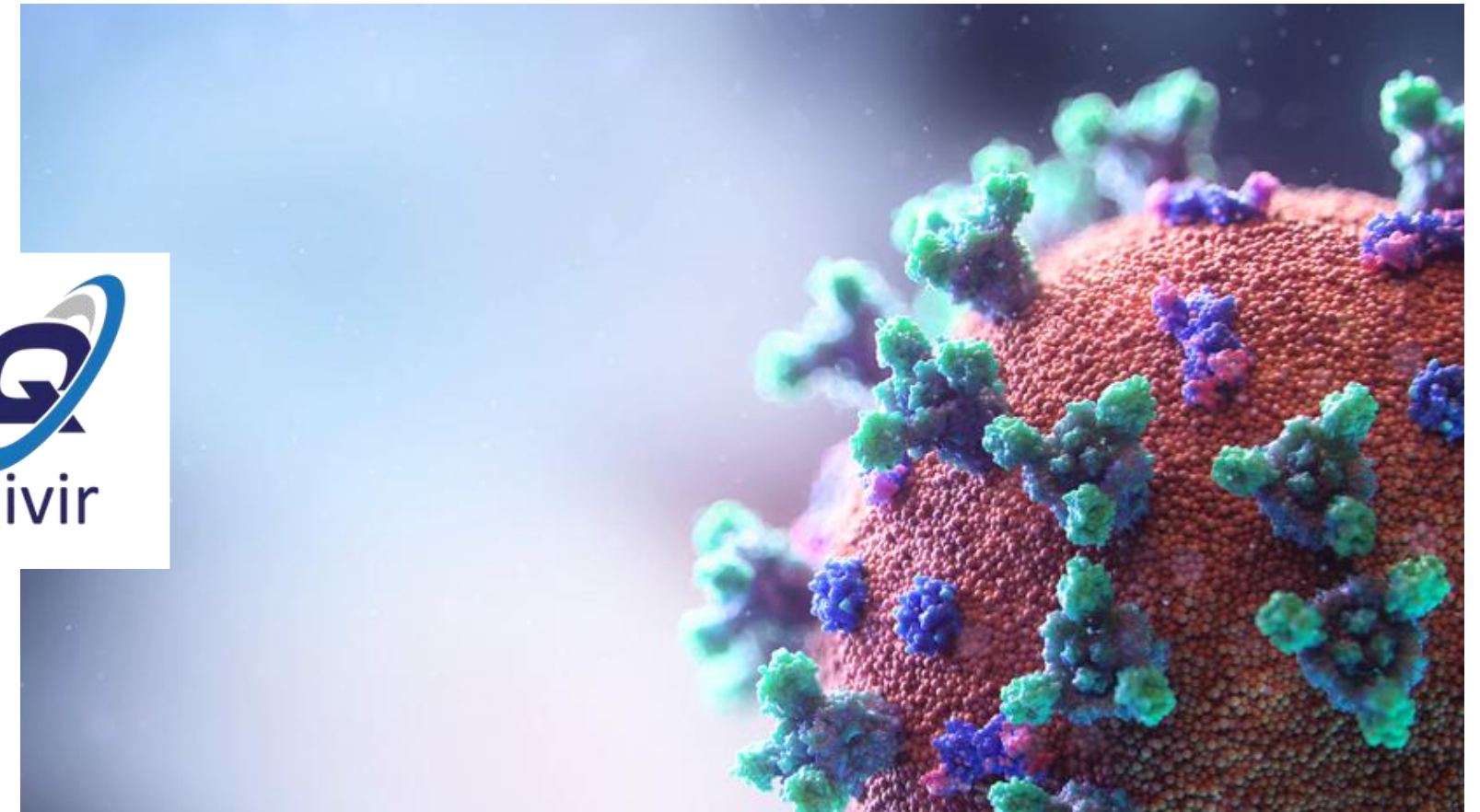
EQUIVIR

Major clinical study: final results imminent, commercialization planned for shortly thereafter.

Equivir: compounds that have demonstrated potential activity against certain viruses associated with serious viral outbreaks. Equivir portfolio is designed to support the body's ability to impede virulence while also blocking multiple methods used by viruses to infect and replicate in host cells.

Acquired exclusive, worldwide development and commercial rights to Equivir inventions discovered by Global Research and Discovery Group, which is scientific think tank and research organization that works with BARDA, DARPA, and the Potomac Institute.

Blend of: Polyphenols, Myricetin, Hesperidin, Piperine.



EQUIVIR CLINICAL TRIAL**

Equivir Clinical Trials with Vedic Lifesciences

Goal of launching as a dietary supplement Q1 2025.

Preliminary results*: Overall, in the initial 150 patient group, approx. 46 incidences of upper respiratory viral infections. 62.3% of the patients in the placebo group acquired a viral infection versus only 37.7% in the Equivir group.

Additional key statistics from the initial findings are:

- 38% of the placebo population acquired an upper respiratory viral infection vs 24% in the Equivir group.
- After 4 days of illness, only 3% of the Equivir group still had mild symptoms vs 55% in the placebo group.
- The average severity was 16% less severe when taking Equivir vs the placebo.
- No patients in the Equivir group became ill a second time while 2 patients in the placebo group had a second upper respiratory viral infection.

**Equivir is being developed with plans to market as an OTC dietary supplement. Therefore, the Company cannot make claims for the treatment or prevention of infections generally or with respect to any specific viruses and is not seeking the U.S. Food and Drug Administration's approval of Equivir as a drug. However, the Company plans to publish the results when both studies are completed.

*Preliminary results announced by ProPhase Labs on February 14, 2024: <https://www.globenewswire.com/en/news-release/2024/02/14/2829018/0/en/ProPhase-Labs-Announces-Preliminary-Positive-Results-for-Dietary-Supplement-Equivir.html.html>

EQUIVIR TIMELINE

Clinical study

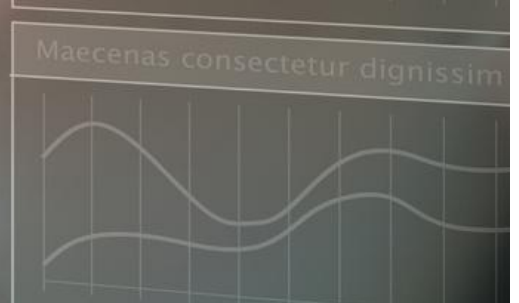
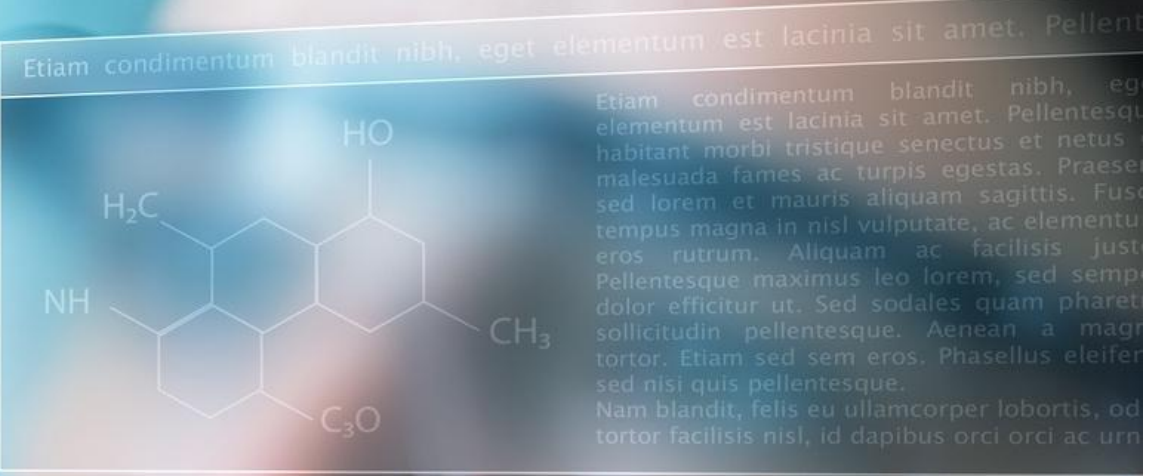
Completed. Positive preliminary results. Final report anticipated Q1 2025.

E-commerce

- Online launch anticipated Q1 2025.
- Leverages comprehensive marketing campaign to include influencers, etc.

Retail

- Positioning for placement in the cough cold section of retail stores.
- Expecting retailers to conduct category reviews Q1 2025.
- Goal to start shipping to retailers in mid-2025.



BE-Smart™ ESOPHAGEAL CANCER DIAGNOSTIC IN DEVELOPMENT

ESOPHAGEAL ADENOCARCINOMA (EAC) – ONE OF THE DEADLIEST CANCERS

- 16,000+ Estimated Deaths in 2023 in the U.S.¹
- 78.3% - 5-Year Mortality Rate (2013-2019)¹
- 21,000+ Estimated New Cases in 2023¹
- The change in the annual incidence of EAC was 766.67% higher in 2017 compared to 1973²
- Journal of American Medical Association once again reported that GI cancers for the 2nd straight decade are the fastest growing cancer type in America³

Gastroesophageal Reflux Disease (GERD) occurs when stomach acid repeatedly flows back into the esophagus. Backwash (acid reflux) can irritate the lining of esophagus. Many experience acid reflux from time to time; for some, GERD may trigger a change in the cells lining the lower esophagus causing **Barrett's Esophagus**.

Barrett's Esophagus - Esophagus becomes damaged by acid reflux; causes the lining to thicken and become red. Associated with increased risk of developing **Esophageal Adenocarcinoma**.

Discovering pre-cancerous tissue in early and treatable stages may increase disease survival and decrease cost of care. As high as 40% of esophageal carcinoma is missed or found late leading to more unfavorable diagnosis.



OPPORTUNITY TO PREVENT ESOPHAGEAL CANCER WITH EARLY AND ACCURATE DIAGNOSIS

Prevalence of GERD in the U.S. of 20% ¹ (Census 337 million ²)	~ 67 million
Prevalence of Barrett's Esophagus in the U.S. is 5.6% of the population ³ (Census 337 million ²)	~ 18 million
New Cases of Esophageal Adenocarcinoma in U.S. per year ⁴	~ 20K
Endoscopy (upper) related to GERD and Barrett's Esophagus average ⁵	~ 7 million

1- <https://www.ncbi.nlm.nih.gov/books/NBK441938/>
2- <https://www.census.gov/popclock/>
3- <https://www.aafp.org/pubs/afp/issues/2022/1000/barrett-esophagus.html#:~:text=Barrett%20esophagus%20is%20estimated%20to,Barrett%20esophagus%20or%20esophageal%20adenocarcinoma>
4- [https://pmc.ncbi.nlm.nih.gov/articles/PMC10007944/#:~:text=Carcinoma%20of%20esophagus%20is%20the,for%2016%2C410%20deaths%20\(2](https://pmc.ncbi.nlm.nih.gov/articles/PMC10007944/#:~:text=Carcinoma%20of%20esophagus%20is%20the,for%2016%2C410%20deaths%20(2)
5- <https://linkinghub.elsevier.com/retrieve/pii/S0016508521036556>

Target Market Endoscopies:	~7mm
Estimated average cost per test:	\$1k - \$2k
Total Potential Addressable Market:	~\$7b - \$14b

ADVANTAGES OF THE BE-Smart™ ESOPHAGEAL CANCER DIAGNOSTIC COMPARED TO LIQUID BIOPSIES

- ✓ BE-Smart is designed to take EXISTING biopsy blocks from routine endoscopies, which is the standard of care for diagnosis of GERD, Barrett's Esophagus and esophageal adenocarcinoma. No additional samples are needed from patients after the endoscopy. With liquid biopsies, the patient would have to return to the physician's office to draw the blood.
- ✓ BE-Smart is highly sensitive and specific in distinguishing early-stage esophageal adenocarcinoma in studies to date. On the other hand, liquid biopsies require the cancer to spread to neighboring tissue and blood vessels in order to produce detectable markers in the blood.
- ✓ Our BE-Smart test examines the suspicious tissue DIRECTLY, not a bi-product somewhere in the blood. In liquid biopsies, there are factors that can create many false positives and false negatives as the tested markers are at very low concentrations. These factors can be other pathological and non-pathological conditions, including exercise, trauma, and surgery.¹
- ✓ We are testing the affected tissue directly on a clinically proven instrument (mass spectrometer), which is highly sensitive.
- ✓ By directly analyzing the affected tissue, the BE-Smart test is designed to detect early stages of cancer before markers have entered the blood.
- ✓ While we are still studying the test's safety and effectiveness, we believe that the BE-Smart test may have the ability to determine early carcinogenesis. FDA Approved liquid biopsy tests on the market are used to monitor a disease or to determine treatment path of a disease. They are still required to be used in combination with standard tests such as endoscopies.

Conclusion: The utility of BE-Smart is potentially quite significant. The BE-Smart test is designed to determine early carcinogenesis of biopsies in which a pathologist might be on the fence and/or mistakenly classify as non-cancerous. This can literally mean the difference between life and death for the patient. An accurate and early diagnosis can lead to more effective and earlier treatments which can lead to significantly better outcomes for the patient.

1. Braig D., Becherer C., Bickert C., Braig M., Claus R., Eisenhardt A.E., Heinz J., Scholber J., Herget G.W., Bronsert P., et al. Genotyping of circulating cell-free DNA enables noninvasive tumor detection in myxoid liposarcomas. Int. J. Cancer. 2019;145:1148–1161. doi: 10.1002/ijc.32216.

BE-Smart™ - ESOPHAGEAL CANCER DIAGNOSTIC

ProPhase is collaborating with Forward Healthcare

Consultants (FHC) to bring its BE-Smart esophageal cancer test to market. FHC will assist with securing market access by focusing on coverage, pricing and coding. Additionally, FHC will bring its vast relationships with physician networks to drive commercialization success.* In parallel, in collaboration with FHC, Company has begun exploring potential partnerships with multi-billion-dollar cancer diagnostic testing companies.

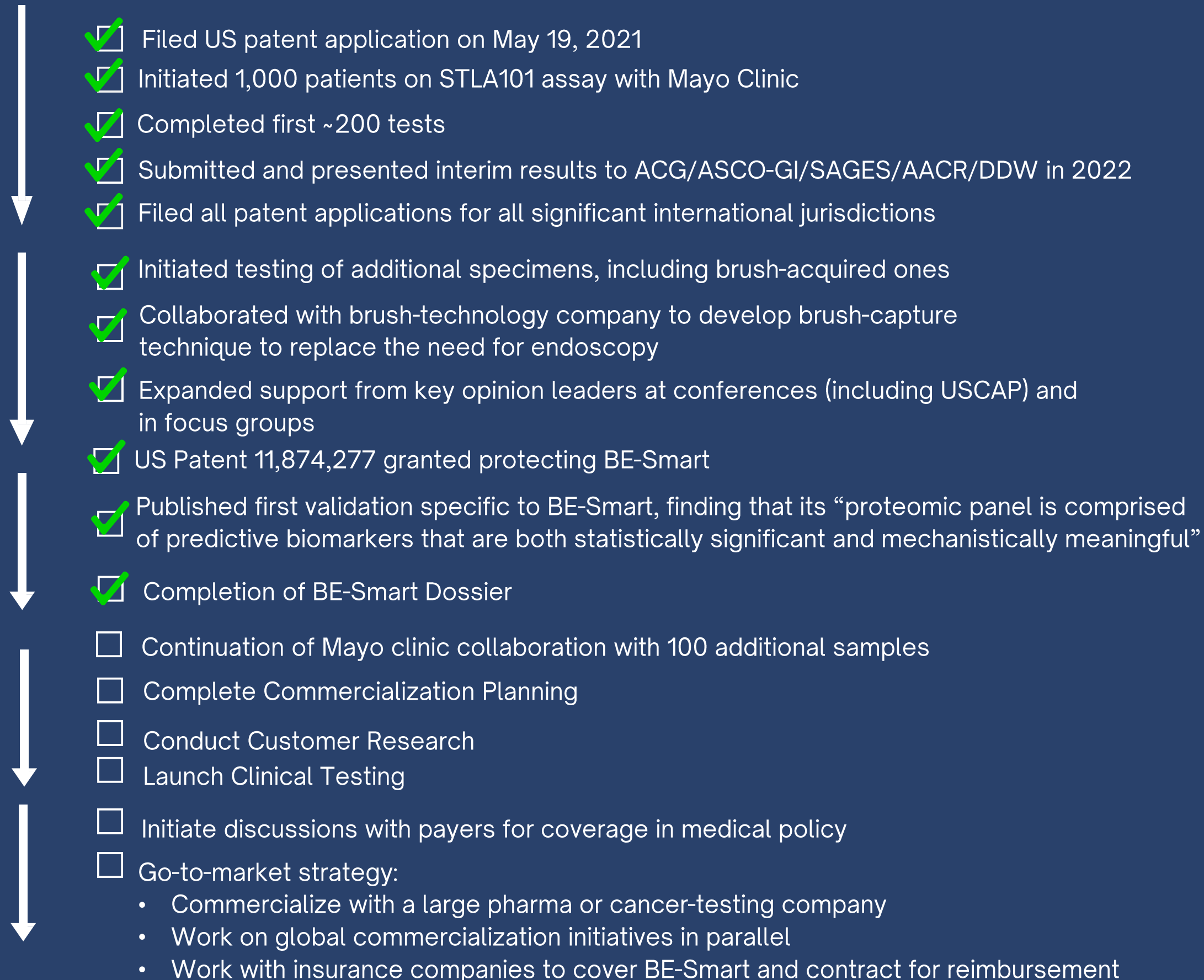
FHC is a world-renowned consulting company that has provided its support to a litany of pharmaceutical companies and helped them grow from small start-ups with development stage products to multi-billion-dollar enterprises with industry leading diagnostic applications.

Continued refining the BE-Smart test algorithm with new data analysis, enhancing its accuracy in predicting Barrett's Esophagus risk.

Receiving an additional set of samples from Mayo Clinic to run a larger data set and learn not just the core proteins associated with EAC but also other potential targets for future use in therapeutic applications. Collaborating with Mayo Clinic and other experts to further validate the test through additional studies and peer-reviewed publications.

BE-Smart™ - ESOPHAGEAL CANCER DIAGNOSTIC

NEAR TERM PATH TO COMMERCIALIZATION



COMPETENT AND PROVEN EXECUTIVE MANAGEMENT TEAM



Ted Karkus

Chairman & CEO
ProPhase Labs, Inc.

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 biotech, genomics and diagnostics company with a commitment of 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.



Stu Hollenshead

COO
ProPhase Labs, Inc.

Stu Hollenshead is a seasoned C-level executive with 15+ years of experience in media, e-commerce, marketing, and technology. He has led growth, monetization, and audience engagement for top digital brands.

At TheStreet, he scaled DTC subscriptions to \$30M and pioneered AI-driven content automation. At Business Insider, he drove audience growth, contributing to its \$442M acquisition by Axel Springer. At WWE, he helped WWE Network reach nearly 2M subscribers.

As COO & CBO of Barstool Sports, he led record-breaking expansion, culminating in its \$551M acquisition by Penn Entertainment. Now simultaneously CEO of 10PM Curfew, a female-centric platform with an audience of 70M+, Stu continues to build and scale high-growth businesses each and every day.



Jason Karkus

President
Nebula Genomics &
DNA Complete

Jason was instrumental in the strong revenue growth at ProPhase Diagnostics, leading 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. Jason developed and now oversees DNA Complete and DNA Expand.

Jason is a graduate of the University of Maryland.



Sergio Miralles

EVP/CIO
ProPhase Labs, 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.



Lance Bisesar

Corporate Controller
ProPhase Labs, Inc.

Lance is an accomplished finance leader experienced in all areas of finance and accounting. Lance has over 17 years of experience in working with large brands, both public and private, of varying industries and sizes.

Prior to ProPhase Labs, Lance served in finance leadership roles at multiple large brand companies including Colgate-Palmolive, Casper Sleep, Newmark and Forest Laboratories, where he was responsible for all accounting matters including financial reporting, general accounting, and related internal controls functions. He began his career with five years in public accounting with Marcum LLP. Lance earned a BBA in accounting from Hofstra University. He is a certified public accountant and is a member of the American Institute of Certified Public Accountants.

INVESTMENT HIGHLIGHTS

Pharmaloz Manufacturing: sale of PMI completed. Announced closing of \$23.6 million sale of Pharmaloz Manufacturing to Houston-based private equity firm on January 22, 2025.

Recently hired Stu Hollenshead as COO. His track record at Barstool Sports, Business Insider and WWE is extraordinary. In collaboration with Jason Karkus, President of Nebula Genomics, has built a world class DTC multi-media infrastructure built to sell healthcare OTC dietary supplements and genomics testing directly to consumers. New opportunities to leverage this infrastructure with telehealth companies offering DTC prescription drugs.

DNA Complete/Nebula Genomics is Well Positioned to Capitalize on the Future Growth of Genomics and Personalized Medicine.

- Proprietary state-of-the-art bioinformatics reporting platform
- Growing genomic database
- Direct-to-consumer opportunities

Equivir (OTC): Clinically studied dietary supplement with significant potential, leveraging existing infrastructure. Goal to commercialize Q1 2025.

BE-Smart Esophageal Cancer Test: Multi billion-dollar target market and hired FHC, world class consulting firm. In collaboration with FHC, goal to attain a potential strategic partnership with one of numerous, large cancer diagnostic companies in 2025 as well as commercialize either as a laboratory developed test (LDT) or in compliance with the applicable FDA requirements.

Competent and Proven Executive Management Team for more than a decade.



ProPhaseLabs.com

TED KARKUS
Chairman & CEO

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Garden City, NY 11530

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Thank You

