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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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POST-EFFECTIVE AMENDMENT NO. 1

TO

**FORM S-4**

ON

**FORM S-3**

REGISTRATION STATEMENT  
*UNDER*  
*THE SECURITIES ACT OF 1933*

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**Sonnet BioTherapeutics Holdings, Inc.**  
(Exact name of registrant as specified in its charter)

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Delaware  
(State or other jurisdiction of  
incorporation or organization)

20-2932652  
(I.R.S. Employer  
Identification Number)

100 Overlook Center, Suite 102  
Princeton, New Jersey 08540  
(609) 375-2227  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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*Copies of all communications, including communications sent to agent for service, should be sent to:*

Steven M. Skolnick, Esq.  
Lowenstein Sandler LLP  
1251 Avenue of the Americas  
New York, New York 10020  
Tel: (212) 262-6700

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**Approximate date of commencement of proposed sale to the public:** From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company.

|                             |                           |     |
|-----------------------------|---------------------------|-----|
| Large accelerated filer [ ] | Accelerated filer         | [ ] |
| Non-accelerated filer [X]   | Smaller reporting company | [X] |
|                             | Emerging growth company   | [ ] |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. [ ]

#### CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered       | Amount to be Registered <sup>(1)</sup> | Maximum Offering Price Per Share | Maximum Aggregate Offering Price | Amount of Registration Fee |
|--|--|----------------------------------|----------------------------------|----------------------------|
| Common stock, par value \$0.0001 per share | 105,812                                | N/A                              | N/A                              | (2)                        |

- (1) Represents the maximum number of shares of common stock, par value \$0.0001 per share ("Common Stock"), of Sonnet BioTherapeutics Holdings, Inc., a Delaware corporation ("Sonnet" or the "Company" or "we"), issuable under outstanding warrants (collectively, the "Sonnet Rollover Warrants") to purchase shares of common stock, no par value, of Sonnet BioTherapeutics, Inc., a New Jersey corporation ("Sonnet Sub"), which Sonnet Rollover Warrants were converted into warrants to purchase shares of Common Stock (the "Converted Warrants") in connection with the merger between the Company and Sonnet Sub, which was completed on April 1, 2020. Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement is also registering an indeterminate number of shares of Common Stock that may be issued as a result of stock splits, stock dividends or similar transactions.
- (2) These shares of Common Stock were registered under the registration statement on Form S-4 (File No. 333-235301) filed by the Company with the Securities and Exchange Commission (the "Commission") on November 27, 2019, as amended by Pre-Effective Amendment No. 1 filed on February 7, 2020, which became effective on February 11, 2020 (the "Form S-4"). All filing fees payable in connection with the issuance of these shares were previously paid in connection with the filing of the Form S-4.

**The Company hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Company shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

#### EXPLANATORY NOTE

Sonnet BioTherapeutics Holdings, Inc., a Delaware corporation ("Sonnet" or the "Company" or "we"), hereby amends its registration statement on Form S-4 (File No. 333-235301) filed with the Securities and Exchange Commission (the "Commission") on November 27, 2019, as amended by Pre-Effective Amendment No. 1 filed on February 7, 2020, which became effective on February 11, 2020 (the "Form S-4"), by filing this Post-Effective Amendment No. 1 on Form S-3 (this "Post-Effective Amendment") containing an updated prospectus relating to the shares of our common stock, par value \$0.0001 per share ("Common Stock"), issuable upon the future exercise of certain outstanding warrants (collectively, the "Sonnet Rollover Warrant") to purchase shares of common stock, no par value, of Sonnet BioTherapeutics, Inc., a New Jersey corporation ("Sonnet Sub"), which were converted into warrants to purchase shares of Common Stock (the "Converted Warrants") in connection with the merger between the Company and Sonnet Sub, which was completed on April 1, 2020. All such shares of Common Stock were previously registered on the Form S-4. This Post-Effective Amendment is being filed to convert 105,812 shares of Common Stock covered by the Form S-4 to be covered by Form S-3.

On April 1, 2020, pursuant to the Agreement and Plan of Merger, dated as of October 10, 2019 (the "Merger Agreement"), by and among the Company, Sonnet Sub and Biosub Inc. ("Merger Sub"), as amended by Amendment No. 1 thereto made and entered into as of February 7, 2020 (the "First Amendment") (the Merger Agreement, as amended by the First Amendment, the "Amended Merger Agreement"), Merger Sub merged with and into Sonnet Sub, with Sonnet Sub surviving as a wholly-owned subsidiary of the Company (the "Merger").

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, DATED MAY 17, 2021**

#### PRELIMINARY PROSPECTUS

**105,812 Shares of Common Stock  
Issuable upon Exercise of Warrants**



This prospectus relates to an aggregate of up to 105,812 shares of common stock, par value \$0.0001 per share ("Common Stock"), of Sonnet BioTherapeutics Holdings, Inc. ("Sonnet" or the "Company" or "we"), issuable upon the future exercise of certain outstanding warrants (collectively, the "Sonnet Rollover Warrants") to purchase shares of common stock, no par value, of Sonnet BioTherapeutics, Inc., a New Jersey corporation ("Sonnet Sub"), which were converted into warrants to purchase shares of Common Stock (the "Converted Warrants") in connection with the merger between the Company and Sonnet Sub, which was completed on April 1, 2020, plus an indeterminate number of shares of Common Stock that may be issued as a result of stock splits, stock dividends, recapitalizations or similar events as described in the warrant agreements governing the Converted Warrants.

On April 1, 2020, pursuant to the Agreement and Plan of Merger, dated as of October 10, 2019 (the "Merger Agreement"), by and among the Company, Sonnet Sub and Biosub Inc. ("Merger Sub"), as amended by Amendment No. 1 thereto made and entered into as of February 7, 2020 (the "First Amendment") (the Merger Agreement, as amended by the First Amendment, the "Amended Merger Agreement"), Merger Sub merged with and into Sonnet Sub, with Sonnet Sub surviving as a wholly-owned subsidiary

of the Company (the “Merger”).

Our Common Stock is listed on The NASDAQ Capital Market (“NASDAQ”) under the symbol “SONN”. On May 10, 2021, the last reported sale price of our Common Stock on NASDAQ was \$1.58.

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Investing in our Common Stock involves risk. See “Risk Factors” beginning on page 7 of this prospectus, as well as the other information contained in or incorporated by reference into this prospectus, including the information contained under the caption entitled “Risk Factors” in our Annual Report on Form 10-K for the year ended September 30, 2020 and subsequent filings with the Securities and Exchange Commission, which are incorporated by reference herein.

Neither the Securities and Exchange Commission nor any other regulatory body 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.

The date of this prospectus is , 2021.

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## **ABOUT THIS PROSPECTUS**

You should read carefully this prospectus in its entirety, together with additional information described under the heading “Where You Can Find More Information” in this prospectus.

If the information in this prospectus conflicts with any statement in a document that we have incorporated by reference, then you should consider only the statement in the more recent document. The information contained or incorporated by reference into this prospectus or in any prospectus supplement is accurate only as of the date of the applicable document. Our business, financial condition, results of operations and prospects may have changed since that date.

**We have not authorized anyone to provide you with different or additional information from that contained or incorporated by reference into this prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus may be used only for the purpose for which it has been prepared. We are offering to sell our Common Stock, and seeking offers to buy our Common Stock, only in jurisdictions where such offers and sales are permitted. This prospectus does not constitute an offer, or an invitation on our behalf to subscribe for and purchase any of our securities, and may not be used for or in connection with an offer or solicitation by anyone, in any jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it is unlawful to make such an offer or solicitation.**

Unless otherwise indicated or the context otherwise requires, all references in this prospectus to “we,” “our,” “us,” “ourselves,” “SONN,” “Sonnet” or the “Company” refer to Sonnet BioTherapeutics Holdings, Inc., a Delaware corporation, and its consolidated subsidiaries. All references in this prospectus to “Sonnet Sub” refer to Sonnet BioTherapeutics Inc., our wholly-owned subsidiary.

## **WHERE YOU CAN FIND MORE INFORMATION**

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC relating to the securities being offered hereby. This prospectus does not contain all of the information in the registration statement and its exhibits. The registration statement, its exhibits and the documents incorporated by reference in this prospectus and their exhibits, all contain information that is material to the offering of the securities hereby. Whenever a reference is made in this prospectus to any of our contracts or other documents, the reference may not be complete. You should refer to the exhibits that are a part of the registration statement in order to review a copy of the contract or documents. The registration statement and the exhibits are available at the SEC’s Public Reference Room or through its Website.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read and copy any materials we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and at its regional offices, a list of which is available on the Internet at <http://www.sec.gov/contact/addresses.htm>. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers, such as us, that file electronically with the SEC. Additionally, you may access our filings with the SEC through our website at <http://www.sonnetbio.com>. The information on our website is not part of this prospectus.

We will provide you without charge, upon your oral or written request, with a copy of any or all reports, proxy statements and other documents we file with the SEC, as well as any or all of the documents incorporated by reference in this prospectus or the registration statement (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents). Requests for such copies should be directed to:

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 should rely only on the information in this prospectus and the additional information described above and under the heading “Incorporation of Certain Information by Reference” below. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely upon it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus was accurate on the date of the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have changed since that date.

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### INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement.

We incorporate by reference the documents listed below that we have previously filed with the SEC:

- our Annual Report on Form 10-K for the year ended September 30, 2020, filed with the SEC on December 17, 2020;
- our Quarterly Reports on Form 10-Q for the quarters ended December 31, 2020 and March 31, 2021, filed with the SEC on February 16, 2021 and May 17, 2021, respectively;
- our Current Reports on Form 8-K filed with the SEC on April 3, 2020 (as amended by Form 8-K/A on June 26, 2020), May 18, 2020, February 5, 2021, March 30, 2021, April 1, 2021 and May 3, 2021 (as amended by Form 8-K/A on May 3, 2021) (other than any portions thereof deemed furnished and not filed); and
- the description of our Common Stock contained in the prospectus, constituting part of our Registration Statement on Form S-1 (File No. 333-230857) filed with the SEC on April 15, 2019, and subsequently amended on May 28, 2019 and June 7, 2019.

All reports and other documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement and after the date of this prospectus but before the termination of the offering of the securities hereunder will also be considered to be incorporated by reference into this prospectus from the date of the filing of these reports and documents, and will supersede the information herein; provided, however, that all reports, exhibits and other information that we “furnish” to the SEC will not be considered incorporated by reference into this prospectus. We undertake to provide without charge to each person (including any beneficial owner) who receives a copy of this prospectus, upon written or oral request, a copy of all of the preceding documents that are incorporated by reference (other than exhibits, unless the exhibits are specifically incorporated by reference into these documents). You may request a copy of these materials in the manner set forth under the heading “Where You Can Find More Information,” above.

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### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference herein, contains forward-looking statements within the meaning of the safe harbor from civil liability provided for such statements by the Private Securities Litigation Reform Act of 1995 (set forth in Section 27A of the Securities Act and Section 21E of the Exchange Act). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These statements include, but are not limited to, statements regarding:

- our lack of operating history and history of operating losses;
- our current and future capital requirements and our ability to satisfy our capital needs;
- the accuracy of our estimates regarding expenses and capital requirements;
- our ability to complete required clinical trials of our products and obtain approval from the U.S. Food and Drug Administration (the “FDA”) or other regulatory agents in different jurisdictions;
- the potential impact of the COVID-19 pandemic on our operations, including on our clinical development plans and timelines;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executive members;
- our ability to internally develop new inventions and intellectual property;
- acceptance of our business model by investors; and

- our ability to adequately support growth.

These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown to us that could cause actual results and developments to differ materially from those expressed or implied in such statements, including the risks described under “Risk Factors” in this prospectus and our Annual Report on Form 10-K for the fiscal year ended September 30, 2020 as updated by our subsequent filings under the Exchange Act, each of which is incorporated by reference in this prospectus in their entirety.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should,” “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus.

You should read this prospectus and the documents that we reference herein and therein, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus and the documents incorporated by reference herein and therein is accurate as of their respective dates. Our business, financial condition, results of operations and prospects may change. We may not update these forward-looking statements, even though our situation may change in the future, unless required by law to update and disclose material developments related to previously disclosed information. We qualify all of the information presented in this prospectus, and particularly our forward-looking statements, by these cautionary statements.

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## PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider before deciding to purchase common stock in this offering. You should read this entire prospectus carefully, as well as the information to which we refer you and the information incorporated by reference herein, before deciding to purchase common stock in this offering. You should pay special attention to the sections titled “Risk Factors,” in each of this prospectus and our Annual Report on Form 10-K for the fiscal year ended September 30, 2020 and in our other reports filed from time to time with the SEC, which are incorporated by reference into this prospectus, as well as our consolidated financial statements, and the related notes thereto and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” each of which is incorporated by reference in this prospectus, before making an investment decision.*

### Overview

We are a clinical-stage biopharmaceutical company with a proprietary technology for developing novel biologic medicines, which we refer to as “F<sub>H</sub>AB” (Fully Human Albumin Binding). F<sub>H</sub>AB utilizes a fully human single chain antibody fragment linked to either one or two therapeutic molecules capable of affecting single or bispecific mechanisms of action. The F<sub>H</sub>AB construct contains a domain that is designed to bind to and “hitch hike” on human serum albumin for transport to targets such as solid tumors or to the lymphatic system. We designed the construct to improve drug accumulation in specific tissues, as well as to extend the duration of activity in the body. F<sub>H</sub>AB development candidates are produced in a mammalian cell culture, which enables glycosylation, thereby reducing the risk of immunogenicity. We believe our F<sub>H</sub>AB technology is well suited for future drug development across a range of human disease areas, including in oncology, autoimmune, pathogenic, inflammatory, and hematological conditions.

Our current internal pipeline development activities are focused on cytokines, a class of cell signaling peptides that, among other important functions, serve as potent immunomodulatory agents. Working both independently and synergistically, specific cytokines have shown the ability to modulate the activation and maturation of immune cells that fight cancer and pathogens. However, because they do not preferentially accumulate in specific tissues and are quickly eliminated from the body, the conventional approach to achieving a treatment effect with cytokine therapy typically requires the administration of high and frequent doses. This can result in a reduced treatment effect accompanied by the potential for systemic toxicity, which poses challenges to the therapeutic application of this class of drugs.

### 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”), pursuant to which Merger Sub merged with and into Sonnet, with Sonnet surviving as a wholly owned subsidiary of us (the “Merger”). In connection with, and immediately prior to the completion of the Merger, we effected a reverse stock split of our common stock, at a ratio of 1-for-26. 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.

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](http://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. You should not rely on any such information in making your decision whether to purchase our common stock.

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## THE OFFERING

*The following summary contains basic information about our Common Stock offered hereby. This description is not complete and does not contain all of the information that you should consider before investing in shares of our Common Stock. For a more complete understanding of our common stock, you should read “Description of Securities” included in our Registration Statement on Form S-4 (File No. 333-235301), as amended, which is incorporated by reference herein.*

|                             |  |
|-----------------------------|--|
| <i>Issuer</i>               | Sonnet BioTherapeutics Holdings, Inc., a Delaware corporation.   |
| <i>Common Stock offered</i> | 105,812 shares of Common Stock.  |
| <i>Use of proceeds</i>      | If all of the Converted Warrants are exercised in full, we will issue approximately 105,812 shares of Common Stock and will receive aggregate net proceeds of up to approximately \$3.1 million. We intend to use the proceeds, if any, from the exercise of the Converted Warrants for general corporate purposes. We have no assurance that any of the Converted Warrants will be exercised. |
| <i>Listing</i>              | Our Common Stock is listed on NASDAQ under the trading symbol “SONN”.  |

Investing in our Common Stock involves risks. See “Risk Factors,” beginning on page 7 of this prospectus, as well as the other information contained in or incorporated by reference into this prospectus, including the information contained under the caption entitled “Risk Factors” in our Annual Report on Form 10-K for the year ended September 30, 2020 and subsequent filings with the Securities and Exchange Commission for a discussion of certain factors that you should carefully consider before making an investment decision.

Unless otherwise indicated, the information contained in this prospectus is as of the date set forth on the cover of this prospectus.

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## RISK FACTORS

*An investment in shares of our Common Stock involves various risks. You should carefully consider the risk factors described in Part I, Item 1A, “Risk Factors” in our Annual Report on Form 10-K for the year ended September 30, 2020, and in our other reports we file from time to time with the SEC, which are incorporated by reference into this prospectus, as the same may be amended, supplemented or superseded from time to time by our filings under the Exchange Act. You should also carefully consider the risks and the other information included or incorporated by reference into this prospectus before investing in our Common Stock. The risks described in the documents incorporated by reference herein are not the only risks applicable to us or an investment in our Common Stock. Additional risks not currently known to us or that we currently consider immaterial also may impair our business.*

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## USE OF PROCEEDS

If all of the Converted Warrants are exercised in full, we will issue approximately 105,812 shares of Common Stock and will receive aggregate net proceeds of up to approximately \$3.1 million. We intend to use the proceeds from the exercise, if any, of the Converted Warrants for general corporate purposes. We have no assurance that any of the Converted Warrants will be exercised.

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## DIVIDEND POLICY

Holders of our common stock are entitled to receive such dividends as may be declared by our board of directors 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. We have never declared or paid cash dividends on our common stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion.

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## PLAN OF DISTRIBUTION

This prospectus relates to the shares of Common Stock that are issuable upon the exercise of Converted Warrants. We are offering these shares of Common Stock directly to the holders of these warrants according to the terms of the underlying warrant agreements. We are not using an underwriter in connection with this offering. These shares of Common Stock will be listed for trading on NASDAQ.

In order to facilitate the exercise of any such warrants, we will furnish, at our expense, such reasonable number of copies of this prospectus to each person holding such a warrant as such holder may request, together with instructions that copies be delivered to the beneficial owners of such warrants.

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## 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 May 10, 2021, 21,197,290 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 and 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:

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- 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, as amended, and Bylaws, as amended 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:

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- 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;
- 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.

#### **Warrants**

##### *Converted Warrants*

The Converted Warrants were issued on April 1, 2020, and currently have an exercise price of \$29.32 per share. The Converted Warrants are currently exercisable and have terms of three years from the respective dates of issuance, between October 2019 and February 2020, of the Sonnet Rollover Warrants in exchange for which the Converted Warrants were issued in the Merger. The Converted Warrants are exercisable for an aggregate of 105,812 shares of Common Stock.

The Converted Warrants also contain a “cashless exercise” feature that allows the holders to elect, at any time, to exercise the Converted Warrants without making a cash payment using a formula set forth in the Converted Warrants.

#### **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.

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### **LEGAL MATTERS**

The validity of the securities offered in this offering will be passed upon for us by Lowenstein Sandler LLP, New York, New York.

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### **EXPERTS**

The consolidated financial statements of Sonnet BioTherapeutics Holdings, Inc. as of September 30, 2020 and 2019 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, 2020 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 adjustment that might result from the outcome of this uncertainty.

The financial statements of Relief Therapeutics SA as of and for the years ended December 31, 2019 and 2018 incorporated herein have been audited by Mazars SA, an independent public accounting firm, as stated in its report dated March 20, 2020, incorporated by reference herein, and have been so included in reliance upon such report and upon the authority of such firm as experts in accounting and auditing. The report on the financial statements of Relief Therapeutics SA includes an explanatory paragraph about the existence of substantial doubt concerning its ability to continue as a going concern.

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**105,812 Shares of Common Stock  
Issuable upon Exercise of Warrants**



**PROSPECTUS**

, 2021

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### **PART II**

#### **INFORMATION NOT REQUIRED IN PROSPECTUS**

*Item 14. Other Expenses of Issuance and Distribution.*



The following table sets forth the expenses, other than underwriting compensation, expected to be incurred in connection with the registration and sale of the securities covered by this registration statement.

|  |    |        |
|--|----|--------|
| SEC registration fee                         | \$ | 0      |
| Legal fees and expenses                      |    | 25,000 |
| Accounting fees and expenses                 |    | 10,000 |
| Printing and miscellaneous fees and expenses |    | 1,000  |
| Total  | \$ | 36,000 |

**Item 15. Indemnification of Directors and Officers**

Section 145 of the Delaware General Corporation Law (the “DGCL”) provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person’s conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys’ fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Article X of our certificate of incorporation, as amended, states that to the fullest extent permitted by the DGCL, a director of the corporation shall not be liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

Under Article XI of our bylaws, any person who was or is made a party or is threatened to be made a party to or is in any way involved in any threatened, pending or completed action suit or proceeding, whether civil, criminal, administrative or investigative, including any appeal therefrom, by reason of the fact that he is or was a director or officer of ours or was serving at our request as a director or officer of another entity or enterprise (including any subsidiary), may be indemnified and held harmless by us, and we may advance all expenses incurred by such person in defense of any such proceeding prior to its final determination, if this person acted in good faith and in a manner reasonably believed to be in and not opposed to our best interest, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his or her conduct was unlawful. The indemnification provided in our bylaws is not exclusive of any other rights to which those seeking indemnification may otherwise be entitled.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

**Item 16. Exhibits**

| EXHIBIT<br>NO. | DESCRIPTION  |
|----------------|--|
| 2.1            | <a href="#"><u>Agreement and Plan of Merger, dated October 10, 2019, by and among the Company, Sonnet Sub. and Merger Sub (filed as Exhibit 2.1 to the Company’s Current Report on Form 8-K as filed on October 11, 2019, and incorporated herein by reference).</u></a>                   |
| 2.2            | <a href="#"><u>Amendment No. 1 to Agreement and Plan of Merger, dated February 7, 2020, by and among the Company, Sonnet Sub and Merger Sub (filed as Exhibit 2.1 to the Company’s Current Report on Form 8-K as filed on February 7, 2020, and incorporated herein by reference).</u></a> |
| 3.1            | <a href="#"><u>Certificate of Incorporation, as amended, of Sonnet BioTherapeutics Holdings, Inc. (incorporated by reference to Exhibit 3.1 to our Annual Report on Form 10-K, filed with the SEC on December 17, 2020).</u></a>   |
| 3.2            | <a href="#"><u>Bylaws of Chanticleer Holdings, Inc. (incorporated by reference to Exhibit 3.2 to our Registration Statement on Form S-4/A (Registration No. 333-235301), filed with the SEC on February 7, 2020).</u></a>  |
| 4.1            | <a href="#"><u>Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-1 (Registration No. 333-178307), filed with the SEC on December 2, 2011).</u></a>  |
| 4.2            | <a href="#"><u>Form of Sonnet BioTherapeutics, Inc. Converted Warrant (incorporated by reference to Exhibit 4.2 to the Company’s Quarterly Report on Form 10-Q filed with the SEC on August 14, 2020).</u></a>   |
| 5.1            | <a href="#"><u>Opinion of Lowenstein Sandler LLP as to validity of the securities being registered.</u></a>  |
| 23.1           | <a href="#"><u>Consent of Lowenstein Sandler LLP (included in Exhibit 5.1 hereto).</u></a>   |
| 23.2           | <a href="#"><u>Consent of KPMG, Independent Registered Public Accounting Firm.</u></a>   |
| 23.3           | <a href="#"><u>Consent of Mazars SA, Independent Public Accounting Firm.</u></a>   |
| 24.1           | <a href="#"><u>Power of Attorney (included on the Signature Page).</u></a>   |

(b) Financial Statement Schedules:

Not Applicable.

**Item 17. Undertakings.**

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement.

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Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

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(5) That, for the purpose of determining any liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the registrant undertakes that in a primary offering of securities of the registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the registrant or used or referred to by the registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the registrant or its securities provided by or on behalf of the registrant; and

(iv) Any other communication that is an offer in the offering made by the registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for the purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in Princeton, New Jersey, on May 17, 2021.

**SONNET BIOTHERAPEUTICS HOLDINGS, INC.**

By: /s/ Pankaj Mohan  
Pankaj Mohan, Ph.D  
Chief Executive Officer

**NOW ALL MEN BY THESE PRESENTS**, that each person whose signature appears below constitutes and appoints Pankaj Mohan, Ph.D and Jay Cross, and each of them, each with full power to act without the other, his true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign any amendments to this registration statement, and to sign any registration statement for the same offering covered by this registration statement, including post-effective amendments or registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming that each of said such attorneys-in-fact and agents or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment has been signed by the following persons in the capacities and on the dates indicated

| <b>Signature</b>                              | <b>Title</b>   | <b>Date</b>  |
|---|--|--------------|
| <u>/s/ Pankaj Mohan</u><br>Pankaj Mohan, Ph.D | President, Chief Executive Officer and Chairman<br>(Principal Executive Officer) | May 17, 2021 |
| <u>/s/ Jay Cross</u><br>Jay Cross             | Chief Financial Officer<br>(Principal Financial and Accounting Officer)          | May 17, 2021 |
| <u>/s/ Albert Dyrness</u><br>Albert Dyrness   | Director   | May 17, 2021 |
| <u>/s/ Nailesh Bhatt</u><br>Nailesh Bhatt     | Director   | May 17, 2021 |
| <u>/s/ Raghu Rao</u><br>Raghu Rao             | Director   | May 17, 2021 |
| <u>/s/ Donald Griffith</u><br>Donald Griffith | Director   | May 17, 2021 |

May 17, 2021

Sonnet BioTherapeutics Holdings, Inc.  
100 Overlook Center, Suite 102  
Princeton, New Jersey 08540

Ladies and Gentlemen:

We have acted as counsel to Sonnet BioTherapeutics Holdings, Inc., a Delaware corporation (the "Company"), in connection with the Company's Post-Effective Amendment No. 1 on Form S-3 to Registration Statement (File No. 333-235301 on Form S-4) (this "Post-Effective Amendment") under the Securities Act of 1933, as amended (the "Securities Act"). The Post-Effective Amendment relates to the registration of 105,812 shares (the "Warrant Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock") issuable by the Company upon the exercise of certain warrants to purchase Common Stock (the "Warrants") referenced in the Post-Effective Amendment, which are currently issued and outstanding.

In connection with rendering this opinion, we have examined the Certificate of Incorporation and the Bylaws of the Company, the forms of the Warrants and such other corporate records, agreements, documents and instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company, and we have made such inquiries of such officers and representatives, as we have deemed necessary or appropriate for the purposes of this opinion.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity of original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. As to all questions of fact material to these opinions that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that, when issued in accordance with the terms of the respective Warrants, the Warrant Shares will be duly authorized, validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the corporate laws of the State of Delaware, and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

We hereby consent to the filing of a copy of this opinion letter as an exhibit to the Post-Effective Amendment. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act.

Very truly yours,

*/s/ Lowenstein Sandler LLP*

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Lowenstein Sandler LLP

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**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Sonnet BioTherapeutics Holdings, Inc.:

We consent to the use of our report dated December 17, 2020, with respect to the consolidated balance sheets of Sonnet BioTherapeutics Holdings, Inc. and subsidiaries as of September 30, 2020 and 2019, the related statements of operations, changes in stockholders' equity (deficit), and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements), incorporated herein by reference and to the reference to our firm under the heading "Experts" in the prospectus.

Our report dated December 17, 2020 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 funding 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.

*/s/ KPMG LLP*

Philadelphia, Pennsylvania  
May 17, 2021

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