

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

**FORM 10-Q**

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2023

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-36268

**MyMD Pharmaceuticals, Inc.**

(Exact name of registrant as specified in its charter)

New Jersey

(State or other jurisdiction of  
incorporation or organization)

855 N. Wolfe Street, Suite 601  
Baltimore, MD

(Address of principal executive offices)

22-2983783

(I.R.S. Employer  
Identification Number)

21205

(Zip Code)

Registrant's telephone number, including area code: (856) 848-8698

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:	Trading Symbol(s)	Name of Each Exchange on Which Registered:
Shares of Common Stock, no par value	MYMD	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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 definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of August 14, 2023, the registrant had 44,930,389 shares of its Common Stock, no par value per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

MYMD PHARMACEUTICALS, INC. AND SUBSIDIARIES  
Condensed Consolidated Balance Sheets  
June 30, 2023 and December 31, 2022  
(unaudited)

	As of	
	June 30, 2023	December 31, 2022
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and Cash Equivalents	\$ 93,823	\$ 749,090
Marketable Securities	11,533,432	4,086,902
Prepaid Expenses	1,515,760	565,787
<b>Total Current Assets</b>	<b>13,143,015</b>	<b>5,401,779</b>
<b>Non-Current Assets</b>		
Operating Lease Right-of-Use Assets	107,571	139,662
Goodwill	10,498,539	10,498,539
Investment in Oravax, Inc.	1,500,000	1,500,000
<b>Total Non-Current Assets</b>	<b>12,106,110</b>	<b>12,138,201</b>
<b>Total Assets</b>	<b>\$ 25,249,125</b>	<b>\$ 17,539,980</b>
<b>LIABILITIES</b>		
<b>Current Liabilities</b>		
Trade and Other Payables	\$ 2,156,452	\$ 2,673,221
Due to MyMD Florida Shareholders	29,982	29,982
Operating Lease Liability	70,287	65,780
Dividends Payable	172,387	-
<b>Total Current Liabilities</b>	<b>2,429,108</b>	<b>2,768,983</b>
<b>Non-Current Liabilities</b>		
Operating Lease Liability, net of current portion	39,505	75,941
Derivative Liabilities	3,465,000	-
Warrant Liabilities	7,813,000	-
<b>Total Non-Current Liabilities</b>	<b>11,317,505</b>	<b>75,941</b>
<b>Total Liabilities</b>	<b>\$ 13,746,613</b>	<b>\$ 2,844,924</b>
<b>Commitments and Contingencies</b>		
Series F Convertible Preferred Stock, 15,000 shares designated, no par value and a stated value of \$1,000 per share, 12,500 and 0 shares issued and outstanding as of June 30, 2023 and December 31, 2022. Liquidation preference of \$12,500,000 plus dividends at 10% per annum of \$172,387 as of June 30, 2023.	760,742	-
<b>STOCKHOLDERS' EQUITY</b>		
Preferred Stock, no par value, 50,000,000 total preferred shares authorized		
Series D Convertible Preferred Stock, 211,353 shares designated, no par value and a stated value of \$0.01 per share, 72,992 shares issued and outstanding as of June 30, 2023 and December 31, 2022	144,524	144,524
Common stock, no par value, 500,000,000 shares authorized 42,027,113 and 39,470,009 issued and outstanding as of June 30, 2023 and December 31, 2022	110,567,664	108,309,436
Accumulated Deficit	(99,970,418)	(93,758,904)
<b>Total Stockholders' Equity</b>	<b>10,741,770</b>	<b>14,695,056</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 25,249,125</b>	<b>\$ 17,539,980</b>

See accompanying notes to these condensed consolidated financial statements.

**MYMD PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Comprehensive Loss**  
**(unaudited)**

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2023	2022	2023	2022
Product Revenue	\$ -	\$ -	\$ -	\$ -
Product Cost of Sales	-	-	-	-
Gross Income	-	-	-	-
Administrative Expenses	1,879,917	1,346,763	2,867,904	2,741,875
Research and Development Expenses	2,224,444	2,163,968	2,994,874	4,793,711
Stock Based Compensation Expenses	1,677,271	132,246	1,746,339	229,245
Warrant Issuance Expenses	-	-	762,834	-
Loss from Operations	(5,781,632)	(3,642,977)	(8,371,951)	(7,764,831)
Other (Income) Expenses				
Interest and Dividend Income	(174,851)	(5,986)	(200,675)	(6,106)
(Gain)/Loss on Sale of Marketable Securities	389	1,999	214	3,649
Change in fair value of Marketable Securities	983	(2,947)	2,695	145
Change in fair value of Derivatives Liabilities	1,490,200	-	315,200	-
Change in fair value of Warrant Liabilities	(2,930,700)	-	(2,810,000)	-
Uninsured Casualty Loss	-	-	-	(4,442)
Total Other Income	(1,613,979)	(6,934)	(2,692,566)	(6,754)
Loss Before Income Tax	(4,167,653)	(3,636,043)	(5,679,385)	(7,758,077)
Income Tax Benefit	-	-	-	-
Net Loss	\$ (4,167,653)	\$ (3,636,043)	\$ (5,679,385)	\$ (7,758,077)
Preferred Stock Dividends	373,796	-	532,129	-
Net Loss Attributable to Common Stockholders	(4,541,449)	(3,636,043)	(6,211,514)	(7,758,077)
Basic and Diluted loss per common share	\$ (0.11)	\$ (0.09)	\$ (0.16)	\$ (0.20)
Weighted average basic and diluted common shares outstanding	40,351,806	38,325,311	40,071,084	38,224,679

See accompanying notes to these condensed consolidated financial statements.



**MYMD PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Cash Flows**  
(unaudited)

	<b>For the Six Months Ended</b>	
	<b>June 30,</b>	
	<b>2023</b>	<b>2022</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (5,679,385)	\$ (7,758,077)
Adjustments to reconcile net loss to net cash used in operating activities:		
Loss on sale of marketable securities	214	3,649
Change in fair value of marketable securities	2,695	145
Change in fair value of derivatives	315,200	-
Change in fair value of warrants	(2,810,000)	-
Stock based compensation		
Options issued to directors	559,224	-
Options issued to key employees	1,044,550	208,332
Options issued to non-employees	142,565	4,916
Restricted stock units to non-employees	-	15,998
Change in assets and liabilities		
Prepaid Expenses	(949,973)	(265,060)
Trade and Other Payables	(516,769)	1,854,909
Operating Leases	162	943
<b>Net cash used by operating activities</b>	<b>(7,891,517)</b>	<b>5,934,245)</b>
<b>Cash flows from investing activities:</b>		
Purchases of marketable securities	(13,199,409)	(6,548)
Proceeds from sale of marketable securities	5,749,970	6,500,000
<b>Net cash (used in)/provided by investing activities</b>	<b>(7,449,439)</b>	<b>6,493,452</b>
<b>Cash flows from financing activities</b>		
Net proceeds from the issuance of preferred stock	14,685,689	-
<b>Net cash provided by financing activities</b>	<b>14,685,689</b>	<b>-</b>
Net (decrease)/increase in cash	(655,267)	559,207
Cash at beginning of period	749,090	555,567
Cash at end of period	<u>\$ 93,823</u>	<u>\$ 1,115,174</u>
Supplemental cash flow information		
Cash paid for:		
Interest	\$ -	\$ -
Income Taxes	\$ -	\$ -
Supplemental Schedule of Non-Cash Financing and Investing Activities		
Accrual of Series F Convertible Preferred Stock Dividend	\$ 172,387	\$ -
Initial fair value of warrant liabilities pursuant to the issuance of Series F Convertible Preferred Stock and Warrants	\$ 10,623,000	\$ -
Initial fair value of derivative liabilities pursuant to the issuance of Series F Convertible Preferred Stock and Warrants	\$ 3,149,800	\$ -

See accompanying notes to these condensed consolidated financial statements.

**Note 1 – Organization and Description of Business**

MyMD Pharmaceuticals, Inc., previously known as Akers Biosciences, Inc., is a New Jersey corporation (“MyMD”). These condensed consolidated financial statements include two wholly owned subsidiaries as of June 30, 2023, Akers Acquisition Sub, Inc. and Bout Time Marketing Corporation, (together, the “Company”). All material intercompany transactions have been eliminated in consolidation.

MyMD Pharmaceuticals (Florida), Inc. (“MyMD Florida”) was formed in 2014 and is a Florida-based clinical development stage biopharmaceutical company that is developing its product candidate, MYMD-1, as an immuno regulator to treat autoimmune diseases, ageing-related diseases. Substantive operations began in 2016 and the Company’s Investigative New Drug application was filed with the U.S. Food and Drug Administration in December 2018. MyMD Florida completed its first-in-human Phase 1 clinical trial in December 2019. A second Phase 1 dosing study was completed in December 2021. 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- $\alpha$ , interleukin 6 (“IL-6”) and interleukin 17 (“IL-17”). MYMD-1 currently is being evaluated in a multicenter Phase 2 clinical trial in patients with sarcopenia and frailty (age-related muscle loss).

Supera Pharmaceuticals, Inc. (“Supera”) was formed in September 2018 and is a Florida based development company that is developing its product candidate “Supera-CBD” as an FDA-approved synthetic analog of naturally grown cannabidiols. Substantially all of Supera’s research and development activities in 2020 and 2021 were related to intellectual property development and securing patents, along with product manufacturing and planning initial pre-clinical development activities. During the year ended December 31, 2021, these activities included preclinical work on Supera-CBD confirming its effectiveness in treating anxiety. The preclinical data was presented at the 4<sup>th</sup> Annual International Cannabinoid Summit describing the superior potency of Supera-CBD. Supera-CBD preclinical genotoxicity studies were completed in February 2022.

On April 16, 2021, pursuant to the previously announced Agreement and Plan of Merger and Reorganization, dated November 11, 2020 (the “Original Merger Agreement”), as amended by Amendment No. 1 thereto, dated March 16, 2021 the Original Merger Agreement, as amended by Amendment No. 1 (the “Merger Agreement”), by and among MyMD, XYZ Merger Sub, Inc. (“Merger Sub”) and MyMD Florida, Merger Sub was merged with and into MyMD Florida, with MyMD Florida continuing after the merger as the surviving entity and a wholly owned subsidiary of MyMD (the “Merger”). At the effective time of the Merger, without any action on the part of any stockholder, each issued and outstanding share of pre-Merger MyMD Florida’s Common Stock, par value \$0.001 per share (the “MyMD Florida Common Stock”), including shares underlying pre-Merger MyMD Florida’s outstanding equity awards, was converted into the right to receive (x) 0.7718 shares (the “Exchange Ratio”) of MyMD’s Common Stock, no par value per share (the “Company Common Stock” or “Common Stock”), (y) an amount in cash, on a pro rata basis, equal to the aggregate cash proceeds received by the Company from the exercise of any options to purchase shares of MyMD Florida Common Stock outstanding at the effective time of the Merger assumed by the Company upon closing of the Merger prior to the second-year anniversary of the closing of the Merger (the “Option Exercise Period”), such payment (the “Additional Consideration”), and (z) potential milestone payment in shares of Company Common Stock up to the aggregate number of shares issued by the Company to pre-Merger MyMD Florida stockholders at the closing of the Merger (the “Milestone Payments”) payable upon the achievement of certain market capitalization milestone events during the 36-month period immediately following the closing of the Merger (the “Milestone Period”). Immediately following the effective time of the Merger, the Company effected a 1-for-2 reverse stock split of the issued and outstanding Company Common Stock (the “Reverse Stock Split”).

On April 16, 2021, MyMD Florida entered into an Asset Purchase Agreement with Supera, a related company through common control, in which Supera was acquired by MyMD Florida through the issuance of 33,937,909 shares of pre-Merger MyMD Florida Common Stock. The Supera entity was dissolved pursuant to this transaction.

In connection with the closing of the Merger, the Company changed its name to MyMD Pharmaceuticals, Inc. and the Company Common Stock, listed previously trading through the close of business on April 16, 2021 under the trading symbol “AKER”, commenced trading on The Nasdaq Capital Market, on a post-Reverse Stock Split adjusted basis, under the trading symbol “MYMD” on April 19, 2021.

On April 8, 2022, the MyMD Florida subsidiary was dissolved and merged into the New Jersey corporation MyMD Pharmaceuticals, Inc. pursuant to an Agreement and Plan of Merger dated April 8, 2022.

MYMD-1 is an oral, next-generation TNF- $\alpha$  inhibitor with the potential to transform the way TNF- $\alpha$  based diseases are treated due to its selectivity and ability to cross the blood brain barrier. Its ease of oral dosing is a significant differentiator compared to currently available TNF- $\alpha$  inhibitors, all of which require delivery by injection or infusion. MYMD-1 has also been shown to selectively block TNF- $\alpha$  action where it is overactivated without preventing it from doing its normal job of responding to routine infection. MYMD-1 is doubly effective at inhibiting inflammation by blocking both TNF- $\alpha$  and IL-6 activity, whereas currently approved anti-TNF and anti-IL-6 treatments for RA can only target one or the other. In addition, in early clinical studies it has not been associated with serious side effects known to occur with traditional immunosuppressive therapies that treat inflammation.

## **Note 2 – Significant Accounting Policies**

### **(a) Basis of Presentation**

The condensed consolidated financial statements of the Company are prepared in U.S. Dollars and in accordance with accounting principles generally accepted in the United States of America (US GAAP).

The accompanying unaudited condensed financial statements have been prepared by the Company. These statements include all adjustments (consisting only of normal recurring adjustments) which management believes necessary for a fair presentation of the statements and have been prepared on a consistent basis using the accounting policies described in Note 2 Significant Accounting Policies included in the Notes to Financial Statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission on March 31, 2023 (the “2022 Annual Report”). Certain financial information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations, although the Company believes that the accompanying disclosures are adequate to make the information presented not misleading. The Notes to Financial Statements included in the 2022 Annual Report should be read in conjunction with the accompanying interim financial statements. The interim operating results for the six months ended June 30, 2023 may not be necessarily indicative of the operating results expected for the full year.

### **(b) Use of Estimates and Judgments**

The preparation of financial statements in conformity with US GAAP requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Information about significant areas of estimation, uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements is included in the following notes for recording research and development expenses, impairment of intangible assets and the valuation of share-based payments.

### **(c) Functional and Presentation Currency**

These condensed consolidated financial statements are presented in U.S. Dollars, which is the Company’s functional currency. All financial information has been rounded to the nearest dollar. Foreign Currency Transaction Gains or Losses, resulting from cash balances denominated in Foreign Currencies, are recorded in the Condensed Consolidated Statements of Comprehensive Loss.



#### **(d) Comprehensive Loss**

The Company follows Financial Accounting Standards Board Accounting Standards Codification (“FASB ASC”) 220 in reporting comprehensive loss. Comprehensive income is a more inclusive financial reporting methodology that includes disclosure of certain financial information that historically has not been recognized in the calculation of net income. Since the Company has no items of other comprehensive income (loss), comprehensive loss is equal to net loss.

#### **(e) Cash and Cash Equivalents**

The Company considers all highly liquid investments, which include short-term bank deposits (up to three months from date of deposit) that are not restricted as to withdrawal date or use, to be cash equivalents.

#### **(f) Fair Value of Financial Instruments**

Fair value measurements discussed herein are based upon certain market assumptions and pertinent information available to management as of and during the three and six months ended June 30, 2023. The carrying amounts of cash equivalents, accounts receivable, other current assets, other assets, accounts payable, and accrued expenses approximated their fair values as of June 30, 2023 due to their short-term nature. The fair value of the bifurcated embedded derivative related to the convertible preferred stock was estimated using a Monte Carlo simulation model, which uses as inputs the fair value of the Company’s common stock and estimates for the equity volatility and traded volume volatility of the Company’s common stock, the time to maturity of the convertible preferred stock, the risk-free interest rate for a period that approximates the time to maturity, dividend rate, a penalty dividend rate, and the probability of default. The fair value of the warrant liabilities was estimated using the Black Scholes Model which uses as inputs the following weighted average assumptions: dividend yield, expected term in years; equity volatility; and risk-free interest rate.

##### *Fair Value Measurement*

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under FASB ASC 820 are described as follows:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company can access.

Level 2 Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability’s fair value measurement level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

## (f) Fair Value of Financial Instruments, continued

The following is a description of the valuation methodologies used for assets measured at fair value as of June 30, 2023 and December 31, 2022.

*Marketable Securities:* Valued using quoted prices in active markets for identical assets.

	Quoted Prices in Active Markets for Identical Assets or Liabilities (Level 1)	Quoted Prices for Similar Assets or Liabilities in Active Markets (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities at June 30, 2023	\$ 11,533,432	\$ -	\$ -
Marketable securities at December 31, 2022	\$ 4,086,902	\$ -	\$ -

Marketable securities are classified as available for sale and are valued at fair market value. Maturities of the securities are less than one year.

As of June 30, 2023 and December 31, 2022, the Company held certain mutual funds, which, under FASB ASC 321-10, were considered equity investments. As such, the change in fair value in the three months ended June 30, 2023 and 2022 was a loss of \$983 and a gain of \$2,947, respectively. The change in fair value in the six months ended June 30, 2023 and 2022 was a loss of \$2,695 and \$145, respectively.

Gains and losses resulting from the sales of marketable securities were losses of \$389 and 1,999 for the three months ended June 30, 2023 and 2022, respectively. Gains and losses resulting from the sales of marketable securities were losses of \$214 and gains of \$3,649 for the six months ended June 30, 2023 and 2022, respectively.

Proceeds from the sales of marketable securities in the six months ended June 30, 2023 and 2022 were \$5,749,970 and \$6,500,000, respectively.

### *Fair Value on a Recurring Basis*

The Company follows the guidance in ASC 820 for its financial assets and liabilities that are re-measured and reported at fair value at each reporting period, and non-financial assets and liabilities that are re-measured and reported at fair value at least annually. The estimated fair value of the warrant liabilities and bifurcated embedded derivatives represent Level 3 measurements. The following table presents information about the Company's liabilities that are measured at fair value on a recurring basis at June 30, 2023, and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

Description	Level	June 30, 2023
Liabilities:		
Warrant liabilities (Note 3)	3	\$ 7,813,000
Derivative liabilities (Note 3)	3	\$ 3,465,000

The following table sets forth a summary of the change in the fair value of the warrant liabilities that is measured at fair value on a recurring basis:

Balance on December 31, 2022	\$ -
Issuance of warrants reported at fair value	10,623,000
Change in fair value of warrant liabilities	(1,175,000)
Balance on March 31, 2023	9,448,000
Change in fair value of warrant liabilities	(1,635,000)
Balance on June 30, 2023	\$ 7,813,000

The following table sets forth a summary of the change in the fair value of the derivative liabilities that is measured at fair value on a recurring basis:

Balance on December 31, 2022	\$ -
Issuance of convertible preferred stock with derivative liabilities	3,149,800
Change in fair value of derivative liabilities	120,700
Balance on March 31, 2023	3,270,500
Change in fair value of derivative liabilities	194,500
Balance on June 30, 2023	\$ 3,465,000

## (g) Derivative Financial Instruments

The Company evaluates its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives in accordance with ASC Topic 815, "Derivatives and Hedging." If liability accounting is required, the Company's derivative instruments are recorded at fair value at the issuance date and re-valued at each reporting date, with changes in the fair value reported in the statements of operations. Derivative assets and liabilities are classified on the balance sheet as current or non-current based on whether or not net-cash settlement or conversion of the instrument could be required within twelve (12) months of the balance sheet date.

The Company has determined that the Series F Convertible Preferred Stock warrants are derivatives that are required to be accounted for as liabilities. The Company has also determined that the following embedded features in the preferred stock are not clearly and closely related to the debt host instrument: 1) make-whole interest upon a contingent redemption event, 2) make-whole interest upon a conversion event, 3) an installment redemption upon an Equity Conditions Failure (as defined in the Certificate of Designation), and 4) variable share-settled installment conversion and as such are bifurcated from the preferred stock and accounted for as liabilities. The fair value of the warrants and embedded features are estimated using internal valuation models. The Company's valuation models utilize inputs and other assumptions and may not be reflective of the price at which they can be settled.

## (h) Prepaid Expenses

Prepaid expenses represent expenses paid prior to the date that the related services are rendered or used are comprised principally of prepaid insurance and research and development expenses.

## (i) Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash on deposit with financial institutions and accounts receivable. At times, the Company's cash in banks is in excess of the FDIC insurance limit. The Company has not experienced any loss as a result of these cash deposits. These cash balances are maintained with three banks as of June 30, 2023.

**(j) Risk Management of Cash and Investments**

It is the Company's policy to minimize the Company's capital resources to investment risks, prioritizing the preservation of capital over investment returns. Investments are maintained in securities, primarily publicly traded, short-term money market funds based on highly rated federal, state and corporate bonds, that minimize the risk to the Company's capital resources and provide ready access to funds.

The Company's investment portfolios are regularly monitored for risk and are held with one brokerage firm.

**(k) Investments**

Investments recorded using the cost method will be assessed for any decrease in value that has occurred that is other than temporary and the other than temporary decrease in value shall be recognized. As and when circumstances and facts change, the Company will evaluate the Company's ability to significantly influence operational and financial policy to establish a basis for converting the investment accounted for using the cost method to the equity method of valuation in accordance with FASB ASC 323.

In accordance with FASB ASC 323, the Company recognizes investments in joint ventures based upon the Company's ability to significantly influence the operational or financial policies of the joint venture. An objective judgment of the level of influence is made at the time of the investment based upon several factors including, but not limited to the following:

- a) Representation on the Board of Directors
- b) Participation in policy-making processes
- c) Material intra-entity transactions
- d) Interchange of management personnel
- e) Technological dependencies
- f) Extent of ownership and the ability to influence decision making based upon the makeup of other owners when the shareholder group is small.

The Company follows the equity method for valuating investments in joint ventures when the existence of significant influence over operational and financial policy has been established, as determined by management; otherwise, the Company will value these investments using the cost method.

In accordance with FASB ASC 321-10-35-2, the Company has elected to measure its investment in Oravax Medical, Inc. ("Oravax") (Note 3) as an equity security without a readily determinable fair value. Under this election, an equity security without a readily available fair value is reflected at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. At each reporting period, the Company is required to make a qualitative assessment considering impairment indicators to evaluate whether the investment is impaired. If deemed impaired, the Company is required to estimate the fair value of the investment and recognize an impairment loss equal to the difference between the fair value of the investment and its carry amount. As of June 30, 2023, the Company performed a qualitative assessment to evaluate whether the investment is impaired and determined that the investment was not impaired and thus no adjustment to fair market value was required as of June 30, 2023.

**(l) Property, Plant and Equipment**

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Costs include expenditures that are directly attributable to the acquisition of the asset.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognized within "other (income)/expense" in the Condensed Consolidated Statements of Comprehensive Loss.

Depreciation is recognized over the estimated useful lives of the property, plant and equipment. Leased assets are depreciated over the shorter of the lease term or their useful lives.

The estimated useful lives for the current and comparative periods are as follows:

	<b>Useful Life (in years)</b>
Plant and equipment	5-12
Furniture and fixtures	5-10
Computer equipment & software	3-5
Leasehold Improvements	Shorter of the remaining lease or estimated useful life

Depreciation methods, useful lives and residual values are reviewed at each reporting date.

**(m) Intangible Assets**

The Company's long-lived intangible assets, other than goodwill, are assessed for impairment when events or circumstances indicate there may be an impairment. These assets were initially recorded at their estimated fair value at the time of acquisition and assets not acquired in acquisitions were recorded at historical cost. However, if their estimated fair value is less than the carrying amount, other intangible assets with indefinite lives are reduced to their estimated fair value through an impairment charge in the Condensed Consolidated Statements of Comprehensive Loss.

### *Patents and Trade Secrets*

Proprietary protection for the Company's products, technology and process is important to its competitive position. As of June 30, 2023, the Company has 16 issued U.S. patents, 52 foreign patents, three pending U.S. patent applications and 13 foreign patent applications pending in such jurisdictions as Australia, Canada, China, European Union, Israel, Japan and South Korea, which if issued are expected to expire between 2036 and 2041. Management intends to protect all other intellectual property (e.g. copyrights, trademarks and trade secrets) using all legal avenues available to the Company.

The Company records expenses related to the application for and maintenance of patents as a component of research and development expenses on the Condensed Consolidated Statement of Comprehensive Loss.

### *Patent Costs*

Patents may be purchased from third parties. The costs of acquiring the patent are capitalized as patent costs if it represents a future economic benefit to the Company. Once a patent is acquired it is amortized over its remaining useful life and assessed for impairment when necessary.

### *Other Intangible Assets*

Other intangible assets that are acquired by the Company, which have definite useful lives, are measured at cost less accumulated amortization and accumulated impairment losses.

### *Amortization*

Amortization is recognized on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

	<b>Useful Life (in years)</b>
Patents and trademarks	12-17

### **(n) Goodwill**

Goodwill is evaluated annually for impairment or whenever we identify certain triggering events or circumstances that would more likely than not reduce the fair value below its carrying amount. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, economic factors (for example, the loss of key personnel), supply costs, unanticipated competitive activities, and acts by governments and courts.

### **(o) Recoverability of Long-Lived Assets**

In accordance with FASB ASC 360-10-35 "Impairment or Disposal of Long-lived Assets", long-lived assets to be held and used are analyzed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable or that the useful lives of those assets are no longer appropriate. The Company evaluates at each balance sheet date whether events and circumstances have occurred that indicate possible impairment.

The Company determines the existence of such impairment by measuring the expected future cash flows (undiscounted and without interest charges) and comparing such amount to the carrying amount of the assets. An impairment loss, if one exists, is then measured as the amount by which the carrying amount of the asset exceeds the discounted estimated future cash flows. Assets to be disposed of are reported at the lower of the carrying amount or fair value of such assets less costs to sell. Asset impairment charges are recorded to reduce the carrying amount of the long-lived asset that will be sold or disposed of to their estimated fair values. Charges for the asset impairment reduce the carrying amount of the long-lived assets to their estimated salvage value in connection with the decision to dispose of such assets.

**(p) Right-of-Use Assets**

The Company leased a facility in Tampa, Florida (“Hyde Park”) under an operating lease (“Hyde Park Lease”) with annual rentals of \$22,048 to \$23,320 plus certain operating expenses. The Hyde Park facility housed the MyMD Florida operations. The Hyde Park Lease took effect on July 1, 2019 for a term of 36 months to expire on June 30, 2022. The Company cancelled the Hyde Park lease in March 2022 without penalty.

The Company leases a facility in Baltimore, Maryland (“2021 Wolfe St”) under an operating lease (“2021 Baltimore Lease”) with annual rentals of \$52,800 to \$56,016 plus certain operating expenses. The 2021 Baltimore Lease took effect on November 17, 2021 for a term of 12 months with automatic renewals unless a sixty-day notice is provided. The initial term expires on November 30, 2022. The lease renewed effective December 1, 2022 for a term of 12 months with automatic renewals unless a sixty-day notice is provided.

The Company leases a facility in Tampa, Florida (“Platt St”) under an operating lease (“Platt Street Lease”) with annual rentals of \$22,030 to \$23,259 plus certain operating expenses. The Platt Street Lease took effect on April 1, 2022 for a term of 36 months. The initial term expires on March 31, 2025.

On January 1, 2019 (“Effective Date”), the Company adopted FASB ASC, Topic 842, Leases (“ASC 842”), which increases transparency and comparability by recognizing a lessee’s rights and obligations resulting from leases by recording them on the balance sheet as lease assets and lease liabilities. The new guidance requires the recognition of the right-of-use (“ROU”) assets and related operating and finance lease liabilities on the balance sheet. The Company adopted the new guidance using the modified retrospective approach on January 1, 2019.

The Company elected the package of practical expedients permitted within the standard, which allows an entity to forgo reassessing (i) whether a contract contains a lease, (ii) classification of leases, and (iii) whether capitalized costs associated with a lease meet the definition of initial direct costs. Also, the Company elected the expedient allowing an entity to use hindsight to determine the lease term and impairment of ROU assets and the expedient to allow the Company to not have to separate lease and non-lease components. The Company has also elected the short-term lease accounting policy under which the Company would not recognize a lease liability or ROU asset for any lease that at the commencement date has a lease term of twelve months or less and does not include a purchase option that the Company is more than reasonably certain to exercise.

For contracts entered into on or after the Effective Date, at the inception of a contract, the Company will assess whether the contract is, or contains, a lease. The Company's assessment is based on: (i) whether the contract involves the use of a distinct identified asset, (ii) whether the Company obtained the right to substantially all the economic benefit from the use of the asset throughout the period, and (iii) whether the Company has the right to direct the use of the asset. Leases entered into prior to January 1, 2020, which were accounted for under ASC 840, were not reassessed for classification.

For operating leases, the lease liability is initially and subsequently measured at the present value of the unpaid lease payments. The Company generally uses its incremental borrowing rate as the discount rate for leases, unless an interest rate is implicitly stated in the lease. The present value of the lease payments is calculated using the incremental borrowing rate for operating leases, which was determined using a portfolio approach based on the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. The lease term for all the Company's leases includes the non-cancellable period of the lease plus any additional periods covered by either a Company option to extend the lease that the Company is reasonably certain to exercise, or an option to extend the lease controlled by the lessor. All ROU assets are reviewed for impairment.

Lease expense for operating leases consists of the lease payments plus any initial direct costs and is recognized on a straight-line basis over the lease term.

The Company's operating leases are comprised of the 2021 Baltimore Lease and the Platt Street Lease on the Condensed Consolidated Balance Sheet. The information related to these leases are presented below:

Balance Sheet Location	As of June 30, 2023			As of December 31, 2022		
	Platt Street Lease	2021	Total	Platt Street Lease	2021	Total
		Baltimore Lease			Baltimore Lease	
Operating Lease						
Lease Right of Use	\$ 36,138	\$ 71,433	\$ 107,571	\$ 45,353	\$ 94,309	\$ 139,662
Lease Payable, current	20,012	50,275	70,287	18,741	47,039	65,780
Lease Payable - net of current	16,739	22,766	39,505	27,070	48,871	75,941

The following provides details of the Company's lease expense:

Lease Expenses	Three Months Ended June 30, 2023			Three Months Ended June 30, 2022			
	Platt Street Lease	2021 Baltimore Lease	Total	Hyde Park Lease	Platt Street Lease	2021 Baltimore Lease	Total
Operating Leases							
Lease Costs	\$ 5,659	\$ 13,600	\$ 19,259	\$ -	\$ 5,660	\$ 13,600	\$ 19,260

  

Lease Expenses	Six Months Ended June 30, 2023			Six Months Ended June 30, 2022			
	Platt Street Lease	2021 Baltimore Lease	Total	Hyde Park Lease	Platt Street Lease	2021 Baltimore Lease	Total
Operating Leases							
Lease Costs	\$ 11,321	\$ 27,200	\$ 38,521	\$ 4,171	\$ 5,660	\$ 26,400	\$ 36,231

Other information related to leases is presented below:

Other Information	Platt Street Lease	2021 Baltimore Lease	Total
Operating Leases			
Operating cash used	\$ 10,970	\$ 27,192	\$ 38,162
Average remaining lease term	21	17	19
Average discount rate	10.0%	10.0%	10.0%

As of June 30, 2023, the annual minimum lease payments of the Company's operating lease liabilities were as follows:

For Years Ending December 31,	Platt Street Lease	2021 Baltimore Lease	Total
2023	11,318	27,328	38,646
2024	23,103	51,348	74,451
2025	5,814	-	5,814
Total future minimum lease payments, undiscounted	\$ 40,235	\$ 78,676	\$ 118,911
Less: Imputed interest	3,484	5,635	9,119
Present value of future minimum lease payments	\$ 36,751	\$ 73,041	\$ 109,792

#### (q) Revenue Recognition

The Company will recognize revenue under ASC 606, Revenue from Contracts with Customers. The core principle of the revenue standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The Company only applies the five-step model to contracts when it is probable that the Company will collect the consideration it is entitled to in exchange for the goods and services transferred to the customer. The following five steps are applied to achieve that core principle:

- 1) Identify the contract with the customer
- 2) Identify the performance obligations in the contract
- 3) Determine the transaction price
- 4) Allocate the transaction price to the performance obligations in the contract
- 5) Recognize revenue when the company satisfies a performance obligation

#### (r) Income Taxes

The Company utilizes an asset and liability approach for financial accounting and reporting for income taxes. The provision for income taxes is based upon income or loss after adjustment for those permanent items that are not considered in the determination of taxable income. Deferred income taxes represent the tax effects of differences between the financial reporting and tax basis of the Company's assets and liabilities at the enacted tax rates in effect for the years in which the differences are expected to reverse.

The Company evaluates the recoverability of deferred tax assets and establishes a valuation allowance when it is more likely than not that some portion or all the deferred tax assets will not be realized. Management makes judgments as to the interpretation of the tax laws that might be challenged upon an audit and cause changes to previous estimates of tax liability. In management's opinion, adequate provisions for income taxes have been made. If actual taxable income by tax jurisdiction varies from estimates, additional allowances or reversals of reserves may be necessary.

Tax benefits are recognized only for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon settlement. A liability for "unrecognized tax benefits" is recorded for any tax benefits claimed in the Company's tax returns that do not meet these recognition and measurement standards. As of June 30, 2023 and December 31, 2022, no liability for unrecognized tax benefits was required to be reported.



There was no income tax benefit recorded for the losses for the three and six months ended June 30, 2023 and 2022 since management determined that the realization of the net deferred tax assets is not more likely than not to be realized and has recorded a full valuation allowance on the net deferred tax assets.

The Company's policy for recording interest and penalties associated with tax audits is to record such items as a component of general and administrative expenses. There were no amounts accrued for penalties and interest for the three and six months ended June 30, 2023 and 2022. The Company does not expect its uncertain tax position to change during the next twelve months. Management is currently unaware of any issues under review that could result in significant payments, accruals or material deviations from its position.

Tax years from 2019 through 2022 remain subject to examination by federal and state jurisdictions.

#### (s) Basic and Diluted Earnings per Share of Common Stock

Basic earnings per common share is based on the weighted average number of shares outstanding during the periods presented. Diluted earnings per share is computed using the weighted average number of common shares plus dilutive common share equivalents outstanding during the period. Potential common shares that would have the effect of increasing diluted earnings per share are considered anti-dilutive.

Diluted net loss per share is computed using the weighted average number of shares of Common Stock and dilutive potential Common Stock outstanding during the period.

As the Company reported a net loss for the three and six months ended June 30, 2023 and 2022, Common Stock equivalents were anti-dilutive.

As of June 30, 2023 and 2022, the following securities are excluded from the calculation of weighted average dilutive common shares because their inclusion would have been anti-dilutive:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2023	2022	2023	2022
Stock Options	3,045,000	4,476,737	3,045,000	4,476,737
Warrants to purchase common stock	13,166,712	5,072,432	13,166,712	5,072,432
Pre-funded Warrants to purchase common stock	-	135,135	-	135,135
Unvested Restricted Stock Units	2,795,000	2,795,000	2,795,000	2,795,000
Series C Convertible Preferred Warrants	27,500	27,500	27,500	27,500
Series D Preferred Convertible Stock	36,496	36,496	36,496	36,496
Series F Convertible Preferred Stock	5,543,238	-	5,543,238	-
Total potentially dilutive shares	24,613,946	12,543,300	24,613,946	12,543,300

#### (t) Stock-based Payments

The Company accounts for stock-based compensation under the provisions of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 718, "Compensation - Stock Compensation", which requires the measurement and recognition of compensation expense for all stock-based awards made to employees and directors based on estimated fair values on the grant date. The Company estimates the fair value of stock-based awards on the date of grant using the Black-Scholes model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods using the straight-line method. In June 2018, the FASB issued ASU No. 2018-07, Compensation – Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting (the "2018 Update"). The amendments in the 2018 Update expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from non-employees. Prior to the 2018 Update, Topic 718 applied only to share-based transactions to employees. Consistent with the accounting requirement for employee share-based payment awards, nonemployee share-based payment awards within the scope of Topic 718 are measured at grant-date fair value of the equity instruments that an entity is obligated to issue when the good has been delivered or the service has been rendered and any other conditions necessary to earn the right to benefit from the instruments have been satisfied.

The Company has elected to account for forfeiture of stock-based awards as they occur.

#### **(u) Research and Development Costs**

In accordance with FASB ASC 730, research and development costs are expensed as incurred and consist of fees paid to third parties that conduct certain research and development activities on the Company's behalf.

#### **(v) Recently Issued Accounting Pronouncements**

##### ***Recently Issued Accounting Pronouncements Adopted***

In May 2021, the FASB issued ASU 2021-04, *Earnings Per Share (Topic 260)*, *Debt - Modifications and Extinguishments (Subtopic 470-50)*, *Compensation - Stock Compensation (Topic 718)*, and *Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)*, *Issuer's Accounting for Certain Modifications or Exchanges or Freestanding Equity - Classified Written Call Options*. The amendments in this Update clarify an issuer's accounting for modifications or exchanges of freestanding equity - classified written call options (for example, warrants) that remain equity classified after modification or exchange. The amendments are effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. An entity should apply the amendments prospectively to modifications or exchanges occurring on or after the effective date of the amendments. Early adoption is permitted for all entities, including adoption in an interim period. If an entity elects to early adopt the amendments in this Update in an interim period, the guidance should be applied as of the beginning of the fiscal year that includes the interim period. The adoption of this ASU had no material impact on the Company's condensed consolidated financial statements and related disclosure.

In June 2016, the FASB issued Accounting Standards Update ("ASU") 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13")*. This standard establishes an impairment model (known as the current expected credit loss ("CECL") model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes as an allowance its estimate of expected credit losses, which is intended to result in a timelier recognition of losses. Under the CECL model, entities will estimate credit losses over the entire contractual term of the instrument (considering estimated prepayments, but not expected extensions or modifications) from the date of initial recognition of the financial instrument. Measurement of expected credit losses are to be based on relevant forecasts that affect collectability. The scope of financial assets within the CECL methodology is broad and includes trade receivables from certain revenue transactions and certain off-balance sheet credit exposures. Different components of the guidance require modified retrospective or prospective adoption.

In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments-Credit Losses*. ASU 2018-19 clarifies that receivables arising from operating leases are not within the scope of the credit losses standard. Instead, entities would need to apply other U.S. GAAP, namely Topic 842 (Leases), to account for changes in the collectability assessment for operating leases. Other than operating lease receivables, Partnership trade receivables include receivables from finance leases and equipment sales. Under Topic 606 (Revenue from Contracts with Customers), revenue is recognized when, among other criteria, it is probable that the entity will collect the consideration to which it is entitled for goods or services transferred to a customer. At the point that finance lease receivables are recorded, they become subject to the CECL model and estimates of expected credit losses over their contractual life will be required to be recorded at inception based on historical information, current conditions, and reasonable and supportable forecasts. Trade receivables derived from equipment sales are of short duration and there is not a material difference between incurred losses and expected losses.

In April 2019, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments*, which amends and clarifies several provisions of Topic 326. In May 2019, the FASB issued ASU 2019-05, *Financial Instruments-Credit Losses (Topic 326): Targeted Transition Relief*, which amends Topic 326 to allow the fair value option to be elected for certain financial instruments upon adoption. ASU 2019-10 extended the effective date of ASU 2016-13 until December 15, 2022. The Company adopted this new guidance, including the subsequent updates to Topic 326, on January 1, 2023 and the adoption did not have a material impact on the Company's condensed consolidated financial statements and related disclosures.

### Recently Issued Accounting Pronouncements Not Adopted

Management does not believe that any recently issued, but not yet effective, accounting standards could have a material effect on the Company's condensed consolidated financial statements. As new accounting pronouncements are issued, the Company will adopt those that are applicable under the circumstances.

### Note 3 – Recent Developments, Liquidity and Management's Plans

#### Closing of the Merger and Reverse Stock Split

On April 16, 2021, pursuant to the previously announced Agreement and Plan of Merger and Reorganization, dated November 11, 2020 (the "Original Merger Agreement"), as amended by Amendment No. 1 thereto, dated March 16, 2021 (the Original Merger Agreement, as amended by Amendment No. 1, the "Merger Agreement"), by and among MyMD, a New Jersey corporation previously known as Akers Biosciences, Inc., XYZ Merger Sub, Inc. ("Merger Sub"), and MyMD Pharmaceuticals (Florida), Inc., a Florida corporation previously known as MyMD Pharmaceuticals, Inc. ("MyMD Florida"), Merger Sub was merged with and into MyMD Florida, with MyMD Florida continuing after the merger as the surviving entity and a wholly owned subsidiary of the Company (the "Merger"). At the effective time of the Merger, without any action on the part of any stockholder, each issued and outstanding share of pre-Merger MyMD Florida's Common Stock, par value \$0.001 per share (the "MyMD Florida Common Stock"), including shares underlying pre-Merger MyMD Florida's outstanding equity awards, was converted into the right to receive (x) 0.7718 shares (the "Exchange Ratio") of the Company's Common Stock, no par value per share (the "Company Common Stock" or "Common Stock"), (y) an amount in cash, on a pro rata basis, equal to the aggregate cash proceeds received by the Company from the exercise of any options to purchase shares of MyMD Florida Common Stock outstanding at the effective time of the Merger assumed by the Company upon closing of the Merger prior to the second-year anniversary of the closing of the Merger (the "Option Exercise Period"), such payment (the "Additional Consideration"), and (z) potential milestone payment in shares of Company Common Stock up to the aggregate number of shares issued by the Company to pre-Merger MyMD Florida stockholders at the closing of the Merger (the "Milestone Payments") payable upon the achievement of certain market capitalization milestone events (the "Milestone Events") during the 36-month period immediately following the closing of the Merger (the "Milestone Period"). The Milestone Events and corresponding Milestone Payments are set forth in the table below.

<u>Milestone Event</u>	<u>Milestone Payment</u>
Market capitalization of the combined company for at least ten (10) trading days during any 20 consecutive trading day period during the Milestone Period is equal to or greater than \$500,000,000 (the "First Milestone Event").	\$20,000,000
For every \$250,000,000 incremental increase in market capitalization of the combined company after the First Milestone Event to the extent such incremental increase occurs for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period, up to a \$1,000,000,000 market capitalization of the combined company.	\$10,000,000 per each incremental increase (it being understood, however, that, if such incremental increase results in market capitalization equal to \$1,000,000,000, such \$10,000,000 payment in respect of such incremental increase shall be payable without duplication of any amount payable in respect of a Second Milestone Event, as defined below).
Market capitalization of the combined company for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period is equal to or greater than \$1,000,000,000 (the "Second Milestone Event")	\$25,000,000
For every \$1,000,000,000 incremental increase in market capitalization of the combined company after the Second Milestone Event to the extent such incremental increase occurs for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period.	\$25,000,000 per each incremental increase

For purposes of the table above, "market capitalization" means, with respect to any trading day, the product of (i) the total outstanding shares of the combined company Common Stock and (ii) the volume weighted average trading price for the combined company Common Stock for such trading day.

Immediately following the effective time of the Merger, the Company effected a 1-for-2 reverse stock split of the issued and outstanding Company Common Stock (the “Reverse Stock Split”). Upon completion of the Merger and the transactions contemplated in the Merger Agreement, (i) the former MyMD Florida equity holders owned approximately 77.05% of the outstanding equity of the Company on a fully diluted basis, assuming the exercise in full of the pre-funded warrants to purchase 986,486 shares of Company Common stock and including 4,188,315 shares of Company Common Stock underlying options to purchase shares of MyMD Florida Common Stock assumed by the company at closing and after adjustments based on the Company’s net cash at closing; and (ii) former Akers Biosciences, Inc. stockholders own approximately 22.95% of the outstanding equity of the Company.

Effective as of 4:05 pm Eastern Time on April 16, 2021, we filed an amendment to its Amended and Restated Certificate of Incorporation to effect the Reverse Stock Split. As a result of the Reverse Stock Split, immediately following the effective time of the Merger, every two shares of our Common Stock held by a stockholder immediately prior to the Reverse Stock Split were combined and reclassified into one share of our Common Stock. No fractional shares were issued in connection with the Reverse Stock Split. Each stockholder who did not have a number of shares evenly divisible pursuant to the Reverse Stock Split ratio and who would otherwise be entitled to receive a fractional share of our Common Stock was entitled to receive an additional share of our Common Stock.

### ***The February 2023 Offering***

On February 21, 2023, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain accredited investors (the “Investors”), pursuant to which it agreed to sell to the Investors (i) an aggregate of 15,000 shares of the Company’s newly-designated Series F convertible preferred stock with a stated value of \$1,000 per share, initially convertible into up to 6,651,885 shares of the Company’s common stock, no par value (the “Common Stock”) at a conversion price of \$2.255 per share (the “Preferred Shares”), and (ii) warrants to acquire up to an aggregate of 6,651,885 shares of Common Stock (the “Warrants”) (collectively, the “February 2023 Offering”).

### ***Series F Convertible Preferred Stock***

The Preferred Shares will be convertible into Common Stock (the “Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$2.255 (the “Conversion Price”). The 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 Conversion Price (subject to certain exceptions). The Company will be required to redeem the Preferred Shares in 12 equal monthly installments, commencing on July 1, 2023. The amortization payments due upon such redemption are payable, at the company’s election, in cash, or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company’s Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) a “Floor Price” of \$0.22 (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Stock Market. The Company may require holders to convert their Preferred Shares into Conversion Shares if the closing price of the Common Stock exceeds \$6.765 per share (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) for 20 consecutive trading days and the daily dollar trading volume of the Common Stock exceeds \$3,000,000 per day during the same period and certain equity conditions described in the Certificate of Designation are satisfied.

The holders of the Preferred Shares will be entitled to dividends of 10% per annum, compounded monthly, which will be payable in cash or shares of Common Stock at the Company’s option, in accordance with the terms of the Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Certificate of Designations), the Preferred Shares will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Preferred Shares are also entitled to receive a dividend make-whole payment. The holders of Preferred Shares have no voting rights on account of the Preferred Shares, other than with respect to certain matters affecting the rights of the Preferred Shares. During the three and six months ending June 30, 2023, the Company recorded dividends totaling \$373,796 and \$532,129, respectively, which are reported as Preferred Stock Dividends on the Condensed Consolidated Statement of Comprehensive Loss.

Notwithstanding the foregoing, the Company’s 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 Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that the Company obtains the Stockholder Approval. Further, the Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment or dividend make-whole payment under, the Certificate of Designations or Warrants.

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

The Preferred Shares were determined to be more akin to a debt-like host than an equity-like host. The Company identified the following embedded features that are not clearly and closely related to the debt host instrument: 1) make-whole interest upon a contingent redemption event, 2) make-whole interest upon a conversion event, 3) an installment redemption upon an Equity Conditions Failure (as defined in the Certificate of Designation), and 4) variable share-settled installment conversion. These features were bundled together, assigned probabilities of being affected and measured at fair value. Subsequent changes in fair value of these features are recognized in the Condensed Consolidated Statement of Comprehensive Loss. The Company estimated at issuance the \$3,149,000 fair value of the bifurcated embedded derivative at issuance using a Monte Carlo simulation model, with the following inputs the fair value of our common stock of \$1.90 on the issuance date, estimated equity volatility of 120.0%, estimated traded volume volatility of 190.0%, the time to maturity of 1.35 years, a discounted market interest rate of 6.8%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 0.5%. The fair value of the bifurcated derivative liabilities was estimated utilizing the with and without method which uses the probability weighted difference between the scenarios with the derivative and the plain vanilla maturity scenario without a derivative.

The discount to the fair value is included as a reduction to the carrying value of the Preferred Shares. During the six months ended June 30, 2023, the Company recorded a total discount of \$14,087,111 upon issuance of the Preferred Shares, which was comprised of the issuance date fair value of the associated embedded derivative of \$3,149,800, stock issuance costs of \$314,311 and the fair value of the Warrants of \$10,623,000. When it is deemed probable that the Preferred Shares will be redeemed, the Company will accrete the Preferred Shares to redemption amount pursuant to ASC 480-10-S99-3A.

During the three and six months ended June 30, 2023, the Company recorded a loss of \$194,500 and \$315,200 related to the change in fair value of the derivative liabilities which is recorded in other income (expense) on the Condensed Consolidated Statement of Comprehensive Loss. The Company estimated the \$3,465,000 fair value of the bifurcated embedded derivative at June 30, 2023 using a Monte Carlo simulation model, with the following inputs the fair value of our common stock of \$1.50 on the valuation date, estimated equity volatility of 130.0%, estimated traded volume volatility of 205.0%, the time to maturity of 1.0 years, a discounted market interest rate of 9.7%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 8.1%.

During the three months ended June 30, 2023, the Company made redeemed \$2,500,000 of the Preferred Shares and \$359,742 of accrued make-whole dividends by issuing 2,368,654 shares of the Company's Common Stock through installment conversions and proportionately relieved \$2,347,852 of discount related to the redeemed Preferred Shares.

#### *Common Stock Warrants*

Pursuant to the February 2023 Offering, the Company issued to investors Warrants to purchase 6,651,885 shares of Common Stock, with an exercise price of \$2.255 per share (subject to adjustment), for a period of five years from the date of issuance.

The Warrants were determined to be within the scope of ASC 480-10 as they are puttable to the Company at Holders' election upon the occurrence of a Fundamental Transaction (as defined in the agreements). As such, the Company recorded the Warrants as a liability at fair value with subsequent changes in fair value recognized in earnings. The Company utilized the Black Scholes Model to calculate the value of these warrants issued during the six months ended June 30, 2023. The fair value of the Warrants of \$10,623,000 was estimated at the date of issuance using the following weighted average assumptions: dividend yield 0%; expected term of 5.0 years; equity volatility of 125.0%; and a risk-free interest rate of 4.09%.

Transaction costs incurred attributable to the issuance of the Warrants of \$762,834 were immediately expensed in accordance with ASC 480.

During the three and six months ended June 30, 2023, the Company recorded a gain of \$1,635,000 and \$2,810,000 related to the change in fair value of the warrant liabilities which is recorded in other income (expense) on the Condensed Consolidated Statement of Comprehensive Loss. The fair value of the Warrants of \$7,813,000 was estimated at June 30, 2023 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.65 years; equity volatility of 120.0%; and a risk-free interest rate of 4.19%.

#### *Liquidity*

As of June 30, 2023, the Company's cash on hand was \$93,823 and marketable securities were \$11,533,432. The Company has incurred a net loss from operations of \$6,228,985 for the six months ended June 30, 2023. As of June 30, 2023, the Company had working capital of \$10,713,907 and stockholders' equity of \$10,741,770 including an accumulated deficit of \$99,970,418. During the six months ended June 30, 2023, cash flows used in operating activities were \$7,891,517 consisting primarily of a net loss of \$5,679,385, an increase in prepaid expenses of \$949,973, a reduction in trade and other payables of \$516,769 and a non-cash change in the fair value of the warrant liabilities of \$2,810,000 offset by non-cash stock based compensation of \$1,746,339 and non-cash change in the fair value of the derivative liabilities of \$315,200. Since its inception, the Company has met its liquidity requirements principally through the sale of its Common Stock in public and private placements.

The Company evaluated the current cash requirements for operations in conjunction with management's strategic plan and believes that the Company's current financial resources as of the date of the issuance of these condensed consolidated financial statements are sufficient to fund its current operating budget and contractual obligations as of June 30, 2023 as they fall due within the next twelve-month period, alleviating any substantial doubt raised by the Company's historical operating results and satisfying its estimated liquidity needs for twelve months from the issuance of these condensed consolidated financial statements.

#### Note 4 – Trade and Other Payables

Trade and other payables consist of the following:

	<u>June 30, 2023</u>	<u>December 31, 2022</u>
Accounts Payable – Trade	\$ 1,659,005	\$ 2,356,555
Accrued Expenses	497,447	316,666
	<u>\$ 2,156,452</u>	<u>\$ 2,673,221</u>

#### Note 5 – Stock-based Payments

##### *Equity incentive Plans*

##### 2013 Stock Incentive Plan

On January 23, 2014, the Company adopted the 2013 Stock Incentive Plan (“2013 Plan”). The 2013 Plan was amended by the Board on January 9, 2015 and September 30, 2016, and such amendments were ratified by shareholders on December 7, 2018. The 2013 Plan provides for the issuance of up to 2,162 shares of the Company’s Common Stock. As of June 30, 2023, grants of restricted stock and options to purchase 1,406 shares of Common Stock have been issued pursuant to the 2013 Plan, and 756 shares of Common Stock remain available for issuance.

##### 2016 Stock Incentive Plan

On December 21, 2016, the shareholders approved, and the Company adopted the 2016 Stock Incentive Plan (“2016 Plan”). The 2016 Plan provides for the issuance of up to 50,000,000 shares of the Company’s Common Stock. As of June 30, 2023, no grants of any kind remain outstanding pursuant to the 2016 Plan, and 0 shares of Common Stock remain available for issuance.

##### 2017 Stock Incentive Plan

On August 7, 2017, the shareholders approved, and the Company adopted the 2017 Stock Incentive Plan (“2017 Plan”). The 2017 Plan provides for the issuance of up to 3,516 shares of the Company’s Common Stock. As of June 30, 2023, grants of restricted stock and options to purchase 2,538 shares of Common Stock have been issued pursuant to the 2017 Plan, and 978 shares of Common Stock remain available for issuance.

##### 2018 Stock Incentive Plan

On December 7, 2018, the shareholders approved, and the Company adopted the 2018 Stock Incentive Plan (“2018 Plan”). On August 27, 2020, the 2019 Plan was modified to increase the total authorized shares. The 2018 Plan, as amended, provides for the issuance of up to 560,063 shares of the Company’s Common Stock. As of June 30, 2023, grants of RSUs and restricted stock to purchase 263,026 shares of Common Stock have been issued pursuant to the 2018 Plan, and 297,037 shares of Common Stock remain available for issuance.

## 2021 Stock Incentive Plan

On April 15, 2021, the shareholders approved, and the Company adopted the 2021 Stock Incentive Plan (“2021 Plan”). The 2021 Plan provides for the issuance of up to 7,228,184 shares of the Company’s Common Stock. As of June 30, 2023, grants of RSUs and stock options to purchase 5,894,207 shares of Common Stock have been issued pursuant to the 2021 Plan, and 1,333,977 shares of Common Stock remain available for issuance.

### *Stock Options*

The following table summarizes the activities for MyMD stock options for the three months ended June 30, 2023:

	<b>Number of Shares</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Grant Date Fair Value</b>	<b>Weighted Average Remaining Contractual Term (years)</b>	<b>Aggregate Intrinsic Value</b>
<b><i>Balance at December 31, 2022</i></b>	<u>4,476,737</u>	<u>\$ 2.64</u>	<u>\$ 2.64</u>	<u>0.64</u>	<u>\$ -</u>
Granted	2,745,000	1.63	1.63	8.53	\$ -
Exercised	-	-	-	-	-
Forfeited	-	-	-	-	-
Canceled/Expired	(4,176,737)	2.59	2.59	-	-
<b><i>Balance at June 30, 2023</i></b>	<u>3,045,000</u>	<u>1.80</u>	<u>1.80</u>	<u>8.19</u>	<u>\$ -</u>
<b><i>Exercisable as of June 30, 2023</i></b>	<u>1,114,999</u>	<u>1.90</u>	<u>1.90</u>	<u>7.86</u>	<u>\$ -</u>

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing stock price of \$1.50 for the Company’s common shares on June 30, 2023 and the closing stock price of \$1.15 for the Company’s common shares on December 31, 2022.

On April 4, 2023, the Company issued 750,000 options to a key employee. The cumulative fair market value of \$978,675 as calculated using Black-Scholes (exercise price \$1.55 per share, stock price \$1.55 per share, volatility of 122.12%, discount rate of 3.39% and a five-year term). 1/3 of the options vested on the grant date, 1/3 vest on the first anniversary of the grant and 1/3 vest on the second anniversary of the grant. The fair-market value of the options is amortized over the 24-month vesting cycle.

On June 7, 2023, the Company issued 1,995,000 options to the directors and key employees. The cumulative fair market value of \$3,128,759 as calculated using Black-Scholes (exercise price \$1.66 per share, stock price \$1.66 per share, volatility of 115.94%, discount rate of 3.79% and a ten-year term). 1/3 of the options vested on the grant date, 1/3 vest on the first anniversary of the grant and 1/3 vest on the second anniversary of the grant. The fair-market value of the options is amortized over the 24-month vesting cycle.

During the three months ended June 30, 2023 and 2022, the Company incurred stock option expenses totaling \$1,677,271 and \$132,246, respectively. During the six months ended June 30, 2023 and 2022, the Company incurred stock option expenses totaling \$1,746,339 and \$213,248, respectively.

The unamortized stock option expenses as of June 30, 2023 and 2022 totaled \$3,175,696 and \$703,772, respectively.

## Restricted Stock Units

On October 14, 2021, the Compensation Committee of the Board of Directors approved grants totaling 2,795,000 Restricted Stock Units to the Company's six directors and seven key employees. Each RSU had a grant date fair value of \$8.09 which will be amortized upon vesting into administrative expenses within the Condensed Consolidated Statement of Comprehensive Loss. Such RSUs were granted under the 2021 Plan. Vesting of each RSU is:

- One-third (33%) of each RSU will vest when the Company's market capitalization is equal to or greater than \$500,000,000 for at least ten trading days during any twenty (20) consecutive trading day period ending on or after December 15, 2021 and the fair market value of the Common Stock equals or exceeds \$5.00 during such trading day period.
- One-third (33%) of each RSU will vest when the Company's market capitalization is equal to or greater than \$750,000,000 for at least ten trading days during any twenty (20) consecutive trading day period ending on or after December 15, 2021 and the fair market value of the Common Stock equals or exceeds \$5.00 during such trading day period.
- The remaining awarded units will vest when the Company's market capitalization is equal to or greater than \$1,000,000,000 for at least ten trading days during any twenty (20) consecutive trading day period ending on or after December 15, 2021 and the fair market value of the Common Stock equals or exceeds \$5.00 during such trading day period.
- In the event that (i) a change in control occurs or (ii) the participant incurs a termination of service by the Company without cause or due to the participant's death or total and permanent disability, then all unvested units shall become vested units immediately upon the occurrence of such event.

As of June 30, 2023, none of the vesting milestones have been met.

On June 28, 2023, 73,776 vested restricted stock units were exchanged for 73,776 shares of the Company Common Stock.

The following is the status of outstanding unvested restricted stock units outstanding as of June 30, 2023 and the changes for the six months ended June 30, 2023:

	Number of RSUs	Weighted Average Grant Date Fair Value
<b>Balance at December 31, 2022</b>	2,795,000	\$ 8.09
Granted	-	-
Exercised	-	-
Vested	-	-
Forfeited	-	-
Canceled/Expired	-	-
<b>Balance at June 30, 2023</b>	<b>\$ 2,795,000</b>	<b>\$ 8.09</b>

As of June 30, 2023, the unamortized value of the RSUs was \$22,611,550.

## Note 6 – Equity

### Authorized Capital Stock

The Company's authorized capital stock consists of 550,000,000 shares, of which 500,000,000 are shares of Common Stock, without par value (the "Common Stock"), and 50,000,000 are shares of preferred stock, without par value, 1,990,000 of which have been designated as Series C Convertible Preferred Stock (the "Series C Preferred Stock"), 211,353 of which have been designated as Series D Convertible Preferred Stock (the "Series D Preferred Stock"), 100,000 of which have been designated as Series E Junior Participating Preferred Stock and 15,000 of which have been designated as Series F Convertible Preferred Stock (the "Series F Preferred Stock"). As of June 30, 2023 and December 31, 2022, there were 42,027,113 and 9,470,009 shares of Common Stock issued and outstanding, respectively. There were 72,992 shares of Series D Preferred Stock issued and outstanding and warrants to purchase Series C Preferred Stock convertible into 27,500 shares of Common Stock issued and outstanding as of June 30, 2023 and December 31, 2022. There were 12,500 and 0 shares of Series F Preferred Stock issued and outstanding as of June 30, 2023 and December 31, 2022. There were no shares of Series C Convertible Preferred Stock or Series E Junior Participating Preferred Stock issued and outstanding as of June 30, 2023 and December 31, 2023.

### Preferred Stock

The holders of preferred shares or preferred warrants are entitled to vote per share, as limited by the certificate of designation for each class of preferred shares or warrants, at meetings of the Company.



### *Series D Convertible Preferred Stock*

The following are the principal terms of the Series D Preferred Stock:

#### *Rank*

The Series D Preferred Stock ranks (1) on parity with Common Stock on an “as converted” basis, (2) senior to any series of our capital stock hereafter created specifically ranking by its terms junior to the Series D Preferred Stock, (3) on parity with any series of our capital stock hereafter created specifically ranking by its terms on parity with the Series D Preferred Stock, and (4) junior to any series of our capital stock hereafter created specifically ranking by its terms senior to the Series D Preferred Stock in each case, as to dividends or distributions of assets upon our liquidation, dissolution or winding up whether voluntary or involuntary.

#### *Conversion Rights*

A holder of Series D Preferred Stock is entitled at any time to convert any whole or partial number of shares of Series D Preferred Stock into shares of our Common Stock, determined by dividing the stated value equal to \$0.01 by the conversion price of \$0.01 per share. A holder of Series D Preferred Stock is prohibited from converting Series D Preferred Stock into shares of Common Stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 4.99% of the total number of shares of our Common Stock then issued and outstanding (with such ownership restriction referred to as the “Series D Beneficial Ownership Limitation”) immediately after giving effect to the issuance of the shares of Common Stock issuable upon conversion of the Series D Preferred Stock. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, provided that any increase in such percentage shall not be effective until 61 days after such notice to us. The conversion rate of the Series D Preferred Stock is subject to proportionate adjustments for stock splits, reverse stock splits and similar events, but is not subject to adjustment based on price anti-dilution provisions.

#### *Dividend Rights*

In addition to stock dividends or distributions for which proportionate adjustments will be made, holders of Series D Preferred Stock are entitled to receive dividends on shares of Series D Preferred Stock equal, on an as-if-converted-to-common-stock basis, to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends are payable on shares of Series D Preferred Stock.

#### *Voting Rights*

Subject to the Series D Beneficial Ownership Limitation, on any matter presented to our stockholders for their action or consideration at any meeting of our stockholders (or by written consent of stockholders in lieu of a meeting), each holder, in its capacity as such, shall be entitled to cast the number of votes equal to the number of whole shares of our Common Stock into which the Series D Preferred Stock beneficially owned by such holder are convertible as of the record date for determining stockholders entitled to vote on or consent to such matter (taking into account all Series D Preferred Stock beneficially owned by such holder). Except as otherwise required by law or by the other provisions of the Certificate of Designation of Series D Convertible Preferred Stock (the “Series D Certificate of Designation”), the holders of Series D Preferred Stock, in their capacity as such, shall vote together with the holders of our Common Stock and any other class or series of stock entitled to vote thereon as a single class.

#### *Liquidation Rights*

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of Series D Preferred Stock are entitled to receive, *pari passu* with the holders of Common Stock, out of the assets available for distribution to stockholders an amount equal to such amount per share as would have been payable had all shares of Series D Preferred Stock been converted into Common Stock immediately before such liquidation, dissolution or winding up, without giving effect to any limitation on conversion as a result of the Series D Beneficial Ownership Limitation, as described above.

#### *Exchange Listing*

Series D Preferred Stock is not listed on the Nasdaq, any national securities exchange or other nationally recognized trading system. Our Common Stock issuable upon conversion of the Series D Preferred Stock is listed on the Nasdaq under the symbol “MYMD”.

#### *Failure to Deliver Conversion Shares*

If we fail to timely deliver shares of Common Stock upon conversion of the Series D Preferred Stock (the “Series D Conversion Shares”) within the time period specified in the Series D Certificate of Designation (within two trading days after delivery of the notice of conversion, or any shorter standard settlement period in effect with respect to trading market on the date notice is delivered), then we are obligated to pay to the holder, as liquidated damages, an amount equal to \$25 per trading day (increasing to \$50 per trading day on the third trading day and \$100 per trading day on the sixth trading day) for each \$5,000 of stated value of Series D Preferred Stock being converted which are not timely delivered. If we make such liquidated damages payments, we are also not obligated to make Series D Buy-In (as defined below) payments with respect to the same Series D Conversion Shares.

#### *Compensation for Series D Buy-In on Failure to Timely Deliver Shares*

If we fail to timely deliver the Series D Conversion Shares to the holder, and if after the required delivery date the holder is required by its broker to purchase (in an open market transaction or otherwise) or the holder or its brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the holder of the Series D Conversion Shares which the holder anticipated receiving upon such conversion or exercise (a “Series D Buy-In”), then we are obligated to (A) pay in cash to such holder (in addition to any other remedies available to or elected by such holder) the amount, if any, by which (x) such holder’s total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of Series D Conversion Shares that such holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such holder, either reissue (if surrendered) the shares of Series D Preferred Stock equal to the number of shares of Series D Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such holder the number of Series D Conversion Shares that would have been issued if we had timely complied with its delivery requirements.

As of June 30, 2023, the Company had 72,992 shares of Series D Convertible Preferred Stock outstanding which represent 36,496 underlying shares of the Company Common Stock.

### ***Series F Convertible Preferred Stock***

The following are the principal terms of the Series F Preferred Stock:

#### *Dividends*

The holders of the Series F Preferred Stock are entitled to dividends of 10.0% per annum, compounded monthly, which are payable in cash or shares of Common Stock at the Company's option, in accordance with the terms of the certificate of designation of the Series F Preferred Stock (the "Series F Certificate of Designation"). Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F Certificate of Designation), shares of Series F Preferred Stock will accrue dividends at the rate of 15.0% per annum. Upon conversion or redemption, the holders of shares of Series F Preferred Stock are also entitled to receive a dividend make-whole payment.

#### *Voting Rights*

The Series F Preferred Stock has no voting rights, except as required by law (including without limitation, the New Jersey Business Corporation Act (the "BCA")) and as expressly provided in the Series F Certificate of Designation. To the extent that under the BCA the vote of the holders of shares of Series F Preferred Stock, voting separately as a class or series, as applicable, is required to authorize a given action of the Company, the affirmative vote or consent of a majority of the outstanding shares of Series F Preferred Stock, voting together in the aggregate and not in separate series unless required under the BCA, represented at a duly held meeting at which a quorum is presented or by written consent of such majority (except as otherwise may be required under the BCA) shall constitute the approval of such action by both the class or the series, as applicable. To the extent that under the BCA holders of shares of Series F Preferred Stock are entitled to vote on a matter with holders of shares of Common Stock, voting together as one class, each share of Series F Preferred Stock shall entitle the holder thereof to cast that number of votes per share as is equal to the number of shares of Common Stock into which it is then convertible (subject to certain beneficial ownership limitations) using the record date for determining the stockholders of the Company eligible to vote on such matters as the date as of which the Conversion Price is calculated.

#### *Liquidation*

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the each holder shares of the Series F Preferred Stock shall be entitled to receive out of the assets, whether capital or surplus, of the Company an amount per share of Series F Preferred Stock equal to the greater of (A) 125% of the stated value of such share of Series F Preferred Stock (plus any applicable make-whole amount, unpaid late charge or other applicable amount) on the date of such payment and (B) the amount per share such holder would receive if such holder converted such share of Series F Preferred Stock into Common Stock immediately prior to the date of such payment. All shares of capital stock of the Company shall be junior in rank to all shares of Series F Preferred Stock with respect to the preferences as to payments upon the liquidation.

#### *Conversion*

The Series F Preferred Stock is convertible into shares of Common Stock (the "Conversion Shares"). The initial conversion price, subject to adjustment as set forth in the Series F Certificate of Designation, is \$2.255 (the "Conversion Price"). The Conversion Price can be adjusted as set forth in the Series F Certificate of Designation for stock dividends and stock splits or the occurrence of a fundamental transaction (generally including any reorganization, recapitalization or reclassification of the Common Stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of the outstanding Common Stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by the outstanding Common Stock). The Conversion Price is also subject to "full ratchet" 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 Conversion Price (subject to certain exceptions). If any shares of Series F Preferred Stock are converted or reacquired by us, such shares shall resume the status of authorized but unissued shares of Series F Preferred Stock of the Company and shall no longer be designated as Series F Preferred Stock.

The Company is required to redeem the shares of Series F Preferred Stock in 12 equal monthly installments, commencing on July 1, 2023. The amortization payments due upon such redemption are payable, at the Company's election, in cash, or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company's Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) a "Floor Price" of \$0.22 (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Stock Market; provided that if the Floor Price is the lowest effective price, the Company will be required to make the amortization payment in cash.

### *Exchange Cap*

The Company was initially restricted from issuing shares of Common Stock upon conversion of the Series F Preferred Stock or exercise of the associated warrants in excess of 19.99% of the shares of Common Stock outstanding as of the date immediately prior to the issuance of the shares of Series F Preferred Stock and the associated warrants (the "Issuable Maximum") until the Company obtained stockholder approval for the issuance of shares of Common Stock in excess of the Issuable Maximum ("Stockholder Approval"). The Company received the Stockholder Approval on July 31, 2023.

### *Optional Conversion*

The Series F Preferred Stock can be converted at the option of the holder at any time and from time to time after the original issuance date. Holders shall effect conversions by providing us with the form of conversion notice (the "Notice of Conversion") specifying the number of shares of Series F Preferred Stock to be converted, the number of shares of Series F Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable holder delivers by email such Notice of Conversion to us.

### *Mandatory Conversion*

If on any day after the issuance of the shares of Series F Preferred Stock the closing price of the Common Stock has exceeded 300% of the Conversion Price per share (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) for 20 consecutive trading days and the daily dollar trading volume of the Common Stock has exceeded \$3,000,000 per trading day during the same period and certain equity conditions described in the Series F Certificate of Designation are satisfied (the "Mandatory Conversion Date"), we shall deliver written notice of the Mandatory Conversion (as defined below) to all holders on the Mandatory Conversion Date and, on such Mandatory Conversion Date, we shall convert all of each holder's shares of Series F Preferred Stock into Conversion Shares at the then effective Conversion Price (the "Mandatory Conversion"). If any of the Equity Conditions shall cease to be satisfied at any time on or after the Mandatory Conversion Date through and including the actual delivery of all of the Conversion Shares to the holders, the Mandatory Conversion shall be deemed withdrawn and void ab initio.

### *Beneficial Ownership Limitation*

The Series F Preferred Stock cannot be converted to Common Stock if the holder and its affiliates would beneficially own more than 4.99% or 9.99% at the election of the holder of the outstanding Common Stock. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided that any increase in this limitation will not be effective until 61 days after such notice from the holder to us and such increase or decrease will apply only to the holder providing such notice.

During the three and six months ended June 30, 2023, the Company recorded a loss of \$194,500 and \$315,200 related to the change in fair value of the derivative liabilities which is recorded in other income (expense) on the Condensed Consolidated Statement of Comprehensive Loss. The Company estimated the \$3,465,000 fair value of the bifurcated embedded derivative at June 30, 2023 using a Monte Carlo simulation model, with the following inputs the fair value of our common stock of \$1.50 on the valuation date, estimated equity volatility of 130.0%, estimated traded volume volatility of 205.0%, the time to maturity of 1.0 years, a discounted market interest rate of 9.7%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 8.1%.

During the three months ended June 30, 2023, the Company made redeemed \$2,500,000 of the Preferred Shares and \$359,742 of accrued make-whole dividends by issuing 2,368,654 shares of the Company's Common Stock through installment conversions and proportionately relieved \$2,347,852 of discount related to the redeemed Preferred Shares.

As of June 30, 2023, the Company had 12,500 shares of Series F Convertible Preferred Stock outstanding.

## Common Stock

The holders of common shares are entitled to one vote per share at meetings of the Company.

As of June 30, 2023, the Company had 42,027,113 shares of Common Stock issued and outstanding. During the six months ended June 30, 2023 issued 2,348,213 shares of common stock as dividend payments for the Series F Convertible Preferred.

## Common Stock Warrants

The table below summarizes the warrant activity for the six months ended June 30, 2023:

	Number of Warrants	Weighted Average Exercise Price	Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
<b>Balance at December 31, 2022</b>	6,514,827	\$ 4.93	3.63	\$ -
Issued	6,651,885	2.255	4.99	-
Exercised	-	-	-	-
Forfeited	-	-	-	-
Canceled/Expired	-	-	-	-
<b>Balance at June 30, 2023</b>	<u>13,166,712</u>	<u>\$ 3.58</u>	<u>3.90</u>	<u>\$ -</u>
<b>Exercisable as of June 30, 2023</b>	<u>13,166,712</u>	<u>\$ 3.58</u>	<u>3.90</u>	<u>\$ -</u>

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing stock price of \$1.50 for the Company's common shares on June 30, 2023 and the closing stock price of \$1.15 for the Company's common shares on December 31, 2022. All warrants were vested on date of grant.

On July 7, 2022, the Company issued warrants to purchase up to 38,265 shares of its Common Stock at an exercise price of \$5.98 to a vendor for services. The cumulative fair market value of \$93,233 as calculated using Black-Scholes (exercise price \$5.98 per share, stock price \$2.99 per share, volatility of 131.06%, discount rate of 3.07% and a five-year term). The warrants are exercisable at any time and from time to time, in whole or in part, following the date of issuance and for a term of five years from the effective date. The fair-market value of the warrants was amortized over the life of the service contract which expired on October 7, 2022. During the three months ended March 31, 2023 and 2022, the Company incurred \$0 expenses related to these warrants.

On August 17, 2022, in connection with the August Offering, the Company issued unregistered investor warrants to purchase up to 1,411,764 shares of its Common Stock at an exercise price of \$5.25 (the "August Investor Warrants") in a private placement. The August Investor Warrants will be exercisable at any time and from time to time, in whole or in part, beginning six months following the date of issuance and for a term of five years from the initial exercise date.

Pursuant to the February 2023 Offering, the Company issued to investors Warrants to purchase 6,651,885 shares of Common Stock, with an exercise price of \$2.255 per share (subject to adjustment), for a period of five years from the date of issuance. (Note 3)

## Pre-funded Common Stock Warrants

The table below summarizes the pre-funded warrant activity for the six months ended June 30, 2023:

	Number of Warrants	Weighted Average Exercise Price	Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
<b>Balance at December 31, 2022</b>	135,135	\$ 0.002	-	\$ 155,135
Issued	-	-	-	-
Exercised	(135,135)	0.002	-	-
Forfeited	-	-	-	-
Canceled/Expired	-	-	-	-
<b>Balance at June 30, 2023</b>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>
<b>Exercisable as of June 30, 2023</b>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>

All pre-funded warrants were vested on date of grant and are exercisable at any time. The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying award and the closing stock price of \$1.50 for the Company's common shares on June 30, 2023 and the closing stock price of \$1.15 for Common Stock on December 31, 2022.

On April 27, 2023, a holder exercised 135,135 pre-funded warrants for 135,135 shares of Company Common Stock for net proceeds of \$0.

### Series C Convertible Preferred Stock Warrants

The table below summarizes the warrant activity for the six months ended June 30, 2023:

	Number of Warrants	Weighted Average Exercise Price	Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
<b>Balance at December 31, 2022</b>	27,500	\$ 8.00	1.94	\$ -
Issued	-	-	-	-
Exercised	-	-	-	-
Forfeited	-	-	-	-
Canceled/Expired	-	-	-	-
<b>Balance at June 30, 2023</b>	<u>27,500</u>	<u>\$ 8.00</u>	<u>1.45</u>	<u>\$ -</u>
<b>Exercisable as of June 30, 2023</b>	<u>27,500</u>	<u>\$ 8.00</u>	<u>1.45</u>	<u>\$ -</u>

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing stock price of \$1.50 for the Company's common shares on June 30, 2023 and the closing stock price of \$1.15 for the Company's common shares on December 31, 2022. All Series C Convertible Preferred Stock Warrants were vested on date of grant.

### Note 7 – Commitments and Contingencies

#### Scientific Advisory Board

On February 1, 2021, the Company formed the Scientific Advisory Board to (i) provide strategic advice and make recommendations to management regarding current and planned research and development programs, (ii) advise management regarding the scientific merit of technology or products involved in licensing and acquisition opportunities and (iii) provide strategic advice to management regarding emerging science and technology issues and trends. During the three months ended June 30, 2023 and 2022, the Company incurred costs of \$0 and \$50,000, respectively. During the six months ended June 30, 2023 and 2022, the Company incurred costs of \$0 and \$98,000, respectively. These expenses are included in Research and Development Expenses on the Condensed Consolidated Statement of Comprehensive Loss. The Scientific Advisory Board was disbanded effective September 30, 2022.

## Litigation and Settlements

### *Raymond Akers Actions*

On April 14, 2021, Raymond F. Akers, Jr., Ph.D. filed a lawsuit against MyMD Pharmaceuticals, Inc. (p/k/a Akers Biosciences, Inc.) in the Superior Court of New Jersey, Law Division, Gloucester County (the “First Raymond Akers Action”). Mr. Akers asserts one common law whistleblower retaliation claim against the Company.

On September 23, 2021, the Court granted MyMD Pharmaceutical, Inc.’s (“MyMD’s”) Motion to Dismiss Plaintiff’s Amended Complaint and dismissed Plaintiff’s Amended Complaint. The Court indicated that Mr. Akers is “free to file another complaint, however, tort-based ‘Pierce’ allegations, and/or CEPA claims are barred by the statute of limitations.”

On March 1, 2022, Mr. Akers filed a second action against MyMD in the Superior Court of New Jersey, Law Division, Gloucester County (the “Second Raymond Akers Action”) again asserting one common law whistleblower retaliation claim against the Company. The Company believes that the Second Raymond Akers Action is without merit and, moreover, was filed against the Court’s specific admonition that Plaintiff does not attempt to circumvent the statute of limitations.

On May 27, 2022, the Court granted-in-part and denied-in-part MyMD’s Motion to Dismiss Plaintiff’s Complaint. The Court reaffirmed the ruling in the First Raymond Akers Action that any tort-based Pierce claims are time-barred. However, the Court denied the Motion as it pertained to Plaintiff’s contract-based Pierce claim and “Repayment of Monies Owed” claim. On July 29, 2022, MyMD filed its Answer, which included affirmative defenses. As of June 30, 2023, the Second Raymond Akers Action is in the discovery phase.

All legal fees incurred were expensed as and when incurred.

## **Note 8 – Related Parties**

### *SRQ Patent Holdings and SRQ Patent Holdings II*

MyMD is a party to two Amended and Restated Confirmatory Patent Assignment and Royalty Agreements, both dated November 11, 2020, with SRQ Patent Holdings and SRQ Patent Holdings II, under which MyMD (or its successor) will be obligated to pay to SRQ Patent Holdings or SRQ Patent Holdings II (or its designees) certain royalties on product sales or other revenue received on products that incorporate or are covered by the intellectual property that was assigned to MyMD. The royalty is equal to 8% of the net sales price on product sales and, without duplication, 8% of milestone revenue or sublicense compensation. SRQ Patent Holdings and SRQ Patent Holdings II are affiliates of Mr. Jonnie Williams, Sr. No revenue has been received subject to these agreements as of June 30, 2023 and 2022.

### *MIRA Pharmaceuticals Limited License Agreement*

MyMD is a party to an Amended and Restated Limited License Agreement, dated June 27, 2022 and amended on April 20, 2023, with MIRA Pharmaceuticals, Inc. (Nasdaq: MIRA), under which the parties agreed to share technical information and know-how pertaining to the synthetic manufacture and formulation of the parties' respective Supera-CBD™ and MIRA1a™ product candidates. MyMD, which holds patent rights to MIRA1a™ in 22 foreign countries, was granted a perpetual, non-exclusive, royalty-free license to use improvements to MIRA1a™ made under the agreement, and MIRA was granted a limited, perpetual, worldwide, non-exclusive, royalty-free license to use Supera-CBD™ as a synthetic intermediate in the manufacture of MIRA1a™. MyMD's President and Chief Medical Officer, Chris Chapman, M.D., is Executive Chairman of MIRA; and MyMD's Chief Scientific Officer, Adam Kaplin, M.D., Ph.D., is President and Chief Scientific Officer of MIRA.

## **Note 9 – Employee Benefit Plan**

The Company maintains a defined contribution benefit plan under section 401(k) of the Internal Revenue Code covering substantially all qualified employees of the Company (the "401(k) Plan"). Under the 401(k) Plan, the Company matches 100% up to a 3% contribution, and 50% over a 3% contribution, up to a maximum of 5%.

The Company made matching contributions to the 401(k) Plan during the three months ended June 30, 2023 and 2022 of \$14,398 and \$11,849, respectively. The Company made matching contributions to the 401(k) Plan during the six months ended June 30, 2023 and 2022 of \$24,679 and \$20,598, respectively.

## **Note 10—Patent Assignment and Royalty Agreement**

In November 2016, the Company entered into an agreement with the holders of certain intellectual property relating to the Company's current product candidate. Under the terms of the agreement, the counterparty assigned its rights and interest in certain patents to the Company in exchange for future royalty payments based on a fixed percentage of future revenues, as defined. The agreement is effective until the later of (1) the date of expiration of the assigned patents or (2) the date of expiration of the last strategic partnership or licensing agreement including the assigned patents. No revenue has been received subject to these agreements as of June 30, 2023 and 2022.

## **Note 11—Subsequent Events**

### *Shareholder approval for changing the Company's state of domicile*

On July 31, 2023 the shareholders approved the Agreement and Plan of Merger between the Company and its wholly owned Delaware subsidiary, MyMD Pharmaceuticals, Inc. ("MyMD Delaware"), pursuant to which the Company will merge with and into MyMD Delaware for the sole purpose of changing the Company's state of domicile, including the approval of the Certificate of Incorporation of MyMD Delaware.

### *FDA Acceptance of IND for Phase 2 Study of MYMD-1® in Rheumatoid Arthritis*

On August 14, 2023 the Company announced that the U.S. Food and Drug Administration (FDA) accepted the Company's Investigational New Drug Application (IND) for a Phase 2 study for evaluating the safety, efficacy, pharmacodynamics and pharmacokinetics of MYMD-1® in patients with active rheumatoid arthritis (RA). The application was based on preclinical data showing that MYMD-1 significantly reduced swelling and other clinical arthritis measures compared to widely used RA therapy, Enbrel® (etanercept). The Company plans to initiate discussions with CRO vendor IQVIA on timing of a Phase 2 study in this indication. The approval triggered a milestone event for the vesting of 50,000 stock options for a key employee.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

*The information set forth below should be read in conjunction with our condensed consolidated financial statements and related notes thereto included elsewhere in this Quarterly Report on Form 10-Q. This discussion and analysis contains forward-looking statements based on our current expectations, assumptions, estimates and projections. These forward-looking statements involve risks and uncertainties. Our actual results could differ materially from those indicated in these forward-looking statements as a result of certain factors, including those discussed in Part II, Item 1A of this Quarterly Report on Form 10-Q, entitled "Risk Factors." References in this discussion and analysis to "us," "we," "our," or "the Company" refer collectively to MyMD Pharmaceuticals, Inc.*

Our financial statements are prepared in accordance with GAAP. These accounting principles require us to make certain estimates, judgments and assumptions. We believe that the estimates, judgments and assumptions upon which we rely are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the financial statements as well as the reported amounts of revenues and expenses during the periods presented. Our financial statements would be affected to the extent there are material differences between these estimates and actual results. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require management's judgment in its application. There are also areas in which management's judgment in selecting any available alternative would not produce a materially different result. The following discussion should be read in conjunction with our financial statements and notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q.

This quarterly report on Form 10-Q and other reports filed by the Company from time to time with the Securities and Exchange Commission (the "SEC" and such reports, collectively, the "Filings") contain or may contain forward-looking statements and information that are based upon beliefs of, and information currently available to, the Company's management as well as estimates and assumptions made by Company's management. Readers are cautioned not to place undue reliance on these forward-looking statements, which are only predictions and speak only as of the date hereof. When used in the Filings, the words "anticipate," "believe," "estimate," "expect," "future," "intend," "plan," or the negative of these terms and similar expressions as they relate to the Company or the Company's management identify forward-looking statements. Such statements reflect the current view of the Company with respect to future events and are subject to risks, uncertainties, assumptions, and other factors, including the risks relating to the Company's business, industry, and the Company's operations and results of operations. Should one or more of these risks or uncertainties materialize, or should the underlying assumptions prove incorrect, actual results may differ significantly from those anticipated, believed, estimated, expected, intended, or planned.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to actual results.



Important factors that could cause actual results to differ materially from the results and events anticipated or implied by such forward-looking statements include, but are not limited to:

- fluctuation and volatility in market price of our Common Stock due to market and industry factors, as well as general economic, political and market conditions;
- the impact of dilution on our shareholders;
- our ability to realize the intended benefits of the Merger (as defined below) and our investment in Oravax Medical, Inc.;
- the impact of our ability to realize the anticipated tax impact of the Merger;
- the outcome of litigation or other proceedings we may become subject to in the future;
- delisting of our Common Stock from the Nasdaq;
- our availability and ability to continue to obtain sufficient funding to conduct planned research and development efforts and realize potential profits;
- our ability to develop and commercialize our product candidates, including MYMD-1, Supera-CBD and other future product candidates;
- the impact of the complexity of the regulatory landscape on our ability to seek and obtain regulatory approval for our product candidates, both within and outside of the U.S.;
- the required investment of substantial time, resources and effort for successful clinical development and marketization of our product candidates;
- challenges we may face with maintaining regulatory approval, if achieved;
- the potential impact of changes in the legal and regulatory landscape, both within and outside of the U.S.;
- the impact of public health emergencies such as the COVID-19 pandemic on the administration, funding and policies of regulatory authorities, both within and outside of the U.S.;
- our dependence on third parties to conduct pre-clinical and clinical trials and manufacture its product candidates;
- the impact of public health emergencies such as the COVID-19 pandemic on our results of operations, business plan and the global economy;
- challenges we may face with respect to our product candidates achieving market acceptance by providers, patients, patient advocacy groups, third party payors and the general medical community;
- the impact of pricing, insurance coverage and reimbursement status of our product candidates;
- emerging competition and rapidly advancing technology in our industry;
- our ability to obtain, maintain and protect our trade secrets or other proprietary rights, operate without infringing upon the proprietary rights of others and prevent others from infringing on its proprietary rights;
- our ability to maintain adequate cyber security and information systems;
- our ability to achieve the expected benefits and costs of the transactions related to the acquisition of Supera Pharmaceuticals, Inc. (“Supera”);
- our ability to effectively execute and deliver our plans related to commercialization, marketing and manufacturing capabilities and strategy;
- emerging competition and rapidly advancing technology in our industry;
- our ability to obtain adequate financing in the future on reasonable terms, as and when we need it;
- challenges we may face in identifying, acquiring and operating new business opportunities;
- our ability to retain and attract senior management and other key employees;
- our ability to quickly and effectively respond to new technological developments;
- changes in political, economic or regulatory conditions generally and in the markets in which we operate; and
- our compliance with all laws, rules, and regulations applicable to our business.

## 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) multiple sclerosis, diabetes, 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- $\alpha$ , 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.

MYMD-1, a next generation, oral selective inhibitor offers the ease of oral dosing which is a significant differentiator compared to currently available TNF- $\alpha$  inhibitors, all of which require delivery by injection or infusion. MYMD-1 has shown effectiveness in pre-clinical and clinical studies in regulating the immune system and stopping pathological inflammation. MYMD-1 is brain penetrable allowing it to potentially treat CNS inflammatory or autoimmune diseases. Unlike other therapies, MYMD-1 has been shown in these studies to selectively block TNF- $\alpha$  when it becomes overactivated in autoimmune diseases and cytokine storms, but not block it from doing its normal job of being a first responder to any routine type of moderate infection. In addition, it has not been shown to cause serious side effects common with traditional immunosuppressive therapies that treat inflammation.

On July 31, 2023 the Company announced statistically significant positive topline results from its randomized Phase 2 study of oral TNF- $\alpha$  inhibitor, MYMD-1<sup>®</sup> in patients with chronic inflammation associated with sarcopenia, or age-related frailty. The study met its primary endpoints of significantly reducing chronic inflammatory markers in participants treated with MYMD-1. MYMD-1 has the potential to be the first drug approved by the United States Food and Drug Administration (FDA) for sarcopenia, an age-related decline in physical function which leads to greater risk of hospitalization, disability, and death.

The study met both of its primary endpoints, significantly reducing serum levels of three biomarkers, TNF- $\alpha$  (P=0.008), sTNFR1 (P=0.02), and IL-6 (P=0.03) and maintaining appropriate plasma concentrations and parameters in pharmacokinetic evaluations. The study also achieved all secondary endpoints related to safety and tolerability. There were no treatment-related adverse events (AEs) or serious adverse events (SAEs) over the course of the study.

The Phase 2 multi-center double-blind, placebo controlled, randomized study (NCT05283486) was designed to investigate the efficacy, tolerability and pharmacokinetics of MYMD-1 in participants aged 65 years or older with chronic inflammation associated with sarcopenia/frailty, a condition linked to elevated levels of proinflammatory cytokines. Patients in the study were dosed weekly with MYMD-1 or placebo over a 28-day period. The study consisted of four dosing cohorts versus placebo (600mg, 750mg, 900mg and 1050mg).

Full results from the study will be presented or published at a later date to be determined. The company plans to initiate discussions with the FDA regarding a Phase 3 study of MYMD-1 in sarcopenia.

On average, it is estimated that 5 to 13% of elderly people between the ages of 60 and 70 are affected by sarcopenia. These numbers increase to 11 to 50% for those aged 80 or above.<sup>1</sup> Currently, there are no FDA approved treatments for chronic inflammation associated with sarcopenia/frailty for those aged 65 years or older.

“The aging disorders market is expected to be at least \$600 billion by 2025<sup>2</sup>,”. “TNF- $\alpha$  blockers are the most prescribed drugs by revenue, a global market of approximately \$40 billion per year.<sup>3</sup> Studies have shown that a slowdown in aging that increases life expectancy by one year is worth \$38 trillion and by 10 years is worth \$367 trillion.<sup>4</sup>”

### References:

1. von Haehling S, Morley JE, Anker SD. An overview of sarcopenia: facts and numbers on prevalence and clinical impact. *J Cachexia Sarcopenia Muscle*. 2010 Dec;1(2):129-133. doi: 10.1007/s13539-010-0014-2. Epub 2010 Dec 17. PMID: 21475695; PMCID: PMC3060646.
2. <https://www.cnbc.com/2019/05/08/techs-next-big-disruption-could-be-delaying-death.html>.
3. October 9, 2019, Tumor Necrosis Factor (TNF) Inhibitor Drugs Market, Acumen Research and Consulting
4. *Nature Aging* | VOL 1 | July 2021 | p. 616–623

- Supera-CBD is a synthetic analog of cannabidiol (“CBD”) being developed to treat various conditions, including, but not limited to, epilepsy, pain, and anxiety/depression, through its effects on the CB2 receptor, and a monoamine oxidase enzyme (“MAO”) type B. Supera-CBD has shown tremendous promise in treating neuroinflammatory and neurodegenerative diseases, and will be a major focus as the Company moves forward.

Supera-CBD’s high potency as a CB2 receptor agonist, coupled with its selectivity for CB2 binding and activation over CB1, differentiates it from plant based CBD. This allows us to investigate its potential role in managing a wide range of conditions such as addiction, anxiety, chronic pain, seizures, and inflammation.

The U.S. Drug Enforcement Administration (DEA) has conducted a scientific review and determined that investigational cannabinoid Supera-CBD is not currently considered a controlled substance or listed chemical. The scientific review of the chemical structure of Supera-CBD was conducted in accordance with the Controlled Substances Act (CSA) and its governing regulations.

### *Closing of the Merger and Reverse Stock Split*

On April 16, 2021, pursuant to the previously announced Agreement and Plan of Merger and Reorganization, dated November 11, 2020 (the “Original Merger Agreement”), as amended by Amendment No. 1 thereto, dated March 16, 2021 (the Original Merger Agreement, as amended by Amendment No. 1, the “Merger Agreement”), by and among MyMD, a New Jersey corporation previously known as Akers Biosciences, Inc., XYZ Merger Sub, Inc. (“Merger Sub”), and MyMD Pharmaceuticals (Florida), Inc., a Florida corporation previously known as MyMD Pharmaceuticals, Inc. (“MyMD Florida”), Merger Sub was merged with and into MyMD Florida, with MyMD Florida continuing after the merger as the surviving entity and a wholly owned subsidiary of the Company (the “Merger”). At the effective time of the Merger, without any action on the part of any stockholder, each issued and outstanding share of pre-Merger MyMD Florida’s Common Stock, par value \$0.001 per share (the “MyMD Florida Common Stock”), including shares underlying pre-Merger MyMD Florida’s outstanding equity awards, was converted into the right to receive (x) 0.7718 shares (the “Exchange Ratio”) of the Company’s Common Stock, no par value per share (the “Company Common Stock” or “Common Stock”), (y) an amount in cash, on a pro rata basis, equal to the aggregate cash proceeds received by the Company from the exercise of any options to purchase shares of MyMD Florida Common Stock outstanding at the effective time of the Merger assumed by the Company upon closing of the Merger prior to the second-year anniversary of the closing of the Merger (the “Option Exercise Period”), such payment (the “Additional Consideration”), and (z) potential milestone payment in shares of Company Common Stock up to the aggregate number of shares issued by the Company to pre-Merger MyMD Florida stockholders at the closing of the Merger (the “Milestone Payments”) payable upon the achievement of certain market capitalization milestone

events (the "Milestone Events") during the 36-month period immediately following the closing of the Merger (the "Milestone Period"). The Milestone Events and corresponding Milestone Payments are set forth in the table below.

<b>Milestone Event</b>	<b>Milestone Payment</b>
Market capitalization of the combined company for at least ten (10) trading days during any 20 consecutive trading day period during the Milestone Period is equal to or greater than \$500,000,000 (the "First Milestone Event").	\$20,000,000
For every \$250,000,000 incremental increase in market capitalization of the combined company after the First Milestone Event to the extent such incremental increase occurs for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period, up to a \$1,000,000,000 market capitalization of the combined company.	\$10,000,000 per each incremental increase (it being understood, however, that, if such incremental increase results in market capitalization equal to \$1,000,000,000, such \$10,000,000 payment in respect of such incremental increase shall be payable without duplication of any amount payable in respect of a Second Milestone Event, as defined below).
Market capitalization of the combined company for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period is equal to or greater than \$1,000,000,000 (the "Second Milestone Event")	\$25,000,000
For every \$1,000,000,000 incremental increase in market capitalization of the combined company after the Second Milestone Event to the extent such incremental increase occurs for at least 10 trading days during any 20 consecutive trading day period during the Milestone Period.	\$25,000,000 per each incremental increase

For purposes of the table above, “market capitalization” means, with respect to any trading day, the product of (i) the total outstanding shares of the combined company Common Stock and (ii) the volume weighted average trading price for the combined company Common Stock for such trading day.

Immediately following the effective time of the Merger, the Company effected a 1-for-2 reverse stock split of the issued and outstanding Company Common Stock (the “Reverse Stock Split”). Upon completion of the Merger and the transactions contemplated in the Merger Agreement, (i) the former MyMD Florida equity holders owned approximately 77.05% of the outstanding equity of the Company on a fully diluted basis, assuming the exercise in full of the pre-funded warrants to purchase 986,486 shares of Company Common stock and including 4,188,315 shares of Company Common Stock underlying options to purchase shares of MyMD Florida Common Stock assumed by the company at closing and after adjustments based on the Company’s net cash at closing; and (ii) former Akers Biosciences, Inc. stockholders own approximately 22.95% of the outstanding equity of the Company.

Effective as of 4:05 pm Eastern Time on April 16, 2021, we filed an amendment to its Amended and Restated Certificate of Incorporation to effect the Reverse Stock Split. As a result of the Reverse Stock Split, immediately following the effective time of the Merger, every two shares of our Common Stock held by a stockholder immediately prior to the Reverse Stock Split were combined and reclassified into one share of our Common Stock. No fractional shares were issued in connection with the Reverse Stock Split. Each stockholder who did not have a number of shares evenly divisible pursuant to the Reverse Stock Split ratio and who would otherwise be entitled to receive a fractional share of our Common Stock was entitled to receive an additional share of our Common Stock.

In connection with the closing of the Merger, we changed our name to MyMD Pharmaceuticals, Inc. and our trading symbol on The Nasdaq Capital Market to MYMD. For additional information concerning the Merger, please see Note 3 to the Company’s condensed consolidated financial statements.

### **Financial Operations Overview**

We will not generate revenue from product sales unless and until we successfully complete clinical development, obtain regulatory approval for, and successfully commercialize our MYMD-1 and Supera-CBD product candidates. The lengthy process of securing marketing approvals for new drugs requires the expenditure of substantial resources. Any significant delay or failure to obtain regulatory approvals would materially adversely affect our product candidate’s development efforts and our business overall. In addition, if we obtain regulatory approval for MYMD-1 and/or Supera-CBD, we expect to incur significant expenses related to developing our commercialization capability to support product sales, marketing, manufacturing and distribution activities.

We anticipate that our expenses will increase significantly as we:

- advance the development of our MYMD-1 and Supera-CBD;
- initiate and continue research and preclinical and clinical development of potential new product candidates;
- maintain, expand and protect our intellectual property as it pertains to MYMD-1 and Supera-CBD;
- expand our infrastructure and facilities to accommodate our growing employee base and ongoing development activities;
- establish agreements with contract research organizations, or CROs, and third-party contract manufacturing organizations, or CMOs, in connection with our Supera-CBD preclinical studies, MYMD-1 ongoing and planned clinical trials, Supera-CBD clinical trials and the development of our manufacturing capabilities for MYMD-1 and Supera-CBD;
- develop the large-scale manufacturing processes and capabilities for the commercialization of our MYMD-1 and Supera-CBD drug product candidates;
- seek marketing approvals for our MYMD-1 and Supera-CBD product candidates that successfully complete clinical trials and
- establish a sales, marketing and distribution infrastructure to commercialize MYMD-1 and Supera-CBD should we obtain marketing approval

As a result of these anticipated expenditures, we will need substantial additional funding to support our continuing operations and pursue our growth strategy.

## Components of our Results of Operations

### Revenue

We have not generated any revenue from product sales and do not expect to generate any revenue from the sale of products in the near future. If our research and development efforts with MYMD-1 and Supera-CBD are successful, we may generate revenue from product sales or through license agreements with third parties.

### Operating Expenses

Our operating expenses are broken into several components, including research and development and general and administrative costs.

We expect operating expenses to increase as we progress through the various clinical trials in the development of MYMD-1 and Supera-CBD.

#### *Research and Development*

Our research and development expenses primarily consist of costs associated with the development of MYMD-1 and Supera-CBD. These costs include, but are not limited to:

- Salaries, wages and benefits of the research and development staff;
- Contractual agreements with third parties including contract research organizations, preclinical activities and clinical trials;
- Outside consultants including fees and expenses;
- Laboratory supplies and equipment;
- Regulatory compliance; and
- Patent application and maintenance costs to protect our intellectual property.

Six of our nine employees are principally involved in research and development activities for either MYMD-1 or Supera-CBD. Their salaries, wages and benefits are captured as a component of research and development but not allocated to specific projects.

We utilize third party contractors and consultants with expertise in specific research or development activities to perform work under the supervision of our researchers. We believe this allows us to control costs and to progress through the development cycle and to utilize our staff more efficiently.

It is difficult to project with absolute accuracy the duration or final cost of the development of MYMD-1 and Supera-CBD or if revenue will be generated from the commercialization of these components. The process of achieving regulatory approval is very costly and time consuming. A few of the many factors that contribute to costs of duration include:

- Size and scope of pre-clinical trials;
- The phases of clinical development and the stage of our product candidates in the cycle;
- Per subject trial costs;
- The number of sites required for the trials and the availability of appropriate sites to perform the trials;
- The time that is required to enroll the appropriate number of trial participants; and
- The time required to achieve the approval of regulatory agencies.

### General and Administrative

General and administrative expenses primarily consist of salaries, wages and benefits for our employees in the executive, legal and accounting functions and third-party costs for legal, accounting, insurance, investor relations, stock market and board expenses.

Although treated as components of general and administrative expenses, we have chosen to disclose the following significant items separately:

#### Stock Based Compensation

Stock-based compensation includes the fair market value, as determined by Black-Scholes, of stock options issued to key staff and consultants.

#### Warrant Issuance Expenses

Warrant issuance expenses represent the portion of the fees and offering expenses incurred in connection with the February 2023 Offering (as defined below) attributable to the issuance of the February 2023 Warrants (as defined below).

#### Other Income (Expense), net

Other income (expense), net consists of interest and dividends earned on our cash, cash equivalents, and investments, gains/(losses) on the sale marketable securities, gains/(losses) on the changes of fair value of equity investments, gains/(losses) on the changes of fair value of warrant liabilities, gains/(losses) on the changes of fair value of derivative liabilities, and an uninsured casualty loss.

## Results of Operations

### Summary of Statements of Operations for the Three Months Ended June 30, 2023 and 2022

We are focused on developing and commercializing two therapeutic platforms based on well-defined therapeutic targets, MYMD-1 and Supera-CBD. The following table summarized the results of operations for the three months ended June 30, 2023 and 2022.

Description	For the Three Months Ended June 30,	
	2023	2022
Operating Expenses		
General and Administrative	\$ 1,879,917	\$ 1,346,763
Research and Development	2,224,444	2,163,968
Stock-Based Compensation	1,677,271	132,245
Warrant Issuance Expenses	-	-
Total Operating Expenses	5,781,632	3,642,977
Loss from Operations	(5,781,632)	(3,642,977)
Other Income (Expense), net	1,613,979	6,934
Net Loss	\$ (4,167,653)	\$ (3,636,043)

## Revenue

We had no revenue from operations during the three months ended June 30, 2023 and 2022.

### General and Administrative Expenses

The table below summarizes our general and administrative expenses for the three months ended June 30, 2023 and 2022:

Description	For the Three Months Ended June 30,	
	2023	2022
Personnel Costs	\$ 397,847	\$ 307,919
Professional Service Costs	272,105	335,768
Stock Market & Investor Relations Costs	307,833	247,946
Other Administrative Costs	902,132	455,130
Total Administrative Expense	\$ 1,879,917	\$ 1,346,763

Personnel costs increased \$89,928 during the three months ended June 30, 2023. Salaries were adjusted retroactively to January 1, 2023 for two corporate officers and a bonus was awarded to a key employee. During the three months ended June 30, 2022, a salary was adjusted for a key employee retroactively to April 16, 2021 and a bonus was awarded to a key employee. Certain salaries, bonuses and related payroll expenses are allocated to the appropriate department based upon the employee's responsibilities.

Professional services costs decreased \$63,663 during the three months ended June 30, 2023. These costs included legal and accounting and specialized consulting services regularly incurred in the normal course of business. The decrease is primarily related to a decrease in fees for accounting services related to our annual audit and quarterly reviews.

Stock market and investor relations costs increased \$59,887 during the three months ended June 30, 2023. These costs include the annual Nasdaq listing fees, activities related to keeping the shareholder base informed through press releases, presentations and other communication efforts and the costs of annual shareholder meetings. The increase is primarily due to the preparation costs associated with the 2023 annual shareholder meeting.

Other administrative expenses increased \$447,002 during the three months ended June 30, 2023. These costs include Board expenses, business insurance, corporate travel and other general operating expenses. The increase is associated with a reimbursement of expenses to a related party as authorized by the Board of Directors in April 2023.

#### Stock-Based Compensation

During the three months ended June 30, 2023, we issued 750,000 options to a key employee. The cumulative fair market value of \$978,675 as calculated using Black-Scholes (exercise price \$1.55 per share, stock price \$1.55 per share, volatility of 122.12%, discount rate of 3.39% and a five-year term). One third of the options vested on the grant date, one third will vest on the first anniversary of the grant date and one third will vest on the second anniversary of the grant date. The fair-market value of the options is amortized over the 24-month vesting cycle. For the three months ended June 30, 2023, we recognized expenses of \$442,596.

During the three months ended June 30, 2023, we issued 1,995,000 options to the directors and key employees. The cumulative fair market value of \$3,128,759 as calculated using Black-Scholes (exercise price \$1.66 per share, stock price \$1.66 per share, volatility of 115.94%, discount rate of 3.79% and a ten-year term). One third of the options vested on the grant date, one third will vest on the first anniversary of the grant date and one third will vest on the second anniversary of the grant date. The fair-market value of the options is amortized over the 24-month vesting cycle. For the three months ended June 30, 2023, we recognized expenses of \$1,141,271.

During the three months ended June 30, 2023, we entered into an agreement with a consultant for services to be rendered in exchange for 50,000 stock options with a fair market value of \$48,625 as calculated using Black-Scholes (exercise price \$1.16 per share, stock price \$1.16 per share, volatility of 120.30%, discount rate of 3.98% and a five-year term) and vested on the grant date. The agreement was ratified by the Board of Directors and the stock options were authorized on July 19, 2023. For the three months ended June 30, 2023, we recognized expenses of \$48,625.

During the three months ended June 30, 2022, we issued 100,000 stock options to a consultant pursuant to a consulting agreement with an issue date fair value of \$2.30 per option. The options expire June 21, 2027 and vested immediately. The fair market value of the shares is being amortized over the twelve month term of the agreement. For the three months ended June 30, 2023 and 2022, we recognized expenses of \$44,779 and \$4,916, respectively.

For the three months ended June 30, 2023 and 2022, we recognized expenses of \$19,908 and \$127,331, respectively, for 200,000 stock options awarded to a key employee in January 2022 with a grant date fair value of \$3.59 per option. The options expire January 28, 2029 and are subject to a variable vesting schedule.

#### Warrant Issuance Expenses

There were no warrant issuance expenses for the three months ended June 30, 2023 and 2022.

#### Research and Development Expenses

The table below summarizes our research and development expenses for the three months ended June 30, 2023 and 2022:

Description	For the Three Months Ended June 30,	
	2023	2022
Salaries and Wages	\$ 498,244	\$ 215,772
Development Programs	1,615,016	746,822
Professional Services	67,360	11,426
Regulatory Expenses	-	1,186,611
Other Research and Development Expenses	43,824	3,337
Total Research and Development Expenses	\$ 2,224,444	\$ 2,163,968

Salaries and wages increased \$282,472 during the three months ended June 30, 2023. Salaries were adjusted retroactively to January 1, 2023 for two corporate officers and bonuses were awarded to key employees. During the three months ended June 30, 2022, a salary was adjusted for a key employee retroactively to April 16, 2021 and a bonus was awarded to a key employee. Certain salaries, bonuses and related payroll expenses are allocated to the appropriate department based upon the employee's responsibilities.

Development program costs include those associated with pre-clinical development, clinical trials and other material and development programs. Costs increased \$868,194 during the three months ended June 30, 2023 primarily due to the completion of the Phase II study for Sarcopenia and the preparation of the results data.

Professional services costs increased \$55,934 during the three months ended June 30, 2023. These costs are primarily related to consulting services not related to a specific development program and legal and maintenance fees associated with the protection of our intellectual property.

Regulatory expenses decreased \$1,186,611 during the three months ended June 30, 2023. These expenses are allocated to specific development programs during the three months ended June 30, 2023 and are now included in the Development Programs total described above. During the three months ended June 30, 2022 regulatory expenses included clinical research organizations (CRO) and regulatory consulting fees associated with the Phase II clinical study design, protocol preparation and the maintenance of the investigator brochures for the Rheumatoid Arthritis trial.

Other research and development expenses increased \$40,487 during the three months ended June 30, 2023. These expenses include laboratory supplies, training and travel for department personnel while working with third-party trial sites. The increase during the three months ended June 30, 2023 is primarily related to expenses for





## Other Income and Expense

The table below summarizes our other income and expenses for the three months ended June 30, 2023 and 2022:

Description	For the Three Months Ended June 30,	
	2023	2022
Interest and Dividend Income	\$ (174,851)	\$ (5,986)
Loss on Investments	389	1,999
Loss on changes in fair value of Equity Investments	983	(2,947)
Gain on changes in fair value of Warrant Liabilities	(2,930,700)	-
Loss on changes in fair value of Derivative Liabilities	1,490,200	-
Total Other (Income)/Expense	\$ (1,613,979)	\$ (6,934)

Other income, net of expenses, totaled \$1,613,979 for the three months ended June 30, 2023, and other income, net of expenses, totaled \$6,934 for the three months ended June 30, 2022.

During the three months ended June 30, 2023 interest and dividend income, the changes in fair value of our investments and realized losses from the sale of investments were primarily the result of rising interest rates and the increased availability of cash for investments.

During the three months ended June 30, 2023, the Company recorded a loss of \$1,490,200 related to the change in fair value of the derivative liabilities, which is recorded in other income (expense) on the Statements of Operations. The Company estimated the \$3,465,000 fair value of the bifurcated embedded derivative at June 30, 2023 using a Monte Carlo simulation model, with the following inputs: the fair value of our common stock of \$1.50 on the valuation date, estimated equity volatility of 130.0%, estimated traded volume volatility of 205.0%, the time to maturity of 1 year, a discounted market interest rate of 9.7%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 8.1%.

During the three months ended June 30, 2023, the Company recorded a gain of \$2,930,700 related to the change in fair value of the warrant liabilities, which is recorded in other income (expense) on the Statements of Operations. The fair value of the Warrants of approximately \$7,813,000 was estimated at June 30, 2023 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.65 years; equity volatility of 120.0%; and a risk-free interest rate of 4.19%.

## Summary of Statements of Operations for the Six Months Ended June 30, 2023 and 2022

We are focused on developing and commercializing two therapeutic platforms based on well-defined therapeutic targets, MYMD-1 and Supera-CBD. The following table summarized the results of operations for the six months ended June 30, 2023 and 2022.

Description	For the Six Months Ended June 30,	
	2023	2022
Operating Expenses		
General and Administrative	\$ 2,867,904	\$ 2,741,875
Research and Development	2,994,874	4,793,711
Stock-Based Compensation	1,746,339	229,245
Warrant Issuance Expenses	762,834	-
Total Operating Expenses	8,371,951	7,764,831
Loss from Operations	(8,371,951)	(7,764,831)
Other Income (Expense), net	2,692,566	6,754
Net Loss	\$ (5,679,385)	\$ (7,758,077)

## Revenue

We had no revenue from operations during the six months ended June 30, 2023 and 2022.

## General and Administrative Expenses

The table below summarizes our general and administrative expenses for the six months ended June 30, 2023 and 2022:

Description	For the Six Months Ended June 30,	
	2023	2022
Personnel Costs	\$ 684,574	\$ 662,572
Professional Service Costs	447,890	683,382
Stock Market & Investor Relations Costs	409,361	518,016
Other Administrative Costs	1,326,079	877,905
Total Administrative Expense	\$ 2,867,904	\$ 2,741,875

Personnel costs increased \$22,002 during the six months ended June 30, 2023. Salaries were adjusted retroactively to January 1, 2023 for a corporate officer and a bonus was awarded to a key employee. During the six months ended June 30, 2022, a salary was adjusted for a key employee retroactively to April 16, 2021 and a bonus was awarded to a key employee. Certain salaries, bonuses and related payroll expenses are allocated to the appropriate department based upon the employee's responsibilities.

Professional services costs decreased \$235,492 during the six months ended June 30, 2023. These costs included legal and accounting and specialized consulting services regularly incurred in the normal course of business. The decrease is primarily related to a decrease in the use of outside consultants, reduced fees for accounting services related to our annual audit and quarterly reviews and a reductions in legal expenses.

Stock market and investor relations costs decreased \$108,655 during the six months ended June 30, 2023. These costs include the annual Nasdaq listing fees, activities related to keeping the shareholder base informed through press releases, presentations and other communication efforts and the costs of annual shareholder meetings. The decrease is associated with the elimination of several investor relations programs that were not performing as expected during 2022.

Other administrative expenses increased \$448,174 during the six months ended June 30, 2023. These costs include Board expenses, business insurance, corporate travel and other general operating expenses. The increase is associated with a reimbursement of expenses to a related party as authorized by the Board of Directors in April 2023.

#### Stock-Based Compensation

During the six months ended June 30, 2023, we issued 750,000 options to a key employee. The cumulative fair market value of \$978,675 as calculated using Black-Scholes (exercise price \$1.55 per share, stock price \$1.55 per share, volatility of 122.12%, discount rate of 3.39% and a five-year term). One third of the options vested on the grant date, one third vest on the first anniversary of the grant date and one third vest on the second anniversary of the grant date. The fair-market value of the options is amortized over the 24-month vesting cycle. For the six months ended June 30, 2023, we recognized expenses of \$442,596.

During the six months ended June 30, 2023, we issued 1,995,000 options to the directors and key employees. The cumulative fair market value of \$3,128,759 as calculated using Black-Scholes (exercise price \$1.66 per share, stock price \$1.66 per share, volatility of 115.94%, discount rate of 3.79% and a ten-year term). One third of the options vested on the grant date, one third vest on the first anniversary of the grant date and one third vest on the second anniversary of the grant date. The fair-market value of the options is amortized over the 24-month vesting cycle. For the six months ended June 30, 2023, we recognized expenses of \$1,141,271.

During the six months ended June 30, 2023, we entered into an agreement with a consultant for services to be rendered in exchange for 50,000 stock options with a fair market value of \$48,625 as calculated using Black-Scholes (exercise price \$1.16 per share, stock price \$1.16 per share, volatility of 120.30%, discount rate of 3.98% and a five-year term) and vested on the grant date. The agreement was ratified by the Board of Directors and the stock options were authorized on July 19, 2023. For the six months ended June 30, 2023, we recognized expenses of \$48,625.

During the six months ended June 30, 2022, we issued 200,000 stock options to an employee with an issue date fair value of \$3.59 per option. The options expire January 28, 2029 and are subject to a variable vesting schedule. For the six months ended June 30, 2023 and 2022, we recognized expenses of \$19,908 and \$208,332, respectively.

During the six months ended June 30, 2022, we issued 100,000 stock options to a consultant pursuant to a consulting agreement with an issue date fair value of \$2.30 per option. The options expire June 21, 2027 and vested immediately. The fair market value of the shares is being amortized over the twelve month term of the agreement. For the six months ended June 30, 2023 and 2022, we recognized expenses of \$93,940 and \$4,916, respectively.

We issued 4,040 restricted stock units with a grant date fair value of \$3.96 per RSU. These units vested upon issue. For the six months ended June 30, 2022, we recognized expenses of \$15,998.

#### Warrant Issuance Expenses

During the six months ended June 30, 2023, we issued 6,651,885 February 2023 Warrants in connection with the February 2023 Offering. The portion of the fees and offering expenses incurred in connection with the February 2023 Offering attributable to the issuance of the February 2023 Warrants totaled \$762,834.

There were no warrant issuance expenses for the six months ended June 30, 2022.

#### Research and Development Expenses

The table below summarizes our research and development expenses for the six months ended June 30, 2023 and 2022:

Description	For the Six Months Ended June 30,	
	2023	2022
Salaries and Wages	\$ 789,718	\$ 427,194
Development Programs	1,995,604	2,226,294
Professional Services	136,624	11,426
Regulatory Expenses	7,100	2,119,174
Other Research and Development Expenses	65,828	9,623
Total Research and Development Expenses	\$ 2,994,874	\$ 4,793,711

Salaries and wages increased \$362,524 during the six months ended June 30, 2023. A salary was adjusted retroactively to January 1, 2023 for a corporate officer and bonuses were awarded to key employees. During the three months ended June 30, 2022, a bonus was awarded to a key employee.

Development program costs include those associated with pre-clinical development, clinical trials and other material and development programs. Costs decreased \$230,690 during the six months ended June 30, 2023 due to the completion of the Phase II study for Sarcopenia.

Professional services costs increased \$125,198 during the six months ended June 30, 2023. These costs are primarily related to consulting services not related to a specific development program and legal and maintenance fees associated with the protection of our intellectual property.

Regulatory expenses decreased \$2,112,074 during the six months ended June 30, 2023. These expenses are allocated to specific development programs during the three months ended June 30, 2023 and are now included in the Development Programs total described above. During the six months ended June 30, 2022 regulatory expenses

included clinical research organizations (CRO) and regulatory consulting fees associated with the Phase II clinical study design, protocol preparation and the maintenance of the investigator brochures for the Rheumatoid Arthritis trial.

Other research and development expenses increased \$56,205 during the six months ended June 30, 2023. These expenses include laboratory supplies, training and travel for department personnel while working with third-party trial sites. The increase during the six months ended June 30, 2023 is primarily related to expenses for seminars and travel.

## Other Income and Expense

The table below summarizes our other income and expenses for the six months ended June 30, 2023 and 2022:

Description	For the Three Months Ended June 30,	
	2023	2022
Interest and Dividend Income	\$ (200,675)	\$ (6,106)
Loss on Investments	214	3,649
Loss on changes in fair value of Equity Investments	2,695	145
Gain on changes in fair value of Warrant Liabilities	(2,810,000)	-
Loss on changes in fair value of Derivative Liabilities	315,200	-
Uninsured Casualty (Gain)/Loss	-	(4,442)
Total Other (Income)/Expense	\$ (2,692,566)	\$ (6,754)

Other income, net of expenses, totaled \$2,142,966 for the six months ended June 30, 2023, and other income, net of expense, totaled \$6,754 for the six months ended June 30, 2022.

During the six months ended June 30, 2023 interest and dividend income, the changes in fair value of our investments and realized losses from the sale of investments were primarily the result of rising interest rates and the increased availability of cash for investments.

During the six months ended June 30, 2023, the Company recorded a loss of \$315,200 related to the change in fair value of the derivative liabilities, which is recorded in other income (expense) on the Statements of Operations. The Company estimated the \$3,465,000 fair value of the bifurcated embedded derivative at June 30, 2023 using a Monte Carlo simulation model, with the following inputs: the fair value of our common stock of \$1.50 on the valuation date, estimated equity volatility of 130.0%, estimated traded volume volatility of 205.0%, the time to maturity of 1 year, a discounted market interest rate of 9.7%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 8.1%.

During the six months ended June 30, 2023, the Company recorded a gain of \$2,810,000 related to the change in fair value of the warrant liabilities, which is recorded in other income (expense) on the Statements of Operations. The fair value of the Warrants of approximately \$7,813,000 was estimated at June 30, 2023 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.65 years; equity volatility of 120.0%; and a risk-free interest rate of 4.19%.

## Liquidity and Capital Resources

As of June 30, 2023, the Company's cash on hand was \$93,823 and marketable securities were \$11,533,432. The Company has incurred a net loss from operations of \$5,679,385 for the six months ended June 30, 2023. As of June 30, 2023, the Company had working capital of \$10,713,907 and stockholders' equity of \$10,741,770 including an accumulated deficit of \$99,970,418. During the six months ended June 30, 2023, cash flows used in operating activities were \$7,891,517 consisting primarily of a net loss of \$5,679,385, an increase in prepaid expenses of \$949,973, a reduction in trade and other payables of \$516,769 and a non-cash change in the fair value of the warrant liabilities of \$2,810,000 offset by non-cash stock based compensation of \$1,746,339 and non-cash change in the fair value of the derivative liabilities of \$315,200. Since its inception, the Company has met its liquidity requirements principally through the sale of its Common Stock in public and private placements.

Holders of the Company's Series F Preferred Shares (as defined below) are entitled to certain dividends and amortization payments as described in the section titled "Series F Preferred Shares" below. Each payment may be made in cash or, at the Company's option and subject to certain conditions, either in shares of Common Stock in an amount based on the Conversion Price (as defined below) in effect at the time that such payment is due or in a combination of cash and shares of Common Stock. If the Company elects to make all payments to the holders of the Series F Preferred Shares that fall due within the twelve-month period following June 30, 2023 in cash, the Company estimates that it will pay to the holders of the Series F Preferred Shares up to \$14.3 million, assuming that a Triggering Event (as defined in the Certificate of Designation) has not occurred. The dividend rate is subject to adjustment, and the actual amount due to the holders of the Series F Preferred Shares may exceed such amount. If the Company elects to make all such payments in shares of Common Stock, based on the Conversion Price of \$2.255 per share of Common Stock in effect as of June 30, 2023 and 12,500 shares of Series F Preferred Stock outstanding as of June 30, 2023, the Company estimates that it will issue to the holders of the Series F Preferred Shares up to 6.3 million shares of Common Stock. The Conversion Price is subject to adjustment, including based on the market price of the Company's Common Stock during the thirty trading day period immediately prior to the date on which a payment is due to the holders of the Series F Preferred Shares, and the actual number of shares issuable to the holders of the Series F Preferred Shares may exceed such number. For more information regarding payments due to the holders of the Series F Preferred Shares, see the section titled "Series F Preferred Shares" below.

Management has evaluated the Company's current cash requirements for operations in conjunction with management's strategic plan and believes that the Company's current financial resources as of the date of the issuance of these condensed consolidated financial statements, are sufficient to fund its current operating budget and contractual obligations as of June 30, 2023 as they fall due within the next twelve-month period, alleviating any substantial doubt raised by the Company's historical operating results and satisfying its estimated liquidity needs for twelve months from the issuance of these condensed consolidated financial statements.

### Operating Activities

Our net cash used in operating activities totaled \$7,891,517 consisting primarily of a net loss of \$5,679,385, an increase in prepaid expenses of \$949,973, a reduction in trade and other payables of \$516,769 and a non-cash change in the fair value of the warrant liabilities of \$2,810,000 offset by non-cash stock based compensation of \$1,746,339 and non-cash change in the fair value of the derivative liabilities of \$315,200.

Our net cash used by operating activities totaled \$5,934,245 during the six months ended June 30, 2022. Net cash used consisted principally of the net loss of \$7,758,077 partially offset by an increase in trade and other payables of \$1,854,909.

### *Investing Activities*

Our net cash consumed by investing activities totaled \$7,891,517 for the six months ended June 30, 2023 as compared to cash provided by investing activities totaling \$6,493,452 during the six months ended March 31, 2022. During the six months ended June 30, 2023 we purchased securities totaling \$13,199,409 and sold securities totaling \$5,749,970. During the six months ended June 30, 2022 we purchased securities totalling \$6,548 and sold securities totalling \$6,500,000.

### *Financing Activities*

Net cash provided by financing activities during the six months ended June 30, 2023 was \$14,685,689, which consisted of the net proceeds from the sale of the Series F Preferred Shares, net of offering costs. Net cash provided by financing activities during the six months ended June 30, 2022 was \$0.

### *August 2022 Offering*

On August 15, 2022, we entered into a securities purchase agreement (the “August 2022 SPA”) with certain accredited and institutional investors pursuant to which we agreed to issue 1,411,764 shares of Common Stock (the “August 2022 Shares”) in a registered direct offering and unregistered warrants to purchase up to an aggregate of 1,411,764 shares of Common Stock in a concurrent private placement (the “August 2022 Warrants”). The August 2022 Warrants have an exercise price of \$5.25 per share, became exercisable six months following the date of issuance and have a term of exercise equal to five years from the initial exercise date. We received net proceeds from the sale of the August 2022 Shares and the August 2022 Warrants, after deducting fees and other estimated offering expenses payable by the Company, of approximately \$5.5 million. As of June 30, 2023, none of the August 2022 Warrants have been exercised and 1,411,764 of the August 2022 Warrants remain outstanding.

### *February 2023 Offering*

On February 21, 2023, we entered into a Securities Purchase Agreement (the “February 2023 SPA”) with certain accredited investors, pursuant to which we agreed to sell in a registered direct offering (the “February 2023 Offering”) (i) an aggregate of 15,000 shares (the “Series F Preferred Shares”) of our newly-designated Series F Convertible Preferred Stock, with a stated value of \$1,000 per Preferred Share and without par value (the “Series F Preferred Stock”), convertible into shares of Common Stock (the “Series F Conversion Shares”) pursuant to the terms of the Certificate of Designations of the Series F Preferred Stock (the “Certificate of Designation”), and (ii) 6,651,885 warrants (the “February 2023 Warrants”) to acquire up to an aggregate of 6,651,885 shares of Common Stock, subject to adjustment (the “February 2023 Warrant Shares”). The Conversion Price (as defined below) 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 Conversion Price (subject to certain exceptions).

At closing, we received net proceeds from the February 2023 Offering of approximately \$13.9 million, after deducting various fees and expenses. We intend to use the net proceeds from this offering for general corporate purposes.

### *Series F Preferred Shares*

The terms of the Series F Preferred Shares are as set forth in the form of Certificate of Designation. The Series F Preferred Shares are convertible into the Conversion Shares at the election of the holder at any time at an initial conversion price of \$2.255 (the “Conversion Price”). The 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 Conversion Price (subject to certain exceptions). The Company is required to redeem the Series F Preferred Shares in 12 equal monthly installments, commencing on July 1, 2023. The amortization payments due upon such redemption are payable, at the company’s election, in cash, or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company’s Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) a “Floor Price” of \$0.22 (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Stock Market. The Company may require holders to convert their Series F Preferred Shares into Conversion Shares if the closing price of the Common Stock exceeds \$6.765 per share (subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events) for 20 consecutive trading days and the daily dollar trading volume of the Common Stock exceeds \$3,000,000 per day during the same period and certain equity conditions described in the Certificate of Designation are satisfied.

The holders of the Series F Preferred Shares are entitled to dividends of 10% per annum, compounded monthly, which are payable in cash or shares of Common Stock at the Company’s option, in accordance with the terms of the Certificate of Designation. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Certificate of Designation), the Series F Preferred Shares will accrue dividends at the rate of 15% per annum. In connection with a Triggering Event, each holder of Series F Preferred Shares will be able to require the Company to redeem in cash any or all of the holder’s Series F Preferred Shares at a premium set forth in the Certificate of Designation. Upon conversion or redemption, the holders of the Series F Preferred Shares are also entitled to receive a dividend make-whole payment. The holders of Series F Preferred Shares have no voting rights on account of the Series F Preferred Shares, other than with respect to certain matters affecting the rights of the Series F Preferred Shares. During the three and six months ending June 30, 2023, the Company recorded dividends totaling \$381,920 and \$532,129, which are reported as Preferred Stock Dividends on the Condensed Consolidated Statement of Comprehensive Loss.

The Company is subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, acquisition and investment transactions, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Certificate of Designation), distributions or redemptions, and the transfer of assets, among other matters. There is no established public trading market for the Series F Preferred Shares and the Company does not intend to list the Series F Preferred Shares on any national securities exchange or nationally recognized trading system.

#### *February 2023 Warrants*

The February 2023 Warrants are exercisable immediately upon issuance at an exercise price of \$2.255 per share (the “Exercise Price”) and expire five years from the date of issuance. The Exercise Price is 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). There is no established public trading market for the February 2023 Warrants and the Company does not intend to list the February 2023 Warrants on any national securities exchange or nationally recognized trading system.

#### *Nasdaq Stockholder Approval*

Our ability to issue Series F Conversion Shares and February 2023 Warrant Shares using shares of Common Stock is subject to certain limitations set forth in the Certificate of Designation and the February 2023 Warrants, including certain beneficial ownership limitations. When the Series F Preferred Shares and the February 2023 Warrants were issued, we were restricted from issuing Series F Conversion Shares and February 2023 Warrant Shares in excess of 19.99% of the shares of Common Stock outstanding as of the date immediately prior to the issuance of the Series F Preferred Shares and the February 2023 Warrants (the “Issuable Maximum”) until the Company obtained stockholder approval for the issuance of shares of Common Stock in excess of the Issuable Maximum (“Stockholder Approval”). The Company received the Stockholder Approval on July 31, 2023.

### **Critical Accounting Policies**

Our management’s discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with US GAAP. The preparation of our condensed consolidated financial statements and related disclosures requires us to make estimates, assumptions and judgments that affect the reported amount of assets, liabilities, costs and expenses and related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors that management believes to be relevant at the time our condensed consolidated financial statements are prepared. Accordingly, we evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions.

Except as noted below, our critical accounting estimates have not changed materially from those previously reported in our Annual Report for the year ended December 31, 2022, on Form 10-K.

#### *Derivative Financial Instruments*

The Company evaluates its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives in accordance with ASC Topic 815, “*Derivatives and Hedging*.” If liability accounting is required, the Company’s derivative instruments are recorded at fair value at the issuance date and re-valued at each reporting date, with changes in the fair value reported in the statements of operations. Derivative assets and liabilities are classified on the balance sheet as current or non-current based on whether or not net-cash settlement or conversion of the instrument could be required within twelve (12) months of the balance sheet date.

The Company has determined that the Series F Convertible Preferred Stock warrants are derivatives that are required to be accounted for as liabilities. The Company has also determined that the following embedded features in the preferred stock are not clearly and closely related to the debt host instrument: 1) make-whole interest upon a contingent redemption event, 2) make-whole interest upon a conversion event, 3) an installment redemption upon an Equity Conditions Failure (as defined in the Certificate of Designation), and 4) variable share-settled installment conversion and as such are bifurcated from the preferred stock and accounted for as liabilities. The fair value of the warrants and embedded features are estimated using internal valuation models. The Company’s valuation models utilize inputs and other assumptions and may not be reflective of the price at which they can be settled.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk.**

Not applicable.

### **Item 4. Controls and Procedures.**

#### **Disclosure Controls and Procedures**

Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”) Rule 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Quarterly Report on Form 10-Q, have concluded that, based on such evaluation, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and is accumulated and communicated to our management, including our principal executive officer and principal financial officer as appropriate to allow timely decisions regarding required disclosure.

#### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting that occurred during our last fiscal quarter ended June 30, 2022 that have materially affected, or are reasonably likely to affect, our internal control over financial reporting.

## PART II - OTHER INFORMATION

### Item 1. Legal Proceedings

From time to time we are a party to litigation and subject to claims incident to the ordinary course of business. Future litigation may be necessary to defend ourselves and our customers by determining the scope, enforceability, and validity of third-party proprietary rights or to establish our proprietary rights. For a description of certain legal proceedings, please read Note 8 to the interim condensed consolidated financial statements, which information is incorporated herein by reference.

### Item 1A. Risk Factors

The following description of risk factors includes any material changes to, and supersedes the description of, risk factors associated with our business, financial condition and results of operations previously disclosed in “Item 1A. Risk Factors” of our Annual Report for the year ended December 31, 2022 on Form 10-K, as filed with the SEC on March 31, 2023. Our business, financial condition and operating results can be affected by a number of factors, whether currently known or unknown, including but not limited to those described below, any one or more of which could, directly or indirectly, cause our actual financial condition and operating results to vary materially from past, or from anticipated future, financial condition and operating results. Any of these factors, in whole or in part, could materially and adversely affect our business, financial condition, operating results and stock price.

The following discussion of risk factors contains forward-looking statements. These risk factors may be important to understanding other statements in this Form 10-Q. The following information should be read in conjunction with the condensed consolidated financial statements and related notes in Part I, Item 1, “Financial Statements” and Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Form 10-Q.

*We may not be able to adequately protect or enforce our intellectual property rights, which could harm our competitive position.*

Our success and future revenue growth will depend, in part, on our ability to protect our intellectual property. We will primarily rely on patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods, to protect our proprietary technologies or processes. It is possible that competitors or other unauthorized third parties may obtain, copy, use or disclose proprietary technologies and processes, despite efforts by the us to protect our proprietary technologies and processes. While we hold rights in several patents, there can be no assurances that any additional patents will be issued, or additional rights will be granted, to us. Even if new patents are issued, the claims allowed may not be sufficiently broad to adequately protect our technology and processes. Our competitors may also be able to develop similar technology independently or design around the patents to which we have rights.

Currently, MyMD has 16 issued U.S. patents, 52 foreign patents, three pending U.S. patent applications and 13 foreign patent applications pending in such jurisdictions as Australia, Canada, China, European Union, Israel, Japan and South Korea and one pending international patent application, which if issued are expected to expire between 2036 and 2041. Although we expect to obtain additional patents and in-licenses in the future, there is no guarantee that we will be able to successfully obtain such patents or in-licenses in a timely manner or at all. Further, any of our rights to existing patents, and any future patents issued to us, may be challenged, invalidated or circumvented. As such, any rights granted under these patents may not provide us with meaningful protection. Even if foreign patents are granted, effective enforcement in foreign countries may not be available. If our patents or rights to patents do not adequately protect our technology or processes, competitors may be able to offer products similar to our products.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

There were no unregistered sales of the Company’s equity securities during the three months ended June 30, 2023, other than those previously reported in a Current Report on Form 8-K.

### Item 3. Defaults Upon Senior Securities

There has been no default in the payment of principal, interest, sinking or purchase fund installment, or any other material default, with respect to any indebtedness of the Company.

### Item 4. Mine Safety Disclosures

Not applicable.

**Item 5. Other Information.**

None.

**Item 6. Exhibits.**

<b>Exhibit Number</b>	<b>Exhibit Description</b>
2.1**	<a href="#"><u>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).</u></a>
2.2	<a href="#"><u>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).</u></a>
3.1	<a href="#"><u>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).</u></a>
3.2	<a href="#"><u>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).</u></a>
3.3	<a href="#"><u>Amended and Restated Bylaws of MyMD Pharmaceuticals, Inc., effective April 16, 2021 (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 April 22, 2021).</u></a>
3.4	<a href="#"><u>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).</u></a>



31.1+	<a href="#"><u>Certification of the Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a).</u></a>
31.2+	<a href="#"><u>Certification of the Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a).</u></a>
32.1+	<a href="#"><u>Certification of the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u></a>
32.2+	<a href="#"><u>Certification of the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u></a>
101	Interactive Data Files of Financial Statements and Notes.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

+ Filed herewith

\*\* 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.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**MYMD PHARMACEUTICALS, INC.**

Date: August 14, 2023

By: /s/ Chris Chapman  
Name: Chris Chapman  
Title: President, Chief Medical Officer, and Director  
(Principal Executive Officer)

Date: August 14, 2023

By: /s/ Ian Rhodes  
Name: Ian Rhodes  
Title: Chief Financial Officer  
(Principal Financial Officer)

## CERTIFICATION PURSUANT TO SARBANES–OXLEY ACT OF 2002

I, Chris Chapman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MyMD Pharmaceuticals, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2023

By: /s/ Chris Chapman

Name: Chris Chapman

Title: President, Chief Medical Officer, and Director  
(Principal Executive Officer)

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## CERTIFICATION PURSUANT TO SARBANES–OXLEY ACT OF 2002

I, Ian Rhodes, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MyMD Pharmaceuticals, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2023

By: /s/ Ian Rhodes  
Name: Ian Rhodes  
Title: Chief Financial Officer  
(Principal Financial Officer)

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**CERTIFICATION PURSUANT TO SECTION 906  
OF THE SARBANES–OXLEY ACT OF 2002**

In connection with the Annual Report of MyMD Pharmaceuticals, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, the undersigned, Chris Chapman, in the capacity and on the date indicated below, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2023

By: /s/ Chris Chapman

Name: Chris Chapman

Title: President, Chief Medical Officer, and Director  
(Principal Executive Officer)

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**CERTIFICATION PURSUANT TO SECTION 906  
OF THE SARBANES–OXLEY ACT OF 2002**

In connection with the Annual Report of MyMD Pharmaceuticals, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, the undersigned, Ian Rhodes, in the capacity and on the date indicated below, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

3. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
4. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2023

By: /s/ Ian Rhodes  
Name: Ian Rhodes  
Title: Chief Financial Officer  
(Principal Financial Officer)

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