

**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, 2024

or

**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

**TNF Pharmaceuticals, Inc.**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	22-2983783 (I.R.S. Employer Identification Number)
855 N. Wolfe Street, Suite 623 Baltimore, MD	21205
(Address of principal executive offices)	(Zip Code)

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

Former name, former address and former fiscal year, if changed since last report: MyMD Pharmaceuticals, Inc.

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 par value \$0.001 per share	TNFA	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 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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer <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 19, 2024, the registrant had 2,370,423 shares of its Common Stock, par value \$0.001 per share, outstanding.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

TNF PHARMACEUTICALS, INC. AND SUBSIDIARIES  
Condensed Consolidated Balance Sheets  
June 30, 2024 and December 31, 2023  
(unaudited)

	As of	
	June 30, 2024	December 31, 2023
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash	\$ 536,026	\$ 2,681,010
Marketable Securities	12,530,326	2,242,106
Prepaid expenses	1,291,380	893,226
<b>Total Current Assets</b>	<b>14,357,732</b>	<b>5,816,342</b>
<b>Non-Current Assets</b>		
Lease Right-of-Use	25,803	47,389
Goodwill	10,498,539	10,498,539
Investment in Oravax Medical	1,500,000	1,500,000
<b>Total Non-Current Assets</b>	<b>12,024,342</b>	<b>12,045,928</b>
<b>Total Assets</b>	<b>\$ 26,382,074</b>	<b>\$ 17,862,270</b>
<b>LIABILITIES</b>		
<b>Current Liabilities</b>		
Trade and Other Payables	\$ 4,616,513	\$ 3,716,218
Deferred Compensation Payable	331,992	-
Due to MyMD FL Shareholders	29,982	29,982
Lease Liability	25,803	48,870
Dividends Payable	778,491	265,019
Derivative Liability	-	61,000
Warrant Liability	-	867,000
<b>Total Current Liabilities</b>	<b>5,782,781</b>	<b>4,988,089</b>
<b>Non-Current Liabilities</b>		
Deferred Compensation Payable, net of current	-	100,538
Derivative Liability, net of current	926,000	-
Warrant Liability, net of current	19,291,000	-
<b>Total Non-Current Liabilities</b>	<b>20,217,000</b>	<b>100,538</b>
<b>Total Liabilities</b>	<b>25,999,781</b>	<b>5,088,627</b>
<b>Commitments and Contingencies</b>		
<b>Mezzanine Equity</b>		
Series F Convertible Preferred Stock, 15,000 shares designated, par value \$0.001 and a stated value of \$1,000 per share, 4,675 and 6,633 shares issued and outstanding as of June 30, 2024 and December 31, 2023.		
Liquidation preference of \$4,675,000 plus dividends at 10% per annum of \$626,553 as of June 30, 2024	4,576,553	6,500,278
Series F Convertible Preferred Stock – Discount	(3,310,483)	(4,702,023)
Series F Convertible Preferred Stock – Derivative	(981,582)	(1,394,184)
Series F-1 Convertible Preferred Stock, 5,050 shares designated, par value \$0.001 and a stated value of \$1,000 per share, 5,050 and 0 shares issued and outstanding as of June 30, 2024 and December 31, 2023.		
Liquidation preference of \$5,050,000 plus dividends at 10% per annum of \$54,813 as of June 30, 2024	5,050,000	-
Series F-1 Convertible Preferred Stock – Discount	(5,050,000)	-
Series G Convertible Preferred Stock, 12,826,273 shares designated, par value \$0.001 and a stated value of \$1,000 per share, 8,950 and 0 shares issued and outstanding as of June 30, 2024 and December 31, 2023.		
Liquidation preference of \$8,950,000 plus dividends at 10% per annum of \$97,145 as of June 30, 2024	8,950,000	-
Series G Convertible Preferred Stock – Discount	(8,950,000)	-
<b>Total Mezzanine Equity</b>	<b>284,488</b>	<b>404,071</b>
<b>STOCKHOLDERS' EQUITY</b>		
Preferred Stock, par value \$0.001, 50,000,000 total preferred shares authorized		
Series D Convertible Preferred Stock, 211,353 shares designated, \$0.001 par value and a stated value of \$0.01 per share, 72,992 shares issued and outstanding as of June 30, 2024 and December 31, 2023	144,524	144,524
Common Stock, par value \$0.001, 250,000,000 shares authorized, 2,370,423 and 2,018,857 shares issued and outstanding as of June 30, 2024 and December 31, 2023	2,370	2,019

Additional Paid in Capital	123,272,874	114,200,096
Accumulated Deficit	<u>(123,321,963)</u>	<u>(101,977,067)</u>
<b>Total Stockholders' Equity</b>	<b><u>97,805</u></b>	<b><u>12,369,572</u></b>
<b>Total Liabilities, Mezzanine Equity, and Stockholders' Equity</b>	<b><u>\$ 26,382,074</u></b>	<b><u>\$ 17,862,270</u></b>

See accompanying notes to these unaudited condensed consolidated financial statements.

**TNF 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,	
	2024	2023	2024	2023
Product Revenue	\$ -	\$ -	\$ -	\$ -
Product Cost of Sales	-	-	-	-
Gross Income	-	-	-	-
Administrative Expenses	1,020,312	1,879,917	2,088,632	2,867,904
Research and Development Expenses	401,104	2,224,444	1,600,042	2,994,874
Stock Based Compensation Expenses	439,627	1,677,271	956,992	1,746,339
Series F Warrant Issuance Expenses	-	-	-	762,834
Series F-1 Warrant Issuance Expenses	539,097	-	539,097	-
Series G Warrant Issuance Expenses	969,505	-	969,505	-
Loss from Operations	<u>(3,369,645)</u>	<u>(5,781,632)</u>	<u>(6,154,268)</u>	<u>(8,371,951)</u>
Other (Income)/Expenses				
Interest and Dividend Income	(21,148)	(174,851)	(39,454)	(200,675)
(Gain)/Loss on Sale of Marketable Securities	75	389	(100)	214
Change in fair value of Marketable Securities	76	983	975	2,695
Change in fair value of Derivatives Liabilities	72,000	1,490,200	11,000	315,200
Change in fair value of Warrant Liabilities	(2,701,000)	(2,930,700)	4,393,000	(2,810,000)
Loss on issuance of Series F-1 Convertible Preferred Stock	3,737,000	-	3,737,000	-
Loss on issuance of Series G Convertible Preferred Stock	5,109,000	-	5,109,000	-
Total Other (Income)/Expense	<u>6,196,003</u>	<u>(1,613,979)</u>	<u>13,211,421</u>	<u>(2,692,566)</u>
Loss Before Income Tax	(9,565,648)	(4,167,653)	(19,365,689)	(5,679,385)
Income Tax Benefit	-	-	-	-
Net Loss	(9,565,648)	(4,167,653)	(19,365,689)	(5,679,385)
Preferred Stock Dividends	777,340	373,796	1,979,207	532,129
Net Loss Attributable to Common Stockholders	<u>\$ (10,342,988)</u>	<u>\$ (4,541,449)</u>	<u>\$ (21,344,896)</u>	<u>\$ (6,211,514)</u>
Basic and Diluted loss per common share	<u>\$ (4.54)</u>	<u>\$ (3.22)</u>	<u>\$ (9.58)</u>	<u>\$ (4.43)</u>
Weighted average basic and diluted common stock outstanding	<u>2,275,699</u>	<u>1,411,029</u>	<u>2,228,218</u>	<u>1,401,672</u>

See accompanying notes to these unaudited condensed consolidated financial statements.

**TNF PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statement of Changes in Stockholders' Equity**  
**For the Three and Six Months Ended June 30, 2024 and 2023**  
**(unaudited)**

	Series F Convertible Preferred Stock		Series F-1 Convertible Preferred Stock		Series G Convertible Preferred Stock		Series D Convertible Preferred Stock		Common Stock			Total Equity		
	Shares	Series F	Shares	Series F-1	Shares	Series G	Shares	Series D	Shares	Common Stock Par Value	Additional Paid In Capital		Accumulated Deficit	
		\$		\$		\$		\$		\$				\$
<b>Balance at December 31, 2023</b>	6,633	\$404,071	-	\$ -	-	\$ -	-	72,992	\$144,524	2,018,857	\$ 2,019	\$114,200,096	\$(101,977,067)	\$12,369,572
Net loss	-	-	-	-	-	-	-	-	-	-	-	-	(9,800,041)	(9,800,041)
Issuance of common stock for vested restricted stock units	-	-	-	-	-	-	-	-	-	908	1	(1)	-	-
Redemption of 383 shares of Series F Convertible Preferred Stock, January 1, 2024 installment of \$1,429,871 paid with cash and common stock	(383)	(23,699)	-	-	-	-	-	-	-	-	-	-	-	-
Accelerated Conversion of 438 shares of Series F Convertible Preferred Stock	(438)	(26,300)	-	-	-	-	-	-	-	131,200	131	88,357	-	88,488
Redemption of 812 shares of Series F Convertible Preferred Stock, February 1, 2024 installment of \$1,429,871 paid with cash and common stock	(812)	(49,773)	-	-	-	-	-	-	-	-	-	-	-	-
Accelerated Conversion of 12 shares of Series F Convertible Preferred Stock	(12)	(914)	-	-	-	-	-	-	-	6,667	7	3,068	-	3,075
Series F Convertible Preferred Stock Dividend	-	-	-	-	-	-	-	-	-	-	-	-	(1,201,867)	(1,201,867)
Reclass of warrant liability upon warrant modification	-	-	-	-	-	-	-	-	-	-	-	7,961,000	-	7,961,000
Stock based compensation - stock options	-	-	-	-	-	-	-	-	-	-	-	517,365	-	517,365
<b>Balance at March 31, 2024</b>	4,988	\$303,385	-	\$ -	-	\$ -	-	72,992	\$144,524	2,157,632	\$ 2,158	\$122,769,885	\$(112,978,975)	\$ 9,937,592
Net loss	-	-	-	-	-	-	-	-	-	-	-	-	(9,565,648)	(9,565,648)
Issuance of 5,050 shares of Series F-1 Convertible Preferred Stock, net of discount and offering costs of \$35,252	-	-	5,050	-	-	-	-	-	-	-	-	-	-	-
Issuance of 8,950 shares of Series G Convertible Preferred Stock, net of discount and offering costs of \$48,559	-	-	-	-	8,950	-	-	-	-	-	-	-	-	-
Accelerated Conversion of 225 shares of Series F Convertible Preferred Stock	(225)	(13,578)	-	-	-	-	-	-	-	150,000	150	45,530	-	45,680
Accelerated Conversion of 88 shares of Series F Convertible Preferred Stock	(88)	(5,319)	-	-	-	-	-	-	-	62,791	62	17,832	-	17,894
Series F Convertible Preferred Stock Dividend	-	-	-	-	-	-	-	-	-	-	-	-	(777,340)	(777,340)
Stock based compensation - stock options	-	-	-	-	-	-	-	-	-	-	-	439,627	-	439,627
<b>Balance at June 30, 2024</b>	4,675	\$284,488	5,050	\$ -	8,950	\$ -	-	72,992	\$144,524	2,370,423	\$ 2,370	\$123,272,874	\$(123,321,963)	\$ 97,805

Series F Convertible Preferred Stock	Series F-1 Convertible Preferred Stock	Series G Convertible Preferred Stock	Series D Convertible Preferred Stock	Common Stock	Additional Paid In Capital	Accumulated Deficit	Total Equity
Series	Series	Series	Series	Common Stock Par Value			

	Shares	F	Shares	F-1	Shares	G	Shares	D	Shares	\$0.001	In Capital	Deficit	Equity
<b>Balance at December 31, 2022</b>	-	\$ -	-	\$ -	-	\$ -	72,992	\$144,524	1,315,674	\$ 1,316	\$108,308,120	\$ (93,758,904)	\$14,695,056
Net loss	-	-	-	-	-	-	-	-	-	-	-	(1,511,732)	(1,511,732)
Round-up shares from the 1-for-30 reverse split effective February 23, 2024	-	-	-	-	-	-	-	-	65,960	66	(66)	-	-
Issuance of 15,000 shares of Series F Convertible Preferred Stock, net of discount and offering costs of \$14,087,111	15,000	912,889	-	-	-	-	-	-	-	-	-	-	-
Series F Convertible Preferred Stock Dividend	-	-	-	-	-	-	-	-	-	-	-	(158,333)	(158,333)
Stock Based Compensation - Stock Options	-	-	-	-	-	-	-	-	-	-	69,068	-	69,068
													-
<b>Balance at March 31, 2023</b>	15,000	\$912,889	-	\$ -	-	\$ -	72,992	\$144,524	1,381,634	\$ 1,382	\$108,377,122	\$ (95,428,969)	\$13,094,059
Net loss	-	-	-	-	-	-	-	-	-	\$ -	\$ -	(4,167,653)	(4,167,653)
Conversion of 1,250 shares of Series F Convertible Preferred Stock, July 1, 2023 installment of \$1,429,871 paid with common stock	(1,250)	(76,074)	-	-	-	-	-	-	39,587	40	255,905	-	255,945
Conversion of 1,250 shares of Series F Convertible Preferred Stock, August 1, 2023 installment of \$1,429,871 paid with common stock	(1,250)	(76,073)	-	-	-	-	-	-	38,688	39	255,905	-	255,944
Series F Convertible Preferred Stock Dividend	-	-	-	-	-	-	-	-	-	-	-	(373,796)	(373,796)
Issuance of common stock for vested restricted stock units	-	-	-	-	-	-	-	-	2,460	2	(2)	-	-
Exercise of prepaid equity forward contract	-	-	-	-	-	-	-	-	4,505	4	(4)	-	-
Stock based compensation - stock options	-	-	-	-	-	-	-	-	-	-	1,677,271	-	1,677,271
													-
<b>Balance at June 30, 2023</b>	12,500	\$760,742	-	\$ -	-	\$ -	72,992	\$144,524	1,466,874	\$ 1,467	\$110,566,197	\$ (99,970,418)	\$10,741,770

See accompanying notes to these unaudited condensed consolidated financial statements.

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

	<b>For the Six Months Ended</b>	
	<b>June 30,</b>	
	<b>2024</b>	<b>2023</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (19,365,689)	\$ (5,679,385)
Adjustments to reconcile net loss to net cash used in operating activities:		
(Gain)/Loss on sale of marketable securities	(100)	214
Change in fair value of marketable securities	975	2,695
Change in fair value of derivatives	11,000	315,200
Change in fair value of warrants	4,393,000	(2,810,000)
Loss on issuance of Series F-1 Convertible Preferred Stock	3,737,000	-
Loss on issuance of Series G Convertible Preferred Stock	5,109,000	-
Stock based compensation		
Options issued to directors	345,056	559,224
Options issued to key employees	558,355	1,044,550
Options issued to non-employees	53,581	142,565
Change in assets and liabilities		
Prepaid Expenses	(398,154)	(949,973)
Trade and Other Payables	900,295	(516,769)
Operating Leases	(1,481)	162
Deferred Compensation Payable	231,454	-
Dividends Payable	(154,843)	-
<b>Net cash used by operating activities</b>	<b>(4,580,551)</b>	<b>(7,891,517)</b>
<b>Cash flows from investing activities:</b>		
Purchases of marketable securities	(12,539,455)	(13,199,409)
Proceeds from sale of marketable securities	2,250,360	5,749,970
<b>Net cash consumed by investing activities</b>	<b>(10,289,095)</b>	<b>(7,449,439)</b>
<b>Cash flows from financing activities</b>		
Redemption of Series F Convertible Preferred Stock	(73,472)	-
Dividends on Series F Convertible Preferred Stock	(1,133,762)	-
Premium on Series F Convertible Preferred Stock	(68,104)	-
Proceeds from issuance of Series F Convertible Preferred Stock	-	14,685,689
Proceeds from issuance of Series F-1 Convertible Preferred Stock	5,050,000	-
Proceeds from the issuance of Series G Convertible Preferred Stock	8,950,000	-
<b>Net cash provided by financing activities</b>	<b>12,724,662</b>	<b>14,685,689</b>
Net decrease in cash	(2,144,984)	(655,267)
Cash at beginning of period	2,681,010	749,090
Cash at end of period	\$ 536,026	\$ 93,823
Supplemental cash flow information		
Cash paid for:	\$ -	\$ -
Interest	\$ -	\$ -
Income Taxes	\$ -	\$ -
Supplemental Schedule of Non-Cash Financing and Investing Activities		
Issuance of common stock for redemptions of Series F Convertible Preferred Stock	\$ 155,137	\$ 511,889
Accrual of Series F Convertible Preferred Stock Dividend	403,758	532,129
Accrual of Series F-1 Convertible Preferred Stock Dividend	54,813	-
Accrual of Series G Convertible Preferred Stock Dividend	97,145	-
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
Initial fair value of warrant liabilities pursuant to the issuance of Series F-1 Convertible Preferred Stock and Warrants	\$ 7,933,000	\$ -
Initial fair value of derivative liabilities pursuant to the issuance of Series F-1 Convertible Preferred Stock and Warrants	\$ 854,000	\$ -
Initial fair value of warrant liabilities pursuant to the issuance of Series G Convertible Preferred Stock and Warrants	\$ 14,059,000	\$ -
Reclass of warrant liability upon warrant modification for the Series F Warrants	\$ 7,961,000	\$ -

See accompanying notes to these unaudited condensed consolidated financial statements.



**TNF PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
Notes to Unaudited Condensed Consolidated Financial Statements

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

TNF Pharmaceuticals, Inc. is a Delaware corporation (“TNF” or the “Company”) that was incorporated in New Jersey prior to the Reincorporation (as defined below). On July 22, 2024, the Company changed its name from MyMD Pharmaceuticals, Inc. to TNF Pharmaceuticals, Inc. by filing a certificate of amendment to its certificate of incorporation with the Secretary of State of Delaware. In addition, effective before the open of market trading on July 24, 2024, the Company’s Common Stock ceased trading under the ticker symbol “MYMD” and began trading on the Nasdaq Stock Market under the ticker symbol “TNFA.”

These condensed consolidated financial statements include two wholly owned subsidiaries as of June 30, 2024, Akers Acquisition Sub, Inc. and Bout Time Marketing Corporation (together, the “Company”). All material intercompany transactions have been eliminated in consolidation.

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 rheumatoid arthritis 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.

At the Company’s annual meeting of stockholders held on July 31, 2023, the stockholders approved a plan to merge the Company with and into a newly formed wholly owned subsidiary, MyMD Pharmaceuticals, Inc., a Delaware corporation (“MyMD Delaware”), with MyMD Delaware being the surviving corporation, for the purpose of changing the Company’s state of incorporation from New Jersey to Delaware (the “Reincorporation”). The Reincorporation was effected as of March 4, 2024. In connection with the Reincorporation to Delaware, the par value of the common and preferred stock was changed to \$0.001 per share.

MyMD Delaware is deemed to be the successor issuer of MyMD New Jersey under Rule 12g-3 of the Securities Exchange Act of 1934, as amended.

The Reincorporation did not result in any change in the Company’s name, business, management, fiscal year, accounting, location of the principal executive offices, assets or liabilities. In addition, the Company’s common stock retained the same CUSIP number and continued to trade on the Nasdaq Capital Market under the symbol “MYMD.” Holders of shares of the Company’s common stock did not have to exchange their existing MyMD New Jersey stock certificates for MyMD Delaware stock certificates.

As of the Effective Date of the Reincorporation, the rights of the Company’s stockholders are governed by the Delaware General Corporation Law, the MyMD Delaware Certificate of Incorporation and the Bylaws of MyMD Delaware.

On February 14, 2024, the Company effected a 1-for-30 reverse stock split (the “Reverse Stock Split”). Simultaneously with the Reverse Stock Split, number of shares of the Company’s common stock authorized for issuance was reduced from 500,000,000 shares to 16,666,666 shares, and our authorized capital stock was reduced from 550,000,000 shares to 66,666,666 shares. The Reverse Stock Split reduced the total number of issued and outstanding shares of Common Stock, including shares held by the Company as treasury shares. All share amounts have been retroactively adjusted for the Reverse Stock Split.

On July 25, 2024, the Company increased the number of authorized shares of the Company’s Common Stock from 16,666,666 to 250,000,000 and made a corresponding change to the number of authorized shares of the Company’s capital stock by filing a Certificate of Amendment to its Certificate of Incorporation with the Secretary of State of the State of Delaware (the “Share Increase”). The Share Increase was approved by the Company’s stockholders at the Company’s special meeting of stockholders held on July 24, 2024.

**Recent Events**

*The February 2023 Offering*

On February 21, 2023, the Company entered into a Securities Purchase Agreement (the “Series F Purchase Agreement”) with certain accredited investors (the “Series F 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 (pre-split) of the Company’s common stock (the “Common Stock”) at an initial conversion price of \$2.255 per share (pre-split), subject to adjustment (the “Series F Preferred Shares”), and (ii) warrants to acquire up to an aggregate of 6,651,885 shares (pre-split) of Common Stock, subject to adjustment (the “Series F Warrants”) (collectively, the “February 2023 Offering”). Following the Reverse Stock Split, (i) the conversion price of the Series F Preferred Shares was adjusted to \$3.18 per share pursuant to the terms of the Series F Certificate of Designations (as defined below), and (ii) the exercise price of the Series F Warrants was adjusted to \$3.18 per share and the number of shares of Common Stock issuable upon exercise of the Series F Warrants was adjusted proportionately to 4,716,904 shares pursuant to the terms of the Series F Warrants.

In connection with the Private Placements (as defined herein), (i) the conversion price of the Series F Preferred Shares was adjusted to \$1.816 per share pursuant to the full ratchet anti-dilution provisions contained in the Series F Certificate of Designations and, (ii) the exercise price of the Series F Warrants was adjusted to \$1.816 per share and the number of shares of Common Stock issuable upon exercise of the Series F warrants was adjusted proportionally to 8,259,911 shares pursuant to the full ratchet anti-dilution provisions contained in the Series F Warrants.

### *Series F Convertible Preferred Stock*

The Series F Preferred Shares became convertible upon issuance into Common Stock (the “Series F Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$2.255 (pre-split) (as adjusted, the “Series F Conversion Price”). The Series F Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F Conversion Price (subject to certain exceptions). Following the Reverse Stock Split, the Series F Conversion Price was adjusted to \$3.18 per share pursuant to the terms of the Certificate of Designations of Series F Convertible Preferred Stock, which was subsequently amended and restated by the filing of the Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock, effective April 8, 2024 (as amended and restated, the “Series F Certificate of Designations”) with the Secretary of State of the State of Delaware. The Series F Conversion Price was further adjusted to \$1.816 per share pursuant to the full ratchet anti-dilutive provisions contained in the Series F Certificate of Designations in connection with the Private Placements (as defined herein).

Prior to the Series F Certificate of Amendment (as defined below), the Company was initially 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 Series F 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 Series F Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) a “Floor Price” of \$6.60 on a post-split basis (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.

On April 5, 2024, the Company entered into an Omnibus Waiver and Amendment (the “Omnibus Agreement”) with the Required Holders (as defined in the Series F Certificate of Designations). Pursuant to the Omnibus Agreement, the Required Holders agreed (i) to defer payment of the monthly installment amounts due on March 1, 2024, and April 1, 2024 (the “Installments”), under Section 9(a) of the Series F Certificate of Designations, until May 1, 2024, and (ii) to waive any breach or violation of the Series F Purchase Agreement, the Series F Certificate of Designations, or the Series F Warrants resulting from missing the Installments. The Company may require holders to convert their Series F Preferred Shares into shares of Common Stock if the closing price of the Common Stock exceeds \$6.765 per share (as adjusted for the Reverse Stock Split) (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 Series F Certificate of Designations are satisfied.

On May 20, 2024, the Company entered into an Omnibus Waiver, Consent, Notice and Amendment (the “Series F Agreement”) with the Required Holders (as defined in the Series F Certificate of Designations). Pursuant to the Series F Agreement, the Required Holders agreed to (i) amend the Series F Purchase Agreement to amend certain terms relating to purchase rights thereunder, (ii) waive certain rights under the Series F Purchase Agreement and Series F Certificate of Designations in respect of the issuance of the Company’s Series F-1 Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (“Series F-1 Preferred Stock”), the Company’s Series G Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (“Series G Preferred Stock”), and entrance by the Company into the Purchase Agreements (as defined herein), (iii) waive the requirement that the Company reserve for issuance a sufficient number of shares of Common Stock as required by the Series F Certificate of Designations, the Series F Purchase Agreement and Series F Warrants, until such time as the Company obtains the Stockholder Approval (as defined herein), and (iv) consent to the issuance of the Series F-1 Preferred Stock and Series G Preferred Stock as required pursuant to certain terms of the Series F Certificate of Designations, the Series F Purchase Agreement and the Series F Warrants, as applicable. The Company and the Required Holders further agreed pursuant to the Series F Agreement, to amend the Series F Certificate of Designations by filing a Certificate of Amendment to the Series F Certificate of Designations (the “Series F Certificate of Amendment”) with the Secretary of State of the State of Delaware. The Series F Certificate of Amendment amends the Series F Certificate of Designations to (i) extend the maturity date to December 31, 2024, (ii) permit and modify certain procedures related to the payment of installment amounts with respect to the Installment Dates (as defined in the Series F Certificate of Designations) falling between (and including) July 1, 2024, and (and including) August 1, 2024, thereunder, and (iii) modify the schedule of Installment Dates.

The holders of the Series F Preferred Shares are entitled to dividends of 10% per annum, compounded monthly, which is payable in cash or shares of Common Stock at the Company's option, in accordance with the terms of the Series F Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F Certificate of Designations), the Series F Preferred Shares accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series F Preferred Shares are also entitled to receive a dividend make-whole payment. Except as required by applicable law, the holders of the Series F Preferred Shares are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F Preferred Shares is entitled to be calculated assuming a conversion price of \$60.21 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series F Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F Certificate of Designations. The Series F Certificate of Designations further provides that the holders of record of the Series F Preferred Shares, exclusively and as a separate class, shall be entitled to elect one director of the Company one time on or before June 30, 2024. Effective as of April 8, 2024, the Company appointed Mitchell Glass to serve as a member of the Company's board of directors, with Mr. Glass having been elected to such position by the holders of the Series F Preferred Shares. During the three months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$625,382 and \$373,796, respectively, which are reported as Series F Preferred Stock Dividends on the Condensed Consolidated Statements of Comprehensive Loss. During the six months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$1,827,249 and \$532,129, respectively, which are reported as Preferred Stock Dividends on the Condensed Consolidated Statements 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 Series F Certificate of Designations. Further, the Series F 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 Series F Certificate of Designations or Series F Warrants.

The Series F Preferred Shares are classified in temporary equity as the holder of the Series F Preferred Stock has the right to require the Company to redeem for cash all or any portion of such holder's shares upon the suspension from trading or the failure of the Common Stock to be trading or listed (as applicable) on an eligible market for a period of five (5) consecutive trading days. The Series F Preferred Stock is not unconditionally redeemable and is only conditionally puttable at the holder's option upon this trading suspension or failure. This would not be considered to be within the Company's control.

The Series F 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 Series F Certificate of Designations), 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 Statements of Comprehensive Loss. The Company estimated at issuance the \$3,149,800 fair value of the bifurcated embedded derivative 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 Series F Preferred Shares. The Company recorded a total discount of \$14,087,111 upon issuance of the Series F 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 Series F Warrants of \$10,623,000.

During the three months ended June 30, 2024 and 2023, the Company recorded \$0 and a loss of \$194,500, respectively, related to the change in fair value of the derivative liabilities, which is recorded in other income (expense) on the Condensed Consolidated Statements of Comprehensive Loss. During the six months ended June 30, 2024 and 2023, the Company recorded \$0 and a loss of \$315,200, respectively, related to the change in fair value of the derivative liabilities, which is recorded in other income (expense) on the Condensed Consolidated Statements of Comprehensive Loss. The Company estimated the \$0 fair value of the bifurcated embedded derivative at June 30, 2024 using a Monte Carlo simulation model, with the following inputs; the fair value of the Company's Common Stock of \$2.39 on the valuation date, estimated equity volatility of 95.0%, estimated traded volume volatility of 175.0%, the time to maturity of 0.25 years, a discounted market interest rate of 6.2%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 1.5%.

#### *Series F Common Stock Warrants*

Pursuant to the February 2023 Offering, the Company issued to investors the Series F Warrants to purchase 4,716,904 shares of Common Stock, with an initial exercise price of \$3.18 per share (subject to adjustment), which was adjusted to \$1.816 per share and the number of shares of Common Stock issuable upon exercise of the Series F warrants was adjusted proportionally to 8,259,911 shares pursuant to the full ratchet anti-dilution provisions contained in the Series F Warrants in connection with the Private Placements (as defined herein)(the "Series F Exercise Price"), for a period of five years from the date of issuance. The Series F Exercise Price and the number of shares issuable upon exercise of the Series F Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Exercise Price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of shares issuable upon exercise of the Series F Warrants will be increased proportionately.

The Series F 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 Series F 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. The fair value of the Series F Warrants of \$10,623,000 was estimated at the date of issuance using the following weighted average assumptions: dividend yield 0%; 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 Series F Warrants of \$762,834 were immediately expensed in accordance with ASC 480.

During the three months ended June 30, 2024, the Company recorded \$0 due to the reclassification of Series F Warrant liabilities to equity on March 31, 2024 (see below). During the six months ended June 30, 2024, the Company recorded a loss of \$7,094,000 related to the change in fair value of the Series F Warrant liabilities through the March 31, 2024 reclassification of Series F Warrant liabilities to equity, which is recorded in other income (expense) on the Condensed Consolidated Statements of Comprehensive Loss. The fair value of the Series F Warrants of \$7,961,000 was estimated at March 31, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 3.90 years; equity volatility of 110.0%; and a risk-free interest rate of 4.31%.

During the three months ended June 30, 2023, the Company recorded a gain of \$1,635,000 related to the change in fair value of the Series F Warrant liabilities, which is recorded in other income (expense) on the Condensed Consolidated Statements of Comprehensive Loss. During the six months ended June 30, 2023, the Company recorded a gain of \$315,200 related to the change in fair value of the Series F Warrant liabilities, which is recorded in other income (expense) on the Condensed Consolidated Statements of Comprehensive Loss.

On May 14, 2024, the Company entered into an Amendment (the “Series F Warrant Amendment”) with the Series F Investors in the February 2023 Offering, effective as of March 31, 2024. The Series F Warrant Amendment modified certain terms of the Series F Warrants relating to the rights of the holders of the Series F Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series F Warrants) that is not within the Company’s control, including the Fundamental Transaction not being approved by the Company’s Board of Directors, the holder of the Series F Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of such Series F Warrant, that is being offered and paid to the holders of the Company’s common stock in connection with the Fundamental Transaction. The modification resulted in the reclassification of the Series F Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, the Company remeasured the Series F Warrant liabilities at \$7,961,000 fair value as of March 31, 2024, the effective date of the modification, and recognized the \$7,094,000 loss on the change in fair value and reclassified the \$7,961,000 fair value of the Series F Warrants to additional paid-in capital as of March 31, 2024.

#### *Series F-1 Private Placement*

On May 20, 2024, the Company entered into a Securities Purchase Agreement (the “Series F-1 Purchase Agreement”) with certain accredited investors (the “Series F-1 Investors”) pursuant to which it agreed to sell to the Series F-1 Investors (i) an aggregate of 5,050 shares of the Company’s newly-designated Series F-1 Preferred Stock, initially convertible into up to 2,780,839 shares of Common Stock at a conversion price of \$1.816 per share, (ii) short-term warrants to acquire up to an aggregate of 2,780,839 shares of Common Stock (the “Series F-1 Short-Term Warrants”) at an exercise price of \$1.816 per share, and (iii) long-term warrants to acquire up to an aggregate of 2,780,839 shares of Common Stock (the “Series F-1 Long-Term Warrants,” and collectively with the Series F-1 Short-Term Warrants, the “Series F-1 Warrants”) at an exercise price of \$1.816 per share (collectively, the “Series F-1 Private Placement”). The closing of the Series F-1 Private Placement occurred on May 23, 2024 (the “Series F-1 Closing Date”).

#### *Series F-1 Preferred Stock*

The Series F-1 Preferred Stock became convertible upon issuance into Common Stock (the “Series F-1 Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$1.816 (the “Series F-1 Conversion Price”). The Series F-1 Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F-1 Conversion Price (subject to certain exceptions).

The Company is required to redeem the Series F-1 Preferred Stock in seven (7) equal monthly installments, commencing on December 1, 2024. The amortization payments due upon such redemption are payable, at the Company’s election, in cash at 105% of the applicable Installment Redemption Amount (as defined in the Series F-1 Certificate of Designations), or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series F-1 Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company’s Common Stock during the thirty consecutive trading day period ending and including the trading day immediately prior to the date the amortization payment is due or (B) \$0.364, which is 20% of the “Minimum Price” (as defined in Nasdaq Stock Market Rule 5635) on the date in which the Series F-1 Stockholder Approval (as defined herein) was obtained or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Capital Market, and, in each case, subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events, which amortization amounts are subject to certain adjustments as set forth in the Series F-1 Certificate of Designations (the “Series F-1 Floor Price”).

The holders of the Series F-1 Preferred Stock are entitled to dividends of 10% per annum, compounded monthly, which are payable in arrears monthly in cash or shares of Common Stock at the Company's option, in accordance with the terms of the Series F-1 Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F-1 Certificate of Designations), the Series F-1 Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series F-1 Preferred Stock are also entitled to receive a dividend make-whole payment. The holders of the Series F-1 Preferred Stock are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F-1 Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series F-1 Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F-1 Certificate of Designations. During the three months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$54,813 and \$0, respectively, which are reported as Series F Preferred Stock Dividends on the Condensed Consolidated Statements of Comprehensive Loss. During the six months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$54,813 and \$0, respectively, which are reported as Series F Preferred Stock Dividends on the Condensed Consolidated Statements 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 Series F-1 Certificate of Designations. Further, the Series F-1 Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment or dividend make-whole payment under, the Series F-1 Certificate of Designations or Series F-1 Warrants.

The Series F-1 Preferred Shares are classified as temporary equity as the holder of the Series F-1 Preferred Stock has the right to require the Company to redeem for cash all or any portion of such Holder's shares upon the suspension from trading or the failure of the Common Stock to be trading or listed (as applicable) on an eligible market for a period of five (5) consecutive Trading Days. The Series F-1 Preferred Stock is not unconditionally redeemable and is only conditionally puttable at the Holder's option upon this trading suspension or failure. This would not be considered to be within the Company's control.

The estimated fair value of the Series F-1 Preferred Stock on the issuance date of approximately \$9.3 million, was determined utilizing Monte Carlo simulations. The estimated aggregate fair value of the Warrants of approximately \$7.9 million was determined utilizing the Black Scholes Model. The aggregate fair value of the Warrants exceeds the aggregate gross proceeds from the transaction as the Warrants were issued in the money. Further, the fair value of the derivative liability related to the Series F-1 Preferred Stock was determined to be approximately \$0.9 million.

The approximately \$5.1 million stock discount (contra-Preferred Stock) resulting from (i) approximately \$4.2 million related to the difference between the gross proceeds and the allocated residual fair value of the Series F-1 Preferred Stock (i.e., \$0), and (ii) approximately \$0.9 million related to the stock derivative at issuance, is accounted for as a reduction to the carrying value of the Series F Preferred Stock and will be accreted from the issuance date to maturity in accordance with ASC 480-10-S99-3A as redemption is deemed probable pursuant to the Installment Redemption terms of the Series F-1 Certificate of Designations.

#### *Series F-1 Warrants*

The Series F-1 Warrants were accounted for as liabilities based on the following analysis. The Series F-1 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 Series F Certificate of Designations), 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 Statements of Comprehensive Loss. The Company estimated at issuance the \$3,149,800 fair value of the bifurcated embedded derivative 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.

Pursuant to the Series F-1 Private Placement, the Company issued to investors (i) the Series F-1 Long-Term Warrants to purchase 2,780,839 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of five years from the date of issuance and (ii) the Series F-1 Short-Term Warrants to purchase 2,780,839 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of eighteen months from the date of issuance.

The exercise price of the Series F-1 Warrants and the number of shares issuable upon exercise of the Series F-1 Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a “full ratchet” basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of shares issuable upon exercise of the Series F-1 Warrants will be increased proportionately.

On August 16, 2024, the Company entered into (i) an Amendment (the “Series F-1 Long Term Warrant Amendment”) with the Series F-1 Investors, effective as of June 30, 2024 relating to the Series F-1 Long Term Warrants, and (ii) an Amendment (the “Series F-1 Short Term Warrant Amendment”) and, together with the Series F-1 Long Term Warrant Amendment, the “Series F-1 Warrant Amendments”) with the Series F-1 Investors, effective as of June 30, 2024 relating to the Series F-1 Short Term Warrants. The Series F-1 Warrant Amendments modified certain terms of the Series F-1 Warrants relating to the rights of the holders of the Series F-1 Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series F-1 Warrants) that is not within the Company’s control, including the Fundamental Transaction not being approved by the Company’s Board of Directors, the holder of the Series F-1 Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of such Series F-1 Warrant, that is being offered and paid to the holders of the Company’s Common Stock in connection with the Fundamental Transaction. Additionally, the Series F-1 Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 30 day volatility, obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder’s request. The modification resulted in the reclassification of the Series F-1 Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, the Company remeasured the Series F-1 Warrants at fair value as of July 25, 2024 (\$6,965,000), and recognized the \$16,000 change in fair value as a non-cash loss and reclassified the Series F-1 Warrants to additional paid-in capital as of July 25, 2024.

#### *Series G Private Placement*

On May 20, 2024, the Company entered into a Securities Purchase Agreement (the “Series G Purchase Agreement” and collectively with the Series F-1 Purchase Agreement, each a “Purchase Agreement” and collectively, the “Purchase Agreements”) with certain accredited investors (the “Series G Investors” and collectively with the Series F-1 Investors, the “Investors”), with certain accredited investors (the “Series G Investors”), pursuant to which it agreed to sell to the Series G Investors (i) an aggregate of 8,950 shares of the Company’s newly-designated Series G Preferred Stock, initially convertible into up to 4,928,416 shares of the Company’s Common Stock, at a conversion price of \$1.816 per share (ii) short-term warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the “Series G Short-Term Warrants”) at an exercise price of \$1.816 per share, and (iii) long-term warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the “Series G Long-Term Warrants,” and collectively with the Series G Short-Term Warrants, the “Series G Warrants”) at an exercise price of \$1.816 per share (collectively, the “Series G Private Placement” and collectively with the Series F-1 Private Placement, each a “Private Placement” and collectively, the “Private Placements”). The closing of the Series G Private Placement occurred on May 23, 2024 (the “Series G Closing Date” and collectively with the Series F-1 Closing Date, the “Closing Date”).

#### *Series G Preferred Stock*

The Series G Preferred Shares became convertible upon issuance into Common Stock (the “Series G Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$1.816 (the “Series G Conversion Price”). The Series G Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series G Conversion Price (subject to certain exceptions). At any time after the issuance date of the Series G Preferred Shares, the Company has the option to redeem in cash all or any portion of the shares of Series G Preferred Shares then outstanding at a premium upon notice by the Company to all holders of the Series G Preferred Shares.

The holders of the Series G Preferred Shares will be entitled to dividends of 10% per annum, compounded monthly, which will be payable in arrears monthly, at the holder's options, (i) in cash, (ii) "in kind" in the form of additional shares of Series G Preferred Shares (the "PIK Shares"), or (iii) in a combination thereof, in each case, in accordance with the terms of the Certificate of Designations of the Series G Preferred Shares (the "Series G Certificate of Designations"). Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series G Certificate of Designations), the Series G Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series G Preferred Shares are also entitled to receive a dividend make-whole payment. The holders of the Series G Preferred Shares will be entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series G Preferred Share is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series G Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series G Certificate of Designations. During the three months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$97,145 and \$0, respectively, which are reported as Series F Preferred Stock Dividends on the Condensed Consolidated Statements of Comprehensive Loss. During the six months ended June 30, 2024 and 2023, the Company recorded dividends totaling \$97,145 and \$0, respectively, which are reported as Series F Preferred Stock Dividends on the Condensed Consolidated Statements of Comprehensive Loss.

Notwithstanding the foregoing, the Company's ability to settle conversions and make dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series G Certificate of Designations. Further, the Series G Certificate of Designations contains a certain beneficial ownership limitation, which applies to each Series G Investor other than PharmaCyte Biotech, Inc., after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series G Preferred Shares or as part of any dividend make-whole payment under the Series G Certificate of Designations.

On June 17, 2024, the Company entered into an Amendment Agreement (the "Series G Amendment") with the Required Holders (as defined in the Series G Certificate of Designations). Pursuant to the Series G Amendment, the Required Holders agreed to amend the Series G Certificate of Designations by filing a Certificate of Amendment ("Series G Certificate of Amendment") to the Series G Certificate of Designations with the Secretary of State of the State of Delaware (the "Secretary of State") to increase the number of authorized shares of Series G Preferred Stock from 8,950 to 12,826,273, in order to authorize a sufficient number of shares of Series G Preferred Stock for the payment of PIK Shares. On June 17, 2024, the Company filed the Series G Certificate of Amendment with the Secretary of State, thereby amending the Series G Certificate of Designations. The Series G Certificate of Amendment became effective with the Secretary of State upon filing.

The Series G Preferred Shares are classified as temporary equity as the holder of the Series G Preferred Stock has the right to require the Company to redeem for cash all or any portion of such Holder's shares upon the suspension from trading or the failure of the Common Stock to be trading or listed (as applicable) on an eligible market for a period of five (5) consecutive Trading Days. The Series G Preferred Stock is not unconditionally redeemable and is only conditionally puttable at the Holder's option upon this trading suspension or failure. This would not be considered to be within the Company's control.

The estimated fair value of the Series G Preferred Stock on the issuance date of approximately \$22.3 million, was determined utilizing Monte Carlo simulations. The estimated aggregate fair value of the Warrants of approximately \$14.1 million was determined utilizing the Black Scholes Model. The aggregate fair value of the Warrants exceeds the aggregate gross proceeds from the transaction as the Warrants were issued in the money.

The approximately \$9.0 million stock discount (contra-Preferred Stock) resulting from the difference between the gross proceeds and the allocated residual fair value of the Series G Preferred Stock (i.e. \$0) is accounted for as a reduction to the carrying value of the Preferred Stock and is not accreted until redemption becomes probable in accordance with ASC 480-10-S99-3A.

Since the fair value of the liabilities required to be subsequently measured at fair value exceeds the net proceeds received, the excess of the fair value over the net proceeds received is recognized as a loss in earnings. As such, the Company recognized a loss on the issuance of preferred stock of approximately \$5.1 million.

On August 8, 2024, the Company entered into an Amendment Agreement (the "August Series G Amendment") with the Required Holders (as defined in the Series G Certificate of Designations). Pursuant to the August Series G Amendment, the Required Holders agreed to amend the Series G Certificate of Designations by filing a Certificate of Amendment ("August Series G Certificate of Amendment") to the Series G Certificate of Designations with the Secretary of State to adjust the calculation of the PIK Shares. On August 8, 2024, the Company filed the August Series G Certificate of Amendment with the Secretary of State, thereby amending the Series G Certificate of Designations. The August Series G Certificate of Amendment became effective with the Secretary of State upon filing.

#### *Series G Warrants*

The Series G 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 Series F Certificate of Designations), 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 Statements of Comprehensive Loss. The Company estimated at issuance the \$3,149,800 fair value of the bifurcated embedded derivative 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.

Pursuant to the Series G Private Placement, the Company issued to investors (i) the Series G Long-Term Warrants to purchase 4,928,416 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of five years from the date of issuance and (ii) the Series G Short-Term Warrants to purchase 4,928,416 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of eighteen months from the date of issuance.

The exercise price of the Series G Warrants and the number of shares issuable upon exercise of the Series G Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of shares issuable upon exercise of the Series G Warrants will be increased proportionately.

On August 16, 2024, the Company entered into (i) an Amendment (the "Series G Long Term Warrant Amendment") with the Series G Investors, effective as of June 30, 2024 relating to the Series G Long Term Warrants, and (ii) an Amendment (the "Series G Short Term Warrant Amendment" and, together with the Series G Long Term Warrant Amendment, the "Series G Warrant Amendments") with the Series G Investors, effective as of June 30, 2024 relating to the Series G Short Term Warrants. The Series G Warrant Amendments modified certain terms of the Series G Warrants relating to the rights of the holders of the Series G Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series G Warrants) that is not within the Company's control, including the Fundamental Transaction not being approved by the Company's Board of Directors, the holder of the Series G Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined in the Series G Warrants) of the unexercised portion of such Series G Warrant, that is being offered and paid to the holders of the Company's Common Stock in connection with the Fundamental Transaction. Additionally, the Series G Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 60 day volatility, obtained from the "HVT" function on



Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder's request. The modification resulted in the reclassification of the Series G Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, the Company remeasured the Series G Warrants at fair value as of July 25, 2024 (\$12,343,000), and recognized the \$11,000 change in fair value as a non-cash loss and reclassified the Series G Warrants to additional paid-in capital as of July 25, 2024.

#### *Registration Rights Agreements*

In connection with the Series F-1 Private Placement, the Company entered into a Registration Rights Agreement with the Series F-1 Investors (the "Series F-1 Registration Rights Agreement,"), pursuant to which the Company agreed to file a resale registration statement (the "Series F-1 Registration Statement") with the SEC to register for resale 200% of the Series F-1 Conversion Shares and (B) 200% of the Series F-1 Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series F-1 Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series F-1 Registration Rights Agreement).

In connection with the Series G Private Placement, the Company entered into a Registration Rights Agreement with the Series G Investors (the "Series G Registration Rights Agreement" and, together with the Series F-1 Registration Rights Agreement, the "Registration Rights Agreements") pursuant to which the Company agreed to file a resale registration statement (the "Series G Registration Statement") with the SEC to register for resale 200% of the Series G Conversion Shares, (B) 200% of the shares of Common Stock issuable upon conversion of the PIK Shares, and (C) 200% of the Series G Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series G Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series G Registration Rights Agreement).

In connection with the Registration Rights Agreements, the Company filed a registration statement on Form S-3 covering such securities, which registration statement was filed on June 21, 2024, amended on August 8, 2024 and declared effective by the SEC on August 12, 2024. Under the Series F-1 Registration Rights Agreement, the Company is obligated to pay certain liquidated damages to the Series F-1 Investors if the Company failed to file the Series F-1 Registration Statement when required, failed to file or cause the Series F-1 Registration Statement to be declared effective by the SEC when required, or fails to maintain the effectiveness of the Series F-1 Registration Statement.

### *Private Placement Warrants*

In connection with the Private Placements, pursuant to (A) an engagement letter (the “GPN Agreement”) with GP Nurmenkari Inc. (“GPN”) and (B) an engagement letter (the “Palladium Agreement,” and collectively with the GPN Agreement, the “Engagement Letters”) with Palladium Capital Group, LLC (“Palladium,” and collectively with GPN, the “Placement Agents”), the Company engaged the Placement Agents to act as non-exclusive placement agents in connection with each Private Placement, pursuant to which, the Company agreed to (i) pay the Placement Agents a cash fee equal to 3% of the gross proceeds of each Private Placement (including any cash proceeds realized by the Company from the exercise of the Series F Warrants), (ii) reimbursement and payment of certain expenses, and (iii) issue to the Placement Agents on the Closing Date, warrants to purchase up to an aggregate of 693,833 of shares of Common Stock to each Placement Agent, which is equal to 3% of the aggregate number of shares of Common Stock underlying the securities issued in each Private Placement, including upon exercise of any Series F Warrants, with terms identical to the Series G Long-Term Warrants and Series F-1 Long-Term Warrants.

### *Nasdaq Stockholder Approval*

The Company’s ability to issue Series F-1 Conversion Shares and Series G Conversion Shares and Series F-1 Warrant Shares and Series G Warrant Shares using shares of Common Stock is subject to certain limitations set forth in the Series F-1 Certificate of Designations and Series G Certificate of Designations, as applicable. Prior to the Nasdaq Stockholder Approval (as defined below), such limitations included a limit on the number of shares that could be issued until the time that the Company’s stockholders have approved the issuance of more than 19.99% of the Company’s outstanding shares of Common Stock in accordance with the rules of the Nasdaq Stock Market. Each Purchase Agreement requires the Company to hold a meeting of its stockholders no later than August 1, 2024, to seek approval (the “Stockholder Approval”) (i) under Nasdaq Stock Market Rule 5635(d) for the issuance of shares of Common Stock in excess of 19.99% of the Company’s issued and outstanding shares of Common Stock at prices below the “Minimum Price” (as defined in Rule 5635 of the Rules of the Nasdaq Stock Market) on the date of the applicable Purchase Agreement pursuant to the terms of the Series F-1 Preferred Shares and Series G Preferred Shares, as applicable, and the Series G Warrants and Series F-1 Warrants, as applicable, and (ii) to increase the number of authorized shares of the Company to ensure that the number of authorized shares of Common Stock is sufficient to meet the Required Reserve Amount (as defined in the Purchase Agreements) pursuant to the terms of each Purchase Agreement. The Company received the Nasdaq Stockholder Approval at a special meeting of stockholders held on July 24, 2024.

### *Executive Officer Contract Amendments and Separations*

Effective November 13, 2023, the Company entered into an amendment to the employment agreement of Dr. Chris Chapman, its President and Chief Medical Officer, providing for Dr. Chapman’s annual base salary to be adjusted from five hundred thousand dollars (\$500,000) (the “Full Base Salary”) to two hundred fifty thousand dollars (\$250,000) in cash per annum, until payment of his Full Base Salary would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion. The amendment further provides that the remaining \$250,000 of base salary per annum (the “Deferral Amount”) shall be deferred until payment of the Deferral Amount would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion, at which time the Deferral Amount may be paid, at Dr. Chapman’s election, in shares of Common Stock or in cash. As of June 30, 2024 and December 31, 2023, the Company had recognized a salary deferral of \$120,192 and \$28,846, respectively, which was paid to Dr. Chapman upon his separation from the Company.

Dr. Chapman’s employment agreement terminated on June 14, 2024. Pursuant to a General Release and Severance Agreement (the “Separation Agreement”), dated as of June 14, 2024, Dr. Chapman is entitled to (i) payment in the amount of \$125,000, less all lawful and authorized withholdings and deductions, to be paid in three (3) equal monthly installments, (ii) a one-time payment equal to \$25,000, less all lawful and authorized withholdings and deductions, (ii) reimbursement for continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“COBRA”) for a period of up to three (3) months, and (iv) acceleration of certain unvested options granted to Dr. Chapman pursuant to those certain Nonqualified Stock Option Agreements, dated April 4, 2023 and June 7, 2023. The Company recognized \$150,000 of salary expense and \$197,427 of stock-based compensation during the three and six months ended June 30, 2024 which is included in the Condensed Consolidated Statement of Comprehensive Loss.

In connection with an overall reduction in compensation paid to the Company’s directors implemented in November 2023, effective November 13, 2023, the Company entered into an amendment to the employment agreement of Christopher C. Schreiber, a Director and the Company’s former Executive Chairman, providing for Mr. Schreiber’s annual fee to be adjusted from three hundred thousand dollars (\$300,000) (the “Full Fee”) to sixty thousand dollars (\$60,000) in cash per annum, until payment of his Full Fee would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion. The amendment further provides that the remaining \$240,000 of the fees per annum (the “Fee Deferral Amount”) shall be deferred until payment of the Fee Deferral Amount would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion, at which time the Fee Deferral Amount may be paid, at Mr. Schreiber’s election, in shares of Common Stock or in cash. The amendment also clarified that Mr. Schreiber’s title is “Director.” As of June 30, 2024 and December 31, 2023, the Company had recognized a salary deferral of \$120,000 and \$27,692, respectively, which is included in Deferred Compensation Payable on the Condensed Consolidated Balance Sheets.

Effective November 13, 2023, the Company entered into an amendment to the employment agreement of Dr. Adam Kaplin, its Chief Scientific Officer, providing that Dr. Kaplin’s employment had an initial term of four months, which the parties had the option to mutually agree to extend for additional consecutive terms of one month each. The amendment further provided that, in the event of termination without cause by the Company prior to the end of the initial term, Dr. Kaplin shall receive his monthly base salary through the end of the initial term. The amendment further provided that all outstanding and unvested shares granted pursuant to the Nonqualified Stock Option Agreement, dated June 7, 2023, between the Company and Dr. Kaplin shall accelerate upon the termination of Dr. Kaplin’s employment. Dr. Kaplin’s amendment further provided that, in the event of a termination for any reason prior to the end of the first renewal term following the end of the initial term, the Company will continue to cover the costs of Dr. Kaplin’s health insurance coverage through the end of the first renewal term, subject to the execution and timely return of a release. Dr. Kaplin’s employment was terminated effective April 15, 2024.

Effective November 13, 2023, the Company entered into a mutual employment separation agreement with Paul M. Rivard, its Chief Legal Officer. The separation agreement provides for a lump-sum severance payment equal to three months of his normal base salary in exchange for a waiver and release. The separation agreement further provides that Mr. Rivard will be deemed a contractor providing services to the Company for purposes of any awards previously granted to him under the 2021 Plan if at the relevant time(s) he is providing services to the Company while under the employ of a law firm representing the Company.

### *Director’s Deferral of Board Service Fees*

On November 13, 2023, the Board approved certain adjustments to the director fees. Mr. Silverman’s fees were decreased from \$216,000 to \$60,000 annually, with payment of the excess amount of \$156,000 deferred until the date that payment of such amount would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion, at which time such amount may be paid, at Mr. Silverman’s election, in shares of Common Stock or in cash. Messrs. Eagle’s, Uzonwanne’s and White’s fees were decreased from \$96,000 to \$60,000 annually, with payment of the excess amounts of \$36,000 per director deferred until the date that payment of such amounts would no longer jeopardize the Company’s ability to continue as a going concern, as determined by the Company in its sole discretion, at which time such amounts may be paid, at each director’s election, in shares of Common Stock or in cash. Upon their appointment to the Board, Messrs. Friscia and Glass were also subject to this deferral. As of June 30, 2024 and December 31, 2023, the Company had recognized a board fee deferral of \$140,800 and \$44,000, respectively, which is included in Deferred Compensation Payable on the Condensed Consolidated Balance Sheets.



## **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, 2023, as filed with the Securities and Exchange Commission on April 1, 2024 (the "2023 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 2023 Annual Report should be read in conjunction with the accompanying interim financial statements. The interim operating results for the three and six months ended June 30, 2024 may not be necessarily indicative of the operating results expected for the full year or any future period.

### **(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 the fair value of financial instruments, derivative financial instruments valuations, 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 Income (Loss)**

The Company follows Financial Accounting Standards Board Accounting Standards Codification (“FASB ASC”) 220 in reporting comprehensive income. Comprehensive income (loss) 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 (loss). 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, 2024. 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, 2024 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, 2024 and December 31, 2023.

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

	<b>Quoted Prices in Active Markets for Identical Assets or Liabilities (Level 1)</b>	<b>Quoted Prices for Similar Assets or Liabilities in Active Markets (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Marketable securities at June 30, 2024	<u>\$ 12,530,326</u>	<u>\$ -</u>	<u>\$ -</u>
Marketable securities at December 31, 2023	<u>\$ 2,242,106</u>	<u>\$ -</u>	<u>\$ -</u>

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, 2024 and December 31, 2023, 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, 2024 and 2023 was a loss of \$76 and a loss of \$983, respectively. The change in fair value in the six months ended June 30, 2024 and 2023 was a loss of \$975 and \$2,695, respectively.

Gains and losses resulting from the sales of marketable securities were losses of \$75 and \$389 for the three months ended June 30, 2024 and 2023, respectively.

Gains and losses resulting from the sales of marketable securities were gains of \$100 and losses of \$214 for the six months ended June 30, 2024 and 2023, respectively.

Proceeds from the sales of marketable securities in the six months ended June 30, 2024 and 2023 were \$2,250,360 and \$5,749,970, 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 as of June 30, 2024 and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

<b>Description</b>	<b>Level</b>	<b>June 30, 2024</b>
<b>Liabilities:</b>		
Warrant liabilities (Note 1)	3	\$ 19,291,000
Derivative liabilities (Note 1)	3	\$ 926,000

<b>Description</b>	<b>Level</b>	<b>December 31, 2023</b>
<b>Liabilities:</b>		
Warrant liabilities (Note 3)	3	\$ 867,000
Derivative liabilities (Note 3)	3	\$ 61,000

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 for the six months ended June 30, 2024:

Balance on December 31, 2023	\$ 867,000
Issuance of warrants reported at fair value	21,992,000
Change in fair value of warrant liabilities	4,393,000
Reclassification of warrant liability to equity upon warrant modification	(7,961,000)
Balance on June 30, 2024	<u>\$ 19,291,000</u>

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 for the six months ended June 30, 2024:

Balance on December 31, 2023	\$ 61,000
Issuance of convertible preferred stock with derivative liabilities	854,000
Change in fair value of derivative liabilities	11,000
Balance on June 30, 2024	<u>\$ 926,000</u>

### **(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.

#### *Warrants*

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant’s specific terms and applicable authoritative guidance in ASC 480, *Distinguishing Liabilities from Equity* (“ASC 480”) and ASC 815. The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company’s own common stock and whether the warrant holders could potentially require “net cash settlement” in a circumstance outside of the Company’s control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be liability classified and recorded at their initial fair value on the date of issuance and remeasured at fair value and each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the Statements of Comprehensive Income (Loss).

#### Modification of warrants

The Company applies the guidance in ASC 815-40 to account for warrants that are liability classified that are subsequently modified resulting in a reclassification to equity. The warrants are remeasured at fair value on the modification date, the change in fair value is recognized as a non-cash gain or loss on the Statement of Comprehensive Income (Loss), and the warrants are reclassified to additional paid-in capital.

### **(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 exceeds the FDIC insurance limit. The Company has not experienced any loss because of these cash deposits. These cash balances are maintained with two banks as of June 30, 2024.

### **(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, 2024, 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, 2024.

#### **(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, 2024, the Company has 17 issued U.S. patents, 68 foreign patents, 2 pending U.S. patent applications and 7 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 remedies 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 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 expired 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 2021 Baltimore Lease was terminated by the lessor on April 30, 2024.

The Company leased 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 Platt Street Lease was cancelled without penalty effective October 31, 2023.

The Company leased a facility in Baltimore, Maryland (“2024 Wolfe St”) under an operating lease (“2024 Baltimore Lease”) with annual rentals of \$32,400 plus certain operating expenses. The 2024 Baltimore Lease took effect on May 1, 2024, for a term of 12 months with automatic renewals unless a sixty-day notice is provided.

In accordance with 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 guidance requires the recognition of the right-of-use (“ROU”) assets and related operating and finance lease liabilities on the balance sheet.

The Company utilizes 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 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 2024 Baltimore Lease, the 2021 Baltimore Lease and the Platt Street Lease on the Condensed Consolidated Balance Sheets. The information related to these leases are presented below:

Balance Sheet Location	As of June 30, 2024				As of December 31, 2023		
	Platt Street Lease	2021 Baltimore Lease	2024 Baltimore Lease	Total	Platt Street Lease	2021 Baltimore Lease	Total
Operating Lease							
Lease Right of Use	\$ -	\$ -	\$ 25,803	\$ 25,803	\$ -	\$ 47,389	\$ 47,389
Lease Payable, current	-	-	25,803	25,803	-	48,870	48,870
Lease Payable - net of current	-	-	-	-	-	-	-

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

Lease Expenses	For the Three Months Ended June 30, 2024				For the Three Months Ended June 30, 2023		
	Platt Street Lease	2021 Baltimore Lease	2024 Baltimore Lease	Total	Platt Street Lease	2021 Baltimore Lease	Total
Operating Leases							
Lease Costs	\$ -	\$ 4,668	\$ 5,400	\$ 10,068	\$ 5,659	\$ 13,600	\$ 19,259

  

Lease Expenses	For the Six Months Ended June 30, 2024				For the Six Months Ended June 30, 2023		
	Platt Street Lease	2021 Baltimore Lease	2024 Baltimore Lease	Total	Platt Street Lease	2021 Baltimore Lease	Total
Operating Leases							
Lease Costs	\$ -	\$ 18,672	\$ 5,400	\$ 24,072	\$ 11,321	\$ 27,200	\$ 38,521

Other information as of June 30, 2024 related to leases is presented below:

Other Information	Platt Street Lease	2021 Baltimore Lease	2024 Baltimore Lease	Total
Operating Leases				
Operating cash used	\$ -	\$ 18,672	\$ -	\$ 18,672
Average remaining lease term	-	-	10	10
Average discount rate	10.0%	10.0%	10.0%	10.0%

As of June 30, 2024, the annual minimum lease payments of the Company's operating lease liabilities were as follows:

	Platt Street Lease	2021 Baltimore Lease	2024 Baltimore Lease	Total
For Years Ending December 31,				
2024	-	-	16,200	\$ 16,200
2025	-	-	10,800	10,800
Total future minimum lease payments, undiscounted	\$ -	\$ -	\$ 27,000	\$ 27,000
Less: Imputed interest	-	-	1,197	1,197
Present value of future minimum lease payments	\$ -	\$ -	\$ 25,803	\$ 25,803

#### (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, 2024 and December 31, 2023, 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, 2024 and 2023 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, 2024 and 2023. 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 2020 through 2023 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 stock plus dilutive common share equivalents outstanding during the period. Potential common stock 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, 2024 and 2023, Common Stock equivalents were anti-dilutive.

As of June 30, 2024 and 2023, the following securities are excluded from the calculation of weighted average dilutive common stock because their inclusion would have been anti-dilutive:

	As of June 30,	
	2024	2023
Stock Options	85,226	37,167
Unvested Restricted Stock Units	46,668	93,169
Warrants to purchase Common Stock	23,895,139	4,934,065
Series C Convertible Preferred Warrants	918	918
Series D Convertible Preferred Stock	1,217	1,217
Series F Convertible Preferred Stock	2,574,339	3,930,818
Series F-1 Convertible Preferred Stock	2,780,837	-
Series G Convertible Preferred Stock	4,928,414	-
Total potentially dilutive shares	<u>34,314,758</u>	<u>8,997,354</u>

#### (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**

As of June 30, 2024 and for the three and six months then ended, there were no recently issued accounting pronouncements that had a material effect on the Company's consolidated financial statements.

**Note 3 –Liquidity and Management's Plans**

As of June 30, 2024, the Company's cash on hand was \$536,026 and marketable securities were \$12,530,326. The Company has incurred a total net loss attributable to stockholders of \$21,344,896 for the six months ended June 30, 2024. As of June 30, 2024, the Company had working capital of \$8,574,951 and stockholders' equity of \$97,805, including an accumulated deficit of \$123,321,963. During the six months ended June 30, 2024, cash flows used in operating activities were \$4,580,551, consisting primarily of a net loss of \$19,365,689, an increase in prepaid expenses of \$398,154, a reduction in dividends payables of \$154,843, and a non-cash gain on the fair market value of derivatives offset by non-cash loss on the fair value of warrants of \$11,000, a non-cash loss on the issuance of preferred stock of \$8,846,000, non-cash stock-based compensation of \$956,992, an increase in trade and other payables of \$900,295, and an increase in deferred compensation of \$231,454. Since its inception, the Company has met its liquidity requirements principally through the sale of its Common Stock and Preferred 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, 2024 as they fall due within the next twelve-month period from the date of the issuance of these financial statements, 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, 2024</u>	<u>December 31, 2023</u>
Accounts Payable – Trade	\$ 4,092,152	\$ 3,079,080
Accrued Expenses	524,361	637,138
	<u>\$ 4,616,513</u>	<u>\$ 3,716,218</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 the Company’s stockholders on December 7, 2018. The 2013 Plan provides for the issuance of up to 73 shares of the Company’s Common Stock. As of June 30, 2024, grants of restricted stock and options to purchase 54 shares of Common Stock have been issued pursuant to the 2013 Plan, and 19 shares of Common Stock remain available for issuance.

##### 2016 Stock Incentive Plan

In 2016, pre-Merger MyMD Florida adopted the MyMD Pharmaceuticals, Inc. Amended and Restated 2016 Equity Incentive Plan (the “2016 Plan”). The 2016 Plan provided for the issuance of up to 50,000,000 shares of the Company’s Common Stock. As of June 30, 2024, no options were outstanding and no shares of Common Stock remain available for issuance under the 2016 Plan. Pursuant to the Merger Agreement, effective as of the effective time of the Merger, the Company assumed pre-Merger MyMD Florida’s Second Amendment to Amended and Restated 2016 Stock Incentive Plan (the pre-Merger MyMD Florida’s Second Amendment to Amended and Restated 2016 Incentive Plan together with the 2016 Plan, the “MyMD Florida Incentive Plan”), assuming all of pre-Merger MyMD Florida’s rights and obligations with respect to the options issued thereunder (except that the term of each options was amended to expire on the second-year anniversary of the effective time of closing). All such options expired on April 16, 2023.

##### 2017 Stock Incentive Plan

On August 7, 2017, the Company’s stockholders approved, and the Company adopted the 2017 Stock Incentive Plan (“2017 Plan”). The 2017 Plan provides for the issuance of up to 118 shares of the Company’s Common Stock. As of June 30, 2024, grants of restricted stock and options to purchase 93 shares of Common Stock have been issued pursuant to the 2017 Plan, and 25 shares of Common Stock remain available for issuance.

##### 2018 Stock Incentive Plan

On December 7, 2018, the Company’s stockholders approved, and the Company adopted the 2018 Stock Incentive Plan (“2018 Plan”). On August 27, 2020, the 2018 Plan was modified to increase the total authorized shares. The 2018 Plan, as amended, provides for the issuance of up to 18,670 shares of the Company’s Common Stock. As of June 30, 2024, grants of RSUs and restricted stock to purchase 8,769 shares of Common Stock have been issued pursuant to the 2018 Plan, and 9,901 shares of Common Stock remain available for issuance.



## 2021 Stock Incentive Plan

On April 15, 2021, the Company's stockholders approved, and the Company adopted the 2021 Stock Incentive Plan ("2021 Plan"). The 2021 Plan provides for the issuance of up to 240,940 shares of the Company's Common Stock. As of June 30, 2024, grants of RSUs and stock options to purchase 153,650 shares of Common Stock have been issued pursuant to the 2021 Plan, and 87,290 shares of Common Stock remain available for issuance.

### Stock Options

The following table summarizes the activities for the Company's stock options for the six months ended June 30, 2024:

	<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, 2023</i></b>	139,840	\$ 46.09	\$ 42.34	8.17	\$ -
Granted	-	-	-	-	-
Exercised	-	-	-	-	-
Forfeited	(36,668)	26.62	26.28	9.17	-
Canceled/Expired	-	-	-	-	-
<b><i>Balance at June 30, 2024</i></b>	<u>103,172</u>	<u>\$ 53.01</u>	<u>\$ 48.40</u>	<u>7.14</u>	<u>\$ -</u>
<b><i>Exercisable as of June 30, 2024</i></b>	<u>85,226</u>	<u>\$ 52.84</u>	<u>\$ 47.95</u>	<u>6.84</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 \$1.84 for the Company's Common Stock on June 30, 2024 and the closing stock price of \$7.77 for the Company's Common Stock on December 31, 2023.

During the three months ended June 30, 2024 and 2023, the Company recognized stock option expenses totaling \$439,627 and \$1,677,271, respectively. During the six months ended June 30, 2024 and 2023, the Company recognized stock option expenses totaling \$956,992 and \$1,746,339, respectively.

The unamortized stock option expenses as of June 30, 2024 totaled \$517,891.

#### Restricted Stock Units

On October 14, 2021, the Compensation Committee of the Board of Directors approved grants totaling 93,169 Restricted Stock Units to the Company's six directors and seven key employees. Each RSU had a grant date fair value of \$242.70 which will be amortized upon vesting into administrative expenses within the 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 \$150.00 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 \$150.00 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 \$150.00 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, 2024, none of the vesting milestones have not been met.

As of the three and six months ended June 30, 2024, respectively, the Company converted 908 vested RSUs issued in September 2020 to a member of the Board of Directors, convertible into 908 shares of Common Stock of the Company. Expenses related to these RSUs had been recognized by pre-merger Akers Biosciences, Inc. in 2021 and prior years.

The following is the status of outstanding unvested restricted stock units outstanding as of June 30, 2024 and the changes for the six months ended June 30, 2024:

	Number of RSUs	Weighted Average Grant Date Fair Value
<b><i>Balance at December 31, 2023</i></b>	88,668	\$ 242.70
Granted	-	-
Vested	-	-
Forfeited	(40,000)	242.70
Canceled/Expired		
<b><i>Balance at June 30, 2024</i></b>	<u>48,668</u>	<u>\$ 242.70</u>

As of June 30, 2024, the unamortized value of the RSUs was \$11,811,721.

## Note 6 – Equity

### Authorized Capital Stock

On July 24, 2024, the Company’s stockholders approved the adoption of the Certificate of Amendment to the Company’s Certificate of Incorporation to increase the number of authorized shares of the Company’s Common Stock from 16,666,666 to 250,000,000 (“Authorized Share Increase Amendment”) and to make a corresponding change to the number of authorized shares of capital stock. On July 25, 2024, the Company filed the Authorized Share Increase Amendment with the Secretary of State of Delaware (the “Secretary of State”). On June 17, 2024, the Company filed a Certificate of Amendment to the Series G Certificate of Designations with the Secretary of State to increase the number of authorized shares of Series G Preferred Stock from 8,950 to 12,826,273.

As of June 30, 2024, the Company’s authorized capital stock consisted of 300,000,000 shares, of which 250,000,000 are shares of Common Stock, \$0.001 par value per share (the “Common Stock”), and 50,000,000 are shares of preferred stock, \$0.001 par value per share, 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, 15,000 of which have been designated as Series F Convertible Preferred Stock (the “Series F Preferred Stock”) 5,050 of which have been designated as Serie F- Preferred Stock and 12,826,273 of which have been designated as Series G Preferred Stock. As of June 30, 2024 and December 31, 2023, there were 2,370,423 and 2,018,857 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 918 shares of Common Stock issued and outstanding as of June 30, 2024 and December 31, 2023. There were 4,675 and 6,633 shares of Series F Preferred Stock issued and outstanding as of June 30, 2024 and December 31, 2023, respectively. There were 5,050 and 0 shares of Series F-1 Preferred Stock issued and outstanding as of June 30, 2024 and December 31, 2023, respectively. There were 8,950 and 0 shares of Series G Preferred Stock issued and outstanding as of June 30, 2024 and December 31, 2023, respectively. There were no shares of Series C Convertible Preferred Stock or Series E Junior Participating Preferred Stock issued and outstanding as of June 30, 2024 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 “TNFA”.

### *Failure to Deliver Conversion Shares*

If the Company fails 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 the Company is 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 the Company makes such liquidated damages payments, the Company is 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 the Company fails 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 the Company is 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 the Company had timely complied with its delivery requirements.

As of June 30, 2024, the Company had 72,992 shares of Series D Convertible Preferred Stock outstanding which represent 1,217 underlying shares of the Company’s Common Stock.

### *Series F Convertible Preferred Stock*

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

#### *Voting Rights*

Except as required by law (including without limitation, the Delaware General Corporation Law (the “DGCL”)), the holders of the Series F Preferred Stock are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F Preferred Stock is entitled to be calculated assuming a conversion price of \$60.21 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F Certificate of Designation. The Series F Certificate of Designation further provides that the holders of record of the Series F Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Company one time on or before June 30, 2024. To the extent that under the DGCL 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 DGCL, represented at a duly held meeting at which a quorum is present or by written consent of such majority (except as otherwise may be required under the DGCL) shall constitute the approval of such action by both the class or the series, as applicable.

#### *Liquidation*

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, each holder of 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.

### *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 “Series F 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 Series F 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 \$6.765 (as adjusted for the Reverse Stock Split) (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”), the Company 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, the Company 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.

### *Series F-1 Preferred Stock*

The following are the principal terms of the Series F-1 Preferred Stock:

#### *Dividends*

The holders of the Series F-1 Preferred Stock are entitled to dividends of 10% per annum, compounded monthly, which are payable in arrears monthly in cash or shares of Common Stock at our option, in accordance with the terms of the Series F-1 Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F-1 Certificate of Designations), the Series F-1 Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series F-1 Preferred Stock are also entitled to receive a dividend make-whole payment.

#### *Voting Rights*

Except as required by law (including without limitation, the Delaware General Corporation Law (the “DGCL”)), the holders of the Series F-1 Preferred Stock are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F-1 Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series F-1 Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series F-1 Certificate of Designations. To the extent that under the DGCL the vote of the holders of shares of Series F-1 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-1 Preferred Stock, voting together in the aggregate and not in separate series unless required under the DGCL, 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 DGCL) shall constitute the approval of such action by both the class or the series, as applicable.

#### *Liquidation*

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, each holder of shares of the Series F-1 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-1 Preferred Stock equal to the greater of (A) 125% of the stated value of such share of Series F-1 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-1 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-1 Preferred Stock with respect to the preferences as to payments upon the liquidation.

### *Exchange Cap*

The Company was initially restricted from issuing shares of Common Stock upon conversion of the Series F-1 Preferred Stock and Series G 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-1 Preferred Stock and Series G 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. The Company received the Stockholder Approval on July 24, 2024.

### *Optional Conversion*

The Series F-1 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-1 Preferred Stock to be converted, the number of shares of Series F-1 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-1 Preferred Stock the closing price of the Common Stock has exceeded \$5.448 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-1 Certificate of Designation are satisfied (the "Mandatory Conversion Date"), the Company 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, the Company shall convert all of each holder's shares of Series F-1 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-1 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.

### **Series G Preferred Stock**

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

#### *Voting Rights*

Except as required by law (including without limitation, the Delaware General Corporation Law (the “DGCL”)), the holders of the Series G Preferred Stock are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series G Preferred Stock is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series G Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series G Certificate of Designations. To the extent that under the DGCL the vote of the holders of shares of Series G 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 G Preferred Stock, voting together in the aggregate and not in separate series unless required under the DGCL, 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 DGCL) shall constitute the approval of such action by both the class or the series, as applicable.

#### *Liquidation*

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, each holder of shares of the Series G Preferred Stock shall be entitled to receive out of the assets, whether capital or surplus, of the Company an amount per share of Series G Preferred Stock equal to the greater of (A) 125% of the stated value of such share of Series G 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 G 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 G Preferred Stock with respect to the preferences as to payments upon the liquidation.

#### *Exchange Cap*

The Company was initially restricted from issuing shares of Common Stock upon conversion of the Series F-1 Preferred Stock and Series G 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-1 Preferred Stock and Series G Preferred Stock and the associated warrants until the Company obtained stockholder approval for the issuance of shares of Common Stock in excess of the Issuable Maximum. The Company received the Stockholder Approval on July 24, 2024.

#### *Optional Conversion*

The Series G 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 G Preferred Stock to be converted, the number of shares of Series G 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.

### *Beneficial Ownership Limitation*

The Series G Preferred Stock cannot be converted to Common Stock if the holder, other than PharmaCyte Biotech, Inc., 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.

### **Common Stock**

The holders of Common Stock are entitled to one vote per share at meetings of the Company.

As of June 30, 2024, the Company had 2,370,423 shares of Common Stock issued and outstanding. During the six months ended June 30, 2024, the Company issued 350,658 shares of common stock in connection with amortization payments or make-whole payments for the Series F Preferred Stock.

## Common Stock Warrants

The table below summarizes the warrant activity for the six months ended June 30, 2024:

	Number of Warrants	Weighted Average Exercise Price	Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
<b>Balance at December 31, 2023</b>	4,933,622	\$ 147.86	4.08	\$ 21,650,589
Issued	15,418,510	1,816	3.15	370,044
Series F Modification				
Removed	(4,716,904)	3.18	3.65	-
Re-issued	8,259,911	1,816	3.65	198,238
Exercised	-	-	-	-
Forfeited	-	-	-	-
Canceled/Expired	-	-	-	-
<b>Balance at June 30, 2024</b>	<u>23,895,139</u>	<u>\$ 3.03</u>	<u>3.31</u>	<u>\$ 568,282</u>
<b>Exercisable as of June 30, 2024</b>	<u>23,895,139</u>	<u>\$ 3.03</u>	<u>3.31</u>	<u>\$ 568,282</u>

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing stock price of \$1.84 for the Company's Common Stock on June 30, 2024 and the closing stock price of \$7.77 for the Company's Common Stock on December 31, 2023.

The Series F Exercise Price and the number of shares issuable upon exercise of the Series F Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F Exercise Price (subject to certain exceptions). Upon any such price-based adjustment to the Series F Exercise Price, the number of shares issuable upon exercise of the Series F Warrants will be increased proportionately. Pursuant to the February 2023 Offering, the Company issued to investors the Series F Warrants to purchase 4,716,904 shares of Common Stock (as adjusted, and subject to further adjustment), with an initial exercise price of \$3.18 per share, which was adjusted to \$1.816 per share and the number of shares of Common Stock issuable upon exercise of the Series F warrants was adjusted proportionally to 8,259,911 shares pursuant to the full ratchet anti-dilution provisions contained in the Series F Warrants in connection with the Private Placement (as defined herein) (as adjusted, and subject to further adjustment), for a period of five years from the date of issuance.

## Series C Convertible Preferred Stock Warrants

The table below summarizes the warrant activity for the six months ended June 30, 2024:

	Number of Warrants	Weighted Average Exercise Price	Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
<b>Balance at December 31, 2023</b>	918	\$ 240.00	0.94	\$ -
Granted	-	-	-	-
Exercised	-	-	-	-
Forfeited	-	-	-	-
Cancelled/Expired	-	-	-	-
<b>Balance at June 30, 2024</b>	<u>918</u>	<u>\$ 240.00</u>	<u>0.44</u>	<u>\$ -</u>
<b>Exercisable as of June 30, 2024</b>	<u>918</u>	<u>\$ 240.00</u>	<u>0.44</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 \$1.84 for the Company's Common Stock on June 30, 2024 and the closing stock price of \$7.77 for the Company's Common Stock on December 31, 2023. All Series C Convertible Preferred Stock Warrants were vested on date of grant.

## **Note 7 – Commitments and Contingencies**

### **Litigation and Settlements**

#### *Raymond Akers Actions*

On April 14, 2021, Raymond F. Akers, Jr., Ph.D. filed a lawsuit against the Company (f/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 the Company’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 the Company 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 the Company’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, the Company filed its Answer, which included affirmative defenses. As of June 30, 2024, 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*

The Company 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 the Company (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 the Company. 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 for the three and six months ended June 30, 2024 and 2023.

#### *MIRA Pharmaceuticals Limited License Agreement*

The Company 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. The Company, 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™. The Company’s former President and Chief Medical Officer, Chris Chapman, M.D., is Executive Chairman of MIRA.

### *Series G Preferred Stock Issuance*

On May 20, 2024, the Company entered into the Series G Purchase Agreement with the Series G Investors, including PharmaCyte Biotech, Inc. (“PharmacYTE”), pursuant to which it agreed to sell to the Series G Investors (i) an aggregate of 8,950 Series G Preferred Stock, initially convertible into up to 4,928,416 shares of the Company’s Common Stock, at a conversion price of \$1.816 per share (ii) Series G Short-Term Warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock at an exercise price of \$1.816 per share, and (iii) Series G Long-Term Warrants acquire up to an aggregate of 4,928,416 shares of Common Stock at an exercise price of \$1.816 per share, for aggregate gross proceeds equaling approximately \$8.9 million. The interim CEO, President and Director of PharmaCyte, Joshua Silverman, serves as the Company’s Chairman of the Board.

### **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 and six months ended June 30, 2024 of \$4,615 and \$10,673, respectively.

The Company made matching contributions to the 401(k) Plan during the three and six months ended June 30, 2023 of \$14,398 and \$24,679, 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 this agreement for the three and six months ended June 30, 2024 and 2023, respectively.

### **Note 11—Subsequent Events**

On August 16, 2024, the Company entered into (i) an Amendment (the “Series F-1 Long Term Warrant Amendment”) with the Series F-1 Investors, effective as of June 30, 2024, relating to the Series F-1 Long Term Warrants, (ii) an Amendment (the “Series F-1 Short Term Warrant Amendment” and, together with the Series F-1 Long Term Warrant Amendment, the “Series F-1 Warrant Amendments”) with the Series F-1 Investors, effective as of June 30, 2024 relating to the Series F-1 Short Term Warrants, (iii) an Amendment (the “Series G Long Term Warrant Amendment”) with the Series G Investors, effective as of June 30, 2024, relating to the Series G Long Term Warrants, (ii) an Amendment (the “Series G Short Term Warrant Amendment” and, together with the Series G Long Term Warrant Amendment, the “Series G Warrant Amendments” and collectively with the Series F-1 Warrant Amendments, the “Warrant Amendments”) with the Series G Investors, effective as of June 30, 2024 relating to the Series G Short Term Warrants.

The Warrant Amendments modified certain terms of the Series F-1 Warrants and Series G Warrants relating to the rights of the holders of such warrants to provide that, in the event of a Fundamental Transaction (as defined in each of the Series F-1 Warrants and Series G Warrants) that is not within the Company’s control, including the Fundamental Transaction not being approved by the Company’s Board of Directors, the holders of the Series F-1 Warrants and Series G Warrants shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined in each of the Series F-1 Warrants and Series G Warrants) of the unexercised portion of such Series F-1 Warrant or Series G Warrants, that is being offered and paid to the holders of the Company’s Common Stock in connection with the Fundamental Transaction. In addition, (i) the Series F-1 Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 30 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder’s request, and (ii) the Series G Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 60 day volatility obtained from the “HVT” function on Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder’s request.

The following pro forma financial information gives effect to the Warrant Amendments and the Stockholder Approval as if they had occurred on June 30, 2024. The Warrant Amendments resulted in that, following the receipt of Stockholder Approval on July 24, 2024, the reclassification of the Series F-1 Warrants and Series G Warrants were reclassified to be considered equity classified and not liability classified in accordance with ASC 815.

**TNF PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
**Pro Forma Condensed Consolidated Balance Sheets**  
(unaudited)

	<u>As Reported</u> <u>June 30, 2024</u>	<u>Adjustments</u>	<u>As Adjusted</u> <u>June 30, 2024</u>
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash	\$ 536,026	\$ -	\$ 536,026
Marketable Securities	12,530,326	-	12,530,326
Prepaid expenses	1,291,380	-	1,291,380
<b>Total Current Assets</b>	<b>14,357,732</b>	<b>-</b>	<b>14,357,732</b>
<b>Non-Current Assets</b>			
Lease Right-of-Use	25,803	-	25,803
Goodwill	10,498,539	-	10,498,539
Investment in Oravax Medical	1,500,000	-	1,500,000
<b>Total Non-Current Assets</b>	<b>12,024,342</b>	<b>-</b>	<b>12,024,342</b>
<b>Total Assets</b>	<b>\$ 26,382,074</b>	<b>\$ -</b>	<b>\$ 26,382,074</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Trade and Other Payables	\$ 4,616,513	\$ -	\$ 4,616,513
Deferred Compensation Payable	331,992	-	331,992
Due to MyMD FL Shareholders	29,982	-	29,982
Lease Liability	25,803	-	25,803
Dividends Payable	778,491	-	778,491
Derivative Liability	-	-	-
Warrant Liability	-	-	-
<b>Total Current Liabilities</b>	<b>5,782,781</b>	<b>-</b>	<b>5,782,781</b>
<b>Non-Current Liabilities</b>			
Deferred Compensation Payable, net of current	-	-	-
Derivative Liability, net of current	926,000	-	926,000
Warrant Liability, net of current	19,291,000	(19,291,000)	-
<b>Total Non-Current Liabilities</b>	<b>20,217,000</b>	<b>(19,291,000)</b>	<b>926,000</b>
<b>Total Liabilities</b>	<b>25,999,781</b>	<b>(19,291,000)</b>	<b>6,708,781</b>
<b>Commitments and Contingencies</b>			
<b>Mezzanine Equity</b>			
Series F Convertible Preferred Stock, 15,000 shares designated, par value \$0.001 per share and a stated value of \$1,000 per share, 4,675 and 6,633 shares issued and outstanding as of June 30, 2024 and December 31, 2023. Liquidation preference of \$4,675,000 plus dividends at 10% per annum of \$626,553 as of June 30, 2024	4,576,553	-	4,576,553
Series F Convertible Preferred Stock – Discount	(3,310,483)	-	(3,310,483)
Series F Convertible Preferred Stock – Derivative	(981,582)	-	(981,582)
Series F-1 Convertible Preferred Stock, 5,050 shares designated, par value \$0.001 per share and a stated value of \$1,000 per share, 5,050 and 0 shares issued and outstanding as of June 30, 2024 and December 31, 2023. Liquidation preference of \$5,050,000 plus dividends at 10% per annum of \$54,813 as of June 30, 2024	5,050,000	-	5,050,000
Series F-1 Convertible Preferred Stock - Discount	(5,050,000)	-	(5,050,000)
Series F-1 Convertible Preferred Stock - Derivative	-	-	-
Series G Convertible Preferred Stock, 12,826,273 shares designated, par value \$0.001 per share and a stated value of \$1,000 per share, 8,950 and 0 shares issued and outstanding as of June 30, 2024 and December 31, 2023. Liquidation preference of \$8,950,000 plus dividends at 10% per annum of \$97,145 as of June 30, 2024	8,950,000	-	8,950,000
Series G Convertible Preferred Stock - Discount	(8,950,000)	-	(8,950,000)
<b>Total Mezzanine Equity</b>	<b>284,488</b>	<b>-</b>	<b>284,488</b>

**STOCKHOLDERS' EQUITY**

Preferred Stock, par value \$0.001 per share, 50,000,000 total preferred shares authorized

Series D Convertible Preferred Stock, 211,353 shares designated, par value \$0.001 per share and a stated value of \$0.01 per share, 72,992 and 72,992 shares issued and outstanding as of June 30, 2024 and December 31, 2023	144,524	-	144,524
Common Stock, par value \$0.001, 250,000,000 shares authorized 2,370,423 and 2,018,857 shares issued and outstanding as of June 30, 2024 and December 31, 2023	2,370	-	2,370
Additional Paid in Capital	123,272,874	19,291,000	142,563,874
Accumulated Deficit	(123,321,963)	-	(123,321,963)
Total Stockholders' Equity	<u>97,805</u>	<u>19,291,000</u>	<u>19,405,805</u>
Total Liabilities, Mezzanine Equity, and Stockholders' Equity	<u>\$ 26,382,074</u>	<u>\$ -</u>	<u>\$ 26,382,074</u>

**TNF PHARMACEUTICALS, INC. AND SUBSIDIARIES**  
**Pro Forma Condensed Consolidated Statement of Changes in Shareholders' Equity**  
**For the Six Months Ended June 30, 2024**  
**(unaudited)**

	Series F		Series F-1		Series G		Series D		Common Stock		Additional Paid In Capital	Accumulated Deficit	Total Equity
	Convertible Preferred Stock		Convertible Preferred Stock		Convertible Preferred Stock		Convertible Preferred Stock		Common Stock Par Value				
	Shares	Series F	Shares	Series F	Shares	Series F	Shares	Series D	Shares	\$0.001			
<b>Balance at June 30, 2024; As Reported</b>	4,675	\$284,488	5,050	\$ -	8,950	\$ -	72,992	\$144,524	2,370,423	\$ 2,370	\$123,272,874	\$(123,321,963)	\$ 97,805
Adjustments	-	-	-	-	-	-	-	-	-	-	19,291,000	-	19,291,000
<b>June 30, 2024; As Adjusted</b>	4,675	\$284,488	5,050	\$ -	8,950	\$ -	72,992	\$144,524	2,370,423	\$ 2,370	\$142,563,874	\$(123,338,963)	\$19,405,805

## 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 and our audited consolidated financial statements and related notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 filed with the Securities and Exchange Commission on April 1, 2024. 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 TNF 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 the Contribution Agreement (as defined below);



- 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 pandemics, such as COVID-19, 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 pandemics, like COVID-19, 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;
- 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

The Company 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 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). By regulating the immunometabolic system, MYMD-1 can also treat autoimmune disease, including (but not limited to) multiple sclerosis, diabetes, rheumatoid arthritis, and inflammatory bowel disease. The Company has significant intellectual property coverage to protect these autoimmune indications, as well as therapy as an anti-aging product;
- The Company is advancing MYMD-1 in sarcopenia based on positive clinical data from its Phase II trial and previous research findings. This previous clinical trial supported the safety profile, including no serious adverse events and no patient dropouts due to an adverse event. Serum analysis confirmed the mechanism of action in patients with sarcopenia aged 65-75 years old. These data support the protocol in development to assess clinical outcomes in patients with sarcopenia;
- In preparation for future studies, the Company and partner Charles River Laboratories completed the dosing in an FDA-required 90-day oral gavage electroencephalogram (EEG) safety study in an animal model. This 90-day dog study was designed to complement the GLP chronic toxicology studies that have been completed and reported to FDA. This complete toxicology package will inform the duration and dosing of future clinical studies;
- An Annual Report is in preparation for submission to FDA;
- 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 promise in treating neuroinflammatory and neurodegenerative diseases, and may benefit from the recent re-classification of cannabis-derived products by FDA;
- In a pre-clinical evaluation of Supera-CBD for pain (Johns Hopkins University School of Medicine - Division of Behavioral Biology), Supera-CBD decreased pain, indicating beneficial effects on inflammatory-induced thermal pain sensitivity at all doses tested;
- The Company is currently preparing several scientific papers for publication in 2024, including an abstract for submission in the fourth quarter 2024 related to the Phase 2 study of MYMD-1 in sarcopenia/frailty to a peer-reviewed publication;
- The Company’s new management is seeking appropriate speaking opportunities to present the Company;
- The Company is exploring non-dilutive opportunities to evaluate MYMD-1 in additional indications not previously considered.

### *Reverse Stock Split*

On February 14, 2024, the Company effected a 1-for-30 reverse stock split (the “Reverse Stock Split”). Simultaneously with the Reverse Stock Split, number of shares of the Company’s common stock authorized for issuance was reduced from 500,000,000 shares to 16,666,666 shares, and our authorized capital stock was reduced from 550,000,000 shares to 66,666,666 shares. The Reverse Stock Split reduced the total number of issued and outstanding shares of Common Stock, including shares held by the Company as treasury shares. All share amounts have been retroactively adjusted for the Reverse Stock Split.

### *2021 Merger and Milestone Payments*

On April 16, 2021, pursuant to the previously announced Agreement and Plan of Merger and Reorganization, dated November 11, 2020 (as subsequently amended, the “Merger Agreement”), by and among the Company, previously known as Akers Biosciences, Inc., XYZ Merger Sub, Inc., a wholly-owned subsidiary of the Company (“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”). The Merger consideration included potential milestone payments to the pre-Merger MyMD Florida stockholders (the “Milestone Payments”) payable in shares of the Company’s Common Stock 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”). On April 16, 2024, the Milestone Period expired and accordingly, the pre-Merger MyMD Florida stockholders are no longer entitled to any potential Milestone Payments pursuant to the Merger Agreement.

The Company previously owned, through its subsidiary Cystron Biotech, LLC (“Cystron”), an exclusive license from Premas Biotech PVT Ltd. (“Premas”) with respect to Premas’ vaccine platform for the development of a vaccine against COVID-19 and other coronavirus infections. On April 16, 2021, pursuant to the Contribution and Assignment Agreement, dated March 18, 2021 (the “Contribution Agreement”) by and among the Company, Cystron, Oravax Medical, Inc. (“Oravax”) and, for the limited purpose set forth therein, Premas, the Company caused Cystron to contribute substantially all of the assets associated with its business of developing and manufacturing Cystron’s COVID-19 vaccine candidate to Oravax. Oravax is pursuing the development of the COVID-19 vaccine candidate. The Company’s interest in Oravax consists of 13% of Oravax’s outstanding shares of capital stock and the rights to a 2.5% royalty on all future net sales. The Company has evaluated several options with respect to its interest in Oravax, including a potential distribution of Oravax shares to the Company’s stockholders. This would make Oravax a publicly held company. In addition, the Company currently has the right to designate a member of the board of directors of Oravax, pursuant to which Mr. Joshua Silverman, our Chairman of the Board, has been designated to serve as a director of Oravax.

## 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 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 products;
- 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.

Four of our six 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 Super-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 using the Black-Scholes options pricing model, 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 attributable to the issuance of the Series F Warrants.

### 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 of 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, 2024 and 2023

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, 2024 and 2023.

Description	For the Three Months Ended June 30,	
	2024	2023
<b>Operating Expenses</b>		
General and Administrative	\$ 1,020,312	\$ 1,879,917
Research and Development	401,104	2,224,444
Stock-Based Compensation	439,627	1,677,271
Series F Warrant Issuance Expenses	-	-
Series F-1 Warrant Issuance Expenses	539,097	-
Series G Warrant Issuance Expenses	969,505	-
Total Operating Expenses	3,369,645	5,781,632
Loss from Operations	(3,369,645)	(5,781,632)
Other Income (Expense), net	(6,196,003)	1,613,979
Net Loss	\$ (9,565,648)	\$ (4,167,653)

## Revenue

We had no revenue from operations during the three months ended June 30, 2024 and 2023.

## General and Administrative Expenses

The table below summarizes our general and administrative expenses for the three months ended June 30, 2024 and 2023:

Description	For the Three Months Ended June 30,	
	2024	2023
Personnel Costs	\$ 207,197	\$ 397,847
Professional Service Costs	306,622	272,105
Stock Market & Investor Relations Costs	82,829	307,833
Other Administrative Costs	423,664	902,132
Total Administrative Expense	\$ 1,020,312	\$ 1,879,917

Personnel costs decreased \$187,477 during the three months ended June 30, 2024. The decrease is related to the Company initiatives relating to reducing the number of employees that was implemented during the fourth quarter of 2023.

Professional services costs increased \$34,517 during the three months ended June 30, 2024. These costs included legal and accounting and specialized consulting services regularly incurred in the normal course of business. The increase is primarily related to an increase in fees for specialized accounting services related to the fair market valuations for the various convertible preferred stock series.

Stock market and investor relations costs decreased \$225,004 during the three months ended June 30, 2024. 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 stockholder meetings. The decrease is primarily due to the preparation costs associated with the 2023 annual stockholder meeting.

Other administrative expenses decreased \$478,468 during the three months ended June 30, 2024. These costs include Board expenses, business insurance, corporate travel and other general operating expenses. The decrease is associated with a reimbursement of expenses to a related party as authorized by the Board of Directors in April 2023.

#### Stock-Based Compensation

Stock-based compensation decreased \$1,237,644 during the three months ended June 30, 2024. The decrease is related to the accelerated vesting of the stock options issued on June 7, 2023 that occurred in the fourth quarter of 2023 which reduced the periodic recognition of costs, to the final vesting of the second tranche of the June 7, 2023 stock options, and to several forfeitures of unvested stock options related to separated employees.

#### Warrant Issuance Expenses

Warrant issuance expenses associated with the issuance of the Series F-1 Convertible Preferred Stock and the Series G Convertible Preferred Stock and Warrants totaled \$1,508,602. These costs included placement agent, legal, and accounting fees.

#### Research and Development Expenses

The table below summarizes our research and development expenses for the three months ended June 30, 2024 and 2023:

Description	For the Three Months Ended June 30,	
	2024	2023
Salaries and Wages	\$ 289,722	\$ 498,244
Development Programs	65,649	1,615,016
Professional Services	39,099	67,360
Regulatory Expenses	390	-
Other Research and Development Expenses	6,344	43,824
Total Research and Development Expenses	\$ 401,104	\$ 2,224,444

Salaries and wages decreased \$208,522 during the three months ended June 30, 2024. The decrease was associated with Company initiatives relating to reducing the number of employees implemented during the fourth quarter of 2023 and due to employee resignations during the three months ended June 30, 2024.

Development program costs include those associated with pre-clinical development, clinical trials and other material and development programs. Costs decreased \$1,549,467 during the three months ended June 30, 2024 primarily due to the completion of the Phase II study for Sarcopenia during the year ended December 31, 2023.

Professional services costs decreased \$28,261 during the three months ended June 30, 2024. 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 increased \$390 during the three months ended June 30, 2024. These expenses were related to the close-out of a multi-site protocol.

Other research and development expenses decreased \$37,480 during the three months ended June 30, 2024. These expenses include laboratory supplies, training and travel for department personnel while working with third-party trial sites. The decrease during the three months ended June 30, 2024 is primarily related to expenses for seminars and travel.

## Other Income and Expense

The table below summarizes our other income and expenses for the three months ended June 30, 2024 and 2023:

Description	For the Three Months Ended June 30,	
	2024	2023
Interest and Dividend Income	\$ (21,148)	\$ (174,851)
Loss on Investments	75	389
Loss on changes in fair value of Equity Investments	76	983
Gain on changes in fair value of Warrant Liabilities	(2,701,000)	(2,930,700)
Loss on changes in fair value of Derivative Liabilities	72,000	1,490,200
Loss on the issuance of preferred stock	8,846,000	-
<b>Total Other (Income)/Expense</b>	<b>\$ 6,196,003</b>	<b>\$ (1,613,979)</b>

Other expenses, net of income, totaled \$6,196,003 for the three months ended June 30, 2024, and other income, net of expenses, totaled \$1,613,979 for the three months ended June 30, 2023.

During the three months ended June 30, 2024 interest and dividend income decreased \$153,703 primarily related to the availability of cash for investment.

During the three months ended June 30, 2024, we recorded a gain of \$2,701,000 related to the change in fair value of the warrant liabilities as follows:

- For the Series F-1 Short-Term Warrants, we recorded a gain of \$624,000. The fair value of the Series F-1 Short-Term warrants of approximately \$2,682,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 1.40 years; equity volatility of 115.0%; and a risk-free interest rate of 4.94%.
- For the Series F-1 Long-Term Warrants, we recorded a gain of \$350,000. The fair value of the Series F-1 Long-Term warrants of approximately \$4,277,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.90 years; equity volatility of 120.0%; and a risk-free interest rate of 4.34%.
- For the Series G Short-Term Warrants, we recorded a gain of \$1,107,000. The fair value of the Series F-1 Short-Term warrants of approximately \$4,752,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 1.40 years; equity volatility of 115.0%; and a risk-free interest rate of 4.94%.
- For the Series G Long-Term Warrants, we recorded a gain of \$620,000. The fair value of the Series F-1 Long-Term warrants of approximately \$7,580,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.90 years; equity volatility of 120.0%; and a risk-free interest rate of 4.34%.

During the three months ended June 30, 2024, we recorded a loss of \$72,000 related to the change in fair value of the Series F-1 Derivative liabilities, which is recorded in other income (expense) on the Statements of Operations. We estimated the \$926,000 fair value of the bifurcated embedded derivative at June 30, 2024 using a Monte Carlo simulation model, with the following inputs: the fair value of our common stock of \$1.84 on the valuation date, estimated equity volatility of 120.0%, estimated traded volume volatility of 195.0%, the time to maturity of 1 year, a discounted market interest rate of 9.6%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 6.9%.

During the three months ended June 30, 2024, we recorded a loss associated with the issuance of the Series F-1 Convertible Preferred Stock totaling \$3,737,000 and the Series G Convertible Preferred Stock totaling \$5,109,000. The losses resulted from the fair market value of the issued warrants exceeding the sum of the gross proceeds, discount and derivative derived from the placement of the preferred shares.

## Summary of Statements of Operations for the Six Months Ended June 30, 2024 and 2023

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, 2024 and 2023.

Description	For the Six Months Ended June 30,	
	2024	2023
<b>Operating Expenses</b>		
General and Administrative	\$ 2,088,632	\$ 2,867,904
Research and Development	1,600,042	2,994,874
Stock-Based Compensation	956,992	1,746,339
Series F Warrant Issuance Expenses	-	762,834
Series F-1 Warrant Issuance Expenses	539,097	-
Warrant Issuance Expenses	969,505	-
<b>Total Operating Expenses</b>	<b>6,154,268</b>	<b>8,371,951</b>
Loss from Operations	(6,154,268)	(8,371,951)
Other Income (Expense), net	(13,211,421)	2,692,566
<b>Net Loss</b>	<b>\$ (19,365,689)</b>	<b>\$ (5,679,385)</b>

## Revenue

We had no revenue from operations during the six months ended June 30, 2024 and 2023, respectively.

## General and Administrative Expenses

The table below summarizes our general and administrative expenses for the six months ended June 30, 2024 and 2023:



Description	For the Six Months Ended	
	June 30,	
	2024	2023
Personnel Costs	\$ 397,268	\$ 684,574
Professional Service Costs	722,987	447,890
Stock Market & Investor Relations Costs	187,376	409,361
Other Administrative Costs	781,001	1,326,079
Total Administrative Expense	\$ 2,088,632	\$ 2,867,904

Personnel costs decreased \$287,306 during the six months ended June 30, 2024. The decrease is related to the Company initiatives relating to reducing the number of employees implemented during the fourth quarter of 2023.

Professional services costs increased \$275,097 during the six months ended June 30, 2024. These costs included legal and accounting and specialized consulting services regularly incurred in the normal course of business. The increase is primarily related to an increase in fees for specialized accounting services related to the fair market valuations for the various convertible preferred stock series.

Stock market and investor relations costs decreased \$221,965 during the six months ended June 30, 2024. 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 primarily due to the preparation costs associated with the 2023 annual shareholder meeting.

Other administrative expenses decreased \$545,078 during the six months ended June 30, 2024. These costs include Board expenses, business insurance, corporate travel and other general operating expenses. The decrease is associated with a reimbursement of expenses to a related party as authorized by the Board of Directors in April 2023.

#### Stock-Based Compensation

Stock-based compensation decreased \$789,347 during the six months ended June 30, 2024. The decrease is related to the accelerated vesting of the June 7, 2023 stock options that occurred in the fourth quarter of 2023 which reduced the periodic recognition of costs, to the final vesting of the second tranche of the June 7, 2023 stock option, and to several forfeitures of unvested stock options related to separated employees.

#### Warrant Issuance Expenses

Warrant issuance expenses associated with the issuance of the Series F-1 Convertible Preferred Stock and the Series G Convertible Preferred Stock and Warrants totaled \$1,508,602. These costs included placement agent, legal, and accounting fees.

#### Research and Development Expenses

The table below summarizes our research and development expenses for the six months ended June 30, 2024 and 2023:

Description	For the Six Months Ended June 30,	
	2024	2023
Salaries and Wages	\$ 553,219	\$ 789,718
Development Programs	954,087	1,995,604
Professional Services	79,406	136,624
Regulatory Expenses	390	7,100
Other Research and Development Expenses	12,940	65,828
Total Research and Development Expenses	\$ 1,600,042	\$ 2,994,874

Salaries and wages decreased \$236,499 during the six months ended June 30, 2024. The decrease was associated with the Company initiatives relating to reducing the number of employees implemented during the fourth quarter of 2023 and to separations due to resignations during the three months ended June 30, 2024.

Development program costs include those associated with pre-clinical development, clinical trials and other material and development programs. Costs decreased \$1,041,517 during the six months ended June 30, 2024 primarily due to the completion of the Phase II study for Sarcopenia during the year ended December 31, 2023.

Professional services costs decreased \$57,218 during the six months ended June 30, 2024. 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 \$6,710 during the six months ended June 30, 2024. These costs are associated with the development and management of the protocols used in various studies.

Other research and development expenses decreased \$52,888 during the six months ended June 30, 2024. These expenses include laboratory supplies, training and travel for department personnel while working with third-party trial sites. The decrease during the three months ended June 30, 2024 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, 2024 and 2023:

Description	For the Three Months Ended June 30,	
	2024	2023
Interest and Dividend Income	\$ (39,454)	\$ (200,675)
(Gain)/Loss on Investments	(100)	214
Loss on changes in fair value of Equity Investments	975	2,695
Gain on changes in fair value of Warrant Liabilities	4,393,000	(2,810,000)
(Gain)/Loss on changes in fair value of Derivative Liabilities	11,000	315,200
Loss on the issuance of preferred stock	8,846,000	-
Total Other (Income)/Expense	\$ 13,211,421	\$ (2,692,566)

Other expenses, net of income, totaled \$13,211,421 for the six months ended June 30, 2024, and other income, net of expense, totaled \$2,692,566 for the six months ended June 30, 2023.

During the six months ended June 30, 2024 interest and dividend income decreased \$161,221 primarily related to the availability of cash for investment.

During the six months ended June 30, 2024, we recorded a loss of \$4,393,000 related to the change in fair value of the warrant liabilities as follows:

- For the Series F Warrants, the May 14, 2024 warrant modification resulted in the reclassification of the Series F Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, we remeasured the Series F Warrant liabilities at \$7,961,000 fair value as of March 31, 2024, the effective date of the modification, utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 3.90 years; equity volatility of 110.0%; and a risk-free interest rate of 4.31%. and recorded a loss of \$7,094,000 on the change in fair value and reclassified the \$7,961,000 fair value of the Series F Warrants to additional paid-in capital as of March 31, 2024.
- For the Series F-1 Short-Term Warrants, we recorded a gain of \$624,000. The fair value of the Series F-1 Short-Term warrants of approximately \$2,682,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 1.40 years; equity volatility of 115.0%; and a risk-free interest rate of 4.94%.
- For the Series F-1 Long-Term Warrants, we recorded a gain of \$350,000. The fair value of the Series F-1 Long-Term warrants of approximately \$4,277,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.90 years; equity volatility of 120.0%; and a risk-free interest rate of 4.34%.
- For the Series G Short-Term Warrants, we recorded a gain of \$1,107,000. The fair value of the Series F-1 Short-Term warrants of approximately \$4,752,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 1.40 years; equity volatility of 115.0%; and a risk-free interest rate of 4.94%.
- For the Series G Long-Term Warrants, we recorded a gain of \$620,000. The fair value of the Series F-1 Long-Term warrants of approximately \$7,580,000 was estimated at June 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.90 years; equity volatility of 120.0%; and a risk-free interest rate of 4.34%.

During the three months ended June 30, 2024, we recorded a loss of \$11,000 related to the change in fair value of the derivative liabilities as follows:

- For the Series F Derivative, we recorded a gain of \$61,000. We estimated the \$0 fair value of the bifurcated embedded derivative at March 31, 2024 using a Monte Carlo simulation model, with the following inputs: the fair value of our common stock of \$2.39 on the valuation date, estimated equity volatility of 95.0%, estimated traded volume volatility of 175.0%, the time to maturity of 0.25 year, a discounted market interest rate of 6.20%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 1.5%.
- For the Series F-1 Derivative, we recorded a loss of \$72,000. We estimated the \$926,000 fair value of the bifurcated embedded derivative at June 30, 2024 using a Monte Carlo simulation model, with the following inputs: the fair value of our common stock of \$1.84 on the valuation date, estimated equity volatility of 120.0%, estimated traded volume volatility of 195.0%, the time to maturity of 1 year, a discounted market interest rate of 9.6%, dividend rate of 10.0%, a penalty dividend rate of 15.0%, and probability of default of 6.9%.

During the six months ended June 30, 2023, we recorded a loss associated with the issuance of the Series F-1 Convertible Preferred Stock totaling \$3,737,000 and the Series G Convertible Preferred Stock totaling \$5,109,000. The losses resulted from the fair market value of the issued warrants exceeding the sum of the gross proceeds, discount and derivative derived from the placement of the preferred shares.

### **Liquidity and Capital Resources**

As of June 30, 2024, the Company's cash on hand was \$536,026 and marketable securities were \$12,530,326. The Company has incurred a total net loss attributable to stockholders of \$21,344,896 for the six months ended June 30, 2024. As of June 30, 2024, the Company had working capital of \$8,574,951 and stockholders' equity of \$97,805 including an accumulated deficit of \$123,321,963. Since its inception, the Company has met its liquidity requirements principally through the sale of its Common and Preferred 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, 2024 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*

During the six months ended June 30, 2024, cash flows used in operating activities were \$4,580,551 consisting primarily of a net loss of \$19,365,689, an increase in prepaid expenses of \$398,154, a reduction in dividends payables of \$154,843, and a non-cash gain on the fair market value of derivatives offset by non-cash loss on the fair value of warrants of 11,000, a non-cash loss on the issuance of preferred stock of \$8,846,000, non-cash stock-based compensation of \$956,992, an increase in trade and other payables of 900,295, and an increase in deferred compensation of \$231,454.

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.

### *Investing Activities*

Our net cash consumed by investing activities totaled \$10,289,095 for the six months ended June 30, 2024 as compared to \$7,449,439 during the six months ended June 30, 2023. During the six months ended June 30, 2024, we purchased securities totaling \$12,539,455 and sold securities totaling \$2,250,3660. During the six months ended June 30, 2023, we purchased securities totaling \$13,199,409 and sold securities totaling \$5,749,970.

### *Financing Activities*

Net cash provided by financing activities during the six months ended June 30, 2024 was \$12,724,662 which consisted of payments for the redemption of Series F Convertible Preferred Stock and the related dividends and premiums and the proceeds from the sale of the Series F-1 Convertible Preferred Stock and the Series G Convertible Preferred Stock. 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 Series F Convertible Preferred Stock, net of offering costs.

### *February 2023 Offering*

On February 21, 2023, we entered into a Securities Purchase Agreement (the “February 2023 SPA”) with certain accredited investors (the “Series F 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 (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, which was subsequently amended and restated by the filing of the Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock, effective April 8, 2024 (as amended and restated, the “Series F Certificate of Designation”), and (ii) warrants (the “Series F Warrants”) to acquire up to an aggregate of 6,651,885 shares of Common Stock (pre-split), subject to adjustment (the “Series F Warrant Shares”). The Series F 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 Series F Conversion Price (subject to certain exceptions). Following the Reverse Stock Split, (i) the Series F Conversion Price was adjusted to \$3.18 per share pursuant to the terms of the Series F Certificate of Designations, and (ii) the Series F Exercise Price (as defined below) was adjusted to \$3.18 per share and the number of Series F Warrant Shares was adjusted proportionately to 4,716,904 shares pursuant to the terms of the Series F Warrants. In connection with the Private Placements (as defined herein), (i) the conversion price of the Series F Preferred Stock was adjusted to \$1.816 per share pursuant to the full ratchet anti-dilution provisions contained in the Series F Certificate of Designations and, (ii) the exercise price of the Series F Warrants was adjusted to \$1.816 per share and the number of shares of Common Stock issuable upon exercise of the Series F Warrants was adjusted proportionally to 8,259,911 shares pursuant to the full ratchet anti-dilution provisions contained in the Series F Warrants.

At closing, we received net proceeds from the February 2023 Offering of approximately \$14.1 million, after deducting various fees and expenses. We have used and intend to continue to use the net proceeds from this offering for general corporate purposes.

As of June 30, 2024, there were 4,988 Series F Preferred Shares outstanding and Series F Warrants outstanding to purchase up to 8,259,911 shares of Common Stock.

#### *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 became convertible upon issuance into the Series F Conversion Shares at the election of the holder at any time at an initial conversion price of \$2.255 (pre-split) (the “Series F 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). Following the Reverse Stock Split, the Series F Conversion Price was adjusted to \$3.18 per share pursuant to the terms of the Series F Certificate of Designations. The Series F Conversion Price was further adjusted to \$1.816 per share pursuant to the full ratchet anti-dilutive provisions contained in the Series F Certificate of Designations in connection with the Private Placements (as defined herein).

Prior to the Series F Certificate of Amendment (as defined below), the Company was initially 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 Series F 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) the Floor Price (as defined below). For purposes of the Series F Certificate of Designation, the “Floor Price” means \$6.60 (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.

On April 5, 2024, the Company entered into an Omnibus Waiver and Amendment (the “Omnibus Agreement”) with the Required Holders (as defined in the Certificate of Designation). Pursuant to the Omnibus Agreement, the Required Holders agreed (i) to defer payment of the installment amounts due on March 1, 2024, and April 1, 2024 (the “Installments”), under Section 9(a) of the Series F Certificate of Designations, until May 1, 2024, and (ii) to waive any breach or violation of the February 2023 SPA, the Series F Certificate of Designations, or the Series F Warrants resulting from missing the Installments. The Company may require holders to convert their Series F Preferred Shares into Series F Conversion Shares if the closing price of the Company’s Common Stock exceeds \$6.765 (as adjusted for the Reverse Stock Split) 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 Company’s Common Stock exceeds \$3,000,000 per day during the same period and certain equity conditions described in the Series F Certificate of Designations are satisfied.

On May 20, 2024, the Company entered into an Omnibus Waiver, Consent, Notice and Amendment (the “Series F Agreement”) with the Required Holders (as defined in the Series F Certificate of Designations). Pursuant to the Series F Agreement, the Required Holders agreed to (i) amend the Series F Purchase Agreement to amend certain terms relating to purchase rights thereunder, (ii) waive certain rights under the Series F Purchase Agreement and Series F Certificate of Designations in respect of the issuance of the Company’s Series F-1 Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (“Series F-1 Preferred Stock”), the Company’s Series G Convertible Preferred Stock, with a par value of \$0.001 per share and a stated value of \$1,000 per share (“Series G Preferred Stock”), and entrance by the Company into the Purchase Agreements (as defined herein), (iii) waive the requirement that the Company reserve for issuance a sufficient number of shares of Common Stock as required by the Series F Certificate of Designations, the Series F Purchase Agreement and Series F Warrants, until such time as the Company obtains the Stockholder Approval (as defined herein), and (iv) consent to the issuance of the Series F-1 Preferred Stock and Series G Preferred Stock as required pursuant to certain terms of the Series F Certificate of Designations, the Series F Purchase Agreement and the Series F Warrants, as applicable. The Company and the Required Holders further agreed pursuant to the Series F Agreement, to amend the Series F Certificate of Designations by filing a Certificate of Amendment to the Series F Certificate of Designations (the “Series F Certificate of Amendment”) with the Secretary of State of the State of Delaware. The Series F Certificate of Amendment amends the Series F Certificate of Designations to (i) extend the maturity date to December 31, 2024, (ii) permit and modify certain procedures related to the payment of installment amounts with respect to the Installment Dates (as defined in the Series F Certificate of Designations) falling between (and including) July 1, 2024, and (and including) August 1, 2024, thereunder, and (iii) modify the schedule of Installment Dates.

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 the Company's Common Stock at the Company's option, in accordance with the terms of the Series F Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series F Certificate of Designations), the Series F Preferred Shares accrue dividends at the rate of 15% per annum. In connection with a Triggering Event, each holder of Series F Preferred Shares is 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. Except as required by applicable law, the holders of the Series F Preferred Shares are entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series F Preferred Shares is entitled to be calculated assuming a conversion price of \$60.21 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the February 2023 SPA, subject to certain beneficial ownership limitations as set forth in the Certificate of Designation. The Series F Certificate of Designations further provides that the holders of record of the Series F Preferred Shares, exclusively and as a separate class, shall be entitled to elect one director of the Company one time on or before June 30, 2024.

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 Series F Certificate of Designations), 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.

#### *Series F Warrants*

The Series F Warrants became exercisable immediately upon issuance, have an exercise price of \$2.255 per share (pre-split) (as adjusted, the "Series F Exercise Price") and expire five years from the date of issuance. The Series F 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 the Company's Common Stock, or securities convertible, exercisable or exchangeable for the Company's Common Stock, at a price below the then-applicable Exercise Price (subject to certain exceptions). Upon any such price-based adjustment to the Series F Exercise Price, the number of February 2023 Warrant Shares issuable upon exercise of the Series F Warrants will be increased proportionately. The Series F Warrants were issued with an initial Exercise Price of \$2.255 per share (pre-split). Following the Reverse Stock Split, the Exercise Price for the Series F Warrants was adjusted to \$3.18 per share and the number of February 2023 Warrant Shares was adjusted to 4,716,904 shares pursuant to the terms of the Series F Warrants. There is no established public trading market for the Series F Warrants and the Company does not intend to list the Series F Warrants on any national securities exchange or nationally recognized trading system. In connection with the Private Placements (as defined herein), the Series F Exercise Price was adjusted to \$1.816 per share and the number of shares of Common Stock issuable upon exercise of the Series F Warrants was adjusted proportionally to 8,259,911 shares pursuant to the full ratchet anti-dilution provisions contained in the Series F Warrants.

On May 14, 2024, the Company entered into an Amendment (the "Series F Amendment") with the Investors in the February 2023 Offering, effective as of March 31, 2024. The Series F Amendment amended certain terms of the Series F Warrants relating to the rights of the holders of the Series F Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series F Warrants) that is not within our control, including not approved by the Company's Board of Directors, the holder of a Series F Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of such Series F Warrant, that is being offered and paid to the holders of our common stock in connection with the Fundamental Transaction.

## ***May 2024 Private Placements***

### ***Series F-1 Private Placement***

On May 20, 2024, the Company entered into a Securities Purchase Agreement (the “Series F-1 Purchase Agreement”) with certain accredited investors (the “Series F-1 Investors”) pursuant to which it agreed to sell to the Series F-1 Investors (i) an aggregate of 5,050 shares of the Company’s newly-designated Series F-1 Preferred Stock, initially convertible into up to 2,780,839 shares of Common Stock at a conversion price of \$1.816 per share, (ii) short-term warrants to acquire up to an aggregate of 2,780,839 shares of Common Stock (the “Series F-1 Short-Term Warrants”) at an exercise price of \$1.816 per share, and (iii) warrants to acquire up to an aggregate of 2,780,839 shares of Common Stock (the “Series F-1 Long-Term Warrants,” and collectively with the Series F-1 Short-Term Warrants, the “Series F-1 Warrants”) at an exercise price of \$1.816 per share (collectively, the “Series F-1 Private Placement”). The closing of the Series F-1 Private Placements occurred on May 23, 2024 (the “Series F-1 Closing Date”).

### ***Series F-1 Preferred Stock***

The Series F-1 Preferred Stock became convertible upon issuance into Common Stock (the “Series F-1 Conversion Shares”) at the election of the holder at any time at an initial conversion price of \$1.816 (the “Series F-1 Conversion Price”). The Series F-1 Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series F-1 Conversion Price (subject to certain exceptions).

The Company is required to redeem the Series F-1 Preferred Stock in seven (7) equal monthly installments, commencing on December 1, 2024. The amortization payments due upon such redemption are payable, at the Company’s election, in cash at 105% of the applicable Installment Redemption Amount (as defined in the Series F-1 Certificate of Designations), or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series F-1 Conversion Price then in effect and (ii) the greater of (A) 80% of the average of the three lowest closing prices of the Company’s Common Stock during the thirty consecutive trading day period ending and including the trading day immediately prior to the date the amortization payment is due or (B) \$0.364, which is 20% of the “Minimum Price” (as defined in Nasdaq Stock Market Rule 5635) on the date in which the Series F-1 Stockholder Approval (as defined herein) was obtained or, in any case, such lower amount as permitted, from time to time, by the Nasdaq Capital Market, and, in each case, subject to adjustment for stock splits, stock dividends, stock combinations, recapitalizations or other similar events, which amortization amounts are subject to certain adjustments as set forth in the Series F-1 Certificate of Designations (the “Series F-1 Floor Price”).

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



Notwithstanding the foregoing, 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 Series F-1 Certificate of Designations. Further, the Series F-1 Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment or dividend make-whole payment under, the Series F-1 Certificate of Designations or Series F-1 Warrants.

#### *Series F-1 Warrants*

Pursuant to the Series F-1 Private Placement, the Company issued to investors (i) the Series F-1 Long-Term Warrants to purchase 2,780,839 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of five years from the date of issuance and (ii) the Series F-1 Short-Term Warrants to purchase 2,780,839 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of eighteen months from the date of issuance.

The exercise price of the Series F-1 Warrants and the number of shares issuable upon exercise of the Series F-1 Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of shares issuable upon exercise of the Series F-1 Warrants will be increased proportionately.

On August 16, 2024, the Company entered into (i) an Amendment (the "Series F-1 Long Term Warrant Amendment") with the Series F-1 Investors, effective as of June 30, 2024 relating to the Series F-1 Long Term Warrants, and (ii) an Amendment (the "Series F-1 Short-Term Warrant Amendment" and, together with the Series F-1 Long Term Warrant Amendment, the "Series F-1 Warrant Amendments") with the Series F-1 Investors, effective as of June 30, 2024 relating to the Series F-1 Short Term Warrants. The Series F-1 Warrant Amendments modified certain terms of the Series F-1 Warrants relating to the rights of the holders of the Series F-1 Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series F-1 Warrants) that is not within the Company's control, including the Fundamental Transaction not being approved by the Company's Board of Directors, the holder of the Series F-1 Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined in the Series F-1 Warrants) of the unexercised portion of such Series F-1 Warrant, that is being offered and paid to the holders of the Company's Common Stock in connection with the Fundamental Transaction. Additionally, the Series F-1 Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 30 day volatility, obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder's request. The modification resulted in the reclassification of the Series F-1 Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, the Company remeasured the Series F-1 Warrants at fair value as of July 25, 2024, the effective date of the modifications, and recognized the change in fair value as a non-cash loss and reclassified the Series F-1 Warrants to additional paid-in capital as of July 25, 2024.

#### *Series G Private Placement*

On May 20, 2024, the Company entered into a Securities Purchase Agreement (the "Series G Purchase Agreement") and collectively with the Series F-1 Purchase Agreement, each a "Purchase Agreement" and collectively, the "Purchase Agreements") with certain accredited investors (the "Series G Investors" and collectively with the Series F-1 Investors, the "Investors"), pursuant to which it agreed to sell to the Series G Investors (i) an aggregate of 8,950 shares of the Company's newly-designated Series G Preferred Stock, initially convertible into up to 4,928,416 shares of the Company's Common Stock, at a conversion price of \$1.816 per share (ii) short-term warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the "Series G Short-Term Warrants") at an exercise price of \$1.816 per share, and (iii) warrants to acquire up to an aggregate of 4,928,416 shares of Common Stock (the "Series G Long-Term Warrants," and collectively with the Series G Short-Term Warrants, the "Series G Warrants") at an exercise price of \$1.816 per share (collectively, the "Series G Private Placement" and collectively with the Series F-1 Private Placement, each a "Private Placement" and collectively, the "Private Placements"). The closing of the Series G Private Placement occurred on May 23, 2024 (the "Series G Closing Date" and, together with the Series F-1 Closing Date, the "Closing Date").

#### *Series G Preferred Stock*

The Series G Preferred Shares became convertible upon issuance into Common Stock (the "Series G Conversion Shares") at the election of the holder at any time at an initial conversion price of \$1.816 (the "Series G Conversion Price"). The Series G Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series G Conversion Price (subject to certain exceptions). At any time after the issuance date of the Series G Preferred Shares, the Company has the option to redeem in cash all or any portion of the shares of Series G Preferred Shares then outstanding at a premium upon notice by the Company to all holders of the Series G Preferred Shares.

The holders of the Series G Preferred Shares will be entitled to dividends of 10% per annum, compounded monthly, which will be payable in arrears monthly at the holder's option (i) in cash, (ii) "in kind" in the form of additional shares of Series G Preferred Shares (the "PIK Shares") or (iii) in combination thereof, in each case, in accordance with the terms of the Certificate of Designations of the Series G Preferred Shares (the "Series G Certificate of Designations"). Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series G Certificate of Designations), the Series G Preferred Stock will accrue dividends at the rate of 15% per annum. Upon conversion or redemption, the holders of the Series G Preferred Shares are also entitled to receive a dividend make-whole payment. The holders of the Series G Preferred Shares will be entitled to vote with holders of the Common Stock on an as-converted basis, with the number of votes to which each holder of Series G Preferred Share is entitled to be calculated assuming a conversion price of \$2.253 per share, which was the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) applicable immediately before the execution and delivery of the Series G Purchase Agreement, subject to certain beneficial ownership limitations as set forth in the Series G Certificate of Designations.

Notwithstanding the foregoing, the Company's ability to settle conversions and make dividend make-whole payments using shares of Common Stock is subject to certain limitations set forth in the Series G Certificate of Designations. Further, the Series G Certificate of Designations contains a certain beneficial ownership limitation, which applies to each Series G Investor other than PharmaCyte Biotech, Inc., after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series G Preferred Shares or as part of any dividend make-whole payment under the Series G Certificate of Designations.

On June 17, 2024, the Company entered into an Amendment Agreement (the "Series G Amendment") with the Required Holders (as defined in the Series G Certificate of Designations). Pursuant to the Series G Amendment, the Required Holders agreed to amend the Series G Certificate of Designations by filing a Certificate of Amendment ("Series G Certificate of Amendment") to the Series G Certificate of Designations with the Secretary of State of the State of Delaware (the "Secretary of State") to increase the number of authorized shares of Series G Preferred Stock from 8,950 to 12,826,273, in order to authorize a sufficient number of shares of Series G Preferred Stock for the payment of PIK Shares. On June 17, 2024, the Company filed the Series G Certificate of Amendment with the Secretary of State, thereby amending the Series G Certificate of Designations. The Series G Certificate of Amendment became effective with the Secretary of State upon filing.

On August 8, 2024, the Company entered into an Amendment Agreement (the "August Series G Amendment") with the Required Holders (as defined in the Series G Certificate of Designations). Pursuant to the August Series G Amendment, the Required Holders agreed to amend the Series G Certificate of Designations by filing a Certificate of Amendment ("August Series G Certificate of Amendment") to the Series G Certificate of Designations with the Secretary of State to adjust the calculation of the PIK Shares. On August 8, 2024, the Company filed the August Series G Certificate of Amendment with the Secretary of State, thereby amending the Series G Certificate of Designations. The August Series G Certificate of Amendment became effective with the Secretary of State upon filing.

#### *Series G Warrants*

Pursuant to the Series G Private Placement, the Company issued to investors (i) the Series G Long-Term Warrants to purchase 4,928,416 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of five years from the date of issuance and (ii) the Series G Short-Term Warrants to purchase 4,928,416 shares of Common Stock, with an exercise price of \$1.816 per share (subject to adjustment), for a period of eighteen months from the date of issuance.

The exercise price of the Series G Warrants and the number of shares issuable upon exercise of the Series G Warrants are subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable exercise price (subject to certain exceptions). Upon any such price-based adjustment to the exercise price, the number of shares issuable upon exercise of the Series G Warrants will be increased proportionately.

On August 16, 2024, the Company entered into (i) an Amendment (the "Series G Long Term Warrant Amendment") with the Series G Investors, effective as of June 30, 2024 relating to the Series G Long Term Warrants, and (ii) an Amendment (the "Series G Short Term Warrant Amendment" and, together with the Series G Long Term Warrant Amendment, the "Series G Warrant Amendments") with the Series G Investors, effective as of June 30, 2024 relating to the Series G Short Term Warrants. The Series G Warrant Amendments modified certain terms of the Series G Warrants relating to the rights of the holders of the Series G Warrants to provide that, in the event of a Fundamental Transaction (as defined in the Series G Warrants) that is not within the Company's control, including the Fundamental Transaction not being approved by the Company's Board of Directors, the holder of the Series G Warrant shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined in the Series G Warrants) of the unexercised portion of such Series G Warrant, that is being offered and paid to the holders of the Company's Common Stock in connection with the Fundamental Transaction. Additionally, the Series G Warrant Amendments amend the definition of Black Scholes Value related to the volatility input which is now an expected volatility equal to the 60 day volatility, obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the trading day immediately following the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction and (2) the date of a holder's request. The modification resulted in the reclassification of the Series G Warrants to be considered equity classified as they were no longer in the scope of ASC 815. In accordance with ASC 815-40, the Company remeasured the Series G Warrants at fair value as of July 25, 2024, the effective date of the modifications, and recognized the change in fair value as a non-cash gain and reclassified the warrant liability to additional paid-in capital as of July 25, 2024.

#### *Private Placement Warrants*

In connection with the Private Placements, pursuant to (A) an engagement letter (the "GPN Agreement") with GP Nurmenkari Inc. ("GPN") and (B) an engagement letter (the "Palladium Agreement," and collectively with the GPN Agreement, the "Engagement Letters") with Palladium Capital Group, LLC ("Palladium," and collectively with GPN, the "Placement Agents"), the Company engaged the Placement Agents to act as non-exclusive placement agents in connection with each Private Placement, pursuant to which, the Company agreed to (i) pay the Placement Agents a cash fee equal to 3% of the gross proceeds of each Private Placement (including any cash proceeds realized by the Company from the exercise of the Series F Warrants), (ii) reimbursement and payment of certain expenses, and (iii) issue to the Placement Agents on the Closing Date, warrants to purchase up to an aggregate of 693,833 of shares of Common Stock to each Placement Agent, which is equal to 3% of the aggregate number of shares of Common Stock underlying the securities issued in each Private Placement, including upon exercise of any Series F Warrants, with terms identical to the Series G Long-Term Warrants and Series F-1 Long-Term Warrants.

#### *Registration Rights Agreements*

In connection with the Series G Private Placement, we entered into a Registration Rights Agreement with the Series G Investors (the "Series G Registration Rights Agreement"), pursuant to which we agreed to file a resale registration statement (the "Series G Registration Statement") with the SEC to register for resale 200% of the Series G Conversion Shares, (B) 200% of the shares of common stock issuable upon conversion of the PIK Shares, and (C) 200% of the Series G Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series G Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series G Registration Rights Agreement).

In connection with the Series F-1 Private Placement, we entered into a Registration Rights Agreement with the Series F-1 Investors (the "Series F-1 Registration Rights Agreement," and, together with the Series G Registration Rights Agreement, the "Registration Rights Agreements"), pursuant to which we agreed to file a resale registration statement (the "Series F-1 Registration Statement") with the SEC to register for resale 200% of the Series F-1 Conversion Shares and (B) 200% of the Series F-1 Warrant Shares promptly following the Closing Date, but in no event later than 30 calendar days after the Closing Date, and to have such Series F-1 Registration Statement declared effective by the Effectiveness Deadline (as defined in the Series F-1 Registration Rights Agreement).

In connection with the Registration Rights Agreements, the Company filed a registration statement on Form S-3 covering such securities, which registration statement was filed on June 21, 2024, amended on August 8, 2024 and declared effective by the SEC on August 12, 2024. Under the Series F-1 Registration Rights Agreement, we are obligated to pay certain liquidated damages to the Series F-1 Investors if the Company failed to file the Series F-1 Registration Statement when required, failed to file or cause the Series F-1 Registration Statement to be declared effective by the SEC when required, or fails to maintain the effectiveness of the Series F-1 Registration Statement.

## Critical Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Future events and their effects cannot be determined with absolute certainty. Therefore, the determination of estimates requires the exercise of judgment. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements. The most significant accounting estimates inherent in the preparation of our financial statements include estimates associated with the determinations of the fair-market value of the preferred stock, stock-based compensation, and the impairment analysis of intangibles.

Our financial position, results of operations and cash flows are impacted by the accounting policies we have adopted. In order to get a full understanding of our financial statements, one must have a clear understanding of the accounting policies employed. A summary of our critical accounting policies is presented within the notes to our consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Our management’s discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, costs and expenses, and the disclosure of contingent assets and liabilities in our financial statements. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on historical experience, known trends and events, and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may materially differ from these estimates under different assumptions or conditions.

Our critical accounting estimates have not changed materially from those previously reported in our Annual Report for the year ended December 31, 2023, on Form 10-K, as filed with the SEC on April 1, 2024.

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

Not applicable.

### Item 4. Controls and Procedures.

#### Evaluation of 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, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II - OTHER INFORMATION

### Item 1. Legal Proceedings

From time to time we are 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 7 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, 2023 on Form 10-K, as filed with the SEC on April 1, 2024. 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.

***Holders of our Series F Preferred Stock, Series F-1 Preferred Stock and Series G Preferred Stock are entitled to certain payments under the applicable Certificate of Designations that may be paid in cash, in shares of Common Stock or in additional shares of Series G Preferred Stock depending on the circumstances. If we make these payments in cash, it may require the expenditure of a substantial portion of our cash resources. If we make these payments in Common Stock, it may result in substantial dilution to the holders of our Common Stock.***

Under the Series F Certificate of Designations and Series F-1 Certificate of Designations, we are required to redeem the shares of the shares of the Series F Preferred Stock and Series F-1 Preferred Stock in equal monthly installments commencing July 1, 2023, and December 1, 2024, respectively. Such holders are also entitled to receive dividends, payable in arrears monthly, and dividends payable on installment dates shall be paid as part of the applicable installment amount. Installment amounts are payable, at the Company’s election, in shares of Common Stock or, subject to certain limitations, in cash. Installment amounts paid in cash must be paid in the amount of 105% of the applicable payment amount due.

Our ability to make payments due to the holders of our Series F Preferred Stock and Series F-1 Preferred Stock using shares of Common Stock is subject to certain limitations set forth in the applicable Certificate of Designations. If we are unable to make installment payments in shares of Common Stock, we may be forced to make such payments in cash. Additionally, the holders of the Series G Preferred Stock are entitled to dividends of 10% per annum, compounded monthly, which are payable in arrears monthly, at the holder’s sole discretion, in cash, or “in kind” in the form of additional Series G Preferred Stock, or a combination thereof. If we do not have sufficient cash resources to make these payments, we may need to raise additional equity or debt capital, and we cannot provide any assurance that we will be successful in doing so. If we are unable to raise sufficient capital to meet our payment obligations, we may need to delay, reduce or eliminate certain research and development programs or other operations, sell some or all of our assets or merge with another entity.

Our ability to make payments due to the holders of our Series F Preferred Stock, Series G Preferred Stock, Series F-1 Preferred Stock using cash is also limited by the amount of cash we have on hand at the time such payments are due as well as certain provisions of the Delaware General Corporation Law (the “DGCL”). Further, we intend to make the installment payments due to holders of Series F Preferred Stock and Series F-1 Preferred Stock in the form of Common Stock to the extent allowed under the applicable Certificate of Designation and applicable law in order to preserve our cash resources. The issuance of shares of Common Stock to the holders of our Series F Preferred Stock and Series F-1 Preferred Stock will increase the number of shares of Common Stock outstanding and could result in substantial dilution to the existing holders of our Common Stock.

***The Certificate of Designations for the Series F Preferred Stock, Series F-1 Preferred Stock and Series G Preferred Stock and the warrants issued concurrently therewith contain anti-dilution provisions that may result in the reduction of the conversion price of the applicable preferred stock or the exercise price of such warrants in the future. These features may increase the number of shares of Common Stock being issuable upon conversion of the Series F Preferred Stock, Series F-1 Preferred Stock and Series G Preferred Stock or upon the exercise of the warrants.***

The Series F Certificate of Designations, Series F-1 Certificate of Designations and Series G Certificate of Designations and the warrants issued concurrently therewith, contain anti-dilution provisions, which provisions require the lowering of the applicable conversion price or exercise, as then in effect, to the purchase price of equity or equity-linked securities issued in subsequent offerings. If in the future, while any of our Series F Preferred Stock, Series F-1 Preferred Stock, Series G Preferred Stock, Series F Warrants, Series F-1 Warrants or Series G Warrants are outstanding, we issue securities for a consideration per share of Common Stock (the “New Issuance Price”) that is less than the applicable conversion price of our preferred stock or the exercise price of the Series F Warrants, Series F-1 Warrants or Series G Warrants, as then in effect, we will be required, subject to certain limitations and adjustments as provided in the applicable Certificate of Designations or the applicable warrants, to reduce the conversion price or the exercise price to be equal to the New Issuance Price, which will result in a greater number of shares of Common Stock being issuable upon conversion or exercise, as applicable, which in turn will increase the dilutive effect of such conversion or exercise on existing holders of our Common Stock. It is possible that we will not have a sufficient number of shares available to satisfy the conversion of the Series F Preferred Stock, Series F-1 Preferred Stock or Series G Preferred Stock or the exercise of the Series F Warrants, Series F-1 Warrants or Series G Warrants if we enter into a future transaction that reduces the applicable conversion price or exercise price. If we do not have a sufficient number of available shares for any such conversions or any such warrant exercises, we may need to seek shareholder approval to increase the number of authorized shares of our Common Stock, which may not be possible and will be time consuming and expensive. The potential for such additional issuances may depress the price of our Common Stock regardless of our business performance and may make it difficult for us to raise additional equity capital while any of our Series F Preferred Stock, Series F-1 Preferred Stock, Series G Preferred Stock or Series F Warrants, Series F-1 Warrants or Series G Warrants are outstanding.

***Under the February 2023 SPA and Purchase Agreements, we are subject to certain restrictive covenants that may make it difficult to procure additional financing.***

The February 2023 SPA, pursuant to which we issued the Series F Preferred Stock, contains, among others, the following restrictive covenants: (i) until all of the Series F Warrants are exercised, we agreed not to enter into any variable rate transactions; and (ii) until the later of no shares of Series F Preferred Stock being outstanding and the maturity date of the Series F Preferred Stock, the opportunity to participate in any subsequent securities offerings by us. The Series F-1 Purchase Agreement, pursuant to which we issued the Series F-1 Preferred Stock, contains, among others, the following restrictive covenants: (i) until all of the Series F-1 Warrants are exercised, we agreed not to enter into any variable rate transactions; and (ii) until the later of no shares of Series F-1 Preferred Stock being outstanding and the maturity date, the opportunity to participate in any subsequent securities offerings by us. The Series G Purchase Agreement, pursuant to which we issued the Series G Preferred Stock, contains, among others, the following restrictive covenants: (i) until all of the Series G Warrants are exercised, we agreed not to enter into any variable rate transactions; and (ii) until the later of no

shares of Series G Preferred Stock being outstanding and the second anniversary of the Series G Closing Date, the opportunity to participate in any subsequent securities offerings by us.

If we require additional funding while these restrictive covenants remain in effect, we may be unable to effect a financing transaction while remaining in compliance with the terms of the February 2023 SPA or Purchase Agreements, or we may be forced to seek a waiver from the investors party to the February 2023 SPA and Purchase Agreements.

***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, the Company has 17 issued U.S. patents, 68 foreign patents, two pending U.S. patent applications and 7 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, 2024, 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>
3.1	<a href="#"><u>Certificate of Amendment of Certificate of Incorporation of TNF Pharmaceuticals, Inc (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 26, 2024).</u></a>
3.2	<a href="#"><u>Certificate of Amendment of Certificate of Incorporation of TNF Pharmaceuticals, Inc (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 26, 2024).</u></a>
3.3	<a href="#"><u>Amended and Restated Certificate of Designations of Series F Convertible Preferred Stock of TNF Pharmaceuticals, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 8, 2024).</u></a>
3.4	<a href="#"><u>Certificate of Designations of Series G Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 23, 2024).</u></a>
3.5	<a href="#"><u>Certificate of Amendment of Certificate of Designations of Series G Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 24, 2024).</u></a>
3.6	<a href="#"><u>Certificate of Designations of Series F-1 Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 23, 2024).</u></a>
4.1	<a href="#"><u>Form of Series G Long-Term Warrant (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
4.2	<a href="#"><u>Form of Series G Short-Term Warrant (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
4.3	<a href="#"><u>Form of Series F-1 Long-Term Warrant (incorporated herein by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
4.4	<a href="#"><u>Form of Series F-1 Short-Term Warrant (incorporated herein by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
4.5	<a href="#"><u>Form of Amendment to Warrant, dated March 14, 2024, by and between TNF Pharmaceuticals, Inc. and the investors party thereto (incorporated herein by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2024).</u></a>
4.6+	<a href="#"><u>Form of Amendment to Series F-1 Long Term Warrant.</u></a>
4.7+	<a href="#"><u>Form of Amendment to Series F-1 Short Term Warrant.</u></a>
4.8+	<a href="#"><u>Form of Amendment to Series G Long Term Warrant.</u></a>
4.9+	<a href="#"><u>Form of Amendment to Series G Short Term Warrant.</u></a>
10.1	<a href="#"><u>Form of Omnibus Waiver and Amendment, dated April 5, 2024, by and between TNF Pharmaceuticals, Inc. and the investors party thereto (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 8, 2024).</u></a>

10.2**	<a href="#"><u>Form of Series G Purchase Agreement (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
10.3**	<a href="#"><u>Form of Series F-1 Purchase Agreement (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
10.4	<a href="#"><u>Form of Series G Registration Rights Agreement (incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
10.5	<a href="#"><u>Form of Series F-1 Registration Rights Agreement (incorporated herein by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
10.6**	<a href="#"><u>Form of Omnibus Waiver, Consent, Notice and Amendment, by and among TNF Pharmaceuticals, Inc. and the investors party thereto (incorporated herein by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 21, 2024).</u></a>
10.7	<a href="#"><u>Form of Amendment Agreement, dated as of June 17, 2024, by and among TNF Pharmaceuticals, Inc. and the investors party thereto (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 17, 2024).</u></a>
10.8	<a href="#"><u>General Release and Severance Agreement, by and between TNF Pharmaceuticals, Inc. and Christopher Chapman, dated as of June 14, 2024 (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 17, 2024).</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

\* Furnished herewith

\*\* Certain of the schedules (and similar attachments) to this exhibit have been omitted in accordance with Item 601(a)(5) of Regulation S-K under the Securities Act because they do not contain information material to an investment or voting decision and that information is not otherwise disclosed in the exhibit or the disclosure document. The registrant hereby agrees to furnish a copy of all omitted schedules (or similar attachments) to the SEC upon its 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.

**TNF PHARMACEUTICALS, INC.**

Date: August 19, 2024

By: /s/ Mitchell Glass

Name: Mitchell Glass

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

Date: August 19, 2024

By: /s/ Ian Rhodes

Name: Ian Rhodes

Title: Interim Chief Financial Officer  
(Principal Financial Officer)



## AMENDMENT

This Amendment (this "Amendment"), dated as of August [ ], 2024, is by and among TNF Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the investor listed on the signature page attached hereto (the "Investor").

## WITNESSETH

WHEREAS, the Company and the Investor are party to that certain Securities Purchase Agreement, dated as of May 20, 2024 (the "Purchase Agreement"), pursuant to which the Company issued to the Investor shares of the Company's Series F-1 Convertible Preferred Stock, par value \$0.001 per share, and a long-term warrant (the "Warrant") to purchase shares of the Company's common stock, par value \$0.001 per share, which expires five years from the date of issuance;

WHEREAS, pursuant to Section 11 of the Warrant, the terms of the Warrant may be amended only if the Company has obtained the written consent of such warrant holder; and

WHEREAS, the Investor and the Company desire to amend certain provisions of the Warrant as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants and obligations hereinafter set forth, the parties hereto, intending legally to be bound, hereby agree as follows:

1. Definitions. Capitalized terms used herein but not otherwise defined herein shall have the respective meanings given such terms in the Warrant.
2. Amendment.
  - (i) Effective as of June 30, 2024, Section 4(c) of the Warrant is hereby amended and restated in its entirety as follows (emphasis added):

(c) Black Scholes Value. Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction; provided, however, that if the Fundamental Transaction is not within the Company's control, including in the event that such Fundamental Transaction is not approved by the board of directors of the Company, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which such Successor Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction.

- (ii) Effective as of June 30, 2024, Section 19(h) of the Warrant is hereby amended and restated in its entirety as follows:

(h) "Black Scholes Value" means the value of the unexercised portion of this Warrant remaining on the date of the Holder's request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder's request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder's request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder's request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder's request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder's request pursuant to Section 4(c)(i).

3. No Consideration. No Holder has received any consideration for its entry into this Amendment which has not also been given to each other Holder. There are no side letters or other agreements between the Company and another Holder related to the execution and delivery of this Amendment or the matters contemplated hereby. Any contravention of the foregoing representations shall be immediately disclosed to each Holder and each Holder shall be entitled, at its option, to receive the benefits of such consideration, side letter or other agreement.
4. Counterparts; Facsimile Execution. This Amendment may be executed in one or more counterparts (including by electronic mail, in PDF or by DocuSign or similar electronic signature), all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.
5. Governing Law. THIS AMENDMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING GOVERNING LAW SET FORTH IN SECTION 9(A) OF THE PURCHASE AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.
6. Terms and Conditions of the Warrant. Except as modified and amended herein, all of the terms and conditions of the Warrant shall remain in full force and effect.

[Signature pages follow immediately.]



[Signature Page to Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

**Company:**

**TNF PHARMACEUTICALS, INC.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

---

*[Signature Page to Amendment]*

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

Name of Investor:

By: \_\_\_\_\_

Name of signatory:

Title:

---

## AMENDMENT

This Amendment (this "Amendment"), dated as of August [ ], 2024, is by and among TNF Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the investor listed on the signature page attached hereto (the "Investor").

## WITNESSETH

WHEREAS, the Company and the Investor are party to that certain Securities Purchase Agreement, dated as of May 20, 2024 (the "Purchase Agreement"), pursuant to which the Company issued to the Investor shares of the Company's Series F-1 Convertible Preferred Stock, par value \$0.001 per share, and a short-term warrant (the "Warrant"), to purchase shares of the Company's common stock, par value \$0.001 per share, which expires eighteen months from the date of issuance;

WHEREAS, pursuant to Section 11 of the Warrant, the terms of the Warrant may be amended only if the Company has obtained the written consent of such warrant holder; and

WHEREAS, the Investor and the Company desire to amend certain provisions of the Warrant as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants and obligations hereinafter set forth, the parties hereto, intending legally to be bound, hereby agree as follows:

1. Definitions. Capitalized terms used herein but not otherwise defined herein shall have the respective meanings given such terms in the Warrant.
2. Amendment.
  - (i) Effective as of June 30, 2024, Section 4(c) of the Warrant is hereby amended and restated in its entirety as follows (emphasis added):

(c) Black Scholes Value. Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction; provided, however, that if the Fundamental Transaction is not within the Company's control, including in the event that such Fundamental Transaction is not approved by the board of directors of the Company, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which such Successor Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction.

- (ii) Effective as of June 30, 2024, Section 19(h) of the Warrant is hereby amended and restated in its entirety as follows:

(h) "Black Scholes Value" means the value of the unexercised portion of this Warrant remaining on the date of the Holder's request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder's request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder's request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder's request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder's request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder's request pursuant to Section 4(c)(i).

3. No Consideration. No Holder has received any consideration for its entry into this Amendment which has not also been given to each other Holder. There are no side letters or other agreements between the Company and another Holder related to the execution and delivery of this Amendment or the matters contemplated hereby. Any contravention of the foregoing representations shall be immediately disclosed to each Holder and each Holder shall be entitled, at its option, to receive the benefits of such consideration, side letter or other agreement.
4. Counterparts; Facsimile Execution. This Amendment may be executed in one or more counterparts (including by electronic mail, in PDF or by DocuSign or similar electronic signature), all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.
5. Governing Law. THIS AMENDMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING GOVERNING LAW SET FORTH IN SECTION 9(A) OF THE PURCHASE AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.
6. Terms and Conditions of the Warrant. Except as modified and amended herein, all of the terms and conditions of the Warrant shall remain in full force and effect.

[Signature pages follow immediately.]



[Signature Page to Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

**Company:**

**TNF PHARMACEUTICALS, INC.**

By: \_\_\_\_\_

Name:

Title:

---

*[Signature Page to Amendment]*

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

Name of Investor:

By:

Name of signatory:

Title:

---



## AMENDMENT

This Amendment (this "Amendment"), dated as of August [ ], 2024, is by and among TNF Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the investor listed on the signature page attached hereto (the "Investor").

## WITNESSETH

WHEREAS, the Company and the Investor are party to that certain Securities Purchase Agreement, dated as of May 20, 2024 (the "Purchase Agreement"), pursuant to which the Company issued to the Investor shares of the Company's Series G Convertible Preferred Stock, par value \$0.001 per share, and a long-term warrant (the "Warrant") to purchase shares of the Company's common stock, par value \$0.001 per share, which expires five years from the date of issuance;

WHEREAS, pursuant to Section 11 of the Warrant, the terms of the Warrant may be amended only if the Company has obtained the written consent of such warrant holder; and

WHEREAS, the Investor and the Company desire to amend certain provisions of the Warrant as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants and obligations hereinafter set forth, the parties hereto, intending legally to be bound, hereby agree as follows:

1. Definitions. Capitalized terms used herein but not otherwise defined herein shall have the respective meanings given such terms in the Warrant.
2. Amendment.
  - (i) Effective as of June 30, 2024, Section 4(c) of the Warrant is hereby amended and restated in its entirety as follows (emphasis added):

(c) Black Scholes Value. Notwithstanding the foregoing and the provisions of Section 4(b) above, at the request of the Holder delivered at any time commencing on the earliest to occur of (x) the public disclosure of any Fundamental Transaction, (y) the consummation of any Fundamental Transaction and (z) the Holder first becoming aware of any Fundamental Transaction through the date that is ninety (90) days after the public disclosure of the consummation of such Fundamental Transaction by the Company pursuant to a Current Report on Form 8-K filed with the SEC, the Company or the Successor Entity (as the case may be) shall purchase this Warrant from the Holder on the date of such request by paying to the Holder cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant. Payment of such amounts shall be made by the Company (or at the Company's direction) to the Holder on or prior to the later of (x) the second (2nd) Trading Day after the date of such request and (y) the date of consummation of such Fundamental Transaction; provided, however, that if the Fundamental Transaction is not within the Company's control, including in the event that such Fundamental Transaction is not approved by the board of directors of the Company, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which such Successor Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction.

- (ii) Effective as of June 30, 2024, Section 19(h) of the Warrant is hereby amended and restated in its entirety as follows:

(h) "Black Scholes Value" means the value of the unexercised portion of this Warrant remaining on the date of the Holder's request pursuant to Section 4(c)(i), which value is calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (1) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder's request pursuant to Section 4(c)(i) and (2) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder's request pursuant to Section 4(c)(i), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (1) the remaining term of this Warrant as of the date of the Holder's request pursuant to Section 4(c)(i) and (2) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder's request pursuant to Section 4(c)(i) if such request is prior to the date of the consummation of the applicable Fundamental Transaction, (iv) a zero cost of borrow and (v) an expected volatility equal to the 60 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction and (B) the date of the Holder's request pursuant to Section 4(c)(i).

3. No Consideration. No Holder has received any consideration for its entry into this Amendment which has not also been given to each other Holder. There are no side letters or other agreements between the Company and another Holder related to the execution and delivery of this Amendment or the matters contemplated hereby. Any contravention of the foregoing representations shall be immediately disclosed to each Holder and each Holder shall be entitled, at its option, to receive the benefits of such consideration, side letter or other agreement.
4. Counterparts; Facsimile Execution. This Amendment may be executed in one or more counterparts (including by electronic mail, in PDF or by DocuSign or similar electronic signature), all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.
5. Governing Law. THIS AMENDMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING GOVERNING LAW SET FORTH IN SECTION 9(A) OF THE PURCHASE AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.
6. Terms and Conditions of the Warrant. Except as modified and amended herein, all of the terms and conditions of the Warrant shall remain in full force and effect.

[Signature pages follow immediately.]



[Signature Page to Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

**Company:**

**TNF PHARMACEUTICALS, INC.**

By: \_\_\_\_\_

Name:

Title:

---

*[Signature Page to Amendment]*

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

Name of Investor:

By:

Name of signatory:

Title:

---

## AMENDMENT

This Amendment (this "Amendment"), dated as of August [ ], 2024, is by and among TNF Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the investor listed on the signature page attached hereto (the "Investor").

## WITNESSETH

WHEREAS, the Company and the Investor are party to that certain Securities Purchase Agreement, dated as of May 20, 2024 (the "Purchase Agreement"), pursuant to which the Company issued to the Investor shares of the Company's Series G Convertible Preferred Stock, par value \$0.001 per share, and a short-term warrant (the "Warrant"), to purchase shares of the Company's common stock, par value \$0.001 per share, which expires eighteen months from the date of issuance;

WHEREAS, pursuant to Section 11 of the Warrant, the terms of the Warrant may be amended only if the Company has obtained the written consent of such warrant holder; and

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4. Counterparts; Facsimile Execution. This Amendment may be executed in one or more counterparts (including by electronic mail, in PDF or by DocuSign or similar electronic signature), all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

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6. Terms and Conditions of the Warrant. Except as modified and amended herein, all of the terms and conditions of the Warrant shall remain in full force and effect.

[Signature pages follow immediately.]



[Signature Page to Amendment]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

**Company:**

**TNF PHARMACEUTICALS, INC.**

By: \_\_\_\_\_

Name:

Title:

---

*[Signature Page to Amendment]*

IN WITNESS WHEREOF, the undersigned has executed and delivered this Amendment as of the date first above written.

Name of Investor:

By:

Name of signatory:

Title:

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## CERTIFICATION PURSUANT TO SARBANES–OXLEY ACT OF 2002

I, Mitchell Glass, certify that:

1. I have reviewed this quarterly report on Form 10-Q of TNF 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 19, 2024

By: /s/ Mitchell Glass

Name: Mitchell Glass

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 TNF 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 19, 2024

By: /s/ Ian Rhodes

Name: Ian Rhodes

Title: Interim 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 Quarterly Report of TNF Pharmaceuticals, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, the undersigned, Mitchell Glass, 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 to the best of my knowledge:

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 19, 2024

By: /s/ Mitchell Glass

Name: Mitchell Glass

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 Quarterly Report of TNF Pharmaceuticals, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2024 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 to the best of my knowledge:

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 19, 2024

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

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