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PRELIMINARY PROSPECTUS SUPPLEMENT

SUBJECT TO COMPLETION

DATED NOVEMBER 7, 2024

(To the Prospectus Dated November 12, 2021)

**Shares of Common Stock
Pre-Funded Warrants to Purchase Common Stock
Shares of Common Stock Underlying the Pre-Funded Warrants**



ProPhase Labs, Inc.

This is a firm commitment public offering of _____ shares of common stock of ProPhase Labs, Inc., par value \$0.0005 per share, pursuant to this prospectus supplement and the accompanying prospectus.

We are also offering pre-funded warrants (each a “Pre-funded Warrant”) to purchase _____ shares of our common stock, exercisable at an exercise price of \$0.001 per share, to those purchasers whose purchase of common stock in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering. The purchase price of each Pre-funded Warrant is equal to the price per share of common stock being sold to the public in this offering, minus \$0.001. The Pre-funded Warrants will be immediately exercisable and may be exercised at any time until all of the Pre-funded Warrants are exercised in full. For each Pre-funded Warrant we sell in this offering, the number of shares of common stock we are offering will be decreased by the number of shares of common stock for which such Pre-funded Warrants are exercisable, on a one-for-one basis.

Our common stock is traded on The Nasdaq Capital Market under the symbol “PRPH”. On November _____, 2024, the last reported sale price of our common stock on the Nasdaq Capital Market was \$ _____ per share. There is no established trading market for the Pre-funded Warrants and we do not intend to list the Pre-funded Warrants on any securities exchange or nationally recognized trading system.

Investing in our securities involves a high degree of risk. Please read “Risk Factors” beginning on page S-6 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this prospectus supplement or the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Per Pre-Funded Warrant	Total
Public offering price	\$	\$	\$
Underwriting discount (1)	\$	\$	\$
Proceeds, before expenses, to us (2)	\$	\$	\$

- (1) Underwriting discounts exclude a non-accountable expense allowance equal to 1.0% of the public offering price payable to the Representative.
- (2) We have also agreed to reimburse the underwriter for certain expenses incurred by it. See “Underwriting” for a description of the compensation payable by us to the underwriter.

Upon closing of this offering, we have agreed to issue to the representative of the underwriters (the “Representative”), or its designees, as partial compensation, warrants to purchase up to 5% of the aggregate number of shares of common stock (and/or Pre-funded Warrants in lieu thereof) sold in this offering (the “Representative’s Warrants”). This prospectus supplement also relates to the offer and sale of the Representative’s Warrants and the offering of the shares of common stock issuable upon exercise of the Representative’s Warrants.

We have granted the underwriter a 45-day option to purchase additional shares of common stock (and/or _____ Pre-funded Warrants in lieu thereof) in an amount up to 15% of the shares of common stock and/or Pre-funded Warrants sold to the public in this offering to cover over-allotments, if any.

The underwriters expect to deliver the securities offered and sold in this offering to purchasers on or about _____, 2024.

ThinkEquity

The date of this prospectus supplement is _____, 2024

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PROSPECTUS

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You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled “Information Incorporated by Reference” and “Where You Can Find More Information.”

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”), using a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference herein and therein.

Unless the context otherwise requires, all references to the terms “we,” “us,” “our,” and the “company” throughout this prospectus supplement mean ProPhase Labs, Inc. and its subsidiaries.

All references in this prospectus supplement to our financial statements include, unless the context indicates otherwise, the related notes.

The information contained in this prospectus supplement or the accompanying prospectus is accurate only as of the date of this prospectus supplement or the accompanying prospectus, as applicable, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus or of any sale of the securities. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

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PROSPECTUS SUPPLEMENT SUMMARY

The following summary of our business highlights some of the information contained elsewhere in or incorporated by reference into this prospectus supplement. Because this is only a summary, however, it does not contain all of the information that may be important to you. You should carefully read this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference, which are described under “Information Incorporated by Reference” and “Where You Can Find More Information” in this prospectus supplement. You should also carefully consider the matters discussed in the section entitled “Risk Factors” in this prospectus supplement, in the accompanying prospectus and in other periodic reports incorporated herein by reference.

Overview

We are a growth oriented and diversified next generation biotech, genomics and diagnostics company that develops and commercializes novel drugs, dietary supplements, and compounds, and contract manufacturing.

Our wholly-owned subsidiary, Pharmed Manufacturing, Inc. (“PMI”), is a full-service contract manufacturer and private label developer of a broad range of non-GMO,

organic and natural-based cough drops and lozenges and over-the-counter (“OTC”) drug and dietary supplement products.

We offer whole genome sequencing and related services through our wholly-owned subsidiary, DNA Complete, Inc. (“DNA Complete”). DNA Complete sequences specimens at Nebula Genomics, Inc. (“Nebula”), a wholly-owned subsidiary of ours, as well as at other laboratories.

Our wholly owned subsidiary, ProPhase BioPharma, Inc. (“PPIO”) is focused on the licensing, development and commercialization of novel drugs, dietary supplements, and compounds. We also develop and market dietary supplements under the TK Supplements® brand.

Previously we offered a broad array of COVID-19 related clinical diagnostic and testing services including polymerase chain reaction (“PCR”) testing for COVID-19 and Influenza A and B as well as rapid antigen testing for COVID-19 through our wholly-owned subsidiary, ProPhase Diagnostics, Inc. (“ProPhase Diagnostics”). ProPhase Diagnostics’ two CLIA- (Clinical Laboratory Improvement Amendments) certified laboratories are located in Old Bridge, New Jersey and Garden City, New York, respectively.

Pharmaloz Contract Manufacturing

PMI is a full-service contract manufacturer and private label developer of a broad range of non-GMO, organic and natural-based cough drops and lozenges and OTC drug and dietary supplement products. PMI provides product development, pre-commercialization services, production, warehousing and distribution services for its customers. Our manufacturing facility, which is located in Lebanon, Pennsylvania, is registered with the United States Food and Drug Administration (“FDA”) and is certified organic and kosher.

As part of the sale of our former Cold-EEZE® business in March 2017, PMI entered into a manufacturing agreement with Mylan Consumer Healthcare Inc. and Mylan Inc. (collectively, “Mylan”) to supply various Cold-EEZE® lozenge products to Mylan following the sale for a period of five years with annual renewal options. Pursuant to the terms of the manufacturing agreement, PMI agreed to manufacture certain products for Mylan, as described in the manufacturing agreement, at prices that reflect current market conditions for such products and include an agreed upon mark-up on our costs. On May 1, 2021, the manufacturing agreement was assigned by Mylan to Meda Consumer Healthcare, Inc. (“Meda”) in connection with Meda’s acquisitions of certain assets from Mylan, including the Cold-EEZE® brand and product line. Meda is currently within Vespvr Brands and the manufacturing agreement is expected to be renewed by the end of the year 2024.

In February 2023, we acquired new equipment and doubled the capacity for pouch packaging, to meet the growing demand for our products and services. PMI also acquired new automation equipment that is expected to double its capacity in the second half of 2024. PMI is also planning for expansion of its lozenge manufacturing business and is projected to add a second line that should be operational by the beginning of the second quarter of 2025. PMI added multiple new customers throughout 2024, including the signing of two top-tier lozenge brands, which we expect to add approximately \$5 million in annualized revenues. PMI continues to negotiate with additional customers in both cough and cold and functional, non-seasonal lozenge products. The goal remains to balance production with seasonal cough and cold lozenges and more functional products that are not seasonal in nature.

In the third quarter of 2024, the Company engaged ThinkEquity LLC as an advisor to pursue strategic alternatives for PMI, including the potential sale of PMI.

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BE-Smart Esophageal Pre-Cancer Diagnostics Screening Test

We own the worldwide exclusive rights to the BE-Smart Esophageal Pre-Cancer diagnostics screening test and related intellectual property assets. The BE-Smart test is aimed at early detection of esophageal cancer. It remains under development but has already been tested by an independent test lab, mProbe, Inc. (“mProbe”), on over 200 human samples. Although further clinical tests are required, the available initial data demonstrates promising potential for early detection of esophageal cancer risk. mProbe, Inc., a precision health and medicine company utilizing clinical proteomics in the oncology space in conjunction with Dr. Christopher Hartley of the prestigious Mayo Clinic, has been utilizing a small sample of tissue collected during endoscopies to help us confirm and optimize the BE-Smart Test. The initial data appears to demonstrate accuracy and reproducibility as well as identification of potential biomarkers for therapeutic drug discovery to treat esophageal cancer. We are continuing to study and develop the BE-Smart test.

In March 2023, we announced a collaboration with mProbe and Dr. Christopher Hartley of Mayo Clinic for the continued development of our BE-Smart Esophageal Pre-Cancer diagnostic screening test. Currently, we plan to commercialize the BE-Smart test as a Laboratory Developed Test (“LDT”). However, on April 29, 2024, FDA released a final rule that classified LDTs as in vitro diagnostics that are regulated by FDA as medical devices under the federal Food, Drug, and Cosmetic Act. Under this approach, FDA proposed to phase out its general enforcement discretion approach for LDTs under a four-year period subject to certain continuing enforcement discretion policies. The final rule was published on May 6, 2024, and in the absence of a successful legal challenge, will become effective after a year, after which medical device regulatory requirements such as medical device reporting, registration and listing, quality system regulation requirements, and premarket authorization requirements, among others, will become applicable eventually. We plan to comply with such requirements, including that of premarket authorization, in partnership with Forward Healthcare Consultants (“FHC”), as described below, if the final rule is not modified or rescinded.

In August 2024, we announced a collaboration with FHC to assist in the approval and commercialization of BE-Smart. The experts at FHC will assist with securing market access by focusing on clinical validation and commercialization planning, to include coverage, pricing, and coding. Additionally, FHC will bring its vast relationships with physician networks to drive commercialization success. FHC has already completed the first two phases of its plan for advancing towards commercialization. This plan includes publishing a peer reviewed paper as well as a comprehensive dossier on the BE-Smart test. In addition, we have initiated certain discussions in coordination with FHC with respect to a potential strategic partnership or sale for the BE-Smart test.

According to the National Institute of Health Chapter 24: Indications and Outcomes of Gastrointestinal Endoscopy, over 20 million endoscopies are performed every year in the United States; approximately seven million of these procedures are done on patients with higher risk for contracting Esophageal Adeno Carcinoma. Two million of these patients have Barrett’s Esophagus, which is a condition in which the flat pink lining of the swallowing tube that connects the mouth to the stomach (esophagus) becomes damaged by acid reflux, which causes the lining to thicken and become red. In patients with Barrett’s Esophagus, one in two hundred will develop esophageal adenocarcinoma. Esophageal cancer is highly lethal and deemed as the sixth cause of cancer death worldwide according to Cancer State Facts, with the overall five-year survival rate less than 20%. We estimate that the reimbursement rate for the test will range between \$1,000 to \$2,000 per test, giving it a total potential addressable market of \$7 billion to \$14 billion dollars per year.

The BE-Smart test is being developed to provide health care providers and patients with data to help determine treatment options, including whether patients not believed to be at risk for esophageal cancer should continue to be monitored or, alternatively, to provide patients who might otherwise have been undiagnosed early treatment before esophageal cells become cancerous. The goal of widespread adoption of the BE-Smart test would allow health care providers to initiate potentially lifesaving early treatment processes such as an ablation procedure to remove the precancerous cells. This diagnostic test, once fully validated, could also significantly reduce unnecessary endoscopies as well as offer peace of mind to patients who are suffering with Barrett’s syndrome who are at greater risk of esophageal cancer.

DNA Complete

DNA Complete focuses on genomics testing technologies, a comprehensive method for analyzing entire genomes, including the genes and chromosomes in deoxyribonucleic acid (“DNA”). The data obtained from genomic sequencing may help to identify inherited disorders and tendencies, predict disease risk, identify expected

drug response, and characterize genetic mutations, including those that drive cancer progression. We currently offer DNA Complete's whole genome sequencing products direct-to-consumers online with plans to sell in food, drug and mass ("FDM") retail stores and to provide testing for universities conducting genomic research. DNA Complete offers three tiers of DNA testing, Essential, Pro, and Elite, which differ in the amount of DNA analyzed (1x whole genome sequencing ("WGS"), 30x WGS, and 100x WGS, respectively), the level of accuracy, the number of reports per month that consumers would receive, and the total of personalized health reports included (more than 175 reports, more than 250 reports, and more than 350 reports, respectively). The DNA Complete tests include the first year of membership. The DNA Complete platform offers both ancestry and personalized health reports covering a number of health dispositions, such as longevity, mental health, cancer, and more. In addition, DNA Complete offers subscription services to ensure ongoing customer engagement by providing regular updates and new insights. DNA Complete sequences specimens at Nebula, a wholly owned subsidiary of ours, as well as at other laboratories.

DNA Complete also offers DNA Expand, a platform that allows consumers to upload their DNA data from previous DNA tests obtained from other service providers to discover 50x more data points derived from over 35 million genetic variants, and to obtain in-depth health and wellness reports that are based on the latest scientific discoveries. DNA Expand's database was created from WGS tests that were obtained from 130 countries and are equivalent to roughly 150 million ancestry single nucleotide polymorphisms based tests.

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ProPhase BioPharma

We formed PBIO in June 2022 to assist in the licensing, development and commercialization of novel drugs, dietary supplements and compounds. Licensed compounds under development currently include Equivir (a dietary supplement candidate) and Equivir G (prescription drug ("Rx") candidate), and two broad-based candidates. We also own the exclusive rights to the BE-Smart Esophageal Pre-Cancer Diagnostic Screening test, which is in development as described above, and related intellectual property ("IP") assets.

Equivir (dietary supplement candidate) and Equivir G (Rx candidate)

We have exclusive worldwide rights to develop and commercialize Equivir (a dietary supplement candidate) and Equivir G (a Rx drug candidate) pursuant to a license agreement with Global BioLife, Inc. ("Global BioLife"), a wholly-owned subsidiary of DSS, Inc.

Equivir is a blend of polyphenols, which are substances found in many nuts, vegetables and berries. The composition is projected to come in capsule form and be taken daily like a multivitamin. The composition is believed to support the human body's immune function, and improve the quality of lives for users. We plan to commercialize Equivir as a dietary supplement, leveraging our distribution in over 40,000 FDM retail stores and online direct to consumers.

In March 2023, we commenced patient enrollment in a randomized, placebo-controlled clinical trial of Equivir to evaluate its effect in supporting immune system functions. Vedic Lifesciences, a leading clinical research organization, was contracted to run the multi-arm trial. Vedic produced interim results in February of 2024 which showed enough data to continue the trial to completion.

TK Supplements

Our TK Supplements[®] product line is dedicated to supporting better health, energy and sexual vitality. Each of our herbal supplements is researched to determine the optimum blend of ingredients to ensure our customers receive premium quality products. To achieve this, we formulate with the highest quality ingredients derived from nature and ingredients enhanced by science. Our TK Supplements[®] product line includes Legendz XL[®], a sexual health formula product intended for men, and Triple Edge XL[®], an energy and stamina support product.

Legendz XL[®] has distribution in Rite Aid, Walgreens, CVS, Walmart and other retailers, and via ecommerce.

In 2022, we restaged Triple Edge XL from a 56 ct to a 20 ct at CVS, making the retail price more in line with competition. The result was a double digit increase in consumer sales and a 40% expansion increase in the number of stores carrying the item between the restaging of the product in September 2022 and January 2023. In January 2024, Triple Edge XL was reviewed by CVS and, based on its 2022 and 2023 sales, CVS has determined to maintain authorization for its fiscal year ending December 31, 2024. We also presented Triple Edge XL 20 ct at Walgreens and other major pharmacies and we are waiting on final decisions on whether those pharmacies will agree to carry Triple Edge XL 20 ct. In the event all of the pharmacies at which we presented Triple Edge XL 20 ct accept the same of such product, we believe that such acceptances will increase demand for product inventory by over 100% in the 12-month period following all of the acceptances.

We also expect to launch our Equivir daily supplement that supports users' immune functions. We are currently awaiting the final results of the trials conducted in India and completed at the end of the second quarter of 2024.

ProPhase Diagnostics

Our wholly-owned subsidiary, ProPhase Diagnostics, which was formed in October 2020, offered a broad array of COVID-19 related clinical diagnostic and testing services including PCR testing for COVID-19 and Influenza A and B as well as rapid antigen testing for COVID-19 at its two CLIA-certified laboratories, located in Old Bridge, New Jersey and Garden City, New York, respectively.

Recent Events

Term Note Agreement

On October 22, 2024, we entered into a term note agreement with an individual investor for cash proceeds of \$500,000 (the "Term Note"). The Term Note has an implicit interest rate of 15%. The Term Note has a term of 12 months and requires us to make interest only monthly payments in the amount of \$6,250 with a \$506,250 balloon payment at end of term. There are no warrants or convertible features associated with this note.

Change of the Company's Independent Registered Public Accounting Firm

On September 30, 2024, Morison Cogen LLP ("Morison"), our independent registered public accounting firm, decided to exit the PCAOB audit business. Based on this decision, the firm circulated a letter to the audit committee (the "Audit Committee") of our board of directors notifying them of such. The firm has therefore resigned as our independent registered public accounting firm, effective as of September 30, 2024.

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On October 18, 2024, we engaged Fruci & Associates II, PLLC (the “New Accountant”) as our new independent registered public accounting firm for the fiscal year ending December 31, 2024.

Resignation of a Director

On September 20, 2024, Eleanor McBrier notified our board of directors of her intention to resign as director of the Company, effective immediately. Ms. McBrier’s resignation was not the result of any dispute or disagreement with us or the board of directors on any matter relating to the Company but because of a conflict with the policies of her existing employer. We expressed our gratitude to Ms. McBrier for her service and contributions during her time on the board of directors. In connection with Ms. McBrier’s resignation, we have initiated a search for her replacement, with a focus on director candidates in the gastroenterology field and related sciences to assist us in the development of our BE-Smart esophageal cancer test.

Failure to Satisfy the Nasdaq Listing Rule

On September 23, 2024, we notified the Nasdaq Stock Market LLC (“Nasdaq”) that we were not in compliance with the audit committee requirement under Nasdaq Listing Rule 5605(c)(2)(A) solely due to a vacancy on the Audit Committee of our board of directors resulting from Eleanor McBrier’s resignation from the board of directors.

On September 26, 2024, we received a notice from Nasdaq indicating that we no longer comply with the audit committee requirements as set forth in Nasdaq Listing Rule 5605 and confirming our opportunity to regain compliance within the cure period provided in Nasdaq Listing Rule 5605(c)(4), which is the earlier of our next annual meeting of stockholders or September 20, 2025, or if the next annual stockholders’ meeting is held before March 19, 2025, then we must evidence compliance no later than March 19, 2025. We are evaluating the membership of the Audit Committee and intends to regain compliance with Nasdaq Listing Rule 5605(c)(2)(A) prior to the expiration of the applicable cure period described above.

2024 Promissory Note

On August 15, 2024, we issued an Amended and Restated Unsecured Promissory Note and Guaranty (the “Note”) for an aggregate principal amount of \$10.0 million to JXVII Trust (“JXVII”), that supersedes, terminates, restates, replaces, and amends the Unsecured Promissory Note And Guaranty, dated as of January 26, 2023, for an aggregate principal amount of \$7.6 million issued to JXVII. The Note is due and payable on August 15, 2027, the third anniversary of August 15, 2024, the date on which the Note was funded (the “Note Closing Date”), and accrues interest at a rate of 15% per year from the Note Closing Date, payable on a quarterly basis, until the Note is repaid in full. We have the right to prepay the Note at any time after the Note Closing Date and prior to the maturity date without premium or penalty upon providing seven days’ written notice to JXVII.

The Note contains customary events of default. If a default occurs and is not cured within the applicable cure period or is not waived, any outstanding obligations under the Note may be accelerated. The Note requires us to use proceeds from any divestment of assets (other than in the ordinary course) for general working capital purposes and prohibits us from distributing or reinvesting such proceeds without the prior approval of JXVII, subject to certain exceptions.

We intend to use the proceeds from the Note for working capital and general corporate purposes, which may include capital expenditures, product development and commercialization expenditures, and acquisitions of companies, businesses, technologies and products within and outside the consumer products industry.

2024 Third Future Receipts Financing

On August 1, 2024, we entered into an agreement of sale of future receipts (“Third Future Receipts Financing Agreement”) with RDM Capital Funding (“RDM”) by which RDM purchased from us our future accounts and contract rights arising from the sale of goods or rendition of services to our customers. The purchase price was \$500,000, which was paid to us on August 2, 2024, net of \$17,500 origination fee. We also incurred \$17,500 brokerage fee. The Third Future Receipts Financing Agreement requires 32 weekly payments of \$21,094 for a total repayment of \$675,000 over the term of the agreement.

2024 Second Future Receipts Financing

On June 27, 2024, we entered into an agreement of sale of future receipts (“Second Future Receipts Financing Agreement”) with Slate Advance (“Slate”) by which Slate purchased from us our future accounts and contract rights arising from the sale of goods or rendition of services to our customers. The purchase price was approximate \$1.5 million, which was paid to us on June 28, 2024, net of \$42,000 origination fee. We also incurred \$22,000 brokerage fee which was paid subsequently in July 2024. The Second Future Receipts Financing Agreement required 32 weekly payments of \$60,718 for a total repayment of approximately \$1.9 million over the term of the agreement.

During the three and six months ended June 30, 2024, the Company recognized \$9,000 interest expense from the amortization of debt discount using the effective interest rate method, respectively. As of June 30, 2024, the outstanding balance under the Second Future Receipts Financing Agreement was \$1.4 million, net of debt discount of \$548,000.

On November 5, 2024, we entered into an agreement with Slate (the “Amended Second Future Receipts Financing Agreement”) pursuant to which the original Second Future Receipts Financing Agreement was amended by increasing the receivables purchased amount to approximately \$2.1 million and the purchase price to approximately \$1.6 million, less the origination fees of \$35,000 and the outstanding balance of approximately \$1.0 million under the agreement, resulting in net proceeds to us of \$527,000. The Amended Second Future Receipts Financing Agreement shall be repaid by us in 24 weekly installments of \$89,000.

2024 Agreement of the Sale of Future Receipts

On February 14, 2024, we entered into an agreement of the sale of future receipts (“Future Receipts Financing Agreement”) with Libertas Funding, LLC pursuant to which we sold, in exchange for a purchase price of approximately \$2.5 million, all of our rights in 20% of our future receipts of approximately \$4.45 million until approximately \$2.96 million, plus fees, is delivered to Libertas Funding, LLC. As of June 30, 2024, the outstanding balance under the Future Receipts Financing Agreement was \$1.9 million, net of debt discount of \$210,000.

2023 Secured Mortgage Loan

On December 20, 2023, our wholly-owned subsidiary Pharnaloz Real Estate Holdings, Inc. (“RE Holdings”) entered into a loan agreement (the “Argentic Loan Agreement”) with Argentic Real Estate Finance 2 LLC. The Argentic Loan Agreement provides for a loan of approximately \$3.3 million (the “Mortgage Loan”) with a stated maturity date on January 6, 2034, bears a fixed interest rate of 8.25% per annum and requires monthly mortgage payments of principal and interest of approximately \$25,000. The obligations under the Argentic Loan Agreement are secured by the real property of RE Holdings located in North Lebanon Township, Pennsylvania. RE Holdings incurred approximately \$341,000 issuance cost, which was recognized as a debt discount and will be amortized using the effective interest method over the term of the Mortgage Loan. RE Holdings retained approximately \$540,000 cash in an escrow account which was recognized as a restricted cash on our consolidated balance sheet as of December 31, 2023.

Corporate Information

We were initially organized in Nevada in July 1989. Effective June 18, 2015, we changed our state of incorporation from the State of Nevada to the State of Delaware. Our principal executive offices are located at 711 Stewart Ave, Suite 200, Garden City, NY 11530 and our telephone number is 215-345-0919.

The Offering

Common stock offered by us	shares of common stock, less the number of shares of common stock underlying any Pre-funded Warrants purchased in the offering.
Pre-funded Warrants offered by us	<p>We are also offering to those purchasers whose purchase of common stock in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, Pre-funded Warrants to purchase up to _____ shares of common stock. Each Pre-funded Warrant entitles the holder to purchase one share of common stock at an exercise price of \$0.001 per share. The purchase price of each Pre-funded Warrant is equal to the price per share of common stock being sold to the public in this offering minus \$0.001. The Pre-funded Warrants will be immediately exercisable and may be exercised at any time until exercised in full. For each Pre-funded Warrant we sell in this offering, the number of shares of common stock we are offering will be decreased by the number of shares of common stock for which such Pre-funded Warrants are exercisable, on a one-for-one basis.</p> <p>This prospectus supplement also relates to the offering of common stock issuable upon exercise of the Pre-funded Warrants.</p>
Public offering price	\$ _____ per share of common stock (\$ _____ per Pre-funded Warrant).
Over-allotment option	We have granted the underwriters a 45-day option to purchase up to an additional _____ shares of common stock and/or Pre-funded Warrants, representing 15% of the shares of common stock and/or Pre-funded Warrants sold in the offering, in each case, to cover over-allotments, if any.
Common stock outstanding immediately prior to this offering	19,078,529 shares.
Common stock outstanding after this offering	_____ shares, assuming the full exercise of any Pre-funded Warrants sold in this offering, and no exercise of the over-allotment option by the underwriters. (or _____ shares, assuming the full exercise of any Pre-funded Warrants sold in this offering and the full exercise of the underwriter's over-allotment option).
Use of proceeds:	We intend to use the proceeds from this offering for working capital and general corporate purposes, which may include capital expenditures, product development and commercialization expenditures, and acquisitions of companies, businesses, technologies and products within and outside the diagnostic services, genomics and consumer products industry. See "Use of Proceeds" on page S-9 of this prospectus supplement.
Risk factors:	This investment involves a high degree of risk. See the information contained in or incorporated by reference under "Risk Factors" beginning on page S-6 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement.
Nasdaq Capital Market Symbol:	Our common stock is listed on The Nasdaq Capital Market under the symbol "PRPH." There is no established trading market for the Pre-funded Warrants, and we do not expect a trading market to develop. We do not intend to list the Pre-funded Warrants on any securities exchange or nationally recognized trading system.

The number of shares of our common stock to be outstanding after this offering is based on 19,078,529 shares of common stock outstanding as of October 29, 2024 and excludes the following:

- 3,913,750 shares of common stock issuable upon the exercise of stock options outstanding under our equity compensation plans and inducement stock option awards, with a weighted-average exercise price of \$6.64 per share;
- 376,000 shares of common stock issuable upon the exercise of warrants with a weighted average exercise price of \$9.13 per share;
- 372,035 shares of common stock reserved for future issuance under our 2022 Equity Compensation Plan (the "2022 Plan"); and
- 300,000 shares of common stock reserved for future issuance under our 2022 Directors' Equity Compensation Plan (the "2022 Directors' Plan").

Except as otherwise indicated herein, all information in this prospectus supplement assumes:

- no exercise of the underwriter's over-allotment option;
- no exercise of the Representative's Warrants to be issued to the Representative of the underwriters in this offering; and
- no issuance of shares of common stock valued at \$2.0 million which are issuable to Stella Diagnostics Inc. ("Stella") and Stella DX, LLC ("Stella DX" and, together with Stella, the "Stella Sellers"), pursuant to the Asset Purchase Agreement, dated December 15, 2022, by and between us and the Stella Sellers (the "Stella Purchase Agreement"), upon the Commercialization Event (as defined in the Stella Purchase Agreement).

RISK FACTORS

An investment in our shares of common stock and Pre-funded Warrants involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risks discussed under the sections captioned "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as amended (the "Form 10-K"), any subsequently filed Quarterly Report on Form 10-Q and in other documents that we subsequently file with the SEC, all of which are incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, together with other information in this prospectus supplement, the accompanying prospectus, the information and documents incorporated by reference herein and therein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

Risks Relating to this Offering and Ownership of Our Common Stock and Pre-funded Warrants

As an investor, you may lose all of your investment.

Investing in our securities involves a high degree of risk. As an investor, you may never recoup all, or even part, of your investment and you may never realize any return on your investment. You must be prepared to lose all of your investment.

Management will have broad discretion as to the use of proceeds from this offering and may not use them effectively.

Our management will have broad discretion as to the application of the net proceeds from this offering and our stockholders will not have the opportunity as part of their investment decisions to assess whether the net proceeds are being used appropriately. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our failure to apply the net proceeds of this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, in our investment of these net proceeds. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

You will suffer immediate and substantial dilution in the net tangible book value per share of the common stock that you purchase in this offering.

Because the offering price per share of our common stock being offered in this offering may be higher than the book value per share of our common stock, you may suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. For a further description of the dilution that investors in this offering will experience, see “Dilution.”

Investors in this offering will also be subject to increased dilution upon the exercise of outstanding stock options and warrants.

Future sales of common stock by stockholders may have an adverse effect on the then prevailing market price of our common stock.

Based on the sale of (i) _____ shares of our common stock and (ii) _____ Pre-funded Warrants in this offering, we will be selling a number of shares of common stock and/or Pre-funded Warrants which represents approximately _____ % of the number of shares of common stock that we currently have outstanding (assuming the immediate exercise of such Pre-Funded Warrants). Sales of a substantial number of shares of our common stock issued in this offering in the public market following this offering, together with shares of our common stock issuable upon conversion or exercise of Pre-funded Warrants or currently outstanding derivative securities, could cause the market price of our common stock to decline and could impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock.

You may experience dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be lower than the price per share paid by investors in this offering.

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There is no established public trading market for the Pre-funded Warrants being offered in this offering, and we do not expect a market to develop for the Pre-funded Warrants.

There is no established public trading market for the Pre-funded Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Pre-funded Warrants on any national securities exchange or other nationally recognized trading system. Without an active market, the liquidity of the Pre-funded Warrants will be limited. Further, the existence of the Pre-funded Warrants may act to reduce both the trading volume and the trading price of our common stock.

The Pre-funded Warrants are speculative in nature.

Except as otherwise provided in the Pre-funded Warrants, until holders of Pre-Funded Warrants acquire our common stock upon exercise of the Pre-funded Warrants, holders of Pre-funded Warrants will have no rights with respect to our common stock underlying such Pre-funded Warrants. Upon exercise of the Pre-funded Warrants, the holders will be entitled to exercise the rights of a stockholder of our common stock only as to matters for which the record date occurs after the exercise date.

Moreover, following this offering, the market value of the Pre-funded Warrants is uncertain. There can be no assurance that the market price of our common stock will ever equal or exceed the price of the Pre-Funded Warrants, and, consequently, whether it will ever be profitable for investors to exercise their Pre-funded Warrants.

Risks Related to Our Business Generally

FDA’s finalized regulations on laboratory-developed tests may impact our operations adversely, and we may not be able to comply with the requirements.

We market our genetic tests as laboratory-developed tests (“LDT”), and plan to also initially market our BE-Smart Esophageal Pre-Cancer as an LDT. Until recently, the FDA has exercised enforcement discretion on LDTs that are marketed in the United States, provided that the LDTs can meet certain conditions that the FDA has outlined. However, on May 6, 2024, the FDA issued a final rule aimed at helping to ensure the safety and effectiveness of laboratory developed tests (LDTs). The rule amends the FDA’s regulations to make explicit that in vitro diagnostic products (“IVD”) are medical devices under the Federal Food, Drug, and Cosmetic Act (FD&C Act) including when the manufacturer of the IVD is a laboratory. Along with this amendment, the FDA is finalizing a policy under which the FDA will provide greater oversight of IVDs offered as LDTs through a phaseout of its general enforcement discretion approach for LDTs over the course of four years, as well as targeted enforcement discretion policies for certain categories of IVDs manufactured by laboratories. As a result of the final regulations, premarket review, clearance, or approvals may be required by FDA for the products that we are currently marketing or plan to market as LDTs. Our business and operations may be adversely affected because we may be required to cease sales of such products and be required to expend significant resources into collecting data from clinical trials, ensuring compliance with the applicable requirements for medical devices, and preparing and submitting premarket applications for the FDA’s review. We may not be able to complete the required clinical trials to enable marketing of our tests due to resource constraints, or we may not be able to complete them in a timely manner. We also may not be able to comply with the associated regulatory requirements including those of premarket authorization, medical device reporting, quality system regulations, and others. In addition, even if we are able to comply with such requirements or complete the clinical trials in a timely manner, there is no guarantee that FDA will clear or approve our products. FDA may also determine that our tests are not safe or effective, and that they must be removed from the market. The FDA may bring enforcement actions against LDTs that are on the market by sending warning letters, untitled letters, it-has-come-to-our-attention letters, or through other actions such as seizure, recalls, civil monetary penalties, injunction, and import refusals and import alerts, among others. If we cannot obtain the required premarket review, clearance, or approval, we may be forced to stop the marketing of our products, which will impact our operations and financial conditions adversely.

Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our debt.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. We had, as of June 30, 2024, approximately (i) \$16.1 million in working capital, (ii) \$2.4 million in cash and cash

equivalents, and (iii) \$13.6 million of outstanding indebtedness, net of discounts. In addition, on August 15, 2024, we amended and restated the unsecured promissory note and guaranty previously issued to JXVII Trust that increased the principal amount from \$7.6 million to \$10.0 million. Our business may not generate cash flow from operations in the future sufficient to service our debt obligations and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Our projections of future performance may not be indicative of actual results

From time to time, we may provide statements to the marketplace in the form of press releases that contain projections related to our future performance. These include statements relating to our projected revenues, our projected collection of receivables, our estimates of future operating and financial results and our planned strategic initiatives including our potential discussions regarding strategic partnerships and M&A activity. Although this information reflects the good faith expectations and estimates of our management based on the information available at the time that such statements were made, there can be no assurance that our actual performance and results will not differ materially from those contained in these projections. Investors are cautioned not to place undue reliance on any projections that may be provided by us.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement (including any documents incorporated by reference herein) contains statements with respect to us which constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and are intended to be covered by the “safe harbor” created by those sections. Forward-looking statements, which are based on certain assumptions and reflect our plans, estimates and beliefs, can generally be identified by the use of forward-looking terms such as “believes,” “expects,” “may,” “will,” “should,” “could,” “seek,” “intends,” “plans,” “estimates,” “anticipates” or other comparable terms. These forward-looking statements include, but are not limited to, statements concerning future events, our future financial performance, business strategy, product development strategy, and plans and objectives of management for future operations. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed in “Risk Factors” in this prospectus supplement and the documents incorporated by reference herein.

We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in company expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

You should read this prospectus supplement, the accompanying prospectus, and the documents that we incorporate by reference herein and therein and have filed as exhibits to the registration statement of which this prospectus supplement is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus supplement is accurate as of the date on the cover of this prospectus supplement only. Our business, financial condition, results of operations and prospects may change. We may not update these forward-looking statements, even though our situation may change in the future, unless we have obligations under the federal securities laws to update and disclose material developments related to previously disclosed information. We qualify all of the information presented in this prospectus supplement, and particularly our forward-looking statements, by these cautionary statements.

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USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$ _____ million from this offering, or approximately \$ _____ million if the underwriters exercise their over-allotment option in full, in each case after deducting the underwriting discount and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include capital expenditures, product development and commercialization expenditures, and acquisitions of companies, businesses, technologies and products within and outside the diagnostic services, genomics and consumer products industry.

Pending our use of the net proceeds from this offering, we intend to maintain the net proceeds as cash deposits or cash management instruments, such as U.S. government securities or money market mutual funds.

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CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of June 30, 2024:

- on an actual basis; and
- on an as adjusted basis to reflect the sale and issuance of (i) _____ shares of common stock in this offering at the public offering price of \$ _____ per share and (ii) Pre-funded Warrants to purchase up to _____ shares of common stock at a public offering price of \$ _____ per Pre-funded Warrants, after deducting the underwriting discount and estimated offering expenses payable by us and assuming the exercise of all Pre-funded Warrants for cash.

(amounts in dollars and in thousands, except share and per share amounts)	As of June 30, 2024	
	Actual	As Adjusted (1)
Cash and cash equivalents	\$ 1,780	\$ _____
Stockholders' equity (deficit):		
Preferred stock, \$0.0005 par value, 1,000,000 shares authorized; no shares outstanding, actual and as adjusted	—	—
Common stock, \$0.0005 par value, 50,000,000 shares authorized; 19,078,529 shares outstanding, actual and shares outstanding, as adjusted	18	_____
Additional paid-in capital	125,703	_____
Treasury stock, at cost, 18,940,967 shares, actual and _____ shares, as adjusted	(64,000)	_____
Accumulated deficit	(17,447)	_____
Total stockholders' equity	<u>44,076</u>	<u>_____</u>

(1) Assumes all originally issued Pre-funded Warrants in this offering have been exercised into common stock.

The above discussion and table are based on 19,078,529 shares of common stock outstanding as of June 30, 2024 and excludes the following:

- 4,253,750 shares of common stock issuable upon the exercise of stock options outstanding under our equity compensation plans and inducement stock option awards, with a weighted-average exercise price of \$6.65 per share;
- 376,000 shares of common stock issuable upon the exercise of warrants with a weighted average exercise price of \$9.13 per share; and
- 367,035 shares of common stock reserved for future issuance under the 2022 Plan.

Except as otherwise indicated herein, all information in this prospectus supplement assumes:

- no exercise of the underwriter’s over-allotment option;
- no exercise of the Representative’s Warrants to be issued to the Representative of the underwriters in this offering; and
- no issuance of shares of common stock valued at \$2.0 million which are issuable to the Stella Sellers upon the Commercialization Event.

DILUTION

If you purchase shares of common stock and/or Pre-funded Warrants in this offering, you will experience dilution to the extent of the difference between the public offering price per share or per Pre-funded Warrant in this offering and our as adjusted net tangible book value per share immediately after this offering.

Our net tangible book value as of June 30, 2024 was approximately \$27.8 million, or \$1.46 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the aggregate number of shares of our common stock outstanding as of June 30, 2024. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of _____ shares of our common stock at a public offering price of \$ _____ per share and Pre-funded Warrants to purchase up to _____ shares of common stock at a public offering price of \$ _____ per Pre-funded Warrant in this offering (including shares of common stock issuable and proceeds received upon full exercise of the Pre-funded Warrants), and after deducting the underwriting discount and estimated offering expenses payable by us, our net tangible book value as of June 30, 2024 would have been approximately \$ _____, or \$ _____ per share of common stock. This represents an immediate increase in as adjusted net tangible book value of approximately \$ _____ per share to existing stockholders and an immediate dilution in net tangible book value of approximately \$ _____ per share to new investors in this offering. The following table illustrates this dilution on a per share basis:

Public offering price per share of common stock		\$
Net tangible book value per share as of June 30, 2024	\$	1.46
Increase in net tangible book value per share attributable to this offering	\$	
As adjusted net tangible book value per share as of June 30, 2024, after giving effect to this offering	_____	\$
Dilution per share to new investors in this offering	_____	\$

If the underwriters exercise in full its option to purchase additional shares of common stock and/or Pre-funded Warrants, the as adjusted net tangible book value per share would be approximately \$ _____ per share, which amount represents an immediate increase in net tangible book value of approximately \$ _____ per share of our common stock to existing stockholders and an immediate dilution in net tangible book value of approximately \$ _____ per share of our common stock to new investors purchasing shares of common stock and/or Pre-funded Warrants in this offering.

The above discussion and table are based on 19,078,529 shares of common stock outstanding as of June 30, 2024 and excludes the following:

- 4,253,750 shares of common stock issuable upon the exercise of stock options outstanding under our equity compensation plans and inducement stock option awards, with a weighted-average exercise price of \$6.65 per share;
- 376,000 shares of common stock issuable upon the exercise of warrants with a weighted average exercise price of \$9.13 per share; and
- 367,035 shares of common stock reserved for future issuance under the 2022 Plan.

Except as otherwise indicated herein, all information in this prospectus supplement assumes:

- no exercise of the underwriter’s over-allotment option;
- no exercise of the Representative’s Warrants to be issued to the Representative of the underwriters in this offering; and
- no issuance of shares of common stock valued at \$2.0 million which are issuable to the Stella Sellers upon the Commercialization Event.

If the holders of outstanding options or warrants or other outstanding convertible securities exercise or convert those options or warrants or other outstanding convertible securities at prices below the public offering price, you will incur further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

The description of our Common Stock is incorporated by reference to Exhibit 4.3 to our annual report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 26, 2020.

Pre-funded Warrants

The following is a brief summary of certain terms and conditions of the Pre-funded Warrants being offered in this offering. The following description is subject in all respects to the provisions contained in the Pre-funded Warrants.

Form

The form of Pre-funded Warrant will be filed as an exhibit to a Current Report on Form 8-K that we will file with the SEC.

Term

The Pre-funded Warrants will not expire until they are fully exercised.

Exercisability

The Pre-funded Warrants are exercisable at any time until they are fully exercised. The Pre-funded Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and payment of the exercise price. No fractional shares of common stock will be issued in connection with the exercise of a Pre-funded Warrant. Rather, we will, at our election, either pay a cash adjustment in respect of such final fraction (upon exercise of the Pre-funded Warrant in whole) in an amount equal to such fraction multiplied by the exercise price or round up the number of shares to be issued upon such final exercise to the next whole share. The holder of the Pre-funded Warrant may also satisfy its obligation to pay the exercise price through a “cashless exercise,” in which the holder receives the net value of the Pre-funded Warrants in shares of common stock determined according to the formula set forth in the Pre-funded Warrant.

Exercise Limitations

Under the terms of the Pre-funded Warrants, the Company may not effect the exercise of any such warrant, and a holder will not be entitled to exercise any portion of any such warrant, if, upon giving effect to such exercise, the aggregate number of shares of common stock beneficially owned by the holder (together with its affiliates, any other persons acting as a group together with the holder or any of the holder’s affiliates, and any other persons whose beneficial ownership of common stock would or could be aggregated with the holder’s for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended) would exceed 4.99% of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of such warrant, which percentage may be increased or decreased at the holder’s election upon 61 days’ notice to the Company subject to the terms of such warrants, *provided that* such percentage may in no event exceed 9.99%.

Exercise Price

The exercise price of our shares of common stock purchasable upon the exercise of the Pre-funded Warrants is \$0.001 per share. The exercise price of the Pre-funded Warrants and the number of shares of common stock issuable upon exercise of the Pre-funded Warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our shares of common stock, as well as upon any distribution of assets, including cash, stock or other property, to our stockholders.

Transferability

Subject to applicable laws, the Pre-funded Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing

We do not intend to list the Pre-funded Warrants on The Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

Upon the consummation of a fundamental transaction (as described in the Pre-funded Warrants, and generally including any reorganization, recapitalization or reclassification of our shares of common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of common stock, or any person or group becoming the beneficial owner of 50% of the voting power of our outstanding shares of common stock), the holders of the pre-funded warrants will be entitled to receive, upon exercise of the Pre-funded Warrants, the kind and amount of securities, cash or other property that such holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction, without regard to any limitations on exercise contained in the Pre-funded Warrants. Notwithstanding the foregoing, in the event of a fundamental transaction where the consideration consists solely of cash, solely of marketable securities or a combination of cash and marketable securities, then each Pre-funded Warrants shall automatically be deemed to be exercised in full in a cashless exercise effective immediately prior to and contingent upon the consummation of such fundamental transaction.

No Rights as a Stockholder

Except by virtue of such holder’s ownership of shares of common stock, the holder of a Pre-funded Warrant does not have the rights or privileges of a holder of our shares of common stock, including any voting rights, until such holder exercises the Pre-funded Warrant.

Governing Law

The Pre-funded Warrants are governed by New York law.

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UNDERWRITING

ThinkEquity LLC is acting as the Representative of the underwriters of the offering. We have entered into an underwriting agreement dated _____, 2024 with the Representative. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to each underwriter named below, and each underwriter named below has severally agreed to purchase, at the public offering price less the underwriting discounts set forth on the cover page of this prospectus supplement, the number of shares of common stock (and/or Pre-funded Warrants in lieu thereof) at the public offering price, less the underwriting discount, as set forth on the cover page of this prospectus supplement, the number of shares of common stock (and/or Pre-funded Warrants in lieu thereof) listed next to its name in the following table:

Underwriter	Number of Shares of Common Stock	Number of Pre-Funded Warrants
ThinkEquity LLC		
Total		

The underwriters are committed to purchase all the shares of common stock (and/or Pre-funded Warrants in lieu thereof) offered by us. The obligations of the underwriters may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, the underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the shares offered by us in this prospectus supplement are subject to various representations and warranties and other customary conditions specified in the underwriting agreement, such as receipt by the underwriters of officers' certificates and legal opinions.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares of common stock (and/or Pre-funded Warrants in lieu thereof) subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

We have granted the Representative an over-allotment option. This option, which is exercisable for up to 45 days after the date of this prospectus supplement, permits the underwriters to purchase up to an aggregate of additional shares of common stock (and/or Pre-funded Warrants in lieu thereof) (equal to 15% of the total number of shares of common stock and/or Pre-funded Warrants sold in this offering) at the public offering price per share, less underwriting discount, solely to cover over-allotments, if any. If the underwriters exercise this option in whole or in part, then the underwriters will be severally committed, subject to the conditions described in the underwriting agreement, to purchase the additional shares of common stock (and/or Pre-funded Warrants in lieu thereof) in proportion to their respective commitments set forth in the prior table.

Discounts, Commissions and Reimbursement

The Representative has advised us that the underwriters propose to offer the shares of common stock (and/or Pre-funded Warrants in lieu thereof) to the public at the public offering price per share set forth on the cover page of this prospectus supplement. The underwriters may offer securities to securities dealers at that price less a concession of not more than \$ _____ per share or Pre-funded Warrant of which up to \$ _____ per share or Pre-funded Warrant may be reallocated to other dealers. After the offering to the public, the public offering price and other selling terms may be changed by the Representative.

The following table summarizes the underwriting discount and proceeds, before expenses, to us:

	Per Share	Per Pre-Funded Warrant	Total	
			Without Over-Allotment Option	With Over-Allotment Option
Public offering price	\$ _____	\$ _____	\$ _____	\$ _____
Underwriting discount (7%)	\$ _____	\$ _____	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____	\$ _____	\$ _____
Non-accountable expense allowance (1%)	\$ _____	\$ _____	\$ _____	\$ _____

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In addition, we have also agreed to pay the Representative (i) a non-accountable expense allowance equal to 1% of the public offering price; (ii) the fees and expenses of the underwriter's legal counsel not to exceed \$125,000; (iii) the \$12,000 cost associated with the use of Ipreo's book building, prospectus tracking and compliance software for the offering; (iv) \$10,000 for data services and communications expenses; and (v) up to \$25,000 of Representative's actual accountable "road show", market making and trading, and clearing firm settlement expenses for this offering. We will pay an expense deposit of \$10,000 (the "Advance") to the Representative, which will be applied against the actual out-of-pocket accountable expenses that will be paid by us to the underwriters in connection with this offering and will be reimbursed to us to the extent not incurred.

We estimate the expenses of this offering payable by us, not including underwriting discount, will be approximately \$ _____.

Representative's Warrants

Upon closing of this offering, we have agreed to issue to the Representative, or its designees, as partial compensation warrants to purchase up to _____ shares of common stock (or _____ shares of common stock if the underwriter's over-allotment option is exercised in full), which is equal to 5% of the aggregate number of shares of common stock (and/or Pre-funded Warrants in lieu thereof) sold in this offering (the "Representative's Warrants"). The Representative's Warrants will be exercisable at a per share exercise price of \$ _____, which is equal to 125% of the public offering price per share of common stock in this offering. The Representative's Warrants are exercisable at any time and from time to time, in whole or in part, during the five year period commencing on the closing date of this offering.

The Representative's Warrants provide for registration rights upon request, in certain cases. The one-time demand registration right provided will not be greater than five years from the effective date of the registration statement in compliance with FINRA Rule 5110(g)(8)(C). The unlimited piggyback registration rights provided will not be greater than seven years from the effective date of the registration statement in compliance with FINRA Rule 5110(g)(8)(D). We will bear all fees and expenses attendant to registering the securities issuable on exercise of the warrants other than underwriting commissions incurred and payable by the holders. The exercise price and number of shares issuable upon exercise of the warrants may be adjusted in certain circumstances including in the event of a stock dividend or our recapitalization, reorganization, merger or consolidation. However, the warrant exercise price or underlying shares will not be adjusted for issuances of shares of common stock at a price below the warrant exercise price.

Lock-Up Agreements

The Company has agreed for a period of three months after the date of the underwriting agreement, and each of its directors and officers has agreed for a period of 120 days after the date of the underwriting agreement, not to do any of the following without the express written consent of the Representative:

- issue (in the case of us), offer, pledge, sell, transfer, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of any shares of common stock or other capital stock or any securities convertible into or exercisable or exchangeable for our common stock or other capital stock; or
- in the case of us, file or cause the filing of any registration statement under the Securities Act with respect to any shares of common stock or other capital stock or any securities convertible into or exercisable or exchangeable for our common stock or other capital stock; or
- complete any offering of debt securities of the Company, other than entering into a line of credit, term loan arrangement or other debt instrument with a traditional bank; or
- enter into any swap or other agreement, arrangement, hedge or transaction that transfers to another, in whole or in part, directly or indirectly, any of the economic consequences of ownership of our common stock or other capital stock or any securities convertible into or exercisable or exchangeable for our common stock or other capital stock, whether any transaction described in any of the foregoing bullet points is to be settled by delivery of our common stock or other capital stock, other securities, in cash or otherwise, or publicly announce an intention to do any of the foregoing.

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Additionally, we have agreed for a period of twelve (12) months after the closing of this offering that we will not directly or indirectly, in any “at the market”, continuous equity or variable rate transaction, other than pursuant to our Sales Agreement with the Representative dated December 28, 2021, offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of shares of our capital stock or any securities convertible into, exercisable or exchangeable for shares of our capital stock without the express written consent of the Representative.

Right of First Refusal

We have granted the Representative an irrevocable right of first refusal, for a period of twelve (12) months from the closing of the offering, to act as sole investment banker, sole book-runner and/or sole placement agent and/or merger and acquisition advisor, at the Representative’s sole discretion, for each and every future public and private equity offering, including all equity linked financings (subject to certain exceptions), as well as acquisition or disposition of business units, entering into a merger, consolidation or other business combination, share purchase or capital exchange, asset sale or acquisition, tender offer, recapitalization, reorganization, consolidation, amalgamation, or similar business combination (subject to certain exceptions), during such twelve (12) month period for the Company or any successor to or any subsidiary of the Company on terms customary to the Representative. The Representative shall have the sole right to determine whether or not any other broker dealer shall have the right to participate in any such transaction and the economic terms of such participation.

Nasdaq Capital Market

Our shares of common stock are listed on the Nasdaq Capital Market under the symbol “PRPH.”

Electronic Offer, Sale and Distribution of Securities

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members. The Representative may agree to allocate a number of securities to underwriters and selling group members for sale to its online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of, nor incorporated by reference into, this prospectus supplement or the registration statement of which this prospectus supplement forms a part, has not been approved or endorsed by us, and should not be relied upon by investors.

Stabilization

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate-covering transactions, penalty bids and purchases to cover positions created by short sales.

Stabilizing transactions permit bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the shares while the offering is in progress.

Syndicate covering transactions involve purchases of shares in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the Representative to reclaim a selling concession from a syndicate member when the shares originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our shares of common stock or preventing or retarding a decline in the market price of our shares of common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Passive Market Making

In connection with this offering, the underwriters and any selling group members may engage in passive market making transactions in our common stocks on Nasdaq in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of shares of our common stock and/or Pre-Funded Warrants and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid, that bid must then be lowered when specified purchase limits are exceeded.

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Other Relationships

Certain of the underwriters and their affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates for which they may in the future receive customary fees.

Offer restrictions outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Australia

This prospectus supplement is not a disclosure document under Chapter 6D of the Australian Corporations Act, has not been lodged with the Australian Securities and Investments Commission and does not purport to include the information required of a disclosure document under Chapter 6D of the Australian Corporations Act. Accordingly, (i) the offer of the securities under this prospectus supplement is only made to persons to whom it is lawful to offer the securities without disclosure under Chapter 6D of the Australian Corporations Act under one or more exemptions set out in section 708 of the Australian Corporations Act, (ii) this prospectus supplement is made available in Australia only to those persons as set forth in clause (i) above, and (iii) the offeree must be sent a notice stating in substance that by accepting this offer, the offeree represents that the offeree is such a person as set forth in clause (i) above, and, unless permitted under the Australian Corporations Act, agrees not to sell or offer for sale within Australia any of the securities sold to the offeree within 12 months after its transfer to the offeree under this prospectus supplement.

China

The information in this document does not constitute a public offer of the securities, whether by way of sale or subscription, in the People's Republic of China (excluding, for purposes of this paragraph, Hong Kong Special Administrative Region, Macau Special Administrative Region and Taiwan). The securities may not be offered or sold directly or indirectly in the PRC to legal or natural persons other than directly to "qualified domestic institutional investors."

European Economic Area—Belgium, Germany, Luxembourg and Netherlands

The information in this document has been prepared on the basis that all offers of securities will be made pursuant to an exemption under the Directive 2003/71/EC ("Prospectus Directive"), as implemented in Member States of the European Economic Area (each, a "Relevant Member State"), from the requirement to produce a prospectus for offers of securities.

An offer to the public of securities has not been made, and may not be made, in a Relevant Member State except pursuant to one of the following exemptions under the Prospectus Directive as implemented in that Relevant Member State:

- to legal entities that are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity that has two or more of (i) an average of at least 250 employees during its last fiscal year; (ii) a total balance sheet of more than €43,000,000 (as shown on its last annual unconsolidated or consolidated financial statements) and (iii) an annual net turnover of more than €50,000,000 (as shown on its last annual unconsolidated or consolidated financial statements);
- to fewer than 100 natural or legal persons (other than qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive) subject to obtaining the prior consent of the Company or any underwriter for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of securities shall result in a requirement for the publication by the Company of a prospectus pursuant to Article 3 of the Prospectus Directive.

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France

This document is not being distributed in the context of a public offering of financial securities (offre au public de titres financiers) in France within the meaning of Article L.411-1 of the French Monetary and Financial Code (Code Monétaire et Financier) and Articles 211-1 et seq. of the General Regulation of the French Autorité des marchés financiers ("AMF"). The securities have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France.

This document and any other offering material relating to the securities have not been, and will not be, submitted to the AMF for approval in France and, accordingly, may not be distributed or caused to be distributed, directly or indirectly, to the public in France.

Such offers, sales and distributions have been and shall only be made in France to (i) qualified investors (investisseurs qualifiés) acting for their own account, as defined in and in accordance with Articles L.411-2-II-2° and D.411-1 to D.411-3, D.744-1, D.754-1, and D.764-1 of the French Monetary and Financial Code and any implementing regulation and/or (ii) a restricted number of non-qualified investors (cercle restreint d'investisseurs) acting for their own account, as defined in and in accordance with Articles L.411-2-II-2° and D.411-4, D.744-1, D.754-1, and D.764-1 of the French Monetary and Financial Code and any implementing regulation.

Pursuant to Article 211-3 of the General Regulation of the AMF, investors in France are informed that the securities cannot be distributed (directly or indirectly) to the public by the investors otherwise than in accordance with Articles L.411-1, L.411-2, L.412-1 and L.621-8 to L.621-8-3 of the French Monetary and Financial Code.

Ireland

The information in this document does not constitute a prospectus under any Irish laws or regulations and this document has not been filed with or approved by any Irish regulatory authority as the information has not been prepared in the context of a public offering of securities in Ireland within the meaning of the Irish Prospectus (Directive 2003/71/EC) Regulations 2005 (the "Prospectus Regulations"). The securities have not been offered or sold, and will not be offered, sold or delivered directly or indirectly in Ireland by way of a public offering, except to (i) qualified investors as defined in Regulation 2(l) of the Prospectus Regulations and (ii) fewer than 100 natural or legal persons who are not qualified investors.

Israel

The securities offered by this prospectus supplement have not been approved or disapproved by the Israeli Securities Authority (the ISA), or ISA, nor have such securities been registered for sale in Israel. The shares may not be offered or sold, directly or indirectly, to the public in Israel, absent the publication of a prospectus. The ISA has not issued permits, approvals or licenses in connection with the offering or publishing the prospectus; nor has it authenticated the details included herein, confirmed their reliability or completeness, or rendered an opinion as to the quality of the securities being offered. Any resale in Israel, directly or indirectly, to the public of the securities offered by this prospectus supplement is subject to restrictions on transferability and must be effected only in compliance with the Israeli securities laws and regulations.

Italy

The offering of the securities in the Republic of Italy has not been authorized by the Italian Securities and Exchange Commission (Commissione Nazionale per le Società—CS—Aga e la Borsa, "CONSOB" pursuant to the Italian securities legislation and, accordingly, no offering material relating to the securities may be distributed in Italy and such securities may not be offered or sold in Italy in a public offer within the meaning of Article 1.1(t) of Legislative Decree No. 58 of 24 February 1998 ("Decree No. 58"), other than:

- to Italian qualified investors, as defined in Article 100 of Decree no.58 by reference to Article 34-ter of CONSOB Regulation no. 11971 of 14 May 1999 ("Regulation no. 11971") as amended ("Qualified Investors"); and
- in other circumstances that are exempt from the rules on public offer pursuant to Article 100 of Decree No. 58 and Article 34-ter of Regulation No. 11971 as amended.

Any offer, sale or delivery of the securities or distribution of any offer document relating to the securities in Italy (excluding placements where a Qualified Investor solicits an offer from the issuer) under the paragraphs above must be:

- made by investment firms, banks or financial intermediaries permitted to conduct such activities in Italy in accordance with Legislative Decree No. 385 of 1 September 1993 (as amended), Decree No. 58, CONSOB Regulation No. 16190 of 29 October 2007 and any other applicable laws; and
- in compliance with all relevant Italian securities, tax and exchange controls and any other applicable laws.

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Any subsequent distribution of the securities in Italy must be made in compliance with the public offer and prospectus requirement rules provided under Decree No. 58 and the Regulation No. 11971 as amended, unless an exception from those rules applies. Failure to comply with such rules may result in the sale of such securities being declared null and void and in the liability of the entity transferring the securities for any damages suffered by the investors.

Japan

The securities have not been and will not be registered under Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948), as amended (the “FIEL”) pursuant to an exemption from the registration requirements applicable to a private placement of securities to Qualified Institutional Investors (as defined in and in accordance with Article 2, paragraph 3 of the FIEL and the regulations promulgated thereunder). Accordingly, the securities may not be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan other than Qualified Institutional Investors. Any Qualified Institutional Investor who acquires securities may not resell them to any person in Japan that is not a Qualified Institutional Investor, and acquisition by any such person of securities is conditional upon the execution of an agreement to that effect.

Portugal

This document is not being distributed in the context of a public offer of financial securities (oferta pública de valores mobiliários) in Portugal, within the meaning of Article 109 of the Portuguese Securities Code (Código dos Valores Mobiliários). The securities have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in Portugal. This document and any other offering material relating to the securities have not been, and will not be, submitted to the Portuguese Securities Market Commission (Comissão do Mercado de Valores Mobiliários) for approval in Portugal and, accordingly, may not be distributed or caused to be distributed, directly or indirectly, to the public in Portugal, other than under circumstances that are deemed not to qualify as a public offer under the Portuguese Securities Code. Such offers, sales and distributions of securities in Portugal are limited to persons who are “qualified investors” (as defined in the Portuguese Securities Code). Only such investors may receive this document and they may not distribute it or the information contained in it to any other person.

Sweden

This document has not been, and will not be, registered with or approved by Finansinspektionen (the Swedish Financial Supervisory Authority). Accordingly, this document may not be made available, nor may the securities be offered for sale in Sweden, other than under circumstances that are deemed not to require a prospectus under the Swedish Financial Instruments Trading Act (1991:980) (Sw. lag (1991:980) om handel med finansiella instrument). Any offering of securities in Sweden is limited to persons who are “qualified investors” (as defined in the Financial Instruments Trading Act). Only such investors may receive this document and they may not distribute it or the information contained in it to any other person.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (“SIX”) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering material relating to the securities may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering material relating to the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA).

This document is personal to the recipient only and not for general circulation in Switzerland.

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United Arab Emirates

Neither this document nor the securities have been approved, disapproved or passed on in any way by the Central Bank of the United Arab Emirates or any other governmental authority in the United Arab Emirates, nor has the Company received authorization or licensing from the Central Bank of the United Arab Emirates or any other governmental authority in the United Arab Emirates to market or sell the securities within the United Arab Emirates. This document does not constitute and may not be used for the purpose of an offer or invitation. No services relating to the securities, including the receipt of applications and/or the allotment or redemption of such shares, may be rendered within the United Arab Emirates by the Company.

No offer or invitation to subscribe for securities is valid or permitted in the Dubai International Financial Centre.

United Kingdom

Neither the information in this document nor any other document relating to the offer has been delivered for approval to the Financial Services Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended (“FSMA”) has been published or is intended to be published in respect of the securities. This document is issued on a confidential basis to “qualified investors” (within the meaning of section 86(7) of FSMA) in the United Kingdom, and the securities may not be offered or sold in the United Kingdom by means of this document, any accompanying letter or any other document, except in circumstances which do not require the publication of a prospectus pursuant to section 86(1) FSMA. This document should not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by recipients to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) received in connection with the issue or sale of the securities has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of FSMA does not apply to the Company.

In the United Kingdom, this document is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 (“FPO”), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together “relevant persons”). The investments to which this document relates are available only to, and any invitation, offer or agreement to purchase will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Canada

The securities may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws. Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for

rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor. Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI33-105 regarding underwriter conflicts of interest in connection with this offering.

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LEGAL MATTERS

The validity of the shares of common stock and Pre-Funded Warrants offered hereby and other legal matters related to this offering will be passed upon by Reed Smith LLP, New York, New York. Loeb & Loeb LLP represents the underwriters in connection with certain legal matters related to this offering.

EXPERTS

The consolidated balance sheets of ProPhase Labs, Inc. and Subsidiaries as of December 31, 2023 and 2022, and the related consolidated statements of operations and other comprehensive income (loss), stockholders' equity, and cash flows for each of the years then ended have been audited by Morison Cogen LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference, which reports express an unqualified opinion on the financial statements. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement to any of our contracts, agreements or other documents, the reference may not be complete, and you should refer to the exhibits that are a part of the registration statement of which this prospectus supplement is a part, or the exhibits to the reports or other documents incorporated by reference in this prospectus supplement for a copy of such contract, agreement or other document.

Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and special reports, and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov> or on our website at <http://www.prophaselabs.com>.

The website addresses referenced herein are not intended to function as hyperlinks, and the information contained in our website and in the SEC's website is not incorporated by reference into this prospectus supplement and should not be considered to be part of this prospectus supplement.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus supplement, to the extent that a statement contained in or omitted from this prospectus supplement, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. This prospectus supplement incorporates by reference our documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until all of the securities are sold:

- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the SEC on March 29, 2024, as amended by [Form 10-K/A](#) filed with the SEC on April 29, 2024;
- Our Quarterly Reports on Form 10-Q for the quarter ended [March 31, 2024](#) and [June 30, 2024](#), filed with the SEC on May 10, 2024 and August 14, 2024, respectively;
- Our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on May 15, 2024;
- Our Current Reports on Form 8-K filed with the SEC on [January 4, 2024](#) (excluding Item 7.01 thereto; as amended by Form 8-K/A filed with the SEC on [May 9, 2024](#), [April 18, 2024](#), [June 21, 2024](#), [August 21, 2024](#) (as amended by Form 8-K/A filed with the SEC on [August 22, 2024](#)), [September 26, 2024](#), [October 4, 2024](#), and [October 18, 2024](#); and
- the description of the Company's common stock contained in Exhibit 4.3 to our annual report on Form 10-K for the fiscal year ended [December 31, 2019](#), filed with the SEC on March 26, 2020, including any amendment or report filed for the purpose of updating such description.

Notwithstanding the foregoing, we are not incorporating any document or portion thereof or information deemed to have been furnished and not filed in accordance with SEC rules.

Documents incorporated by reference are available from us, without charge. You may obtain documents incorporated by reference in this prospectus supplement by requesting them in writing or by telephone at the following address:

ProPhase Labs, Inc.
711 Stewart Ave., Suite 200
Garden City, NY 11530
Attn: Corporate Secretary
Phone: (215) 345-0919

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PROSPECTUS

PROPHASE LABS, INC.

\$300,000,000

**COMMON STOCK
PREFERRED STOCK
WARRANTS**

UNITS

This prospectus will allow us to issue, from time to time at prices and on terms to be determined at or prior to the time of the offering, up to \$300,000,000 in aggregate principal amount of our common stock, preferred stock, warrants and/or units in one or more offerings. We may offer these securities separately or together in units.

This prospectus describes the general terms of the securities we may offer and the general manner in which these securities will be offered. We will provide you with the specific terms of any offering in one or more supplements to this prospectus. The prospectus supplements will specify the securities being offered and also the specific manner in which the securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

Our securities may be sold directly by us to you, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market, under the symbol “PRPH.” On November 4, 2021, the last reported sale price of our common stock on the Nasdaq Capital Market was \$5.91 per share.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described on page 3 of this prospectus under the caption “Risk Factors.” We may include specific risk factors in supplements to this prospectus under the caption “Risk Factors.” This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement.

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

The date of this prospectus is November 12, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock, preferred stock and/or warrants, either individually or in units, in one or more offerings, with a total value of up to \$300,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of securities under this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find More Information” before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein

by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

Unless the context otherwise requires, “ProPhase,” “the Company,” “we,” “us,” “our” and similar terms refer to ProPhase Labs, Inc.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplement. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

The Company

We are a diversified biotech and genomics company with deep experience with over-the-counter (“OTC”) consumer healthcare products and dietary supplements. We conduct our operations through two operating segments: diagnostic services and consumer products. Until late fiscal year 2020, we were engaged primarily in the research, development, manufacture, distribution, marketing and sale of OTC consumer healthcare products and dietary supplements in the United States. This includes the development and marketing of dietary supplements under the TK Supplements® brand. However, commencing in December 2020, we also began offering COVID-19 and other RPP Molecular tests through our new diagnostic service business.

Our wholly-owned subsidiary, Pharmed Manufacturing, Inc. (“PMI”), is a full-service contract manufacturer and private label developer of a broad range of non-GMO, organic and natural-based cough drops and lozenges and OTC drug and dietary supplement products.

Our wholly-owned subsidiary, ProPhase Diagnostics, Inc. (“ProPhase Diagnostics”), offers a variety of medical tests, including COVID-19 and RPG Molecular tests. On October 23, 2020, we completed the acquisition of all of the issued and outstanding shares of capital stock of Confucius Plaza Medical Laboratory Corp., which operates a 4,000 square foot Clinical Laboratory Improvement Amendments (“CLIA”) accredited laboratory located in Old Bridge, New Jersey for approximately \$2.5 million. In December 2020, we expanded our diagnostic service business with the signing of a lease and the build out of a second, larger CLIA accredited laboratory in Garden City, New York. Operations at this second facility commenced in February 2021.

On August 10, 2021, we acquired Nebula Genomics, Inc. (“Nebula”), a privately owned personal genomics company, through our wholly-owned subsidiary, ProPhase Precision Medicine, Inc. We intend to offer whole genome sequencing and related services through this new subsidiary.

In addition, we continue to actively pursue acquisition opportunities for other companies, technologies and products within and outside the consumer products industry.

Contract Manufacturing Services

PMI provides consumer product development, pre-commercialization services, production, warehousing and distribution services for its customers. Our manufacturing facility, which is located in Lebanon, Pennsylvania, is registered with the U.S. Food and Drug Administration (the “FDA”) and is a certified organic and kosher.

TK Supplements® Product Line

Our TK Supplements® product line is dedicated to promoting better health, energy and sexual vitality. Each of our herbal supplements is researched to determine the optimum blend of ingredients to ensure our customers receive premium quality products. To achieve this, we formulate with the highest quality ingredients derived from nature and ingredients enhanced by science. Our TK Supplements® product line includes Legendz XL®, a male sexual enhancement and Triple Edge XL®, an energy and stamina booster.

In fiscal year 2020, we extended our distribution of Legendz XL® to include more customer accounts including national chain drug retailers, internet-based retailers and several regional retailers and leveraged our existing infrastructure and retail distribution platform. We have produced and refined a television commercial and initiated television and digital media testing for Legendz XL® for marketing to consumers. We have also completed a broad series of clinical studies that support important product claims that we have incorporated into our product packaging and marketing communications for Legendz XL®.

We also introduced Triple Edge XL® to a limited number of retail customers in Fiscal 2020 and have gained distribution with one large national chain drug retailer.

Diagnostic Services

ProPhase Diagnostics offers a variety of important medical diagnostic testing services, including, among others, COVID-19 testing and RPP molecular tests. We offer both nasal swab testing and saliva testing, and are a preferred lab for Spectrum Solutions, the manufacturer and supplier of the first FDA EUA (Emergency Use Authorization) authorized saliva collection kit used for COVID-19 testing. We currently operate two lab facilities including (i) our facility located in Old Bridge, New Jersey, acquired in October 2020, with capacity to process up to 10,000 COVID-19 tests per day and (ii) our facility located in Garden City, New York, which opened in January 2021, and commenced operations in February 2021, with capacity to process up to 50,000 COVID-19 tests per day.

Whole Genome Sequencing and Related Services

On August 10, 2021, we acquired Nebula Genomics, Inc., a privately owned personal genomics company, through our wholly-owned subsidiary, ProPhase Precision

Medicine, Inc. We intend to offer whole genome sequencing and related services through this new subsidiary.

Nebula currently provides consumers access to affordable and secure whole genome sequencing via its online portal. Nebula's solution is powered by the innovations of George Church, Ph.D. Dr. Church pioneered the development of multiple DNA sequencing methods, including molecular multiplexing approaches that enable next-generation DNA sequencing (NGS) as well as nanopore sequencing. Nebula has been implementing large-scale human genome sequencing to advance the understanding of the causes of diseases and lay the foundation for personalized therapies of the future. These include targeted gene therapies that aim to ameliorate or cure genetic diseases.

Nebula's technology decodes close to 100% of a person's DNA, generating over 100 gigabytes of data. This enables Nebula to provide its users with deep ancestry reports based on Y chromosomal and mitochondrial DNA with a high level of accuracy. Nebula's whole genome sequencing DNA test also decodes all ~20,000 genes in the human genome, which to the best of our knowledge, exceeds the amount of information offered by other widely available services. The Nebula DNA test can identify rare genetic mutations, and is diagnostics-ready, providing valuable information to healthcare providers in a HIPAA-compliant format. Nebula was the first company to bring the cost of sequencing a human genome below \$300 (the cost of the first human genome sequencing was approximately \$3 billion) and subsequently became one of the largest online direct-to-consumer whole genome sequencing companies.

We intend to integrate Nebula's whole genome sequencing services with the robust clinical diagnostic testing services already offered at our CLIA-certified molecular testing laboratories.

Corporate Information

We were initially organized in Nevada in July 1989. Effective June 18, 2015, we changed our state of incorporation from the State of Nevada to the State of Delaware. Our principal executive offices are located at 711 Stewart Avenue, Suite 200, Garden City, New York 11530 and our telephone number is 215-345-0919.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks referenced below and described in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described in our period reports filed with the SEC, which are incorporated by reference in this prospectus.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Forward-looking statements in this prospectus and any accompanying prospectus supplement give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may" or other similar expressions in this prospectus and any prospectus supplement. In particular, forward-looking statements include statements relating to future actions, prospective products and applications, customers, technologies, future performance or future financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- Our dependence on our largest manufacturing customers;
- Our ability to successfully offer, perform and generate revenues from our new diagnostic services and genomics sequencing services;
- Our ability to generate sufficient profits from RPP Molecular tests and other tests if and when demand for COVID-19 testing decreases or becomes no longer necessary;
- The complexity of billing for, and collecting revenue for, our testing services;
- Our ability to secure additional capital, when needed to support our diagnostic services business and product development and commercialization programs;
- Potential disruptions to our supply chain or increases to the price of or adulteration of key raw materials or supplies;
- Potential disruptions in our ability to manufacture our products and those of others;
- Seasonal fluctuations in demand for the products and services we offer;
- Our ability to successfully develop and commercialize our existing products and any new products;
- Our ability to compete effectively, including our ability to maintain and increase our markets and/or market share in the markets in which we do business;
- Our ability to attract, retain and motivate our key employees;
- Our ability to protect our proprietary rights;
- Our ability to comply with regulatory requirements applicable to our businesses; and
- Our dependence on third parties to provide services critical to our lab diagnostic services business.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. The forward-looking statements are based upon management's beliefs and assumptions and are made as of the date of this prospectus. We undertake no obligation to publicly update or revise any forward-looking statements included in this prospectus to conform such statements to actual results or changes in our expectations, except as otherwise required by law. You should not place undue reliance on these forward-looking statements.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities that may be offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for our operations and for other general corporate purposes, including, but not limited to, our internal research and development programs, general working capital and possible future acquisitions. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, interest-bearing securities or apply them to the reduction of short-term indebtedness.

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DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 51,000,000 shares, all with a par value of \$0.0005 per share, 50,000,000 of which are designated as common stock and 1,000,000 of which are designated as preferred stock.

The following description of our capital stock and certain provisions of our Certificate of Incorporation and our Amended and Restated Bylaws, or Bylaws, are summaries and are qualified by reference to our Certificate of Incorporation and our Bylaws.

As of November 4, 2021, we had 15,515,055 shares of our common stock outstanding and zero shares of preferred stock outstanding. As of November 4, 2021, we also had outstanding options to acquire 4,896,874 shares of our common stock, having a weighted-average exercise price of \$3.17 per share, and warrants to purchase 855,000 shares of our common stock, having a weighted-average exercise price of \$8.23 per share.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders, except on matters relating solely to terms of preferred stock. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock will be entitled to receive ratably such dividends, if any, as may be declared from time to time by the board of directors out of funds legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of our common stock will be entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The holders of our common stock will have no preemptive or conversion rights or other subscription rights. There will be no redemption or sinking fund provisions applicable to our common stock.

Preferred Stock

Pursuant to the terms of our Certificate of Incorporation, our board of directors has the authority to issue preferred stock in one or more series and to fix the number of shares constituting such series and the designation of such series, the voting powers, if any, of the shares of such series, and the preferences and relative participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series, without further vote or action by the stockholders. Although we have no present plans to issue any shares of preferred stock, the issuance of shares of preferred stock, could decrease the amount of earnings and assets available for distribution to the holders of common stock, could adversely affect the rights and powers, including voting rights, of the common stock, and could have the effect of delaying, deterring or preventing a change of control of us or an unsolicited acquisition proposal.

Anti-Takeover Effects of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

The provisions of Delaware law and our Certificate of Incorporation and Bylaws, could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Delaware Statutory Business Combinations Provision. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, or the DGCL. Section 203 prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a “business combination” is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an “interested stockholder” is a person who, together with his or her affiliates and associates, owns, or within three years prior, did own, 15% or more of the corporation’s voting stock.

Blank-Check Preferred Stock. Our board of directors is authorized to issue, without stockholder approval, preferred stock, the rights of which will be determined at the discretion of the board of directors and that, if issued, could operate as a “poison pill” to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that our board of directors does not approve.

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Special Meetings of Stockholders. Special meetings of the stockholders may be called at any time only by the Chairman of the board of directors or the board of directors, subject to the rights of the holders of any series of preferred stock then outstanding.

No Written Consent of Stockholders. Our Bylaws provide that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our Bylaws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder’s notice generally must be delivered not less than 90 days or more than 120 days prior to the anniversary of the previous year’s annual meeting.

Election and Removal of Directors. Except as may otherwise be provided by the DGCL, any director or the entire board of directors may be removed, with or without cause, at an annual meeting or a special meeting called for that purpose, by the affirmative vote of the holders of a majority of the shares then entitled to vote at an election of directors. Vacancies on our board of directors resulting from the removal of directors and newly created directorships resulting from any increase in the number of directors

may be filled solely by the affirmative vote of a majority of the remaining directors then in office. This system of electing and removing directors may discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of our directors. Our Certificate of Incorporation and Bylaws do not provide for cumulative voting in the election of directors.

Exclusive Jurisdiction. Our Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, the Certificate of Incorporation or the Bylaws, or (iv) any action asserting a claim against the Company governed by the internal affairs doctrine."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Stock Market Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "PRPH."

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DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase shares of our common stock and/or preferred stock. We may offer warrants separately or together with one or more additional warrants, common stock, or preferred stock, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the warrant to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the warrant, warrant agreement or warrant certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable warrant agreement and warrant certificate for additional information before you decide whether to purchase any of our rights.

We will provide in a prospectus supplement the following terms of the warrants being issued:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock and/or preferred stock will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants may be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrant Agent

The warrant agent for any warrants we offer will be set forth in the applicable prospectus supplement.

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DESCRIPTION OF UNITS

The following description, together with the additional information that we include in any applicable prospectus supplements summarizes the material terms and provisions

of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units consisting of common stock, preferred stock and/or warrants for the purchase of common stock or preferred stock in one or more series, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement;
- the price or prices at which such units will be issued;
- the applicable United States federal income tax considerations relating to the units; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those set forth in any prospectus supplement or as described under “Description of Capital Stock” and “Description of Warrants” will apply to each unit, as applicable, and to any common stock, preferred stock or warrant included in each unit, as applicable.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

PLAN OF DISTRIBUTION

General Plan of Distribution

We may offer securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2) through agents, (3) in “at the market offerings” within the meaning of Rule 415(a)(4) of the Securities Act, (4) directly to one or more purchasers, or (5) through a combination of such methods. We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed from time to time;
- market prices prevailing at the time of sale;
- prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any underwriter or agent involved in the offer or sale of the securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement which the underwriter will use to make re-sales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement information regarding any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities

Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for listing and trading on the Nasdaq Capital Market. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the Nasdaq Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

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In order to facilitate the offering of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing the applicable security in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

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LEGAL MATTERS

Reed Smith LLP, New York, New York, will pass upon the validity of the issuance of the securities to be offered by this prospectus.

EXPERTS

The consolidated balance sheet of ProPhase Labs, Inc. and Subsidiaries as of December 31, 2020, and the related consolidated statements of operations and other comprehensive income (loss), statements of changes in stockholders' equity, and cash flows for the year ended December 31, 2020, and the related notes, have been audited by Friedman LLP, independent registered public accounting firm, as stated in their report, which is incorporated herein by reference.

The consolidated balance sheet of ProPhase Labs, Inc. and Subsidiaries as of December 31, 2019, and the related consolidated statements of operations and other comprehensive income (loss), stockholders' equity, and cash flows for the year ended December 31, 2019, and the related notes, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities offered under this prospectus, we refer you to the registration statement and the exhibits filed as a part of the registration statement. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including ProPhase Labs, Inc. The SEC's Internet site can be found at www.sec.gov. We maintain a website at www.prophaselabs.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement and any prospectus supplement filed hereafter, including the exhibits, for further information about us and the securities we may offer

pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in “Where You Can Find More Information.” The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the fiscal year ended [December 31, 2020](#) filed on March 31, 2021;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended [March 31, 2021](#) and [June 30, 2021](#), filed on [May 14, 2021](#) and [August 13, 2021](#), respectively;
- our Current Reports on Form 8-K filed on [January 7, 2021](#), [January 15, 2021](#), [January 20, 2021](#), [May 13, 2021](#), [May 21, 2021](#), [June 15, 2021](#), [August 16, 2021](#), and [September 8, 2021](#); and
- the description of the Company’s Common Stock filed as Exhibit 4.3 to the Company’s Annual Report on Form 10-K for the fiscal year ended [December 31, 2019](#), filed with the Commission on March 26, 2020.

In addition, all documents that the Company files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents, except as to any document or portion of any document that is deemed furnished and not filed.

Pursuant to Rule 412 under the Securities Act, any statement contained in the documents incorporated or deemed to be incorporated by reference in this Registration Statement shall be deemed to be modified, superseded or replaced for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference in this Registration Statement modifies, supersedes or replaces such statement. Any such statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this Registration Statement.

**Shares of Common Stock
Pre-funded Warrants to Purchase Common Stock
Shares of Common Stock Underlying the Pre-Funded Warrants**



PRELIMINARY PROSPECTUS SUPPLEMENT

ThinkEquity

, 2024
