

PROSPECTUS



1,306,250 Shares of Common Stock
1,537,500 Pre-Funded Warrants to Purchase up to 1,537,500 Shares of Common Stock
5,687,500 Common Warrants to Purchase up to 5,687,500 Shares of Common Stock
85,312 Underwriter Warrants to Purchase up to 85,312 Shares of Common Stock
1,537,500 Shares of Common Stock issuable upon exercise of the Pre-Funded Warrants
5,687,500 Shares of Common Stock issuable upon exercise of the Common Warrants
85,312 Shares of Common Stock issuable upon exercise of the Underwriter Warrants

We are offering 1,306,250 shares of our common stock and common warrants to purchase an aggregate of 5,687,500 shares of our common stock (and the shares of common stock that are issuable from time to time upon exercise of the common warrants). We are also offering pre-funded warrants to purchase up to 1,537,500 shares of common stock to those purchasers whose purchase of shares 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 opportunity to purchase, if any such purchaser so chooses, pre-funded warrants to purchase shares of our common stock, in lieu of shares of common stock that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. Each pre-funded warrant will be exercisable for one share of our common stock. The purchase price of each pre-funded warrant and accompanying common warrant will be equal to the price at which a share of common stock and accompanying common warrant are sold to the public in this offering, minus \$0.0001, and the exercise price of each pre-funded warrant will be \$0.0001 per share. 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. This offering also relates to the shares of common stock issuable upon exercise of any pre-funded warrants sold in this offering. Each share of common stock and pre-funded warrant is being sold together with a common warrant to purchase two shares of our common stock at an exercise price of \$1.60 per share. The common warrants will be exercisable immediately and will expire five years from the date of issuance. The shares of common stock and pre-funded warrants, and the accompanying common warrants, can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance.

Our common stock is listed on The Nasdaq Capital Market under the symbol "SONN." On October 24, 2023, the last reported sale price of our common stock on The Nasdaq Capital Market was \$1.81 per share. There is no established public trading market for the pre-funded warrants or common warrants, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the pre-funded warrants or common warrants on any national securities exchange. Without an active trading market, the liquidity of the pre-funded warrants or common warrants will be limited.

You should read this prospectus, together with additional information described under the headings "Information Incorporated by Reference" and "Where You Can Find More Information," carefully before you invest in any of our securities.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 5 of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share and Accompanying Common Warrant	Per Pre- Funded Warrant and Accompanying Common Warrant	Total
Public offering price	\$ 1.60	\$ 1.5999	\$ 4,549,846.25
Underwriting discounts and commissions (1)	\$ 0.112	\$ 0.112	\$ 318,500.00
Proceeds to us, before expenses	\$ 1.488	\$ 1.4879	\$ 4,231,346.25

(1) See "Underwriting" for additional information regarding underwriting compensation.

The delivery of the securities offered hereby to purchasers is expected to be made on or about October 27, 2023.

Joint Book-Running Managers

Chardan

Ladenburg Thalmann

The date of this prospectus is October 24, 2023

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS	1
PROSPECTUS SUMMARY	2
THE OFFERING	3
RISK FACTORS	5
USE OF PROCEEDS	6
DILUTION	7
DESCRIPTION OF CAPITAL STOCK	8
DESCRIPTION OF SECURITIES WE ARE OFFERING	11
UNDERWRITING	13
EXECUTIVE COMPENSATION	17
INFORMATION INCORPORATED BY REFERENCE	21
WHERE YOU CAN FIND MORE INFORMATION	22

ABOUT THIS PROSPECTUS

We incorporate by reference important information into this prospectus. You may obtain the information incorporated by reference without charge by following the instructions under “Where You Can Find More Information.” You should carefully read this prospectus as well as additional information described under “Information Incorporated by Reference,” before deciding to invest in our securities.

Neither we nor the underwriters have authorized anyone to provide you with additional information or information different from that contained or incorporated by reference in this prospectus filed with the Securities and Exchange Commission (the “SEC”). We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The underwriters are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus, or any document incorporated by reference in this prospectus, is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

The information incorporated by reference or provided in this prospectus contains statistical data and estimates, including those relating to market size and competitive position of the markets in which we participate, that we obtained from our own internal estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Industry publications, studies and surveys generally state that they have been obtained from sources believed to be reliable. While we believe our internal company research is reliable and the definitions of our market and industry are appropriate, neither this research nor these definitions have been verified by any independent source.

For investors outside the United States (“U.S.”): We and the underwriters have not done anything that would permit this offering or the possession or distribution of this prospectus in any jurisdiction where action for those purposes is required, other than in the U.S. Persons outside the U.S. who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside of the U.S.

CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements contained in this prospectus other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, liquidity, future revenue, projected expenses, results of operations, expectations concerning the timing and our ability to commence and subsequently report data from planned non-clinical studies and clinical trials, prospects, plans and objectives of management are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “plan,” “expect,” “predict,” “potential,” “opportunity,” “goals,” or “should,” and similar expressions are intended to identify forward-looking statements. Such statements are based on management’s current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors.

We based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in “Risk Factors” in this prospectus, and under a similar heading in any other annual, periodic or current report incorporated by reference into this prospectus or that we may file with the SEC in the future. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge quickly and from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this prospectus, may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are qualified in their entirety by this cautionary statement.

You should also read carefully the factors described in the “Risk Factors” section of this prospectus, and under a similar heading in any other annual, periodic or current report incorporated by reference into this prospectus, to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. You are advised to consult any further disclosures we make on related subjects in our future public filings.

PROSPECTUS SUMMARY

This summary highlights information about our company, this offering and information contained in greater detail in other parts of this prospectus or incorporated by reference into this prospectus from our filings with the SEC listed in the section entitled “Information Incorporated by Reference.” Because it is only a summary, it does not contain all of the information that you should consider before purchasing our securities in this offering and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus, the registration statement of which this prospectus is a part, and the information incorporated by reference into this prospectus in their entirety, including the “Risk Factors” and our financial statements and the related notes incorporated by reference into this prospectus, before purchasing our securities in this offering.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to “the Company,” “we,” “us” and “our” refer to Sonnet BioTherapeutics Holdings, Inc. and our consolidated subsidiaries.

On August 31, 2023, we effected a reverse stock split of our issued and outstanding common stock, par value \$0.0001 per share, at a ratio of 1-for-22 and on September 16, 2022, we effected a reverse stock split of our issued and outstanding common stock at a ratio of 1-for-14. All of our historical share and per share information related to issued and outstanding common stock and outstanding options and warrants exercisable for common stock included in this prospectus have been adjusted, on a retroactive basis, to reflect the reverse stock splits. The information dated before August 31, 2023 incorporated by reference into this prospectus has not been adjusted to reflect the reverse stock splits. See “Corporate Information.”

Corporate Overview

Sonnet BioTherapeutics Holdings, Inc. (“we,” “us,” “our” or the “Company”), is a clinical stage, oncology-focused biotechnology company with a proprietary platform for innovating biologic medicines of single- or bi-specific action. Known as F_HAB™ (Fully Human Albumin Binding), the technology utilizes a fully human single chain antibody fragment that binds to and “hitch-hikes” on human serum albumin for transport to target tissues. We designed the construct to improve drug accumulation in specific tissues, as well as to extend the duration of activity in the body. F_HAB development candidates are produced in a mammalian cell culture, which enables

glycosylation, thereby reducing the risk of immunogenicity. We believe our F_HAB technology, for which we received a U.S. patent in June 2021, is a distinguishing feature of our biopharmaceutical platform that is well suited for future drug development across a range of human disease areas, including in oncology, autoimmune, pathogenic, inflammatory, and hematological conditions.

Recent Developments

Registered Direct Offering and Private Placement

On June 28, 2023, we entered into a securities purchase agreement with certain investors pursuant to which we agreed to sell and issue, in (i) a registered direct offering (the “RD Offering”), an aggregate of (a) 166,363 shares of common stock at a purchase price of \$9.90 per share and accompanying Private Warrant, and (b) 60,909 pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to an aggregate of 60,909 shares of common stock (the “Pre-Funded Warrant Shares”) at a purchase price of \$9.8978 per Pre-Funded Warrant and accompanying Private Warrant and (ii) in a concurrent private placement (the “Private Placement” and together with the RD Offering, the “June 2023 Offering”), Private Warrants to purchase up to 227,272 shares of common stock. The Private Warrants will be exercisable as of December 30, 2023 at an exercise price of \$14.8478 per share and will expire three and one-half years from the date of issuance. The closing of the issuance and sale of these securities was consummated on June 30, 2023. The gross proceeds from the offering, prior to deducting offering expenses and placement agent fees and expenses payable by us, was approximately \$2.25 million.

Pursuant to a placement agency agreement dated as of June 28, 2023, we engaged Chardan Capital Markets, LLC (“Chardan”) to act as our exclusive placement agent in connection with the June 2023 Offering. We paid to Chardan (i) a cash fee equal to 8.0% of the aggregate gross proceeds of the June 2023 Offering, excluding the proceeds, if any, from the exercise of the Private Warrants and (ii) a non-accountable expense allowance of 0.5% of the aggregate gross proceeds of the June 2023 Offering, and (iii) reimbursed Chardan for certain expenses and legal fees up to \$35,000. In addition, we issued to Chardan or its designees, PA Warrants to purchase up to 6,818 shares of common stock. The PA Warrants will be exercisable as of December 30, 2023 and have a term of exercise equal to three and a half years from the date of issuance, with an exercise price of \$14.8478 per share.

Corporate Information

We were organized on October 21, 1999, under the name Tulvine Systems, Inc., under the laws of the State of Delaware. On April 25, 2005, Tulvine Systems, Inc. formed a wholly owned subsidiary, Chanticleer Holdings, Inc., and on May 2, 2005, Tulvine Systems, Inc. merged with, and changed its name to, Chanticleer Holdings, Inc. On April 1, 2020, we completed our business combination with Sonnet BioTherapeutics, Inc. (“Sonnet”), in accordance with the terms of the Agreement and Plan of Merger, dated as of October 10, 2019, as amended, by and among us, Sonnet and Biosub Inc., a wholly-owned subsidiary of the Company (“Merger Sub”) (the “Merger Agreement”), pursuant to which Merger Sub merged with and into Sonnet, with Sonnet surviving as a wholly owned subsidiary of us (the “Merger”). Under the terms of the Merger Agreement, we issued shares of common stock to Sonnet’s stockholders at an exchange rate of 0.106572 shares for each share of Sonnet common stock outstanding immediately prior to the Merger. In connection with the Merger, we changed our name from “Chanticleer Holdings, Inc.” to “Sonnet BioTherapeutics Holdings, Inc.,” and the business conducted by us became the business conducted by Sonnet.

On August 31, 2023, we effected a reverse stock split of our issued and outstanding common stock, par value \$0.0001 per share, at a ratio of 1-for-22 (the “2023 Reverse Stock Split”), and on September 16, 2022, we effected a reverse stock split of our issued and outstanding common stock at a ratio of 1-for-14 (the “2022 Reverse Stock Split” and, together with the 2023 Reverse Stock Split, the “Reverse Stock Splits”). Shares of common stock underlying outstanding stock options and other equity instruments convertible into common stock were proportionately reduced and the respective exercise prices, if applicable, were proportionately increased in accordance with the terms of the agreements governing such securities in connection with the Reverse Stock Splits. No fractional shares were issued in connection with the Reverse Stock Splits. Stockholders who would otherwise be entitled to a fractional share of common stock instead receive a proportional cash payment. All of our historical share and per share information related to issued and outstanding common stock and outstanding options and warrants exercisable for common stock included in this prospectus have been adjusted, on a retroactive basis, to reflect the Reverse Stock Splits. The information dated before August 31, 2023 incorporated by reference into this prospectus has not been adjusted to reflect the 2023 Reverse Stock Split.

Our principal executive offices are located at 100 Overlook Center, Suite 102, Princeton, New Jersey 08540, and our telephone number is (609) 375-2227. Our website is www.sonnetbio.com. Our website and the information contained on, or that can be accessed through, our website shall not be deemed to be incorporated by reference in, and are not considered part of, this prospectus supplement or the accompanying prospectus. You should not rely on any such information in making your decision whether to purchase our common stock.

The Offering

Common Stock to be Offered

1,306,250 shares.

Pre-funded Warrants to be Offered

We are also offering pre-funded warrants to purchase up to 1,537,500 shares of common stock to those purchasers whose purchase of shares 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 opportunity to purchase, if such purchasers so choose, pre-funded warrants to purchase shares of common stock, in lieu of shares of common stock that would otherwise result in any such purchaser’s beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. Each pre-funded warrant will be exercisable for one share of our common stock. The purchase price of each pre-funded warrant and accompanying common warrant will equal the price at which the share of common stock and accompanying common warrant are being sold to the public in this offering, minus \$0.0001, and the exercise price of each pre-funded warrant will be \$0.0001 per share. The pre-funded warrants will be exercisable immediately and may be exercised at any time until all of the pre-funded warrants are exercised in full. This offering also relates to the shares of common stock issuable upon exercise of any pre-funded warrants sold in this offering.

Common Warrants to be Offered

Common warrants to purchase an aggregate of 5,687,500 shares of our common stock. Each share of our common stock and each pre-funded warrant to purchase one share of our common stock is being sold together with a common warrant to purchase two shares of our common stock. Each common warrant will have an exercise price of \$1.60 per share, will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The shares of common stock and pre-funded warrants, and the accompanying common warrants, as the case may be, can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the common warrants.

Common Stock to be Outstanding Immediately After this Offering (1)

4,594,176 shares, assuming all of the pre-funded warrants offered hereby are exercised and no exercise of the common warrants offered hereby.

Underwriter Warrants to be Offered

We have agreed to issue to the underwriters warrants (the “underwriter warrants”) to purchase up to 85,312 shares of common stock (representing 3% of the aggregate number of shares sold in this offering, including the number of shares of common stock underlying the pre-funded warrants), at an exercise price of \$2.00 per share (representing 125% of the price at which a share of common stock and accompanying common warrant are sold to the public in this offering). The underwriter warrants will be exercisable immediately and for five years from the date of commencement of sales in this offering. The issuance of the underwriter warrants and the shares issuable upon exercise of the underwriter warrants are registered on the registration statement of which this prospectus forms a part.

Use of Proceeds

We estimate that the net proceeds from this offering will be approximately \$3.8 million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of the common warrants in this offering.

We currently intend to use the net proceeds from this offering for research and development, including clinical trials, working capital and general corporate purposes. See “Use of Proceeds” for additional information.

3

Risk Factors

An investment in our securities involves a high degree of risk. See “Risk Factors” beginning on page 5 of this prospectus and the other information included and incorporated by reference in this prospectus for a discussion of the risk factors you should carefully consider before deciding to invest in our securities.

National Securities Exchange Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol “SONN.” There is no established public trading market for the pre-funded warrants or common warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants or common warrants on any national securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants or common warrants will be limited.

(1) The number of shares of our common stock that will be outstanding immediately after this offering is based on 1,750,426 shares of common stock outstanding as of October 17, 2023, and excludes:

- 2,326 shares of common stock underlying restricted stock units outstanding as of October 17, 2023;
- 14,480 shares of common stock reserved for future issuance under the 2020 Omnibus Equity Incentive Plan as of October 17, 2023;
- 730,333 shares of common stock issuable upon the exercise of warrants outstanding as of October 17, 2023, with a weighted average exercise price of \$115.60 per share;
- 1,537,500 shares of common stock issuable upon the exercise of the pre-funded warrants issued in this offering;
- 5,687,500 shares of common stock issuable upon the exercise of the common warrants issued in this offering; and
- 85,312 shares of common stock issuable upon the exercise of the underwriter warrants issued in this offering.

Unless otherwise indicated, this prospectus reflects and assumes no issuances or exercises of any other outstanding shares, options or warrants after October 17, 2023.

4

RISK FACTORS

Investing in our securities involves a high degree of risk. We urge you to carefully consider all of the information contained in this prospectus and other information which may be incorporated by reference in this prospectus as provided under “Information Incorporated by Reference.” In particular, you should consider the risk factors below, together with those under the heading “Risk Factors” in our most recent Annual Report on Form 10-K, which is incorporated by reference into this prospectus, as those risk factors are amended or supplemented by our subsequent filings with the SEC. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not currently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described below or in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. As a result, you could lose all or part of your investment.

RISKS RELATED TO THIS OFFERING

If you purchase shares of common stock in this offering, you will experience immediate and substantial dilution in your investment. You will experience further dilution if we issue additional equity or equity-linked securities in the future.

Because the price per share of our common stock being offered is substantially higher than the as adjusted net tangible book value per share of our common stock, you will suffer immediate and substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. Based on a combined public offering price of \$1.60 per share of common stock and accompanying common warrant being sold in this offering, and our as adjusted net tangible book value as of June 30, 2023 of \$1.57 per share, if you purchase securities in this offering, you will suffer immediate and substantial dilution of \$0.03 per share with respect to the as adjusted net tangible book value of the common stock. See the section entitled “Dilution” for a more detailed discussion of the dilution you will incur if you purchase securities in this offering.

If we issue additional shares of common stock, or securities convertible into or exchangeable or exercisable for shares of common stock, our stockholders, including investors who purchase shares of common stock and/or pre-funded warrants and accompanying common warrants in this offering, will experience additional dilution, and any such issuances may result in downward pressure on the price of our common stock. We also cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders.

Future sales of substantial amounts of our common stock or securities convertible into or exchangeable or exercisable for shares of common stock, either by us or by our existing stockholders, or the possibility that such sales could occur, could adversely affect the market price of our common stock.

Future sales in the public market of shares of our common stock or securities convertible into or exchangeable or exercisable for shares of common stock, including shares

referred to in the foregoing risk factor, shares held by our existing stockholders or shares issued upon exercise of our outstanding stock options or warrants, or the perception by the market that these sales could occur, could lower the market price of our common stock or make it difficult for us to raise additional capital.

There is no public market for the pre-funded warrants or common warrants being offered in this offering.

There is no established public trading market for the pre-funded warrants or common 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 or common warrants on any securities exchange or nationally recognized trading system, including The Nasdaq Capital Market. Without an active market, the liquidity of the pre-funded warrants and common warrants will be limited.

Holders of pre-funded warrants and common warrants purchased in this offering will have no rights as common stockholders until such holders exercise such warrants and acquire our common stock.

Until holders of pre-funded warrants or common warrants acquire shares of our common stock upon exercise of such warrants, holders of pre-funded warrants or common warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the pre-funded warrants or common warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

We will have broad discretion in the use of our existing cash and cash equivalents, including the proceeds from this offering, and may invest or spend our cash in ways with which you do not agree and in ways that may not increase the value of your investment.

We will have broad discretion over the use of our cash and cash equivalents, including the proceeds from this offering. You may not agree with our decisions, and our use of cash may not yield any return on your investment. We intend to use the net proceeds from this offering for research and development, including clinical trials, working capital and general corporate purposes. Our failure to apply the net proceeds from 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, on 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.

5

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$3.8 million from the sale of the securities offered by us in this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, excluding the proceeds, if any, from the exercise of the common warrants issued in this offering.

We currently intend to use the net proceeds from this offering for research and development, including clinical trials, working capital and general corporate purposes. See “Risk Factors” for a discussion of certain risks that may affect our intended use of the net proceeds from this offering.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot currently allocate specific percentages of the net proceeds that we may use for the purposes specified above, and we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to obtain additional financing, the progress, cost and results of our preclinical and clinical development programs, and whether we are able to enter into future licensing or collaboration arrangements.

Pending the use of the net proceeds from this offering, we intend to invest the net proceeds in investment-grade, interest-bearing instruments, certificates of deposit or direct or guaranteed obligations of the U.S.

6

DILUTION

If you invest in our securities, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the adjusted net tangible book value per share of our common stock immediately after the closing of this offering.

Our historical net tangible book value as of June 30, 2023 was \$3.4 million, or \$1.96 per share of common stock. Our historical net tangible book value is the amount of our total tangible assets less our liabilities. Historical net tangible book value per common share is our historical net tangible book value divided by the number of shares of common stock outstanding as of June 30, 2023.

After giving effect to the sale of 1,306,250 shares of common stock and accompanying common warrants at a combined public offering price of \$1.60 per share and accompanying common warrants and pre-funded warrants to purchase up to 1,537,500 shares of common stock and accompanying common warrants a combined public offering price of \$1.5999 per pre-funded warrant and accompanying warrants in this offering, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, excluding the proceeds, if any, from the exercise of the common warrants issued in this offering, and assuming all of the pre-funded warrants offered in this offering are exercised, our as adjusted net tangible book value as of June 30, 2023 would be \$7.2 million, or \$1.57 per share of common stock. This amount represents an immediate decrease in net tangible book value of \$0.39 per share to our existing stockholders and an immediate dilution of \$0.03 per share to investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting as adjusted net tangible book value per share after this offering from the combined public offering price per share paid by investors participating in this offering.

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

Combined public offering price per share and accompanying common warrant		\$	1.60
Historical net tangible book value per share as of June 30, 2023	\$	1.96	
Decrease in net tangible book value per share attributable to this offering		(0.39)	
Net tangible book value per share after giving effect to this offering			1.57
Dilution per share to new investors in this offering	\$		0.03

The table and discussion above is based on 1,744,984 shares of common stock outstanding as of June 30, 2023 and excludes:

- 2,326 shares of common stock underlying unvested restricted stock units outstanding as of June 30, 2023;
- 5,516 shares of common stock subject to restricted stock awards granted as of June 30, 2023 but not yet issued;
- 14,480 shares of common stock reserved for future issuance under the 2020 Omnibus Equity Incentive Plan as of June 30, 2023;

- 730,333 shares of common stock issuable upon the exercise of warrants outstanding as of June 30, 2023, with a weighted average exercise price of \$115.60 per share;
- 1,537,500 shares of common stock issuable upon the exercise of the pre-funded warrants issued in this offering;
- 5,687,500 shares of common stock issuable upon the exercise of the common warrants issued in this offering; and
- 85,312 shares of common stock issuable upon the exercise of the underwriter warrants issued in this offering.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of:

- 125,000,000 shares of common stock, par value \$0.0001 per share; and
- 5,000,000 shares of preferred stock, par value \$0.0001 per share, of which, as of the date of this prospectus, none of which shares have been designated.

As of close of business on October 17, 2023, 1,750,426 shares of common stock were issued and outstanding and no shares of preferred stock were issued and outstanding.

The additional shares of our authorized stock available for issuance may be issued at times and under circumstances so as to have a dilutive effect on earnings per share and on the equity ownership of the holders of our common stock. The ability of our board of directors to issue additional shares of stock could enhance the board's ability to negotiate on behalf of the stockholders in a takeover situation but could also be used by the board to make a change-in-control more difficult, thereby denying stockholders the potential to sell their shares at a premium and entrenching current management. The following description is a summary of the material provisions of our capital stock. You should refer to our Certificate of Incorporation, as amended (the "Certificate of Incorporation") and Amended and Restated Bylaws (the "Bylaws"), both of which are on file with the SEC as exhibits to previous SEC filings, for additional information. The summary below is qualified by provisions of applicable law.

Common Stock

Holders of our common stock are each entitled to cast one vote for each share held of record on all matters presented to stockholders. Cumulative voting is not allowed; the holders of a majority of our outstanding shares of common stock may elect all directors. Holders of our common stock are entitled to receive such dividends as may be declared by our board out of funds legally available and, in the event of liquidation, to share pro rata in any distribution of our assets after payment of liabilities. Our directors are not obligated to declare a dividend. It is not anticipated that we will pay dividends in the foreseeable future. Holders of our do not have preemptive rights to subscribe to any additional shares we may issue in the future. There are no conversion, redemption, sinking fund or similar provisions regarding the common stock. All outstanding shares of common stock are fully paid and nonassessable.

The rights, preferences and privileges of holders of common stock are subject to the rights of the holders of any outstanding shares of preferred stock.

Preferred Stock

We are authorized to issue up to 5,000,000 shares of preferred stock, all of which are undesignated. Our board of directors has the authority to issue preferred stock in one or more classes or series and to fix the designations, powers, preferences and rights, and the qualifications, limitations or restrictions thereof, including dividend rights, conversion right, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any class or series, without further vote or action by the stockholders. Although we have no present plans to issue any other shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, 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. The preferred stock may provide for an adjustment of the conversion price in the event of an issuance or deemed issuance at a price less than the applicable conversion price, subject to certain exceptions.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;

- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and

rights upon liquidation, dissolution or winding up of our affairs.

Anti-takeover Effects of Delaware Law and our Certificate of Incorporation and Bylaws

Our Certificate of Incorporation and Bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or tender offers or delaying or preventing a change of control. These provisions are as follows:

- they provide that special meetings of stockholders may be called by the President, the board of directors or at the request by stockholders of record owning at least thirty-three and one-third (33 1/3%) percent of the issued and outstanding voting shares of our common stock;
- they do not include a provision for cumulative voting in the election of directors. Under cumulative voting, a minority stockholder holding a sufficient number of shares may be able to ensure the election of one or more directors. The absence of cumulative voting may have the effect of limiting the ability of minority stockholders to effect changes in our board of directors; and
- they allow us to issue, without stockholder approval, up to 5,000,000 shares of preferred stock that could adversely affect the rights and powers of the holders of our common stock.

We are subject to the provisions of Section 203 of the Delaware General Corporation Law, an anti-takeover law. Subject to certain exceptions, the statute 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:

- prior to such date, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

9

- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least eighty-five percent 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (1) by persons who are directors and also officers and (2) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least sixty-six and two-thirds percent 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, for purposes of Section 203, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns or, within three (3) years prior to the determination of interested stockholder status, owned fifteen percent (15%) or more of a corporation’s outstanding voting securities.

Potential Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may utilize these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, to facilitate corporate acquisitions or payment as a dividend on the capital stock.

The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, the board of directors has the discretion to determine designations, rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences of each series of preferred stock, all to the fullest extent permissible under the DGCL and subject to any limitations set forth in our Certificate of Incorporation. The purpose of authorizing the board of directors to issue preferred stock and to determine the rights and preferences applicable to such preferred stock is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible financings, acquisitions and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from acquiring, a majority of our outstanding voting stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Securities Transfer Corporation. The transfer agent address is Securities Transfer Corporation, 2901 N Dallas Parkway, Suite 380, Plano, TX 75093, (469) 633-0101.

10

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering (i) 1,306,250 shares of our common stock, (ii) pre-funded warrants to purchase 1,537,500 shares of our common stock and (iii) common warrants to purchase up to an aggregate of 5,687,500 shares of our common stock. Each share of common stock or pre-funded warrant is being sold together with a common warrant to purchase two shares of our common stock. The shares of common stock or pre-funded warrants and accompanying common warrants will be issued separately. We are also registering the shares of common stock issuable from time to time upon exercise of the pre-funded warrants and common warrants offered hereby.

Common Stock

The material terms and provisions of our common stock are described under the caption “Description of Capital Stock” in this prospectus.

Pre-Funded Warrants

The following summary of certain terms and provisions of pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrant, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

Duration and Exercise Price. Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.0001. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The pre-funded warrants will be issued separately from the accompanying common warrants and may be transferred separately immediately thereafter.

Exercisability. 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 accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Purchasers of the pre-funded warrants in this offering may elect to deliver their exercise notice following the pricing of the offering and prior to the issuance of the pre-funded warrants at closing to have their pre-funded warrants exercised immediately upon issuance and receive shares of common stock underlying the pre-funded warrants upon closing of this offering. A holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% of the outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's pre-funded warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. Purchasers of pre-funded warrants in this offering may also elect prior to the issuance of the pre-funded warrants to have the initial exercise limitation set at 9.99% of our outstanding common stock. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will round down to the next whole share.

Cashless Exercise. If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the shares of common stock underlying the pre-funded warrants under the Securities Act is not then effective or available, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the pre-funded warrants.

Transferability. Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

11

Exchange Listing. There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

Right as a Stockholder. Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their pre-funded warrants.

Fundamental Transaction. In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, 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 the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction.

Common Warrants

The following summary of certain terms and provisions of common warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the common warrants, the form of which will be filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of common warrants for a complete description of the terms and conditions of the common warrants.

Duration and Exercise Price. Each common warrant offered hereby will have an initial exercise price per share equal to \$1.60. The common warrants will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The common warrants will be issued separately from the common stock (or pre-funded warrants) and may be transferred separately immediately thereafter. A common warrant to purchase two shares of our common stock will be issued for every share of common stock (or pre-funded warrant to purchase a share of common stock) purchased in this offering.

Exercisability. The common warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the common warrant to the extent that the holder would own more than 4.99% of the outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's common warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the common warrants. No fractional shares of common stock will be issued in connection with the exercise of a common warrant. In lieu of fractional shares, we will round down to the next whole share.

Cashless Exercise. If, at the time a holder exercises its common warrants, a registration statement registering the issuance of the shares of common stock underlying the common warrants under the Securities Act is not then effective or available and an exemption from registration under the Securities Act is not available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the common warrants.

Transferability. Subject to applicable laws, a common warrant may be transferred at the option of the holder upon surrender of the common warrant to us together with the appropriate instruments of transfer.

Exchange Listing. There is no established public trading market for the common warrants, and we do not expect a market to develop. In addition, we do not intend to list the common warrants on any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the common warrants will be limited.

Right as a Stockholder. Except as otherwise provided in the common warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the common warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their common warrants.

Fundamental Transaction. In the event of a fundamental transaction, as described in the form of common warrant, and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the common warrants will be entitled to receive upon exercise of the common warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common warrants immediately prior to such fundamental transaction. In the event of a Change of Control (as defined in each common warrant) approved by our Board of Directors, the holders of the common warrants have the right to require us or a successor entity to redeem the common warrants for cash in the amount of the Black-Scholes Value (as defined in each common warrant) of the unexercised portion of the common warrants on the date of the consummation of the Change of Control. In the event of a Change of Control which is not approved by our Board of Directors, the holders of the common warrants have the right to require us or a successor entity to redeem the common warrants for the consideration paid in the Change of Control in the amount of the Black-Scholes Value of the unexercised portion of the common warrants on the date of the consummation of the Change of Control.

12

We entered into an underwriting agreement with Chardan Capital Markets, LLC (“Chardan”) and Ladenburg Thalmann & Co. Inc. (“Ladenburg”), as representatives of the several underwriters (the “Representatives”), relating to this offering. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters and each of the underwriters has agreed to purchase, severally and not jointly, the number of shares, pre-funded warrants and common warrants set forth opposite its name in the following table:

	Number of Shares of Common Stock	Number of Pre-Funded Warrants	Number of Common Warrants
Chardan Capital Markets, LLC	979,688	1,153,125	4,265,626
Ladenburg Thalmann & Co. Inc.	326,562	384,375	1,421,874
TOTAL	1,306,250	1,537,500	5,687,500

The underwriters have agreed to purchase all of the shares of common stock and pre-funded warrants and accompanying common warrants offered by us, if any are purchased. The obligations of the underwriters may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the obligations of the underwriters are subject to customary conditions, representations and warranties contained in the underwriting agreement, such as receipt by the underwriters of officers’ certificates and legal opinions.

The underwriters have advised us that they propose initially to offer the shares of common stock and pre-funded warrants and accompanying common warrants to purchase shares of common stock to the public at the public offering price set forth on the cover page of this prospectus and to dealers at a price less a concession not in excess of \$0.056 per share and accompanying common warrant and per pre-funded warrant and accompanying common warrant, based on the combined public offering price per share and accompanying common warrant or pre-funded warrant and accompanying common warrant. After the shares of common stock and pre-funded warrants and accompanying common warrants are released for sale to the public, the underwriters may change the offering price, the concession, and other selling terms at various times.

We have agreed to indemnify the underwriters against certain 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 securities in this offering 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 orders to the public, and to reject orders in whole or in part.

Discounts, Commissions and Reimbursement

The following table provides information regarding the amount of the discounts and commissions to be paid to the underwriters by us.

	Per Share and Accompanying Common Warrant	Per Pre-Funded Warrant and Accompanying Common Warrant	Total
Public offering price	\$ 1.60	\$ 1.5999	\$ 4,549,846.25
Underwriting discounts and commissions (1)	\$ 0.112	\$ 0.112	\$ 318,500.00
Proceeds to us, before expenses	\$ 1.488	\$ 1.4879	\$ 4,231,346.25

(1) We have agreed to pay the underwriters a commission of 7% of the gross proceeds of this offering.

The Company has agreed to pay all reasonable out-of-pocket expenses of the Underwriters relating to this offering, including a maximum of \$65,000 for the fees and disbursements of counsel to the Underwriters. The Company has also agreed to pay to the Representatives, at the closing of this offering, a non-accountable expense allowance equal to 1% of the gross proceeds of this offering.

We estimate that our total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$400,000.

Underwriter Warrants

We have agreed to issue to the Representatives warrants (the “underwriter warrants”) to purchase up to 85,312 shares of common stock (representing 3% of the aggregate number of shares and pre-funded warrants sold in this offering, including the number of shares of common stock underlying the pre-funded warrants), at an exercise price of \$2.00 per share (representing 125% of the price at which a share of common stock and accompanying common warrant are sold to the public in this offering). The underwriter warrants will be exercisable immediately and for five years from the date of commencement of sales in this offering. The issuance of the underwriter warrants and the shares issuable upon exercise of the underwriter warrants are registered on the registration statement of which this prospectus forms a part. The underwriter warrants shall not be redeemable. Pursuant to FINRA Rule 5110(e), the shares of common stock issuable upon exercise of the underwriter warrants may not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days following the commencement of sales under the registration statement of which this prospectus forms a part, except that they may be assigned, in whole or in part, to any officer or partner of the underwriters. The underwriter warrants may be exercised as to all or a lesser number of shares of common stock for a period of five (5) years after the commencement of sales under the registration statement of which this prospectus forms a part, will provide for cashless exercise in the event an effective registration statement for the shares of common stock issuable upon exercise of the underwriter warrants is not available. The underwriter warrants provide for registration rights (including a one-time demand registration right at the expense of the Company and unlimited piggyback rights, each expiring 5 years from the closing of the offering) and customary anti-dilution provisions (adjustment in the number and price of such warrants and the shares issuable upon exercise of such warrants) resulting from corporate events (which would include dividends, reorganizations, mergers, etc.), as permitted by FINRA Rule 5110(g)(8).

Lock-Up Agreements

We have agreed with the underwriters that we will not, without the prior written consent of the Representatives, for a period of 90 days after the date of this prospectus: (i) offer, pledge, sell, 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, directly or indirectly, any classes of our stocks or any securities convertible into or exercisable or exchangeable for any classes of our stocks, (ii) file or caused to be filed any registration statement with the SEC, relating to the offering of any classes of our stocks or any securities convertible into or exercisable or exchangeable for any classes of our stocks, (iii) complete any offering of debt securities, other than entering into a line of credit with a traditional bank, or (iv) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any classes of our stocks, whether any such transaction described in clause (i), (ii), (iii) or (iv) above is to be settled by delivery of any classes of our stocks or such other securities, in cash or otherwise.

Tail Period

Subject to FINRA Rule 5110(g)(5)(B), in the event that this offering is not consummated as contemplated herein, the underwriter will be entitled to receive a cash fee equal to (a) seven percent (7.0%) of the gross proceeds received by us from any financing or capital raising transaction and (b) warrants to purchase common stock equal to three percent (3%) of the number of shares of common stock sold in a subsequent offering, to the extent that such proceeds are provided to us by any investor directly introduced by the underwriters to us during the period beginning on August 28, 2023 and ending on the earlier of the closing of the Offering or the earlier termination of the engagement (the “Engagement Period”) and the transaction is consummated at any time during the Engagement Period or within the one-month month period following the Engagement Period.

Discretionary Accounts

The underwriters do not intend to confirm sales of the shares of common stock, the pre-funded warrants and the common warrants offered hereby to any accounts over which they have discretionary authority.

Electronic Offer, Sale, and Distribution of Securities

A prospectus in electronic format may be made available on the websites maintained by the underwriter. The prospectus in electronic format will be identical to the paper version of such prospectus. The underwriter may agree to allocate a number of shares to underwriter and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriter 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 or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us, and should not be relied upon by investors.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol “SONN.” On October 24, 2023, the last reported sale price of our common stock on The Nasdaq Capital Market was \$1.81 per share. There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the pre-funded warrants on any national securities exchange. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

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 securities 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 securities while the offering is in progress.
- Over-allotment transactions involve sales by the underwriter of securities in excess of the number of securities the underwriter is obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of securities over-allotted by the underwriter is not greater than the number of securities that they may purchase in the over-allotment option. In a naked short position, the number of securities involved is greater than the number of securities in the over-allotment option. The underwriter may close out any short position by exercising their over-allotment option and/or purchasing securities in the open market.
- Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of securities to close out the short position, the underwriter will consider, among other things, the price of securities available for purchase in the open market as compared with the price at which they may purchase securities through exercise of the over-allotment option. If the underwriter sells more securities than could be covered by exercise of the over-allotment option and, therefore, have a naked short position, the position can be closed out only by buying securities in the open market. A naked short position is more likely to be created if the underwriter is concerned that after pricing there could be downward pressure on the price of the securities in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the securities originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, over-allotment transactions, syndicate covering transactions, and penalty bids may have the effect of raising or maintaining the market price of our securities or preventing or retarding a decline in the market price of our securities. As a result, the price of our securities in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriter make any representation or prediction as to the effect that the transactions described above may have on the price of our securities. These transactions may be affected on the Nasdaq Stock Market, 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 selling group members may engage in passive market making transactions in our securities on the Nasdaq Stock Market in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of the shares 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, then that bid must then be lowered when specified purchase limits are exceeded.

Certain Relationships

The underwriters and their affiliates have provided, or may in the future, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of our Company. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Except for the services provided in connection with this offering and as described below, the underwriters have not provided us with any investment banking or other financial services during the 180-day period preceding the date of this prospectus.

On June 28, 2023, we entered into a securities purchase agreement with certain investors pursuant to which we agreed to sell and issue, in (i) a registered direct offering

(the “RD Offering”), an aggregate of (a) 166,363 shares of common stock at a purchase price of \$9.90 per share and accompanying warrant (the “Private Warrant”), and (b) 60,909 pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to an aggregate of 60,909 shares of common stock (the “Pre-Funded Warrant Shares”) at a purchase price of \$9.8978 per Pre-Funded Warrant and accompanying Private Warrant and (ii) in a concurrent private placement (the “Private Placement” and together with the RD Offering, the “June 2023 Offering”), Private Warrants to purchase up to 227,272 shares of common stock. The Private Warrants will be exercisable as of December 30, 2023 at an exercise price of \$14.8478 per share and will expire three and one-half years from the date of issuance. The closing of the issuance and sale of these securities was consummated on June 30, 2023. The gross proceeds from the offering, prior to deducting offering expenses and placement agent fees and expenses payable by us, was approximately \$2.25 million.

Pursuant to a placement agency agreement dated as of June 28, 2023, we engaged Chardan to act as our exclusive placement agent in connection with the June 2023 Offering. We paid to Chardan (i) a cash fee equal to 8.0% of the aggregate gross proceeds of the June 2023 Offering, excluding the proceeds, if any, from the exercise of the Private Warrants, which amounted to \$180,000, and (ii) a non-accountable expense allowance of 0.5% of the aggregate gross proceeds of the June 2023 Offering, which amounted to \$11,250, and (iii) reimbursed Chardan for certain expenses and legal fees, which amounted to \$35,000. In addition, we issued to Chardan or its designees, placement agent warrants (the “PA Warrants”) to purchase up to 6,818 shares of common stock, which were valued at 0.9750%. The PA Warrants will be exercisable as of December 30, 2023 and have a term of exercise equal to three and a half years from the date of issuance, with an exercise price of \$14.8478 per share. The PA Warrants do not have any registration rights and are subject to a lock-up period of 180 days from the date of the placement.

Pursuant to applicable FINRA rules and, in particular, Rule 5110(e)(1), for a period of 180 days beginning on the date of commencement of sales of this offering, the PA Warrants may not be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities; provided, however, the PA Warrants may be transferred to the placement agent’s officers, partners, registered persons or affiliates as long as the warrants remain subject to the lock-up restriction above.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table shows the compensation awarded to or earned by each person serving as the Company’s principal executive officer during fiscal year 2023, the Company’s two most highly compensated executive officers who were serving as executive officers as of September 30, 2023 and up to two additional individuals for whom disclosure would have been provided but for the fact that such individuals were not serving as an executive officer as of September 30, 2023. The persons listed in the following table are referred to herein as the “Named Executive Officers.”

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	All Other Compensation (\$)	Total (\$)
Pankaj Mohan, Ph.D.	2023	538,998	309,924	95,724	-	78,074	1,022,720
<i>President and Chief Executive Officer(2)</i>	2022	559,729	218,680	144,061	-	82,923	1,005,393
John Cini, Ph.D.	2023	417,750	146,490	23,931	-	38,240	626,411
<i>Chief Scientific Officer</i>	2022	413,048	113,899	36,015	-	52,014	614,976
Jay Cross	2023	388,725	178,813	15,829	-	35,882	619,250
<i>Chief Financial Officer(3)</i>	2022	403,676	127,649	30,128	-	43,358	604,811

- (1) Represents the aggregate grant date fair value for grants made in 2023 and 2022 computed in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718. This calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the executive will perform the requisite service for the award to vest in full.
- (2) Dr. Mohan became the Chairman of Sonnet in June 2018 and the Chief Executive Officer in January 2019, and the Chairman, President and Chief Executive Officer of the Company at the closing of the Merger.
- (3) Mr. Cross became the Chief Financial Officer of Sonnet in May 2019, and the Chief Financial Officer of the Company at the closing of the Merger.

Narrative Disclosure to Summary Compensation Table

Employment Agreements

The material terms of each named executive officer’s employment agreement or arrangement are described below.

Sonnet entered into an employment agreement with Dr. Mohan on December 31, 2018, as amended (the “Mohan Agreement”), setting forth the terms of his employment as Chief Executive Officer, which agreement was assumed by the Company at the closing of the Merger. Pursuant to the employment agreement, Dr. Mohan is entitled to, among other things, (i) an annual gross base salary of \$490,000, (ii) eligibility for a bonus equal to 5.4% of gross revenue received by the Company from a strategic transaction and (iii) for any year in which the bonus in the previous clause amounts to less than 50% of the base salary, an additional performance-based cash bonus to bring the aggregate cash bonus for such year to up to 50% of the base salary, as determined by the Board. The employment agreement shall terminate in accordance with its terms. Pursuant to Dr. Mohan’s employment agreement, if he is terminated without “Cause” or for “Good Reason” within 2 months prior to or within 12 months following a “Change in Control”, he is entitled to (i) his base salary for 18 months, (ii) a bonus equal to his performance bonus for the year in which the termination occurs, divided by 12, and then multiplied by 18, and (iii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 18 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage. If Dr. Mohan is terminated without “Cause” or for “Good Reason” not coincident with a “Change in Control”, he is entitled to (i) his base salary for 18 months, (ii) any performance bonus for the performance year in which his termination occurs, and (iii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 18 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage.

Sonnet entered into an employment agreement with Dr. Cini on January 10, 2020, as amended (the “Cini Agreement”), setting forth the terms of his employment as Chief Scientific Officer, which agreement was assumed by the Company at the closing of the Merger. Pursuant to the employment agreement, Dr. Cini is entitled to, among other things, (i) an annual gross base salary of \$370,000, (ii) eligibility for a bonus equal to 1.1% of gross revenue received by the Company from a strategic transaction and (iii) for any year in which the bonus in the previous clause amounts to less than 35% of the base salary, an additional performance-based cash bonus to bring the aggregate cash bonus for such year to up to 35% of the base salary, as determined by the Board. The employment agreement shall terminate in accordance with its terms. Pursuant to Dr. Cini’s

employment agreement, if he is terminated without “Cause” or for “Good Reason” within 2 months prior to or within 12 months following a “Change in Control”, he is entitled to (i) his base salary for 12 months and (ii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 18 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage. If Dr. Cini is terminated without “Cause” or for “Good Reason” not coincident with a “Change in Control”, he is entitled to (i) his base salary for 9 months and (ii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 12 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage.

Sonnet entered into an employment agreement with Mr. Cross on January 10, 2020 (the “Cross Agreement”), setting forth the terms of his employment as Chief Financial Officer, which agreement was assumed by the Company at the closing of the Merger. Pursuant to the employment agreement, Mr. Cross is entitled to, among other things, (i) an annual gross base salary of \$365,000 and (ii) eligibility for a performance-based cash bonus of up to 40% of the base salary, as determined by the Board. The employment agreement shall terminate in accordance with its terms. Pursuant to Mr. Cross’s employment agreement, if he is terminated without “Cause” or for “Good Reason” within 2 months prior to or within 12 months following a “Change in Control”, he is entitled to (i) his base salary for 12 months, (ii) any performance bonus for the performance year in which his termination occurs, and (iii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 18 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage. If Mr. Cross is terminated without “Cause” or for “Good Reason” not coincident with a “Change in Control”, he is entitled to (i) his base salary for 9 months, (ii) any performance bonus for the performance year in which his termination occurs, and (iii) if he timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 12 months following the termination date, (b) the date he becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date he becomes ineligible for COBRA continuation coverage.

Other Agreements

On April 1, 2020, the Company entered into an employment agreement with Ms. Dexter (the “Dexter Agreement”), setting forth the terms of her employment as Chief Technical Officer. Pursuant to the employment agreement, Ms. Dexter is entitled to, among other things, (i) an annual gross base salary of \$310,000 and (ii) eligibility for a performance-based cash bonus of up to 35% of the base salary, as determined by the Board. The employment agreement shall terminate in accordance with its terms. Pursuant to Ms. Dexter’s employment agreement, if she is terminated without “Cause” or for “Good Reason” within 2 months prior to or within 12 months following a “Change in Control”, she is entitled to (i) her base salary for 12 months, (ii) any performance bonus for the performance year in which her termination occurs, and (iii) if she timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 18 months following the termination date, (b) the date she becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date she becomes ineligible for COBRA continuation coverage. If Ms. Dexter is terminated without “Cause” or for “Good Reason” not coincident with a “Change in Control”, she is entitled to (i) his base salary for 9 months, (ii) any performance bonus for the performance year in which her termination occurs, and (iii) if she timely continued coverage under COBRA, payment for COBRA premiums necessary to continue coverage until the earliest of (a) 12 months following the termination date, (b) the date she becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment, or (c) the date she becomes ineligible for COBRA continuation coverage.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth certain information, on an award-by-award basis, concerning unexercised options to purchase common stock, restricted shares of common stock and common stock that has not yet vested for each named executive officer and outstanding as of September 30, 2023.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END - 2023

Name	Stock Awards	
	Equity incentive plan awards: Number of unearned shares, units or other rights that have not vested (#)	Equity incentive plan awards: Market or payout value of unearned shares, units or other rights that have not vested (\$)
Pankaj Mohan Ph.D.	3,343(1)	9,680
John Cini, Ph.D.	843(1)	2,420
Jay Cross	705(2)	2,025

- (1) Each restricted stock award vests 100% on January 1, 2024.
- (2) Each restricted stock unit (“RSU”) award vests 100% on January 1, 2024

Director Compensation

Non-Employee Director Compensation Policy

In connection with the Merger, the Board approved a compensation policy for its non-employee directors. Other than reimbursement for reasonable expenses incurred in connection with attending board and committee meetings, this policy provides for the following cash compensation:

- each non-employee director is entitled to receive an annual fee from us of \$35,000;
- the chair of our audit committee will receive an annual fee from us of \$15,000;
- the chair of our compensation committee will receive an annual fee from us of \$10,000;
- the chair of our nominating and corporate governance committee will receive an annual fee from us of \$8,000; and
- each non-chairperson member of the audit committee, the compensation committee and the nominating and corporate governance committee will receive annual fees from us of \$7,500, \$5,000 and \$4,000, respectively.

Each non-employee director that joins the Board receives an initial option grant to purchase 0.080% of the Company’s fully-diluted outstanding Common Stock at the closing of the Merger, which shall vest 33% per year over three years, the first vesting date to occur on the one-year anniversary of the grant date. Each non-employee director also receives an annual option grant to purchase 0.040% of the Company’s fully-diluted outstanding Common Stock at the closing of the Merger, which shall vest 100% upon the earlier of the one-year anniversary of the grant date or the next annual stockholder meeting. Upon a change in control, as defined in the Company’s equity incentive plan, 100% of the shares underlying these options shall become vested and exercisable immediately prior to such change in control.

Except as set forth in the table below, the non-employee directors did not receive any cash or equity compensation during fiscal year 2023:

DIRECTOR COMPENSATION						
	Fees Earned or Paid in Cash (\$)	Stock Awards \$(1)	Option Awards \$(1)	All Other Compensation (\$)	Total (\$)	
Nailesh Bhatt(2)	54,000	3,845	-	-	57,845	
Albert Dyrness(3)	55,500	3,845	-	-	59,345	
Donald Griffith (4)	-	3,278	-	134,048	137,326	
Raghu Rao(5)	116,500	3,845	-	-	120,345	
Lori McNeill	70,000	3,845	-	-	73,845	

- (1) Represents the aggregate grant date fair value for grants made in 2023 computed in accordance with FASB ASC Topic 718. This calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the executive will perform the requisite service for the award to vest in full.
- (2) Mr. Bhatt holds an aggregate of 171 restricted stock units, as of September 30, 2023.
- (3) Mr. Dyrness holds an aggregate of 171 restricted stock units, as of September 30, 2023.
- (4) Mr. Griffith has served as Sonnet's Financial Controller since January 1, 2019, and since the Merger serves as our Controller. The amounts in the table above under "All Other Compensation" represent salary and bonus earned by Mr. Griffith for the fiscal year 2023. See the description of the employment agreement with Mr. Griffith below. Mr. Griffith holds an aggregate of 146 restricted stock units, as of September 30, 2023.
- (5) Mr. Rao holds an aggregate of 171 restricted stock units, as of September 30, 2023.
- (6) Ms. McNeill holds an aggregate of 171 restricted stock units, as of September 30, 2023.

Other Agreement with a Director

Sonnet entered into an employment agreement with Mr. Griffith on January 1, 2019, setting forth the terms of his employment as Financial Controller. Pursuant to the employment agreement, Mr. Griffith is entitled to, among other things, (i) an annual prorated gross base salary of \$150,000 and (ii) eligibility for a target bonus equal to 25% of gross salary earned. The employment agreement has no specific term and constitutes an at-will employment.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" information into this document, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. 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.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act made subsequent to the date of this prospectus until the termination of the offering of the securities described in this prospectus (other than information in such filings that was "furnished," under applicable SEC rules, rather than "filed"). We incorporate by reference the following documents or information that we have filed with the SEC:

- our Annual Report on Form 10-K for the year ended [September 30, 2022](#), filed with the SEC on December 15, 2022;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended [December 31, 2022](#), [March 31, 2023](#), and [June 30, 2023](#), filed with the SEC on February 13, 2023, May 10, 2023, and August 14, 2023, respectively; and
- our Current Reports on Form 8-K filed with the SEC on [October 4, 2022](#), [October 17, 2022](#), [October 31, 2022](#), [November 2, 2022](#), [November 9, 2022](#), [January 9, 2023](#), [January 19, 2023](#), [February 13, 2023](#), [March 24, 2023](#), [April 18, 2023](#), [June 30, 2023](#), [July 21, 2023](#), [August 22, 2023](#), [August 31, 2023](#), [September 1, 2023](#) and [September 19, 2023](#) (other than any portions thereof deemed furnished and not filed).

Any statement contained in this prospectus or contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent that a statement contained in this prospectus or any subsequently filed supplement to this prospectus, or document deemed to be incorporated by reference into this prospectus, modifies or supersedes such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these filings at no cost, by writing or telephoning us at the following address:

Sonnet BioTherapeutics Holdings, Inc.
Attn: Pankaj Mohan, Ph.D., CEO and Chairman
100 Overlook Center, Suite 102
Princeton, New Jersey 08540
(609) 375-2227

You may also access these filings on our website at www.sonnetbio.com. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide different or additional information on our behalf. An offer of these securities is not being made in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date of those respective documents.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the SEC. 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 we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on the information contained in this prospectus or incorporated by reference into this prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any jurisdiction

where the offer is not permitted. You should assume that the information contained in this prospectus, or any document incorporated by reference in this prospectus, is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or any sale of our securities.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public from commercial document retrieval services and over the Internet at the SEC's website at <http://www.sec.gov>.

We maintain a website at www.sonnetbio.com. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference into, and is not part of, this prospectus.

LEGAL MATTERS

The validity of the common stock and certain other legal matters will be passed upon for us by Lowenstein Sandler LLP, New York, New York. Lucosky Brookman LLP, Woodbridge, New Jersey, has acted as counsel to the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of Sonnet BioTherapeutics Holdings, Inc. as of September 30, 2022 and 2021 and for the years then ended have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the September 30, 2022 consolidated financial statements contains an explanatory paragraph that states that Sonnet BioTherapeutics Holdings, Inc. has incurred recurring losses and negative cash flows from operations since inception and will require substantial additional financing to continue to fund its research and development activities that raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

22



1,306,250 Shares of Common Stock
1,537,500 Pre-Funded Warrants to Purchase up to 1,537,500 Shares of Common Stock
5,687,500 Common Warrants to Purchase up to 5,687,500 Shares of Common Stock
85,312 Underwriter Warrants to Purchase up to 85,312 Shares of Common Stock
1,537,500 Shares of Common Stock issuable upon exercise of the Pre-Funded Warrants
5,687,500 Shares of Common Stock issuable upon exercise of the Common Warrants
85,312 Shares of Common Stock issuable upon exercise of the Underwriter Warrants

PROSPECTUS

Joint Book-Running Managers

Chardan

Ladenburg Thalmann

The date of this prospectus is October 24, 2023
