Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MYMD PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization) 22-2983783 (I.R.S. Employer Identification No.)

855 N. Wolfe Street, Suite 623 Baltimore, MD 21205 (856) 848-8698

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mitchell Glass, M.D. President and Chief Medical Officer MyMD Pharmaceuticals, Inc. 855 N. Wolfe Street, Suite 623 Baltimore, MD 21205 (856) 848-8698

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

Copies to: Rick A. Werner, Esq. Alla Digilova, Esq. Haynes and Boone, LLP 30 Rockefeller Plaza, 26th Floor New York, New York 10112 (212) 659-7300

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 of 1933, 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. \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. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer | | Accelerated filer | |
|-------------------------|-------------|---------------------------|--|
| Non-accelerated filer | \boxtimes | Smaller reporting company | |
| | | 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. \Box

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant 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 of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a) may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus 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 it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated June 21, 2024

PROSPECTUS



MyMD Pharmaceuticals, Inc.

473,841 Shares of Common Stock

This prospectus relates to the resale by the selling stockholders named in this prospectus from time to time of up to an aggregate of 473,841 shares of our common stock, par value \$0.001 per share (the "Common Stock"), issuable upon (i) the conversion of shares of our newly designated Series F-1 convertible preferred stock (the "Series F-1 Preferred Shares"), (ii) the conversion of shares of our newly designated Series G convertible preferred stock (the "Initial Series G Preferred Shares"), (iii) the conversion of shares additional Initial Series G Preferred Shares, if any, issued as dividends upon election by a holder of the Initial Series G Preferred Shares to be paid such dividends in "kind" in the form of Initial Series G Preferred Shares (the "PIK Preferred Shares", and, together with Initial Series G Preferred Shares, the "Series G Preferred Shares"), and (iv) upon exercise of certain warrants (the "Warrants").

The Series F-1 Preferred Shares were acquired by the applicable selling stockholders under the Securities Purchase Agreement (the "Series F-1 Purchase Agreement"), dated May 20, 2024, by and among the Company and the investors party thereto (the "Series F-1 Investors"), the Initial Series G Preferred Shares were acquired by the applicable selling stockholders under the Securities Purchase Agreement (the "Series G Purchase Agreement" and, together with the Series F-1 Purchase Agreement, the "Purchase Agreements"), dated May 20, 2024, by and among the Company and the investors party thereto (the "Series G Investors" and, together with the Series F-1 Investors, the "Investors"). The Warrants were acquired by the selling stockholders under (i) the Purchase Agreements, (ii) an engagement agreement (the "GPN Engagement Agreement"), dated May 16, 2024, between the Company and GP Nurmenkari Inc. ("GPN") and (iii) an engagement agreement (the "Palladium Engagement Agreement"), dated April 9, 2024, between the Company and Palladium Capital Group, LLC ("Palladium" and, together with GPN, the "Placement Agents"), as applicable. The shares of Common Stock issuable upon the conversion of the Preferred Shares are herein referred to as "Conversion Shares," and the shares of Common Stock issuable upon the exercise of the Warrants are herein referred to as "Warrant Shares."

The Conversion Shares and the Warrant Shares were issued in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act") and Regulation D promulgated thereunder.

We are registering the resale of the Conversion Shares and Warrant Shares covered by this prospectus as required by (i) the Registration Rights Agreement, dated May 20, 2024, by and among the Company and the Series F-1 Investors (the "Series F-1 Registration Rights Agreement") and (ii) the Registration Rights Agreement, dated May 20, 2024, by and among the Company and the Series G Investors (the "Series G Registration Rights Agreement") and, together with the Series F-1 Registration Rights Agreement, the "Registration Rights Agreements"), as applicable. The selling stockholders will receive all of the proceeds from any sales of the shares offered hereby. We will not receive any of the proceeds, but we will incur expenses in connection with the offering. To the extent the Warrants are exercised for cash, if at all, we will receive the exercise price of the Warrants. We intend to use those proceeds, if any, for general corporate purposes.

Our registration of the shares of Common Stock covered by this prospectus does not mean that the selling stockholders will offer or sell any of such shares of Common Stock. The selling stockholders named in this prospectus, or their donees, pledgees, transferees or other successors-in-interest, may resell the shares of Common Stock covered by this prospectus through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the possible methods of sale that may be used by the selling stockholders, you should refer to the section of this prospectus entitled "*Plan of Distribution*."

Any shares of Common Stock subject to resale hereunder will have been issued by us and acquired by the selling stockholders prior to any resale of such shares pursuant to this prospectus.

No underwriter or other person has been engaged to facilitate the sale of the Common Stock in this offering. We will bear all costs, expenses and fees in connection with the registration of the Common Stock. The selling stockholders will bear all commissions and discounts, if any, attributable to their respective sales of the Common Stock.

Our Common Stock is listed on the Nasdaq Capital Market under the symbol "MYMD." On June 20, 2024, the last reported sales price for our Common Stock was \$1.955 per share.

Investment in our Common Stock involves risk. See "<u>Risk Factors</u>" contained in this prospectus, in our periodic reports filed from time to time with the Securities and Exchange Commission, which are incorporated by reference in this prospectus and in any applicable prospectus supplement. You should carefully read this prospectus and the accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in our Common Stock.

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

The date of this prospectus is , 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of the registration statement that we filed with the Securities and Exchange Commission (the "SEC") pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the shares of our Common Stock covered by this prospectus. As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus.

This prospectus and the documents incorporated by reference into this prospectus include important information about us, the securities being offered and other information you should know before investing in our securities. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares of Common Stock are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus.

You should rely only on this prospectus and the information incorporated or deemed to be incorporated by reference in this prospectus. We have not, and the selling stockholders have not, authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

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

Unless otherwise indicated, information contained or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily uncertain due to a variety of factors, including those described in "Risk Factors" beginning on page 9 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our securities. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our securities, including the information discussed under "Risk Factors" in this prospectus and the documents incorporated by reference and our financial statements and related notes that are incorporated by reference in this prospectus. In this prospectus, unless the context indicates otherwise, "MyMD," the "Company," the "registrant," "we," "us," "our," or "ours" refer to MyMD Pharmaceuticals, Inc. and its consolidated subsidiaries.

Overview

MyMD is focused on developing and commercializing two therapeutic platforms based on well-defined therapeutic targets, MYMD-1 and Supera-CBD:

- MYMD-1 is a clinical stage small molecule that regulates the immunometabolic system to treat autoimmune disease, including (but not limited to) rheumatoid arthritis, and inflammatory bowel disease. MYMD-1 is being developed to treat age-related illnesses such as frailty and sarcopenia. MYMD-1 works by regulating the release of numerous pro-inflammatory cytokines, such as TNF-α, interleukin 6 ("IL-6") and interleukin 17 ("IL-17"). MYMD-1 currently is being evaluated in patients with sarcopenia (age-related muscle loss). The company has significant intellectual property coverage to protect these autoimmune indications, as well as therapy as an anti-aging product.
- Supera-CBD is a synthetic analog of CBD being developed to treat various conditions, including, but not limited to, epilepsy, pain and anxiety/depression, through its effects on the CB2 receptor, opioid receptors and monoamine oxidase enzyme ("MAO") type B.

Private Placement of Preferred Shares and Warrants

On May 20, 2024, we entered into the Series F-1 Purchase Agreement with the Series F-1 Investors, pursuant to which we issued and sold on May 23, 2024, in a private placement (the "Series F-1 Private Placement"), (i) an aggregate of 5,050 Series F-1 Preferred Shares, initially convertible into up to an aggregate of 2,780,839 Conversion Shares (such shares issuable upon conversion of the Series F-1 Preferred Shares, the "Series F-1 Conversion Shares") at a conversion price of \$1.816 per share, and (ii) short-term warrants (the "Series F-1 Short-Term Warrants") to acquire up to an aggregate of 2,780,839 shares of Common Stock (such shares issuable upon conversion of the Series F-1 Short-Term Warrants, the "Series F-1 Long-Term Warrants, the "Series F-1 Short-Term Warrants, the "Series F-1 Long-Term Warrant Shares" and, together with the Series F-1 Short-Term Warrant Shares, the "Series F-1 Long-Term Warrant Shares" and, together with the Series F-1 Short-Term Warrant Shares.

On May 20, 2024, we entered into the Series G Purchase Agreement with the Series G Investors, pursuant to which we issued and sold on May 23, 2024, in a private placement (the "Series G Private Placement"), (i) an aggregate of 8,950 Initial Series G Preferred Shares, initially convertible into up to an aggregate of 4,928,416 Conversion Shares (such shares issuable upon conversion of the Initial Series G Preferred Shares, the "Initial Series G Conversion Shares") at a conversion price of \$1.816 per share, and (ii) short-term warrants (the "Series G Short-Term Warrants") to acquire up to an aggregate of 4,928,416 shares issuable upon conversion of the Series G Short-Term Warrant Shares") at an exercise price of \$1.816 per share, and (iii) long-term warrants (the "Series G Short-Term Warrant Shares") to acquire up to an aggregate of 4,928,416 shares of Common Stock (such shares issuable upon conversion of the Series G Short-Term Warrant Shares") to acquire up to an aggregate of 4,928,416 shares of Common Stock (such shares issuable upon conversion of the Series G Short-Term Warrants, the "Series G Warrants") to acquire up to an aggregate of 4,928,416 shares of Common Stock (such shares issuable upon conversion of the Series G Short-Term Warrants, the "Series G Warrants") to acquire up to an aggregate of 4,928,416 shares of Common Stock (such shares issuable upon conversion of the Series G Short-Term Warrants, the "Series G Long-Term Warrant Shares") at an exercise price of \$1.816 per share, and (iii) long-term warrants (the "Series G Long-Term Warrant Shares") at an exercise G Short-Term Warrants, the "Series G Long-Term Warrant Shares" and, together with the Series G Short-Term Warrant Shares, the "Series G Warrant Shares") at an exercise price of \$1.816 per share. Each Preferred Share and accompanying Warrants were sold together at a combined offering price of \$1,000.

The terms of the Series F-1 Preferred Shares are as set forth in the Certificate of Designations of the Series F-1 Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (the "Series F-1 Certificate of Designations"), which was filed and became effective with the Secretary of State of the State of Delaware on May 21, 2024. The terms of the Series G Preferred Shares are as set forth in the Certificate of Designations of the Series G Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (the "Series G Certificate of Designations"), which was filed and became effective with the Secretary of State of the State of Delaware on May 21, 2024. The terms of the Series G Certificate of Designations"), which was filed and became effective with the Secretary of State of the State of Delaware on May 21, 2024. The Series F-1 Short-Term Warrants and Series G Short-Term Warrants are immediately exercisable and expire 18 months from issuance. The Series F-1 Long-Term Warrants and Series G Long-Term Warrants are immediately exercisable and expire 5 years from issuance.

Pursuant to the GPN Engagement Agreement, the Company issued to GPN, and its designees, common stock purchase warrants (the "GPN Warrants") to acquire up to an aggregate of 693,832 shares of Common Stock (the "GPN Warrant Shares") at an initial exercise price of \$1.816 (the "GPN Exercise Price"), which amount is approximately equal to 3% of the number of shares of Common Stock that the Preferred Shares and Warrants were initially convertible into, on substantially the same terms as the Series G Long-Term Warrants and Series F-1 Long-Term Warrants sold to investors. Pursuant to the Palladium Engagement Agreement, the Company issued to Palladium, and its designees, common stock purchase warrants (the "Palladium Warrants" and, together with the GPN Warrants, the "Placement Agent Warrants") to acquire up to an aggregate of 693,832 shares of Common Stock (the "Palladium Warrants" and, together with the GPN Warrant Shares, the "Placement Agent Warrant Shares"), which amount is approximately equal to 3% of the number of shares of Common Stock that the Preferred Shares and Warrants were initially convertible into, on substantially the same terms as the Series G Long-Term Warrants and Series F-1 Long-Term Warrants sold to investors.

The Private Placements are exempt from the registration requirements of the Securities Act pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D of the Securities Act and in reliance on similar exemptions under applicable state laws. Each of the investors in the Private Placements has represented to us that it is an accredited investor within the meaning of Rule 501(a) of Regulation D and that it is acquiring the securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. The Preferred Shares and Warrants are being offered without any general solicitation by us or our representatives.

Registration Rights Agreements

In connection with the Series F-1 Private Placement, we entered into the Series F-1 Registration Rights Agreement, pursuant to which we are obligated, among other things, to (i) file a registration statement with the SEC within 30 days of May 23, 2024 (the "Series F-1 Closing Date") for purposes of registering the sum of (A) 200% of the Series F-1 Conversion Shares and (B) 200% of the Series F-1 Warrant Shares, in each case, for resale by the selling stockholders, (ii) use our best efforts to have the registration statement declared effective by the Effectiveness Deadline (as defined in the Series F-1 Registration Rights Agreement), and (iii) maintain the registration until the earlier of (x) the date on which the selling stockholders may sell their Series F-1 Conversion Shares or Series F-1 Warrant Shares without restriction pursuant to Rule 144 under the Securities Act, (y) the date on which the selling stockholders no longer hold any Series F-1 Conversion Shares or Series F-1 Warrant Shares and (z) the five year anniversary of the Series F-1 Closing Date. The Company will be obligated to pay certain liquidated damages to the Series F-1 Investors if the Company fails to file the registration statement when required, fails to cause the registration statement to be declared effective by the SEC when required, or fails to maintain the effectiveness of the registration statement pursuant to the terms of the Series F-1 Registration Rights Agreement.

In connection with the Series G Private Placement, we entered into the Series G Registration Rights Agreement, pursuant to which we are obligated, among other things, to (i) file a registration statement with the SEC within 30 days of May 23, 2024 (the "Series G Closing Date") for purposes of registering the sum (A) 200% of the Initial Series G Conversion Shares, (B) 200% of the PIK Conversion Shares, and (C) 200% of the Series G Warrant Shares, in each case, for resale by the selling stockholders, (ii) use our best efforts to have the registration statement declared effective by the Effectiveness Deadline (as defined in the Series G Registration Rights Agreement), and (iii) maintain the registration until the earlier of (x) the date on which the selling stockholders may sell their Initial Series G Conversion Shares, PIK Conversion Shares, or Series G Warrant Shares without restriction pursuant to Rule 144 under the Securities Act, (y) the date on which the selling stockholders no longer hold any Initial Series G Conversion Shares, PIK Conversion Shares and (z) the five year anniversary of the Series G Closing Date.

Series F-1 Preferred Shares

The Series F-1 Preferred Shares rank (i) pari passu to Series G Preferred Shares and PIK Conversion Shares and (ii) junior to shares of the Company's Series F Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (the "Series F Preferred Stock") issued and outstanding pursuant to the Amended and Restated Certificate of Designations of the Series F Preferred Stock (the "Series F Certificate of Designations"), in each case, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of us. The Series F-1 Preferred Shares are convertible into Common Stock at the election of the holder at any time at an initial conversion price of \$1.816 (the "Series F-1 Conversion Price"). The Series F-1 Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F-1 Conversion Price (subject to certain exceptions). The Series F-1 Conversion Price may also be voluntarily reduced by the Company to any amount and for any period of time deemed appropriate by the Board at any time with the prior written consent of the holders of at least a majority of the outstanding Series F-1 Preferred Shares, subject to the rules and regulations of Nasdaq.

We are required to redeem the Series F-1 Preferred Shares in seven (7) equal monthly installments, commencing on December 1, 2024. The amortization payments due upon such redemption are payable, at our election, in cash at 105% of the applicable Installment Redemption Amount (as defined in the Series F-1 Certificate of Designations), or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series F-1 Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of our Common Stock during the thirty consecutive trading day period ending and including the trading day immediately prior to the date the amortization payment is due or (B) the lower of (x) \$0.4506 and (y) 20% of the "Minimum Price" (as defined in Nasdaq Stock Market Rule 5635) on the date in which the Series F-1 Stockholder Approval (as defined herein) is obtained or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Capital Market, and, in each case, subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events, which amortization amounts are subject to certain adjustments as set forth in the Series F-1 Certificate of Designations (the "Series F-1 Floor Price").

We may require holders to convert their Series F-1 Preferred Stock into Series F-1 Conversion Shares if (i) the closing price of the Common Stock equals or exceeds \$5.448 per share (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) for 20 consecutive trading days, (ii) the daily dollar trading volume of the Common Stock on the trading market exceeds three million dollars (\$3,000,000) per trading day during the same period, and (iii) certain equity conditions described in the Series F-1 Certificate of Designation are satisfied on each trading day during the same period.

The holders of the Series F-1 Preferred Stock are entitled to dividends of 10% per annum, compounded monthly, which are payable in arrears monthly in cash or shares of Common Stock at our option, in accordance with the terms of the Series F-1 Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F-1 Certificate of Designations), the Series F-1 Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series F-1 Preferred Stock are also entitled to receive a dividend make-whole payment. The holders of the Series F-1 Preferred Stock are entitled to vote with holders of the Common Stock on as as-converted basis, with the number of votes to which each holder of Series F-1 Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price applicable immediately before the execution and delivery of the Series F-1 Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F-1 Certificate of Designations.

Notwithstanding the foregoing, our ability to settle conversions and make amortization and dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series F-1 Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that our stockholders have approved the issuance of more than 19.99% of our outstanding shares of Common Stock in accordance with Nasdaq listing standards (the "Series F-1 Stockholder Approval"). We have agreed to seek stockholder approval of these matters at a meeting to be held no later than August 1, 2024. Further, the Series F-1 Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series F-1 Preferred Stock or as part of any amortization payment or dividend make-whole payment under the Series F-1 Certificate of Designations.

The Series F-1 Certificate of Designations includes certain Triggering Events, including, among other things, our failure to pay any amounts due to the holders of the Series F-1 Preferred Stock when due. In connection with a Triggering Event, each holder of Series F-1 Preferred Stock will be able to require us to redeem in cash any or all of the holder's Series F-1 Preferred Stock at a premium set forth in the Series F-1 Certificate of Designations.

Series G Preferred Shares

The Series G Preferred Shares rank (i) pari passu to the Series F-1 Preferred Shares and (ii) junior to shares of the Series F Preferred Stock issued and outstanding pursuant to the Series F Certificate of Designations, in each case, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of us. The Series G Preferred Shares are convertible into Common Stock at the election of the holder at any time at an initial conversion price of \$1.816 (the "Series G Conversion Price" and, together with the Series F-1 Conversion Price, the "Conversion Price"). The Series G Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series G Conversion Price (subject to certain exceptions). The Series G Conversion Price may also be voluntarily reduced by the Company to any amount and for any period of time deemed appropriate by the Board at any time with the prior written consent of the holders of at least a majority of the outstanding Series G Preferred Shares, subject to the rules and regulations of Nasdaq. We have the option, at any time, to redeem in cash all or any portion of the Series G Preferred Shares then outstanding at a premium upon notice by us to all holders of the Series G Preferred Shares.

The holders of the Series G Preferred Shares are entitled to dividends of 10% per annum, compounded monthly, which are payable in arrears monthly, at the Holder's sole discretion, in cash or "in kind" in the form of additional Series G Preferred Shares (such Conversion Shares issuable upon conversion of such PIK Preferred Shares, the "PIK Conversion Shares") at the holder's option, equal to the quotient of the (A) dividend payable on such date and (B) the arithmetic average of closing prices of our Common Stock for each of the five (5) Trading Days before the applicable Dividend Payment Date (as defined in the Series G Certificate of Designations); provided that such price shall not be lower than the price that equals the lowest of (x) \$0.4506 and (y) 20% of the "Minimum Price" (as defined in Nasdaq Stock Market Rule 5635) on the date in which the Series G Stockholder Approval (as defined herein) is obtained or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Capital Market, and in each case subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events, which amortization amounts are subject to certain adjustments as set forth in the Series G Certificate of Designations (the "Series G Floor Price").

Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series G Certificate of Designations), the Series G Preferred Shares will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series G Preferred Shares are also entitled to receive a dividend make-whole payment. The holders of the Series G Preferred Shares are entitled to vote with holders of the Common Stock on as as-converted basis, with the number of votes to which each holder of Series G Preferred Shares is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price applicable immediately before the execution and delivery of the Series G Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series G Certificate of Designations.

Notwithstanding the foregoing, our ability to settle conversions and make dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series G Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that our stockholders have approved the issuance of more than 19.99% of our outstanding shares of Common Stock in accordance with Nasdaq listing standards (the "Series G Stockholder Approval" and, together with the Series F-1 Stockholder Approval, the "Stockholder Approval"). We agreed to seek stockholder approval of these matters at a meeting to be held no later than August 1, 2024. Further, the Series G Certificate of Designations contains a certain beneficial ownership limitation, which applies to each Series G Investor other than PharmaCyte Biotech, Inc. ("Pharmacyte"), after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series G Preferred Shares or as part of any dividend make-whole payment under the Series G Certificate of Designations.

The Series G Certificate of Designations includes certain Triggering Events, including, among other things, our failure to pay any amounts due to the holders of the Series G Preferred Shares when due. In connection with a Triggering Event, each holder of Series G Preferred Shares will be able to require us to redeem in cash any or all of the holder's Series G Preferred Shares at a premium set forth in the Series G Certificate of Designations.

Notwithstanding the foregoing, our ability to settle conversions and make amortization and dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in each Certificate of Designations. Prior to receiving the Stockholder Approval, such limitations include a limit on the number of shares that may be issued until the time, if any, that our stockholders have approved the issuance of more than 19.9% of our issued and outstanding shares of Common Stock in accordance with the Nasdaq listing standards.

Series F-1 Warrants

The Series F-1 Long-Term Warrants are exercisable for Series F-1 Long-Term Warrant Shares immediately, at an exercise price of \$1.816 per share and expire five years from the date of issuance. The Series F-1 Short-Term Warrants are exercisable for Series F-1 Short-Term Warrant Shares immediately, at an exercise price of \$1.816 per share and expire eighteen months from the date of issuance. The exercise price of each Series F-1 Warrant and the number of Series F-1 Warrant Shares issuable upon exercise of the Series F-1 Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisely price, the number of Series F-1 Warrant Shares issuable upon exercise of the Series F-1 Warrants will be increased proportionately. The exercise price may also be voluntarily reduced by the Company to any amount and for any period of time deemed appropriate by the Board at any time with the prior written consent of the holders of at least a majority of the outstanding Series F-1 Warrants, subject to the rules and regulations of Nasdaq. The Series F-1 Warrants may be exercised for cash, provided that, if there is no effective registration statement available registering the exercise of the Series F-1 Warrants, the Series F-1 Warrants may be exercised on a cashless basis.

Series G Warrants

The Series G Long-Term Warrants are exercisable for Series G Long-Term Warrant Shares immediately, at an exercise price of \$1.816 per share and expire five years from the date of issuance. The Series G Short-Term Warrants are exercisable for Series G Warrant and the number of Series G Warrant Shares issuable upon exercise of the Series G Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of Series G Warrant Shares issuable upon exercise of the Series G Warrants will be increased proportionately. The exercise price may also be voluntarily reduced by the Company to any amount and for any period of time deemed appropriate by the Board at any time with the prior written consent of the holders of at least a majority of the outstanding Series G Warrants, subject to the rules and regulations of Nasdaq. The Series G Warrants may be exercised for cash, provided that, if there is no effective registration statement available registering the exercise of the Series G Warrants, the Series G Warrants may be exercised on a cashless basis.



Notwithstanding the foregoing, until such time as we have received the Stockholder Approval, we cannot issue any Warrant Shares if the issuance of such Warrant Shares (taken together with the issuance of any Conversion Shares or other shares of Common Stock issuable pursuant to the terms of the Certificate of Designations) would exceed 19.99% of our issued and outstanding shares of Common Stock prior to the Private Placements, which amount is the aggregate number of shares of Common Stock which we may issue under the rules or regulations of Nasdaq.

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company" and accordingly may provide less public disclosure than larger public companies. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Corporate Information

MyMD Pharmaceuticals, Inc. is a Delaware corporation with its principal business office at 55 N. Wolfe Street, Suite 601, Baltimore, MD 21205. Our telephone number is (856) 848-8698and our website can be found at *www.mymd.com*. Through our website, we will make available, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission, or SEC. Information contained on, or that can be accessed through, our website is not and shall not be deemed to be a part of this prospectus.

THE OFFERING

| Common Stock to be Offered by the Selling Stockholders | Up to an aggregate of 473,841 shares of Common Stock, which are issuable to such selling stockholders pursuant to the terms of the Preferred Shares and Warrants. This amount is approximately equal to 19.99% of our issued and outstanding shares of Common Stock immediately prior to the Private Placements, which amount is the aggregate number of shares of Common Stock which we may currently issue upon conversion of the Preferred Shares and exercise of Warrants under the rules or regulations of Nasdaq prior to obtaining the Stockholder Approval. |
|--|---|
| | The terms of the Series F-1 Registration Rights Agreement require us to register the number of shares of Common Stock equal to the sum of (i) 200% of the maximum number of Series F-1 Conversion Shares issuable upon conversion of the Series F-1 Preferred Shares (assuming for purposes hereof that (x) the Series F-1 Preferred Shares are convertible at the Series F-1 Conversion Price, and (y) any such conversion shall not take into account any limitations on the conversion of the Series F-1 Preferred Shares issuable upon exercise of the Series F-1 Warrants issued to the Series F-1 Investors (without taking into account any limitations on the exercise of such Series F-1 Warrants set forth therein), in each case subject to the adjustments set forth in the Series F-1 Warrants. |
| | The terms of the Series G Registration Rights Agreement require us to register the number of shares of Common Stock equal to the sum of (i) 200% of the maximum number of Initial Series G Conversion Shares issuable upon conversion of the Initial Series G Preferred Shares (assuming for purposes hereof that (x) the Initial Series G Preferred Shares are convertible at the Series G Conversion Price, and (y) any such conversion shall not take into account any limitations on the conversion of the Initial Series G Preferred Shares set forth in the Series G Certificate of Designations), (ii) 200% of the maximum number of PIK Conversion Shares issuable upon conversion of the PIK Preferred Shares (assuming for purposes hereof that (x) the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares set forth in the Series G Certificate of Designations), and (iii) 200% of the maximum number of Series G Warrant Shares issuable upon exercise of the Series G Warrants issued to the Series G Investors (without taking into account any limitations on the exercise of such Series G Warrants set forth therein), in each case subject to the adjustments set forth in the Series G Certificate of Designations and Series G Warrants. |
| | Additionally, we are registering 100% of the maximum number of Placement Agent Warrant Shares issuable upon exercise of the Placement Agent Warrants issued to the Placement Agents (without taking into account any limitations on the exercise of such Placement Agent Warrants set forth therein). |
| | If we obtain the Stockholder Approval, we intend to amend the registration statement of which this prospectus is a part to increase the number of shares of Common Stock registered hereunder to the extent necessary to comply with the terms of the Registration Rights Agreements and to register shares issuable upon exercise of the Warrants issued to the Placement Agents, or their respective designees. |
| Use of Proceeds | We will not receive any proceeds from the sale of the Conversion Shares and Warrant Shares by the selling stockholders. However, we will receive proceeds from the exercise of the Warrants if such warrants are exercised for cash. We currently intend to use such proceeds for general corporate purposes. |
| Plan of Distribution | The selling stockholders named in this prospectus, or their pledgees, donees, transferees, distributees, beneficiaries or other successors-in-interest, may offer or sell the shares of Common Stock from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders may also resell the shares of Common Stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions. |
| | See "Plan of Distribution" beginning on page 19 of this prospectus for additional information on the methods of sale that may be used by the selling stockholders. |
| Nasdaq Capital Market Symbol | Our Common Stock is listed on the Nasdaq Capital Market under the symbol "MYMD." |
| Risk Factors | Investing in our Common Stock involves significant risks. See "Risk Factors" beginning on page 9 of this prospectus and the documents incorporated by reference in this prospectus. |
| | 8 |

RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information contained in this prospectus and in the documents we incorporate by reference, you should carefully consider the risks discussed below and under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC, before making a decision about investing in our securities. The risks and uncertainties discussed below and in the documents incorporated by reference are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our Common Stock could decline and you could lose part or all of your investment.

Risks Related to this Offering and Our Common Stock

The issuance of the shares of Common Stock covered by this prospectus could significantly increase the total number of shares of Common Stock issued and outstanding and thereby cause our existing stockholders to experience substantial dilution.

The shares of Common Stock being offered pursuant to this prospectus represent Conversion Shares issuable upon the conversion of our Preferred Shares and Warrant Shares issuable upon the exercise of the Warrants. As of June 18, 2024 there were 2,370,423 shares of Common Stock issued and outstanding (prior to any deemed issuance of any Conversion Shares or Warrant Shares). If we are required to issue the maximum number of Conversion Shares and Warrant Shares that are being registered hereunder, the number of shares of Common Stock issued and outstanding after such issuance would represent approximately 120% of the number of shares of Common Stock issued and outstanding as of the date of this prospectus. As a result, an existing stockholder's proportionate interest in us will be substantially diluted. The actual number of shares of Common Stock that we issue to the selling stockholders may be less than the aggregate number of shares covered by this prospectus.

The Series F-1 Certificate of Designations provides for amortization payments to be issued in the form of shares of Common Stock at a conversion price that varies with the trading price of our Common Stock, and each Certificate of Designations contains "full ratchet" anti-dilution provisions applicable to the conversion price and the conversion price for voluntary conversions of Preferred Shares into Common Stock. These features may result in a greater number of shares of Common Stock being issued upon conversions than if the conversions were effected at the conversion price in effect as of the date of this prospectus. Sales of these shares will dilute the interests of other security holders and may depress the price of our Common Stock and make it difficult for us to raise additional capital.

The Series F-1 Certificate of Designations for our Series F-1 Preferred Shares provides for the payment of amortization payments to the holder of our Series F-1 Preferred Shares in cash or shares of Common Stock, or a combination thereof, at the Company's option. If the Company elects to pay any dividends in shares of Common Stock, the conversion price used to calculate the number of shares issuable will equal to the greater of (A) 80% of the average of the three lowest closing prices of our Common Stock during the thirty consecutive trading day period ending and including the trading day immediately prior to the date the amortization payment is due or (B) the lower of (x) \$0.4506 and (y) 20% of the Minimum Price on the Stockholder Approval Date or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Capital Market. In addition, each Certificate of Designations contains "full ratchet" anti-dilution provisions applicable to the conversion prices used in voluntary conversions of Preferred Shares by the holders thereof and by the Company in paying any shares of Common Stock, which provisions require the lowering of the applicable conversion price, as then in effect, to the purchase price of equity or equity-linked securities issued in subsequent offerings. If in the future, while any of our Preferred Shares are outstanding, we issue securities at an effective Common Stock purchase price that is less than the applicable conversion price of our Preferred Shares, as then in effect, we will be required, subject to certain limitations and adjustments as provided in each Certificate of Designations, to further reduce the relevant conversion price, which will result in a greater number of shares of Common Stock being issuable upon conversion of the Preferred Shares or upon amortization payments to the holders of the Series F-1 Preferred Shares in shares of Common Stock, which in turn will have a greater dilutive effect on our shareholders. The potential for such additional issuances may depress

Further, it is possible that we will not have a sufficient number of available shares to satisfy the conversion of the Preferred Shares or the amortization payments to the holders of the Series F-1 Preferred Shares in shares of Common Stock if we enter into a future transaction that reduces the applicable conversion price. If we do not have a sufficient number of available shares for any Preferred Shares conversions, we will be required to increase our authorized shares, which may not be possible and will be time consuming and expensive.

The Series F-1 Certificate of Designations provides for the payment of dividends in cash or in shares of our Common Stock, or a combination thereof, and we may not be permitted to pay such dividends in cash, which will require us to have shares of Common Stock available to pay the dividends.

Each share of the Series F-1 Preferred Shares is entitled to receive cumulative dividends at the rate per share of 10% per annum of the stated value per share. The dividends are payable in cash, out of any funds legally available for such purpose, or shares of Common Stock in the case of an Installment Conversion (as defined in the Series F-1 Certificate of Designations). The conversion price used to calculate the number of shares of Common Stock issuable in connection with an Installment Conversion is subject to reduction if in the future we issue securities for less than the conversion price of our Series F-1 Preferred Shares, as then in effect. This may have the effect of increasing the number of shares we would be obligated to issue in order to make an amortization payment in shares of Common Stock. We will not be permitted to pay the amortization in cash unless we are legally permitted to do so under Delaware law. As such, we may rely on having available shares of Common Stock to pay such amortization, which will result in dilution to our shareholders. If we do not have such available shares, we may not be able to satisfy our amortization obligations.

Substantial future sales or other issuances of our Common Stock could depress the market for our Common Stock.

Sales of a substantial number of shares of our Common Stock and any future sales of a substantial number of shares of Common Stock in the public market, including the issuance of shares or any shares issuable upon conversion of the Preferred Shares or exercise of the Warrants, or the perception by the market that those sales could occur, could cause the market price of our Common Stock to decline or could make it more difficult for us to raise funds through the sale of equity and equity-related securities in the future at a time and price that our management deems acceptable, or at all. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or Common Stock, which could also depress the market for our Common Stock. We cannot predict the effect, if any, that market sales of those shares of Common Stock or the availability of those shares for sale will have on the market price of our Common Stock.



You may experience future dilution as a result of future equity offerings and other issuances of our securities.

In order to raise additional capital, we may in the future offer additional shares of Common Stock or other securities convertible into or exchangeable for our Common Stock prices that may not be the same as the price per share paid by the investors in this offering. We may not 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 the investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of Common Stock or securities convertible into shares of Common Stock in future transactions may be higher or lower than the price per share paid to the selling stockholders. Our stockholders will incur dilution upon exercise of any outstanding stock options, warrants or other convertible securities or upon the issuance of shares of Common Stock under our stock incentive programs.

Any additional capital raised through the sale of equity or equity-backed securities may dilute our stockholders' ownership percentages and could also result in a decrease in the market value of our equity securities.

The terms of any securities issued by us in future capital transactions may be more favorable to new investors, and may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have a further dilutive effect on the holders of any of our securities then outstanding.

We expect to require additional capital in the future in order to pursue our strategic goals, including in order to complete our planned and future pre-clinical and clinical development for MYMD-1 and Supera-CBD and potentially commercialize these product candidates. If we do not obtain any such additional financing, it may be difficult to effectively realize our long-term strategic goals and objectives.

Our current cash resources will not be sufficient to fund the development of our product candidates through all of the required clinical trials to receive regulatory approval and commercialization. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant expenses related to commercial launch, product sales, medical affairs, regulatory, marketing, manufacturing and distribution. If we cannot secure this additional funding when such funds are required, we may fail to develop our product candidates or be forced to forego certain strategic opportunities.

In addition, we may incur substantial costs in pursuing future capital financing, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we issue, such as convertible notes and warrants, which may adversely impact our financial condition.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain "forward-looking statements," which include information relating to future events, future financial performance, strategies, expectations, competitive environment and regulation. Our use of the words "may," "will," "would," "could," "should," "believes," "estimates," "projects," "potential," "expects," "plans," "seeks," "intends," "evaluates," "pursues," "anticipates," "continues," "designs," "impacts," "forecasts," "target," "outlook," "initiative," "objective," "designed," "priorities," "goal" or the negative of those words or other similar expressions is intended to identify forward-looking statements that represent our current judgment about possible future events. Forward-looking statements should not be read as a guarantee of future performance or results and will probably not be accurate indications of when such performance or results will be achieved. All statements included or incorporated by reference in this prospectus, and in related comments by our management, other than statements of historical facts, including without limitation, statements about future events or financial performance, are forward-looking statements that involve certain risks and uncertainties.

These statements are based on certain assumptions and analyses made in light of our experience and perception of historical trends, current conditions and expected future developments as well as other factors that we believe are appropriate in the circumstances. While these statements represent our judgment on what the future may hold, and we believe these judgments are reasonable, these statements are not guarantees of any events or financial results. Whether actual future results and developments will conform with our expectations and predictions is subject to a number of risks and uncertainties, including the risks and uncertainties discussed in this prospectus, any prospectus supplement and the documents incorporated by reference under the captions "Risk Factors" and "Special Note Regarding Forward-Looking Statements" and elsewhere in those documents.

Consequently, all of the forward-looking statements made in this prospectus as well as all of the forward-looking statements incorporated by reference to our filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are qualified by these cautionary statements and there can be no assurance that the actual results or developments that we anticipate will be realized or, even if realized, that they will have the expected consequences to or effects on us and our subsidiaries or our businesses or operations. We caution investors not to place undue reliance on forward-looking statements. We undertake no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information, future events, or other such factors that affect the subject of these statements, except where we are expressly required to do so by law.

USE OF PROCEEDS

All shares of our Common Stock offered by this prospectus are being registered for the accounts of the selling stockholders and we will not receive any proceeds from the sale of these shares. However, we will receive proceeds from the exercise of the Warrants if the Warrants are exercised for cash. We intend to use those proceeds, if any, for general corporate purposes. The holders of the Warrants are not obligated to exercise their Warrants for cash, and we cannot predict whether holders of the Warrants will choose to exercise all or any of their Warrants for cash.

SELLING STOCKHOLDERS

Unless the context otherwise requires, as used in this prospectus, "selling stockholders" includes the selling stockholders listed below and donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the selling stockholders as a gift, pledge or other non-sale related transfer.

We have prepared this prospectus to allow the selling stockholders or their successors, assignees or other permitted transferees to sell or otherwise dispose of, from time to time, up to 473,841 shares of our Common Stock.

The Common Stock being offered by the selling stockholders are those issuable to the selling stockholders upon conversion of the Preferred Shares and exercise of the Warrants. For additional information regarding the issuance of the Preferred Shares and the Warrants, see "Private Placement of Preferred Shares and Warrants" above. We are registering the Conversion Shares and Warrant Shares in order to permit the selling stockholders to offer the shares for resale from time to time. The selling stockholders may also sell, transfer or otherwise dispose of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act, or pursuant to another effective registration statement covering those shares.

Relationships with the Selling Stockholders

Except for the ownership of the Preferred Shares and the Warrants issued pursuant to the Purchase Agreements and the Engagement Agreements, as applicable, and except as described below, in our periodic reports and current reports filed with the SEC from time to time, the selling stockholders have not had any material relationship with us within the past three years.

The Series F-1 Investors were party to that certain Securities Purchase Agreement by and among the Company and the Series F-1 Investors, pursuant to which the Company agreed to sell in a registered direct offering (i) Series F Preferred Stock convertible into shares of Common Stock pursuant to the terms of the Series F Certificate of Designations of the Series F Preferred Stock, and (ii) warrants to acquire shares of Common Stock, subject to adjustment ("Series F Warrants").

Information About Selling Stockholders Offering

The table below lists the selling stockholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of the shares of Common Stock held by each of the selling stockholders. The second column (titled "Number of Shares of Common Stock Owned Prior to Offering") lists the number of shares of Common Stock beneficially owned by the selling stockholders, based on their respective ownership of shares of Common Stock, Preferred Shares and Warrants as of June 18, 2024, assuming conversion of the Preferred Shares and exercise of the Warrants and any other warrants held by each such selling stockholder on that date, but taking account of any limitations on conversion and exercise set forth therein.

The third column (titled "Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus") lists the shares of Common Stock being offered by this prospectus by the selling stockholders and does not take in account any limitations on (i) conversion of the Preferred Shares set forth therein or (ii) exercise of the Warrants set forth therein.

The third, fourth and fifth columns (titled "Number of Shares of Common Stock Owned After Offering" and "Percentage of Common Stock Owned After Offering") assume the conversion of the Preferred Shares and exercise of the Warrants at the Conversion Price and the conversion of the PIK Shares at the Series G Floor Price and the sale of all of the shares offered by the selling stockholders pursuant to this prospectus. Because the conversion price of the Preferred Shares and the exercise price of the Warrants may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus.

This prospectus covers the resale of approximately 19.99% of our issued and outstanding shares of Common Stock immediately prior to the Private Placements, which amount is the aggregate number of shares of Common Stock which we may currently issue upon conversion of the Preferred Shares and exercise of Warrants under the rules or regulations of Nasdaq prior to obtaining the Stockholder Approval.

The terms of the Series F-1 Registration Rights Agreement require us to register the number of shares of Common Stock equal to the sum of (i) 200% of the maximum number of Series F-1 Conversion Shares issuable upon conversion of the Series F-1 Preferred Shares (assuming for purposes hereof that (x) the Series F-1 Preferred Shares are convertible at the Series F-1 Conversion Price, and (y) any such conversion shall not take into account any limitations on the conversion of the Series F-1 Preferred Shares set forth in the Series F-1 Certificate of Designations, and (ii) 200% of the maximum number of Series F-1 Warrant Shares issuable upon exercise of the Series F-1 Warrants issued to the Series F-1 Investors (without taking into account any limitations on the exercise of such Series F-1 Warrants set forth therein), in each case subject to the adjustments set forth in the Series F-1Certificate of Designations and Series F-1 Warrants.

The terms of the Series G Registration Rights Agreement require us to register the number of shares of Common Stock equal to the sum of (i) 200% of the maximum number of Initial Series G Conversion Shares issuable upon conversion of the Initial Series G Preferred Shares (assuming for purposes hereof that (x) the Initial Series G Preferred Shares are convertible at the Series G Conversion Price, and (y) any such conversion shall not take into account any limitations on the conversion of the Initial Series G Preferred Shares (assuming for purposes hereof that (x) the Initial Series G Preferred Shares (assuming for purposes hereof that (x) the Initial Series G Preferred Shares (assuming for purposes hereof that (x) the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion of the PIK Preferred Shares (assuming for purposes hereof that (x) the PIK Preferred Shares are convertible at the Series G Floor Price, and (y) any such conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares set forth in the Series G Certificate of Designations), (ii) 200% of the maximum number of PIK Conversion Shares issuable upon conversion shall not take into account any limitations on the conversion of the PIK Preferred Shares set forth in the Series G Certificate of Designations), and (iii) 200% of the maximum number of Series G Warrant Shares issuable upon exercise of the Series G Warrants issued to the Series G Investors (without taking into account any limitations on the exercise of such Series G Warrants set forth in the Series G Certificate of Designations and Series G Warrants.

Additionally, we will register 100% of the maximum number of Placement Agent Warrant Shares issuable upon exercise of the Placement Agent Warrants issued to the Placement Agents (without taking into account any limitations on the exercise of such Placement Agent Warrants set forth therein).

If we obtain the Stockholder Approval, we intend to amend the registration statement of which this prospectus is a part to increase the number of shares of Common Stock registered hereunder to the extent necessary to comply with the terms of the Registration Rights Agreements and to register the maximum number of shares issuable upon exercise of the Warrants issued to the Placement Agents, or their respective designees.

Under the terms of the Certificate of Designations and the Warrants, a selling stockholder, other than Pharmacyte, may not convert the Preferred Shares or exercise the Warrants to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our shares of Common Stock which would exceed 4.99%, or, at the election of the selling stockholder, 9.99% of the outstanding shares of the Company. The number of shares in the second column reflects these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

| Name of Selling Stockholder | Number of Shares of Common Stock Owned Prior to Offering (1) | Maximum Number of Shares of Common Stock to be Sold Pursuant to this Presenctus | Number of shares of Common Stock Owned After Offering | Percentage of Common Stock Owned After Offering |
|--|---|---|--|---|
| Iroquois Capital Investment Group, LLC (2) | 124,196 | Prospectus 23,947 | 124,196 | 4.99% |
| Iroquois Master Fund Ltd. (3) | 123,900 | 44,702 | 123,900 | 4.99% |
| Intracoastal Capital LLC (4) | 124,496 | 68,650 | 124,496 | 4.99% |
| Five Narrow Lane LP (5) | 23,947 | 23,947 | - | - |
| The Hewlett Fund LP (6) | 31,930 | 31,930 | - | - |
| PharmaCyte Biotech, Inc. (7) | 223,512 | 223,512 | - | - |
| Aramas Capital Management, LLC (8) | 6,386 | 6,386 | - | - |
| Scot Cohen (9) | 124,496 | 7,982 | 124,496 | 4.99% |
| V4 Global, LLC (10) | 124,496 | 15,965 | 124,496 | 4.99% |
| GP Nurmenkari Inc. (11) | 13,410 | 13,410 | - | - |
| Palladium Capital Group, LLC (12) | 13,410 | 13,410 | - | - |

* Less than 1%

- (1) This table and the information in the notes below are based upon information available to the Company and upon 2,370,423 shares of Common Stock issued and outstanding as of June 18, 2024 (prior to any deemed issuance of any Conversion Shares or Warrant Shares). Except as expressly noted in the footnotes below, beneficial ownership has been determined in accordance with Rule 13d-3 under the Exchange Act. The amounts set forth in this column reflect the application of various limitations on the issuance of Conversion Shares and Warrant Shares in the Certificate of Designations and the Warrants, respectively, including beneficial ownership limitations and limitations under the rules or regulations of Nasdaq.
- (2) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder. Other shares of Common Stock beneficially owned prior to this offering consist of (i) 5,707 shares of common stock, (ii) 497,647 shares of common stock issuable upon conversion of Series F Preferred Stock (subject to a 4.99% beneficial ownership blocker), and (iii) 1,514,317 shares of common stock issuable upon exercise of Series F Warrants (subject to a 4.99% beneficial ownership blocker) that are currently exercisable or exercisable within 60 days of June 18, 2024.

The shares are held directly by Iroquois Capital Investment Group, LLC, a limited liability company ("ICIG"). Richard Abbe is the managing member of ICIG. Mr. Abbe has voting control and investment discretion over securities held by ICIG. As such, Mr. Abbe may be deemed to be the beneficial owner (as determined under Section 13(d) of the Exchange Act) of the securities held by ICIG. Mr. Abbe disclaims beneficial ownership over the securities listed except to the extent of his pecuniary interest therein. ICIG's address is 2 Overhill Road, Suite 400, Scarsdale, NY 10583.

(3) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder. Other shares of Common Stock beneficially owned prior to this offering consist of (i) 11,348 shares of common stock, (ii) 904,563 shares of common stock issuable upon conversion of Series F Preferred Stock (subject to a 4.99% beneficial ownership blocker), and (iii) 2,753,304 shares of common stock issuable upon exercise of Series F Warrants (subject to a 4.99% beneficial ownership blocker) that are currently exercisable or exercisable within 60 days of June 18, 2024.

The shares are held directly by Iroquois Master Fund Ltd. ("IMF"). Iroquois Capital Management L.L.C. is the investment manager of IMF. Iroquois Capital Management, LLC has voting control and investment discretion over securities held by IMF. As Managing Members of Iroquois Capital Management, LLC, Richard Abbe and Kimberly Page make voting and investment decisions on behalf of Iroquois Capital Management, LLC in its capacity as investment manager to IMF. As a result of the foregoing, Mr. Abbe and Mrs. Page may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Iroquois Capital Management and IMF. Each of Iroquois Capital Management, LLC, Mr. Abbe and Ms. Page disclaims beneficial ownership over the securities listed except to the extent of their pecuniary interest therein. IMF's address is 2 Overhill Road, Suite 400, Scarsdale, NY 10583.

(4) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder. Other shares of Common Stock beneficially owned prior to this offering consist of (i) 1,162,383 shares of common stock issuable upon conversion of Series F Preferred Stock (subject to a 4.99% beneficial ownership blocker), and (iii) 3,579,295 shares of common stock issuable upon exercise of Series F Warrants (subject to a 4.99% beneficial ownership blocker) that are currently exercisable or exercisable within 60 days of June 18, 2024.

Mitchell P. Kopin ("Mr. Kopin") and Daniel B. Asher ("Mr. Asher"), each of whom are managers of Intracoastal Capital LLC ("Intracoastal"), have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of the securities reported herein that are held by Intracoastal. Intracoastal's address is 245 Palm Trail, Delray Beach, FL 33483.

(5) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

Messrs. Arie Rabinowitz and Joe Hammer have voting and investment control over the securities held by Five Narrow Lane LP. Five Narrow Lane LP'S address is 510 Madison Avenue, Suite 1400, New York, NY 10022.

(6) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

Martin Chopp has voting and dispositive power over the securities held by The Hewlett Fund LP ("Hewlett"). Hewlett's address is 100 Merrick Road, Suite 400W, Rockville Centre, NY 11570.

(7) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

PharmaCyte Biotech, Inc.'s address is 3960 Howard Hughes Parkway, Suite 500, Las Vegas, Nevada 89169.

(8) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

Aramas Capital Management, LLC's address is c/o Aramas Capital Holdings, LLC 19 Orchard Street, Manhasset, NY 11030.

(9) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder. Other shares of Common Stock beneficially owned prior to this offering consist of (i) 91,777 shares of Common Stock issuable upon conversion of Series F Preferred Stock (subject to a 4.99% beneficial ownership blocker), and (iii) 137,655 shares of Common Stock issuable upon exercise of Series F Warrants (subject to a 4.99% beneficial ownership blocker) that are currently exercisable or exercisable within 60 days of June 18, 2024

Mr. Cohen's address is 445 Grand Bay Drive, Apt. P1A, Key Biscayne, FL 33149.

(10) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder Other shares of Common Stock beneficially owned prior to this offering consist of (i) 45,888 shares of Common Stock issuable upon conversion of Series F Preferred Stock (subject to a 4.99% beneficial ownership blocker), and (iii) 275,330 shares of Common Stock issuable upon exercise of Series F Warrants (subject to a 4.99% beneficial ownership blocker) that are currently exercisable or exercisable within 60 days of June 18, 2024.

The shares are held by V4 Global, LLC ("V4"). Scot Cohen has voting and dispositive control with respect to the securities being offered. V4 and Scot Cohen disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein. V4's address is 445 Grand Bay Drive, Apt. P1A, Key Biscayne, FL 33149.

(11) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

GP Nurmenkari Inc.'s address is 22 Elizabeth Street, Norwalk, CT 06854.

(12) Shares of Common Stock to be sold pursuant to this prospectus represent the number of shares of Common Stock that may be issued, in the aggregate, upon conversion or exercise (as the case may be) of any Preferred Shares or any Warrants beneficially owned by the selling stockholder.

Palladium Capital Group, LLC's address is 152 West 57th Street, New York, NY 10019.

PLAN OF DISTRIBUTION

We are registering the shares of Common Stock issuable upon conversion of the Preferred Shares and exercise of the Warrants to permit the resale of these shares of Common Stock by the holders of the Preferred Shares and Warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Common Stock, although we will receive the exercise price of any Warrants not exercised by the selling stockholders on a cashless exercise basis. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may sell all or a portion of the shares of Common Stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

In addition, the selling stockholders may transfer the securities by other means not described in this prospectus. If the selling stockholders effect such transactions by selling securities to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from purchasers of the securities for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the securities or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the securities in the course of hedging in positions they assume. The selling stockholders may also sell securities short and deliver securities to broker-dealers that in turn may sell such securities.

The selling stockholders may pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the securities in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the securities may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of securities is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of securities being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the securities registered pursuant to the registration statement of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of securities by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to such securities. All of the foregoing may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

We will pay all expenses of the registration of the securities pursuant to the Registration Rights Agreements, estimated to be \$150 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the Registration Rights Agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the securities will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Haynes and Boone, LLP, New York, New York.

EXPERTS

The consolidated balance sheets of MyMD Pharmaceuticals, Inc. and Subsidiaries as of December 31, 2023 and 2022, and the related consolidated statements of comprehensive loss, changes in stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2023 have been audited by Morison Cogen LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference (which report includes an explanatory paragraph about the existence of substantial doubt concerning our ability to continue as a going concern). Such consolidated financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and current reports and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC.

These documents are also available, free of charge, through the Investors section of our website, which is located at www.mymd.com. Information contained on our website is not incorporated by reference into this prospectus and you should not consider information on our website to be part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we have filed with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, subsequent to the date of this prospectus and prior to the termination of the offering:

- Our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on April 1, 2024;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, filed with the SEC on May 15, 2024;
- Our Current Reports on Form 8-K and Form 8-K/A filed with the SEC on February 13, 2024, March 7, 2024, March 26, 2024, April 8, 2024, April 18, 2024, May 21, 2024, May 23, 2024 and June 17, 2024; and
- The description of our Common Stock contained in Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and
 Exchange Commission on March 31, 2022, including any amendments thereto or reports filed for the purposes of updating this description.

All filings filed by us pursuant to the Securities Exchange Act of 1934, as amended, after the date of the initial filing of this registration statement and prior to the effectiveness of such registration statement (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) shall also be deemed to be incorporated by reference into the prospectus.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. Any statement contained in a document incorporated by reference into this prospectus will be deemed to be modified or superseded for the purposes of this prospectus to the extent that a later statement contained in this prospectus or in any other document incorporated by reference into this prospectus modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the reports or documents that have been incorporated by reference in this prospectus but not delivered with this prospectus (other than an exhibit to these filings, unless we have specifically incorporated that exhibit by reference in this prospectus). Any such request should be addressed to us at:

MyMD Pharmaceuticals, Inc. 855 N. Wolfe Street, Suite 601 Baltimore, MD 21205 (856) 848-8698

You may also access the documents incorporated by reference in this prospectus through our website at www.mymd.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

473,841 Shares



COMMON STOCK PROSPECTUS

PART II: INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various costs and expenses payable by us in connection with the sale of the securities being registered. All such costs and expenses shall be borne by us. Except for the Securities and Exchange Commission registration fee, all the amounts shown are estimates.

| Securities and Exchange Commission Registration Fee | \$ 150.02 |
|---|-----------------|
| Printing and engraving costs | - |
| Legal fees and expenses | 25,000 |
| Accounting fees and expenses | 5,000 |
| Miscellaneous Fees and Expenses | 2,000 |
| Total | \$ 32,150.02 |

Item 15. Indemnification of Directors and Officers

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

Article IX of our Articles of Incorporation provides that no director shall be personally liable to the Company or its stockholders for any monetary damages for any breach of fiduciary duty as a director.

Article IX of our Articles of Incorporation provides that the Company shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnified Person") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Company or, while a director or officer of the Company, is or was serving at the request of the Company as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability corporation, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding. The Company shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board.

Article VIII Section 8.01 of our By-laws provides that the Company shall indemnify, to the fullest extent permitted by the Delaware General Corporation Law, as now or hereinafter in effect, any Indemnified Person, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such 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. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed 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 to be best interests of the corporation, and, with respect to any criminal action or proceeding, had ne reasonable to be best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Article VIII Section 8.02 of our By-laws provides that the Company shall indemnify, to the fullest extent permitted by the Delaware General Corporation Law, as now or hereinafter in effect, any Indemnified Person, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of any threatened, pending or completed action or actions brought by or in the right of the Company 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 shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Item 16. Exhibits

| Exhibit Number | Exhibit Description |
|-------------------|---|
| 2.1** | Agreement and Plan of Merger and Reorganization, dated November 11, 2020, by and among Akers Biosciences, Inc., XYZ Merger Sub Inc., and MYMD |
| | Pharmaceuticals, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 12, 2020). |
| 2.2 | Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated March 16, 2021, by and among Akers Biosciences, Inc., XYZ Merger Sub Inc., and MyMD Pharmaceuticals, Inc. (incorporated herein by reference to Exhibit 2.2 to the Company's Registration Statement on Form S-4/A filed with the Securities and Exchange Commission on March 19, 2021) |
| 2.3 | Agreement and Plan of Merger, dated March 4, 2024, by and between MyMD Pharmaceuticals, Inc., a New Jersey corporation, and MyMD Pharmaceuticals, Inc., a Delaware corporation (incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 7, 2024). |
| 3.1 | Amended and Restated Certificate of Incorporation, effective April 16, 2021 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 22, 2021). |
| 3.2 | Certificate of Amendment to Amended and Restated Certificate of Incorporation, effective April 16, 2021 (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 22, 2021). |
| 3.3 | Certificate of Amendment to the Amended and Restated Certificate of Incorporation, effective February 14, 2024 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 13, 2024). |
| 3.4 | Certificate of Incorporation of MyMD Pharmaceuticals, Inc., a Delaware corporation (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 7, 2024). |
| 3.5 | Certificate of Correction, dated March 25, 2024, to the Certificate of Incorporation of MyMD Pharmaceuticals, Inc., a Delaware corporation (incorporated herein by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K/A filed with the Securities and Exchange Commission on March 26, 2024). |
| 3.6 | Form of Certificate of Designations of Series F Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2023). |
| 3.7 | Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 8, 2024). |
| 3.8 | Certificate of Amendment of Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (incorporated herein by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024). |
| 3.9 | Certificate of Designations of Series F-1 Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 23, 2024). |

- 3.10 Certificate of Designations of Series G Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 23, 2024).
- 4.1 Form of Series C Convertible Preferred Stock Warrant Certificate (incorporated herein by reference to Exhibit 4.9 to the Company's Registration Statement on Form S-1/A filed with the Securities and Exchange Commission on November 29, 2019).
- 4.2 Form of Pre-Funded Warrant Certificate (incorporated herein by reference to Exhibit 4.10 to the Company's Registration Statement on Form S-1/A filed with the Securities and Exchange Commission on November 29, 2019).
- 4.3 Form of Placement Agent Warrant Certificate (incorporated herein by reference to Exhibit 4.12 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2022).
- 4.3 Form of Placement Agent Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 8, 2020).
- 4.5 Form of Placement Agent Warrant (incorporated herein by references to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 15, 2020).
- 4.6 Form of Placement Agent Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 13, 2020).
- 4.7 Form of Placement Agent Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 18, 2020).
- 4.8 Rights Agreement dated as of September 9, 2020 between Akers Biosciences, Inc. and VStock Transfer, LLC as Rights Agent (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 9, 2020).
- 4.9 Amendment No. 1 to Rights Agreement, dated as of March 18, 2021, by and between Akers Biosciences, Inc. and VStock Transfer, LLC, as Rights Agent (incorporated herein by reference to Exhibit 4.19 to the Company's Registration Statement on Form S-4/A filed with the Securities and Exchange Commission on March 19, 2021).
- 4.10 Form of Pre-Funded Warrant, of Akers Biosciences, Inc. (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 12, 2020).
- 4.11 Form of Investor Warrant. of Akers Biosciences, Inc. (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 12, 2020).
- 4.12 Form of Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 15, 2022).
- 4.13 Form of Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2023).
- 4.14 Form of Series G Long-Term Warrant. (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).
- 4.15 Form of Series G Short-Term Warrant. (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).



- 4.16 Form of Series F-1 Long-Term Warrant. (incorporated herein by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).
- 4.17 Form of Series F-1 Short-Term Warrant. (incorporated herein by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).
- 5.1* Opinion of Haynes and Boone, LLP.
- 23.1* Consent of Morison Cogen LLP.

23.2* Consent of Haynes and Boone, LLP (included in Exhibit 5.1).

- 24.1* Power of Attorney.
- 107* Filing Fee Table.

 ∞ The schedules and exhibits to the Agreement and Plan of Merger and Reorganization have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

* Filed herewith.

Item 17. Undertakings

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;

(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. 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 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.

(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:

Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 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 of 1933, 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 of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B (§230.430B of this chapter):

(A) 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

(B) 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 of 1933 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 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.

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *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 first use, 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 date of first use.

(5) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the 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.

(6) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Baltimore, State of Maryland, on June 21, 2024.

MyMD Pharmaceuticals, Inc.

| Bv: | /s/ Mitchell | Glass | MD |
|-----|--------------|--------|------|
| DV. | /s/ Milchell | Giass, | M.D. |

Name: Mitchell Glass, M.D.

Title: President and Chief Medical Officer and Director

POWER OF ATTORNEY

Each person whose signature appears below hereby appoints Mitchell Glass as his or her true and lawful attorney-in-fact, with full power of substitution, and with the authority to execute in the name of each such person, any and all amendments (including without limitation, post-effective amendments) to this registration statement on Form S-3, to sign any and all additional registration statements relating to the same offering of securities as this registration statement that are filed pursuant to Rule 462(b) of the Securities Act of 1933, and to file such registration statements with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, necessary or advisable to enable the registrant to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, which amendments may make such other changes in the registration statement as the aforesaid attorney-in-fact executing the same deems appropriate.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|------------------------------|--|---------------|
| /s/ Mitchell Glass, M.D. | President and Chief Medical Officer and Director | June 21, 2024 |
| Mitchell Glass, M.D. | (principal executive officer) | |
| /s/ Ian Rhodes | Interim Chief Financial Officer | June 21, 2024 |
| Ian Rhodes | (principal financial and accounting officer) | |
| /s/ Joshua Silverman | Chairman of the Board | June 21, 2024 |
| Joshua Silverman | | |
| /s/ Bill J. White | Director | June 21, 2024 |
| Bill J. White | | |
| /s/ Christopher C. Schreiber | Director | June 21, 2024 |
| Christopher C. Schreiber | | |
| /s/ Jude Uzonwanne | Director | June 21, 2024 |
| Jude Uzonwanne | | |
| /s/ Craig Eagle | Director | June 21, 2024 |
| Craig Eagle | | |
| /s/ Stephen Friscia | Director | June 21, 2024 |
| Stephen Friscia | | |
| | ШС | |

MyMD Pharmaceuticals, Inc. 855 N. Wolfe Street, Suite 601 Baltimore, MD 21205

Ladies and Gentlemen:

We have acted as counsel for MyMD Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>"), in connection with the filing with the Securities and Exchange Commission (the "<u>Commission</u>") on the date hereof, under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), of a registration statement on Form S-3 (the "<u>Registration Statement</u>") by the Company which registers the resale by the holders thereof of 473,841 shares of common stock of the Company, par value \$0.001 per share (the "<u>Common Stock</u>") issuable upon the conversion of shares of the Company's newly designated Series F-1 convertible preferred stock (the "<u>Series F-1 Preferred Shares</u>"), shares of Common Stock issuable upon the conversion of shares of the Company's newly designated Series G convertible preferred stock ("<u>Series G Preferred Shares</u>," and, together with the Series F-1 Preferred Shares, the "<u>Preferred Shares</u>") and shares of the Common Stock issuable upon exercise of certain warrants (the "<u>Warrants</u>"), herein collectively as the "<u>Securities</u>."

In rendering the opinions expressed herein, we have examined and relied upon the originals, or copies certified to our satisfaction, of (i) the Certificate of Incorporation and Bylaws of the Company, as of the date hereof ("<u>Company Charter Documents</u>"); (ii) the Registration Statement and all exhibits thereto; (iii) Certificate of Designations of Series F-1 Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. (the "<u>Series F-1 Certificate of Designations</u>"), (iv) Certificate of Designations of Series G Convertible Preferred Stock of MyMD Pharmaceuticals, Inc. ("<u>Series G Certificate of Designations</u>"), (v) the Warrants; (vi) a specimen of the Company's Common Stock certificate; (vii) a certificate executed by an officer of the Company, dated as of the date hereof, and (viii) such other corporate records of the Company as we have deemed necessary or appropriate for purposes of the opinions hereafter expressed.

As to questions of fact material to the opinions expressed below, we have, without independent verification of their accuracy, relied to the extent we deemed reasonably appropriate upon the representations and warranties of the Company contained in such documents, records, certificates, instruments or representations furnished or made available to us by the Company.

In making the foregoing examinations, we have assumed (i) the genuineness of all signatures, (ii) the authenticity of all documents submitted to us as originals, (iii) the conformity to original documents of all documents submitted to us as certified or photostatic copies, (iv) that all agreements or instruments we have examined are the valid, binding and enforceable obligations of the parties thereto, and (v) that all factual information on which we have relied was accurate and complete.

We have also assumed that (i) the Company will continue to be incorporated and in existence and good standing in its jurisdiction of organization; (ii) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective; (iii) no stop order of the Commission preventing or suspending the use of the prospectus contained in the Registration Statement or any prospectus supplement will have been issued; (iv) a prospectus properly describing the Securities offered thereby will have been delivered to the purchaser(s) of the Securities as required in accordance with applicable law; (v) all Securities will be offered, issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the prospectus and any prospectus supplement; (vi) any definitive purchase, underwriting or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto and will be an enforceable obligation of the parties thereto; (vii) upon effectiveness of the Registration Statement, there will be sufficient shares of Common Stock authorized under the Company Charter Documents and not otherwise reserved for issuance; and (viii) there will not have occurred any change in law or in the Company Charter Documents of the Company adversely affecting the Securities or the rights of the holders thereof.

Based upon the foregoing and subject to the assumptions and qualifications stated herein, we are of the opinion that (i) the Common Stock are validly issued, fully paid and non-assessable; (ii) the Common Stock issuable upon conversion of the Preferred Shares, when issued in accordance with the terms of the applicable Certificate of Designations, will be validly issued, fully paid and non-assessable, and (iii) the Common Stock underlying the Warrants, when issued in accordance with the terms of the Warrants, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited exclusively to the General Corporation Law of the State of Delaware (the "DGCL") and applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the DGCL and such provisions of the Delaware Constitution and we have not considered, and express no opinion on, any other laws of the laws of the jurisdiction.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the heading "Legal Matters" in the prospectus constituting part of such Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Haynes and Boone, LLP Haynes and Boone, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the reference of our firm under the caption "Experts" in the Registration Statement on Form S-3 and related Prospectus of MyMD Pharmaceuticals, Inc. and to the incorporation by reference therein of our report dated April 1, 2024, with respect to the consolidated financial statements of MyMD Pharmaceuticals, Inc. included in its Annual Report on Form 10-K filed with the Securities and Exchange Commission on April 1, 2024.

/s/ Morison Cogen LLP

Blue Bell, Pennsylvania June 21, 2024

Calculation of Filing Fee Tables

Form S-3

MyMD Pharmaceuticals, Inc.

Table 1: Newly Registered and Carry Forward Securities

| | Security Type | Security Class Title | Fee Calculation or Carry Forward Rule | Amount Registered (1) | Proposed Maximum Offering Price Per Unit New | Maximum Aggregate Offering Price | Fee Rate | Amount of Registratio Fee | | Carry Forward File <u>Number</u> | Carry Forward Initial effective date | Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward |
|--|--------------------------|--------------------------------|---|-----------------------------|---|---|--------------|---------------------------------|---|---|--|--|
| | | Common | | | 11000 | ly Registered Se | curnes | | | | | |
| Fees to Be Paid Fees Previously | Equity | Stock, par value \$0.001 | Rule 457(c) | 473,841(2) | \$ 2.145(3) | \$1,016,388.95 | \$0.00014760 | \$ 150.0 | 2 | | | |
| Paid | | | | | | | | | | | | |
| C | Carry Forward Securities | | | | | | | | | | | |
| Carry Forward Securities | | | | | | | | | | | | |
| | | | ering Amoun | | | \$1,016,388.95 | | | | | | |
| | | | Previously Pa Fee Offsets | aid | | | | | | | | |
| | | | Fee Onsets | | | | | \$ 150.0 | 2 | | | |
| | | | | | | | | | | | | |

(1) Pursuant to Rule 416 under the Securities Act of 1933 (the "Securities Act"), the shares being registered hereunder include such indeterminate number of shares of common stock, par value \$0.001 per share (the "Common Stock"), as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) Represents an aggregate of 473,841 shares of Common Stock issuable upon the conversion of shares of Series F-1 convertible preferred stock, upon the conversion of shares of Series G convertible preferred stock, or upon exercise of certain warrants.

(3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low prices of the Common Stock as reported on The Nasdaq Capital Market on June 18, 2024, which such date is within five business days of the filing of this registration statement, of \$2.145 per share.