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 September 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: 001-11460

Eterna Therapeutics Inc.
(Exact name of registrant as specified in its charter)

Delaware	**31-1103425**
(State of incorporation)	*(I.R.S. Employer Identification No.)*
1035 Cambridge Street, Suite 18A Cambridge , Massachusetts	**02141**
(Address of principal executive offices)	*(Zip Code)*

(212) 582-1199
(Registrant's telephone number, including area code)

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common stock, $0.005 par value per share	**ERNA**	**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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 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 November 8, 2024, the registrant had outstanding 51,374,713 shares of common stock, $ 0.005 par value per share.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains "forward-looking statements" as that term is defined under the Private Securities Litigation Reform Act of 1995 ("PSLRA"), Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements include statements related to future events, results, performance, prospects and opportunities, including statements related to our strategic plans, capital needs, and our financial position. Forward-looking statements are based on information currently available to us, on our current expectations, estimates, forecasts, and projections about the industries in which we operate and on the beliefs and assumptions of management. Forward looking statements often contain words such as "expects," "anticipates," "could," "targets," "projects," "intends," "plans," "believes," "seeks," "estimates," "may," "will," "would," and similar expressions. In addition, any statements that refer to projections of our future financial performance, our anticipated growth and trends in our business, and other characterizations of future events or circumstances, are forward-looking statements. Forward-looking statements by their nature address matters that are, to different degrees, subject to risks and uncertainties that could cause actual results to differ materially and adversely from those expressed in any forward-looking statements. For us, particular factors that might cause or contribute to such differences include those risks and uncertainties described in Part I, Item 1A "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the Securities and Exchange Commission (the "SEC") on March 14, 2024, in Part II, Item 1A "Risk Factors" of this Quarterly Report on Form 10-Q, and in other documents we file from time to time with the SEC.

Readers are urged not to place undue reliance on the forward-looking statements in this Quarterly Report on Form 10-Q, which speak only as of the date of this Quarterly Report on Form 10-Q. We are including this cautionary note to make applicable, and take advantage of, the safe harbor provisions of the PSLRA. Except as required by law, we do not undertake, and expressly disclaim any obligation, to disseminate, after the date hereof, any updates or revisions to any such forward-looking statements to reflect any change in expectations or events, conditions or circumstances on which any such statements are based.

We believe that the expectations reflected in forward-looking statements in this Quarterly Report on Form 10-Q are based upon reasonable assumptions at the time made. However, given the risks and uncertainties, you should not rely on any forward-looking statements as a prediction of actual results, developments or other outcomes. You should read these forward-looking statements with the understanding that we may be unable to achieve projected results, developments or other outcomes and that actual results, developments or other outcomes may be materially different from what we expect.

Unless stated otherwise or the context otherwise requires, all references in this Quarterly Report on Form 10-Q to "Eterna" refer to Eterna Therapeutics Inc., references to "Eterna LLC" refer to Eterna Therapeutics LLC, a wholly owned subsidiary of Eterna, and references to the "Company," "we," "us" or "our" refer to Eterna and its subsidiaries, including Eterna LLC, Novellus, Inc. and Novellus Therapeutics Limited.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

ETERNA THERAPEUTICS INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except par value amounts)
(unaudited)

	September 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash	$ 4,264	$ 7,575
Other receivables	187	425
Prepaid expenses and other current assets	279	1,599
Total current assets	4,730	9,599
Restricted cash	-	4,095
Property and equipment, net	105	493
Right-of-use assets - operating leases	719	32,781
Goodwill	2,044	2,044
Other assets	120	120
Total assets	$ 7,718	$ 49,132
LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY		
Current liabilities:		
Accounts payable	$ 2,193	$ 1,067
Accrued expenses	1,166	1,893
Income taxes payable	18	2
Bridge notes, net of debt discount	776	-

Bridge notes derivative liability	4,926	-
Operating lease liabilities, current	201	2,216
Due to related party, current	559	1,205
Deferred revenue, current	-	190
Other current liabilities	113	-
Total current liabilities	9,952	6,573
Convertible notes, net	32,037	6,773
Warrant liabilities	10,463	116
Operating lease liabilities, non-current	534	32,854
Deferred revenue, non-current	-	392
Contingent consideration liability	41	107
Other liabilities	84	84
Total liabilities	53,111	46,899
Stockholders' (deficit) equity:		
Preferred stock, $ 0.005 par value, 1,000 shares authorized, 156 designated and outstanding of Series A convertible preferred stock at September 30, 2024 and December 31, 2023, $ 156 liquidation preference	1	1
Common stock, $ 0.005 par value, 100,000 shares authorized at September 30, 2024 and December 31, 2023; 5,411 and 5,410 issued and outstanding at September 30, 2024 and December 31, 2023, respectively	27	27
Additional paid-in capital	180,348	189,186
Accumulated deficit	(225,769)	(186,981)
Total stockholders' (deficit) equity	(45,393)	2,233
Total liabilities and stockholders' (deficit) equity	$ 7,718	$ 49,132

The accompanying notes are an integral part of these condensed consolidated financial statements.

ETERNA THERAPEUTICS INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Revenue	$ 487	$ 51	$ 581	$ 51
Cost of revenues	(60)	120	96	170
Gross income (loss)	547	(69)	485	(119)
Operating expenses:				
Research and development	1,001	1,387	3,446	4,560
General and administrative	3,381	4,049	11,592	10,231
Gain on lease termination	(1,576)	-	(1,576)	-
Acquisition of Exacis in-process research and development	-	-	-	460
Total operating expenses	2,806	5,436	13,462	15,251
Loss from operations	(2,259)	(5,505)	(12,977)	(15,370)
Other expense, net:				
Loss on extinguishment of debt	(22,440)	-	(22,440)	-
Fair value adjustments to bridge notes derivative liability	(1,038)	-	(1,038)	-
Change in fair value of warrant liabilities	831	20	897	166
Change in fair value of contingent consideration	-	-	66	118
Loss on non-controlling investment	-	-	-	(59)
Interest expense, net	(1,686)	(113)	(3,269)	(88)
Other expense, net	-	(1)	-	(281)
Total other expense, net	(24,333)	(94)	(25,784)	(144)
Loss before income taxes	(26,592)	(5,599)	(38,761)	(15,514)
(Provision) benefit for income taxes	(12)	8	(19)	(1)
Net loss	(26,604)	(5,591)	(38,780)	(15,515)
Series A preferred stock dividend	-	-	(8)	(8)
Net loss attributable to common stockholders	$ (26,604)	$ (5,591)	$ (38,788)	$ (15,523)
Net loss per common share - basic and diluted	$ (4.92)	$ (1.03)	$ (7.17)	$ (2.94)
Weighted average shares outstanding - basic and diluted	5,410	5,410	5,410	5,281

The accompanying notes are an integral part of these condensed consolidated financial statements.

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY
For the three and nine months ended September 30, 2024 and 2023 (unaudited)
(in thousands)

	Series A Preferred Stock		Common Stock		Additional Paid-in	Accumulated	
	Shares	Amount	Shares	Amount	Capital	Deficit	Total
Balances at July 1, 2024	156	$ 1	5,411	$ 27	$ 190,611	$ (199,165)	$ (8,526)
Fair value of forward sale contract pursuant to common stock offering	-	-	-	-	576	-	576
Reclassification of warrants to liability	-	-	-	-	(11,244)	-	(11,244)
Stock-based compensation	-	-	-	-	405	-	405
Net loss	-	-	-	-	-	(26,604)	(26,604)
Balances at September 30, 2024	156	$ 1	5,411	$ 27	$ 180,348	$ (225,769)	$ (45,393)
Balances at January 1, 2024	156	$ 1	5,410	$ 27	$ 189,186	$ (186,981)	$ 2,233
Fair value of forward sale contract pursuant to common stock offering	-	-	-	-	576	-	576
Reclassification of warrants to liability	-	-	-	-	(11,244)	-	(11,244)
Issuance of note warrants	-	-	-	-	720	-	720
Stock-based compensation	-	-	-	-	1,110	-	1,110
Issuance of common stock from vested restricted units	-	-	1	-	-	-	-
Cash dividends to Series A preferred stockholders	-	-	-	-	-	(8)	(8)
Net loss	-	-	-	-	-	(38,780)	(38,780)
Balances at September 30, 2024	156	$ 1	5,411	$ 27	$ 180,348	$ (225,769)	$ (45,393)
Balances at July 1, 2023	156	$ 1	5,410	$ 27	$ 179,067	$ (175,229)	$ 3,866
Issuance of warrants in connection with convertible notes financing	-	-	-	-	5,113	-	5,113
Stock-based compensation	-	-	-	-	174	-	174
Net loss	-	-	-	-	-	(5,591)	(5,591)
Balances at September 30, 2023	156	$ 1	5,410	$ 27	$ 184,354	$ (180,820)	$ 3,562
Balances at January 1, 2023	156	$ 1	5,127	$ 26	$ 177,377	$ (165,297)	$ 12,107
Issuance of common stock in connection with Exacis asset acquisition	-	-	69	-	208	-	208
Issuance of common stock related to stock purchase agreement with Lincoln Park Capital Fund, LLC, net	-	-	214	1	579	-	580
Issuance of warrants in connection with convertible notes financing	-	-	-	-	5,113	-	5,113
Cash dividends to Series A preferred stockholders	-	-	-	-	-	(8)	(8)
Stock-based compensation	-	-	-	-	1,077	-	1,077
Net loss	-	-	-	-	-	(15,515)	(15,515)
Balances at September 30, 2023	156	$ 1	5,410	$ 27	$ 184,354	$ (180,820)	$ 3,562

The accompanying notes are an integral part of these condensed consolidated financial statements.

ETERNA THERAPEUTICS INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(unaudited)

	For the nine months ended September 30,	
	2024	2023
Cash flows from operating activities:		
Net loss	$ (38,780)	$ (15,515)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	120	62
Stock-based compensation	1,110	1,077
Amortization of right-of-use asset	1,450	580
Gain on lease termination	(1,576)	-
Accrued interest expense	441	113
Paid-in-kind interest expense	829	-
Amortization of debt discount and debt issuance costs	2,148	52
Loss on extinguishment of debt	22,440	-
Fair value adjustments to bridge notes derivative liability	1,038	
Change in fair value of warrant liabilities	(897)	(166)
Change in fair value of contingent consideration liability	(66)	(118)
Commitment shares issued to Lincoln Park Capital, LLC	-	249
Loss on shares sold to Lincoln Park Capital, LLC	-	11

Non-cash component of acquisition of Exacis in-process research and development	-	433
Gain on disposal of fixed assets	-	1
Loss on non-controlling investment	-	59
Changes in operating assets and liabilities:		
Other receivables	238	(825)
Prepaid expenses and other current assets	1,225	340
Other non-current assets	1	(2,911)
Accounts payable and accrued expenses	758	1,099
Operating lease liability	(1,656)	795
Due to related party	(646)	(1,313)
Deferred revenue	(582)	599
Other liabilities	113	(369)
Net cash used in operating activities	(12,291)	(15,747)
Cash flows from investing activities:		
Purchase of property and equipment	(369)	-
Proceeds received from the sale of fixed assets	4	-
Net cash used in investing activities	(365)	-
Cash flows from financing activities:		
Proceeds received from convertible note financings	1,405	8,715
Fees paid related to convertible note financings	(34)	(175)
Proceeds received from bridge notes financings	3,887	-
Proceeds from sale of common stock pursuant to stock purchase agreement with Lincoln Park Capital Fund, LLC	-	320
Dividends paid to Series A preferred stockholders	(8)	(8)
Net cash provided by financing activities	5,250	8,852
Net decrease in cash and cash equivalents	(7,406)	(6,895)
Cash, cash equivalents and restricted cash at beginning of period	11,670	15,541
Cash, cash equivalents and restricted cash at end of period	$ 4,264	$ 8,646
Supplemental disclosures of cash flow information:		
Cash paid during the period for:		
Interest	$ 46	$ 13
Income taxes	$ 2	$ 4
Supplemental disclosure of non-cash investing and financing activities:		
Note warrants issued	$ 755	$ -
Unpaid fees incurred in connection with the December 2023 financing	$ 32	$ -
Paid in-kind interest added to convertible notes principal	$ 1,006	$ -
Adjustment to lease liability and ROU asset due to remeasurement	$ 4,245	$ -
Reclassification of warrants to liability	$ 11,244	$ -
Warrants issued in connection with July 2023 Financing	$ -	$ 5,234
Unpaid fees incurred in connection with the July 2023 Financing	$ -	$ 27
Initial measurement of ROU assets	$ -	$ 34,410
Initial measurement of lease liability	$ -	$ 34,170
Contingent consideration for Exacis asset acquisition	$ -	$ 225
Issuance of common stock for Exacis asset acquisition	$ -	$ 208
Reconciliation of cash, cash equivalents and restricted cash at end of period:		
Cash and cash equivalents	$ 4,264	$ 4,551
Restricted cash	-	4,095
Total cash, cash equivalents and restricted cash at end of period	$ 4,264	$ 8,646

The accompanying notes are an integral part of these condensed consolidated financial statements.

ETERNA THERAPEUTICS INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1) DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business

Eterna Therapeutics Inc. (the "Company") is a preclinical-stage cell therapy company. Its vision is to improve the lives of patients with difficult-to-treat diseases through innovative, effective, and safe, but accessible cellular therapies, and its mission is to develop allogenic off-the-shelf cellular therapies, leveraging induced pluripotent stem cell ("iPSC")-derived mesenchymal stem cells ("iMSCs") to target solid tumors. As used herein, the "Company" or "Eterna" refers collectively to Eterna and its consolidated subsidiaries (Eterna Therapeutics LLC, Novellus, Inc. and Novellus Therapeutics Limited) unless otherwise stated or the context otherwise requires .

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial statements and with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, the unaudited financial statements include all the normal recurring adjustments that are necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented.

These condensed consolidated financial statements should be read together with the audited consolidated financial statements and notes thereto contained in Eterna's Annual Report on Form 10-K for the year ended December 31, 2023 filed with the Securities and Exchange Commission (the "SEC") on March 14, 2024, as amended by the Form 10-K/A filed with the SEC on March 18, 2024 (as amended, the "2023 10-K"). The accompanying

condensed consolidated balance sheet as of December 31, 2023 has been derived from the audited financial statements contained in the 2023 10-K but does not include all of the information and footnotes required by GAAP for complete financial statements. The results of operations for the three and nine months ended September 30, 2024 are not necessarily indicative of the results to be anticipated for the entire year ending December 31, 2024, or any other period.

Reclassifications

Certain reclassifications have been made to the Company's prior year amounts to conform to the current year presentation.

2) LIQUIDITY AND CAPITAL RESOURCES

The Company has incurred significant operating losses and has an accumulated deficit as a result of its efforts to develop product candidates and providing general and administrative support for operations. As of September 30, 2024, the Company had an unrestricted cash balance of approximately $ 4.3 million and an accumulated deficit of approximately $ 225.8 million. For the three and nine months ended September 30, 2024, the Company incurred a net loss of $ 26.6 million and $ 38.8 million, respectively, and for the nine months ended September 30, 2024, the Company used cash of $ 12.3 million in operating activities.

In October 2022, the Company entered into a sublease for approximately 45,500 square feet of office and laboratory space in Somerville, Massachusetts. Pursuant to the sublease, the Company delivered to the sublessor a security deposit in the form of a letter of credit in the amount of $ 4.1 million. The letter of credit was issued by the Company's commercial bank, which required that the Company cash collateralize the letter of credit by depositing $ 4.1 million in a restricted cash account with such bank.

On August 5, 2024, the sublessor drew down on the letter of credit for the full $ 4.1 million to cover past due rent, plus penalties and interest. On August 9, 2024, the Company and the sublessor entered into a sublease termination agreement, effective August 31, 2024. See Note 8 for additional information regarding the sublease and sublease termination agreement..

In April 2023, the Company entered into a standby equity purchase agreement (the "ELOC") and a registration rights agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park"), pursuant to which Lincoln Park committed to purchase up to $ 10.0 million of the Company's common stock in an "equity line" financing arrangement. During the year ended December 31, 2023, the Company issued and sold approximately 214,000 shares of common stock under the ELOC for gross proceeds of $ 0.3 million. No shares were sold under the ELOC during the three or nine months ended September 30, 2024.

In July and December 2023, the Company received $ 16.5 million in aggregate gross proceeds from the issuance of convertible notes, and on January 11, 2024 it received an additional $ 1.4 million in gross proceeds from the issuance of additional convertible notes. On September 24, 2024, the Company received $ 3.9 million in aggregate gross proceeds from the issuance of convertible notes, and on October 29, 2024, the Company received $ 1.1 million in gross proceeds from the sale of shares of the Company's common stock. See Note 5 and Note 17 for additional information regarding these financings.

In connection with preparing the accompanying condensed consolidated financial statements as of and for the three and nine months ended September 30, 2024, the Company's management concluded that there is substantial doubt regarding the Company's ability to continue as a going concern because it does not expect to have sufficient cash or working capital resources to fund operations for the twelve-month period subsequent to the issuance date of these condensed consolidated financial statements. The Company will need to raise additional capital, which could be through the sales of shares of its common stock under the ELOC, public or private equity offerings, debt financings, out-licensing the Company's intellectual property, strategic partnerships or other means. Other than the ELOC, the Company currently has no arrangements for capital, and no assurances can be given that it will be able to raise capital when needed, on acceptable terms, or at all.

The accompanying condensed consolidated financial statements have been prepared on a going-concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The accompanying condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

3) ASSET ACQUISITION

On April 26, 2023, the Company entered into an asset purchase agreement (the "Exacis Purchase Agreement"), with Dilos Bio (formerly known as Exacis Biotherapeutics Inc. ("Exacis")), the stockholders party thereto and, with respect to specified provisions therein, Factor Limited. Pursuant to the Exacis Purchase Agreement, the Company acquired from Exacis substantially all of Exacis' intellectual property assets (the "Exacis Assets"), including all of Exacis' right, title and interest in and to an exclusive license agreement between Exacis and Factor Limited (the "Purchased License"). The Company assumed none of Exacis' liabilities, other than liabilities under the Purchased License that accrue subsequent to the closing date. The transactions contemplated by the Exacis Purchase Agreement (the "Exacis Acquisition") closed on April 26, 2023.

In consideration for the Exacis Assets, on the closing date of the transaction, the Company issued to Exacis approximately 69,000 shares of common stock, which shares were subject to a 12-month lockup that expired in April 2024. The shares were issued to Exacis at a price based on the Company having an assumed equity valuation of $ 75.0 million, divided by the number of issued and outstanding shares of common stock as of the close of business two trading days prior to the closing date. For accounting purposes, the shares issued were valued at $ 3.00 per share, which was the closing price of the Company's common stock on the date of issuance. The Company additionally agreed to make certain contingent payments through April 23, 2026 related to achieving a market capitalization of $ 100 million and $ 200 million for a consecutive period of time (the "Market Cap Contingent Consideration"), as well as contingent payments related to the Company receiving proceeds related to the Purchased License through April 23, 2028.

The Company accounted for the Exacis Acquisition as an asset acquisition because it determined that substantially all of the fair value of the assets acquired was concentrated in the Purchased License. Assets acquired in an asset acquisition are recognized based on their cost to the acquirer and generally allocated to the assets on a relative fair value basis. The Company's cost for acquiring the Exacis Assets includes the issuance of the Company's common stock, direct acquisition-related costs and contingent consideration. The table below shows the total fair value of the consideration paid for the Exacis Assets (in thousands). See Note 4 for more information on the fair value measurement of the assets acquired.

	Fair Value of Consideration
Shares issued	$ 208
Contingent consideration	225

Direct costs	27
Total fair value	$ 460

The Company allocated 100 % of the fair value of the consideration to the Purchased License, which the Company determined is an in-process research and development ("IPR&D") asset. IPR&D assets acquired through an asset purchase that have no alternative future uses and no separate economic values from their original intended purpose are expensed in the period the cost is incurred. As a result, the Company expensed the fair value of the Purchased License during the three and nine months ended September 30, 2023.

On September 24, 2024, in connection with entering into the Exclusive License and Collaboration Agreement ("the Factor L&C Agreement") with Factor Bioscience Limited ("Factor Limited"), the Purchase License was terminated. See Note 10 for more information on the Factor L&C Agreement.

4) CONTRACT WITH CUSTOMER

On February 21, 2023, the Company and Lineage Cell Therapeutics, Inc. ("Lineage") entered into an exclusive option and license agreement (the "Lineage Agreement"), which provided Lineage with the option (the "Option Right") to obtain an exclusive sublicense of intellectual property from the Company and to request the Company to develop a customized cell line (the intellectual property that would be sublicensed by Lineage is currently licensed by the Company from Factor Limited). The Lineage Agreement was amended in August 2023 to provide for changes specifically related to the cell line customization activities such as (i) payment terms, (ii) certain definitions, (iii) certain courses of action if the customized cell line selected by Lineage is not successful and (iv) documentation requirements. Lineage paid the Company a $ 0.3 million non-refundable up-front payment (the "Option Fee") for the Option Right and paid an initial payment of $ 0.4 million to commence the cell line customization activities, per the amended payment terms. If Lineage obtained the sublicense, the Company would be entitled to receive additional license fees, including milestone payments and royalties.

On September 24, 2024, the Company and Factor Bioscience (as defined in Note 10) entered into an agreement (the "Lineage Assignment Agreement") under which the Company assigned the Lineage Agreement to Factor Bioscience. The Company's rights and obligations under the agreement are now the responsibility of Factor Bioscience.

Payments to the Company related to the Lineage Agreement will be subject to the Lineage Assignment Agreement, which provides for Factor Bioscience paying the Company thirty percent (30 %) of all amounts it actually receives from Lineage in the event that Lineage exercises its Option Right. Upon receipt of payment for the customization activities set forth in the Lineage Agreement, Factor Bioscience will pay the Company twenty percent (20 %) of all amounts Factor Bioscience receives from Lineage.

The Company recognizes revenue under ASC 606, *Revenue from Contracts with Customers* ("ASC 606") when a customer obtains control of promised services or goods in an amount that reflects the consideration to which the Company expects to receive in exchange for those goods or services.

Pursuant to ASC 606, the Company determined that the Option Right was an unexercised right held by Lineage under the Lineage Agreement at contract inception, as the cell line customization activities and the sublicense were optional purchases at contract inception. These optional purchases of goods and services would be treated as separate contracts if and when Lineage determines that it would make such purchases. Therefore, 100 % of the Option Fee was allocated to the Option Right. The Option Fee would remain in deferred revenue until such time that Lineage entered into the sublicense or when the Option Right expired. However, as a result of the Lineage Assignment Agreement, and there being no further obligations regarding the nonrefundable payment related to the Option Right, the Company recognized the $ 0.3 million Option Right payment in full as revenue during the three and nine months ended September 30, 2024.

The Option Right and the cell line customization activities were accounted for as separate contracts, and the Company determined that the amended terms discussed above represented a modification to the cell line customization contract. Because there were no goods or services transferred to Lineage before entering into the amendment, and therefore, no previously recognized revenue, there was no catch-up adjustment to revenue required at the time of the amendment.

Lineage was to make payments to the Company for the cell line customization activities over the development period. The Company would only earn the remaining full amount of the cell line customization fee if it made certain progress towards delivery of the customized cell line. The Company determined that $ 0.4 million of consideration received could be recognized without the probability of being reversed, and it placed a constraint on the remaining contractual customization fee. The $ 0.4 million was being recognized equally over the development period. However, as a result of the Lineage Assignment Agreement, and there being no further obligations the Company must fulfill for the customization activities, the Company accelerated the recognition of the remaining deferred revenue and recognized approximately $ 0.2 million during the three and nine months ended September 30, 2024. The Company recognized approximately $ 0.1 million in revenue during the three and nine months ended September 30, 2023 related to the customization activities.

The Company recognized direct labor and supplies used in the customization activities as incurred, which are recorded as a cost of revenue. As provided for in the A&R Factor License Agreement discussed in Note 10, the Company was obligated to pay Factor Limited 20 % of any amounts the Company received from a customer that was related to the licensed technology under the A&R Factor License Agreement, which is also recorded as a cost of revenue. For the three and nine months ended September 30, 2023, the Company recognized $ 0.1 million in license fees, which is recorded in cost of revenues, due to Factor Limited. There was no such license fee incurred during the three or nine months ended September 30, 2024.

5) CONVERTIBLE NOTES FINANCINGS, BRIDGE FINANCING, EXCHANGE TRANSACTION AND EQUITY FINANCING

On July 14, 2023, the Company received $ 8.7 million from a private placement in which the Company issued $ 8.7 million in aggregate principal amount of convertible notes (the "July 2023 Convertible Notes") and warrants to purchase an aggregate of approximately 6.1 million shares of its common stock (the "July 2023 Warrants"). The Company recognized approximately $ 0.2 million in fees associated with the transaction.

On December 14, 2023, the Company entered into a purchase agreement with certain purchasers for the private placement of $ 9.2 million of convertible notes (the "December 2023 Convertible Notes" and together with the July 2023 Convertible Notes, the "Convertible Notes") and warrants to purchase an aggregate of approximately 9.6 million shares of the Company's common stock (the "December 2023 Warrants" and together with the July 2023 Warrants, the "Note Warrants").

There were two closings under the December 14, 2023 purchase agreement – one on December 15, 2023 and the second on January 11, 2024. At the first closing, the Company received $ 7.8 million and issued $ 7.8 million of December 2023 Convertible Notes and December 2023 Warrants to purchase approximately 8.1 million shares of its common stock. At the second closing, the Company received $ 1.4 million and issued $ 1.4 million of December 2023 Convertible Notes and December 2023 Warrants to purchase approximately 1.5 million shares its common stock.

See Note 13 for more information on the Note Warrants.

The July 2023 Convertible Notes bear interest at 6 % per year, and the December 2023 Convertible Notes bear interest at 12 % per year, both of which are payable quarterly in arrears. At the Company's election, it may pay interest either in cash or in-kind by increasing the outstanding principal amount of the Convertible Notes. The Convertible Notes mature on the five-year anniversary of the date of their issuance, unless earlier converted or repurchased. The Company does not have the option to redeem any of the Convertible Notes prior to maturity.

At the option of the holders, the Convertible Notes may be converted from into shares of the Company's common stock at an initial conversion price of, with respect to the July 2023 Convertible Notes, $ 2.86 per share and, with respect to the December 2023 Convertible Notes, $ 1.9194 per share, subject to customary adjustments for stock splits, stock dividends, recapitalization and the like.

As of September 30, 2024, none of the Convertible Notes were converted into shares of common stock.

The Convertible Notes provide for customary events of default which include (subject in certain cases to customary grace and cure periods), among others: nonpayment of principal or interest, breach of covenants or other agreements in the Convertible Notes; the occurrence of a material adverse effect event (as defined in the related securities purchase agreement) and certain events of bankruptcy. Generally, if an undisputed event of default occurs and is continuing under the Convertible Notes, the holder may require the Company to redeem some or all of their Convertible Notes at a redemption price equal to 100 % of the principal amount of the Convertible Notes being redeemed, plus accrued and unpaid interest thereon. As of September 30, 2024, there were no events of default that occurred under any of the Convertible Notes.

Bridge Notes Financing

On September 24, 2024, the Company entered into a purchase agreement with certain purchasers for the private placement of $ 3.9 million of convertible notes (the "Bridge Notes"). The Bridge Notes bear interest at 12% per year, payable quarterly in arrears. At the Company's election, it may pay interest either in cash or in-kind by increasing the outstanding principal amount of the Bridge Notes. The Bridge Notes mature on the one-year anniversary of the date of their issuance, unless earlier converted or repurchased. The Company does not have the option to redeem any of the Bridge Notes prior to maturity. The Bridge Notes financing closed on September 24, 2024.

The only conversion event for the Bridge Notes is upon stockholder approval at the Company's annual meeting of stockholders on October 29, 2024 (the "Annual Meeting), in which case, 100 % of the principal amount of the Bridge Notes plus all accrued and unpaid interest thereon and, interest that would have accrued on the principal amount through December 24, 2024, will automatically convert into shares of the Company's common stock at a conversion price of $ 0.50 . Otherwise, the Bridge Notes may be paid in cash upon maturity.

The Bridge Notes have the same customary events of default provision as the Convertible Notes. As of September 30, 2024, there were no events of default that occurred under any of the Bridge Notes.

The Company was required to bifurcate the conversion feature from the Bridge Notes and record it as a derivative liability at its fair value. The Company determined the fair value of the derivative liability by taking the difference between the fair value of the Bridge Notes with the conversion feature and without the conversion feature, which resulting in the Company recording a $ 5.5 million derivative liability, with a corresponding $ 3.9 million reduction in the carrying value of the Bridge Notes recorded as a debt discount and a $ 1.6 million charge to expense for the incremental fair value of the derivative liability as of September 24, 2024. The debt discount is are amortized over the contractual terms of the Bridge Note as a component of interest expense.

At September 30, 2024, the Company remeasured the fair value of the Bridge Notes derivative liability and recorded a reduction in the liability of $ 0.6 million. The corresponding credit of $ 0.6 million is recorded as a component of the fair value adjustments to Bridge Notes derivative liability on the accompanying condensed consolidated statement of operations for the three and nine months ended September 30, 2024, which also includes the $ 1.6 million incremental expense noted above.

Exchange Transaction

On September 24, 2024, the Company entered into exchange agreements (the "Exchange Agreements") with the holders of (i) warrants to purchase an aggregate of approximately 4.4 million shares of our common stock the Company issued in December 2022 with an exercise price of $ 1.43 per share (the "December 2022 warrants"); (ii) the July 2023 convertible notes and July 2023 warrants; and (iii) the December 2023 convertible notes and the December 2023 warrants (the "Exchange Transactions"). The parties to the Exchange Agreements represent the holders of all the outstanding convertible notes and all the outstanding warrants described above except for a December 2022 warrant to purchase approximately 0.1 million shares of our common stock.

Subject to approval by the Company's stockholders at the Annual Meeting, under the Exchange Agreements (i) the holders of the warrants agreed to exchange all their warrants for shares of the Company's common stock at an exchange ratio of 0.5 of a share of common stock for every one share of common stock issuable upon exercise of the applicable warrant (rounded up to the nearest whole number), and (ii) the holders of the convertible notes agreed to exchange all their convertible notes for shares of the Company's common stock at an exchange ratio equal to (A) the sum expressed in U.S. dollars of (1) the principal amount of the applicable convertible note, plus (2) all accrued and unpaid interest thereon through the date the applicable convertible note is exchanged plus (3) all interest that would have accrued through, but not including, the maturity date of applicable convertible note if it was outstanding from the date such convertible note is exchanged through its maturity date (the sum of (A) totaling approximately $ 28.4 million), divided by (B) $ 1.00 (rounded up to the nearest whole number) (the "Exchange Transactions").

The Company determined that the modifications to the convertible notes should be accounted for as an extinguishment of debt because there was at least a 10 % change in the cash flows of the modified debt instrument compared to the carrying amount of the original debt instrument, and as such, the difference between the reacquisition price (which includes any premium) and the net carrying amount of the debt being extinguished (which includes any deferred debt issuance costs) should be recognized as a gain or loss when the debt is extinguished.

As of September 24, 2024, prior to entering into the Exchange Agreements, there was approximately $ 10.1 million of net carrying amount of the convertible notes, which was comprised of $ 19.4 million of principal and accrued interest through such date, offset by approximately $ 9.3 million of unamortized debt issuance costs. The fair value of the reacquired convertible notes was $ 32.0 million and was determined by multiplying approximately 28,351,000 shares the Company would be issuing on October 29, 2024 by the closing stock price of $ 1.13 per share on September 24, 2024. The difference between the reacquisition price and the net carrying amount of the convertible notes being extinguished was approximately $ 21.9 million. Accordingly, the Company increased the carrying value of the reacquired convertible notes to $ 32.0 million and recognized a loss on extinguishment of debt of approximately $ 21.9 million during the three and nine months ended September 30, 2024.

Because shareholder approval was required for the Exchange Transactions to occur, the Company determined that the modifications to the warrants resulted in a change in classification of such warrants from equity to liability. A provision that requires shareholder approval precludes equity classification because such approval is not an input into a fixed-for-fixed valuation model. As a result, the Company recorded the warrants at fair value as

of September 24, 2024 by taking the number of shares of common stock issuable from the exchanged warrants multiplied by the closing stock price of $ 1.13 and reclassified approximately $ 11.2 million from equity to warrant liabilities. The Company then marked-to-market the warrants as of September 30, 2024 by taking the same quantity of shares multiplied by the closing stock price on such date and recognized a reduction to the warrant liabilities of $ 0.8 million. A corresponding credit of $ 0.8 million was recognized as a change in fair value of warrant liabilities for the three and nine months ended September 30, 2024 on the accompanying condensed consolidated statement of operations.

Equity Financing

On September 24, 2024, the Company entered into a securities purchase agreement (the "SPA") with certain accredited investors to sell in a private placement an aggregate of approximately 1,517,000 shares of the Company's common stock (or, in lieu thereof, pre-funded warrants to purchase one share of our common stock) for a purchase price of $ 0.75 per share of common stock and $ 0.745 per pre-funded warrant (the "Common Stock Private Placement" and together with the Bridge Notes and the Exchange Transactions, the "September 2024 Transactions"). The closing of the Common Stock Private Placement was conditioned upon receiving stockholder approval at the Annual Meeting.

The SPA represents a forward sale contract obligating the Company to sell a fixed number of shares of its common stock at a fixed price per share upon obtaining shareholder approval at the Annual Meeting. The Company measured the fair value of the forward sale contract as the difference between (A) the fair value of the expected shares to be purchased by the investors as of the date the Company entered into the SPA and (B) the purchase price of the shares, and recorded approximately $ 0.6 million to additional paid-in capital as of September 24, 2024. Because of the concurrent execution of the SPA and the Exchange Agreements, and because the investors in the SPA are also parties to the Exchange Transactions, the $ 0.6 million was added to the $ 21.9 million loss on extinguishment of debt discussed above for a total loss of $ 22.4 million during the three and nine months ended September 30, 2024.

On October 29, 2024, the Company held its Annual Meeting, the Company's stockholders approved the September 2024 Transactions, and as a result, the following occurred on October 29, 2024:

- Under the Common Stock Private Placement, the Company issued approximately 1,402,000 shares of common stock and pre-funded warrants to purchase 115,000 shares of common stock and received approximately $ 1.1 million in gross proceeds from the issuance of such securities. The pre-funded warrants have an exercise price of $ 0.005 per share, are exercisable at any time and will not expire until exercised in full.

- Under the Bridge Notes, approximately $ 3.0 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $ 0.50 into approximately 6,244,000 shares of the Company's common stock and approximately $ 0.9 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $ 0.50 into pre-funded warrants to purchase 1,764,000 shares of common stock. The pre-funded warrants have an exercise price of $ 0.005 per share, are exercisable at any time and will not expire until exercised in full. As of October 29, 2024, there were no Bridge Notes outstanding.

- Under the Exchange Transactions, (i) the holders of the warrants exchanged approximately 19,902,000 warrants for approximately 9,951,000 shares of the Company's common stock, and (ii) the holders of the convertible notes exchanged all their convertible notes for approximately 28,351,000 shares of our common stock for a total of 38,302,000 shares of our common stock under the Exchange Transactions. As of October 29, 2024, there were no Convertible Notes outstanding.

6) FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between willing market participants. A fair value hierarchy has been established for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

● Level 1 Inputs – Valued based on quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

● Level 2 Inputs – Valued based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

● Level 3 Inputs – Valued based on inputs for which there is little or no market value, which require the reporting entity to develop its own assumptions.

The carrying amounts reported on the balance sheet for cash, other receivable, prepaid assets and other current assets, accounts payable and accrued expenses, other current liabilities and other liabilities approximate fair value based due to their short maturities.

The Company issued approximately 343,000 warrants in connection with a private placement during the first quarter of 2022 (the "Q1-22 warrants"), which were determined to be classified as a liability. The Company also recorded the Market Cap Contingent Consideration liability related to the Exacis Acquisition. See Note 3 for more information related to the Exacis Acquisition.

In connection with the Bridge Notes, the Company recorded a derivative liability as of September 24, 2024. In connection with the Exchange Transactions, on September 24, 2024, the Company reclassified the warrants included in the Exchange Transactions from equity to a liability. See Note 5 for more information related to the Bridge Notes and Exchange Transactions.

The Company uses a Black-Scholes option pricing model to estimate the fair value of the Q1-22 warrant liabilities and a Monte Carlo simulation model to estimate the fair value of the contingent consideration related to the Market Cap Contingent Consideration, both of which are considered a Level 3 fair value measurement.

The Company determined the fair value of the derivative liability by taking the difference between the fair value of the Bridge Notes with the conversion feature and without the conversion feature.

With respect to the warrants in the Exchange Transactions, the Company determined the fair value of the warrants as of September 24, 2024 by taking the number of shares of common stock issuable from the exchanged warrants multiplied by the closing stock price of $ 1.13 and reclassified approximately $ 11.2 million from equity to warrant liabilities.

The Company remeasures the fair value of the warrant liabilities , the Bridge Notes derivative liability and the Market Cap Contingent Consideration at each reporting period and changes in the fair values are recognized in the statement of operations.

The following tables summarize the liabilities that are measured at fair value as of September 30, 2024 and December 31, 2023 (in thousands):

Description	Level	September 30, 2024	December 31, 2023
Liabilities:			
Warrant liabilities - Q1-22 warrants	3	$ 15	$ 116
Warrant liabilities – Exchange Transactions	3	$ 10,448	$ -
Bridge Notes derivative liability	3	$ 4,926	$ -
Market Cap Contingent Consideration			

Certain inputs used in Black-Scholes and Monte Carlo models may fluctuate in future periods based upon factors that are outside of the Company's control. A significant change in one or more of these inputs used in the calculation of the fair value may cause a significant change to the fair value of the Company's warrant liabilities or contingent consideration liabilities, which could also result in material non-cash gains or losses being reported in the Company's condensed consolidated statement of operations.

The following table presents the changes in the liabilities measured at fair value from January 1, 2024 through September 30, 2024 (in thousands):

	Warrant Liabilities	Derivative Liability	Contingent Consideration
Fair value at January 1, 2024	$ 116	$ -	$ 107
Reclassification of warrants from equity to liability	11,244	-	-
Initial measurement of Bridge Notes derivative liability	-	5,566	-
Change in fair value	(897)	(640)	(66)
Fair value at September 30, 2024	$ 10,463	$ 4,926	$ 41

The Company assessed the fair value of the Market Cap Contingent Consideration at September 30, 2024 and determined that there were no material changes to the inputs used in the June 30, 2024 remeasurement that would have resulted in a material change to the liability at September 30, 2024. Therefore, the Company did not recognize a change in fair value of the Market Cap Contingent Consideration for the three months ended September 30, 2024.

The Company remeasured the Bridge Notes derivative liability by taking the difference between the fair value of the Bridge Notes with the conversion feature and without the conversion feature as of September 30, 2024 and recorded a $ 0.6 million credit for the change in fair value during the three months ended September 30, 2024.

The table below is provided for comparative purposes only and presents information about the fair value of the Company's convertible notes relative to the carrying values recognized in the condensed consolidated balance sheet as of September 30, 2024 and December 31, 2023 (in thousands).

		September 30, 2024		December 31, 2023	
	Level	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Notes	3	$ 32,037	$ 29,768	$ 16,616	$ 17,594
Bridge Notes	3	$ 3,887	$ 8,409	$ -	$ -

The carrying value of the Convertible Notes in the table above is reflective of the reacquisition price of the Convertible Notes as a result of the Exchange Agreements entered into on September 24, 2024, which was recorded at its fair value as of September 24, 2024. The Company determined the fair value of the Convertible Notes by multiplying the 28.4 million shares expected to be issued in common stock on October 29, 2024 by the closing stock price of $ 1.05 per share on September 30, 2024.

The carrying value of the Bridge Notes in the table above is shown before the bifurcation of the Bridge Notes derivative liability. The Company determined the fair value of the Bridge Notes by multiplying the 8.0 million shares expected to be issued in common stock (or in pre-funded warrants) on October 29, 2024 by the closing stock price of $ 1.05 per share on September 30, 2024.

See Note 5 for more information on the Convertible Notes and the Bridge Notes.

The Company assessed the fair value of the 2023 convertible notes as of December 31, 2023 using a binomial model, which is considered a Level 3 measurement.

7) GOODWILL

In 2018, the Company acquired IRX Therapeutics ("IRX"), which was accounted for as a business combination. The Company recorded goodwill in the amount of $ 2.0 million related to the IRX acquisition. Goodwill is not amortized but is tested for impairment annually, or more frequently if the Company becomes aware of any events occurring or changes in circumstances that indicate that the fair value of the entity is less than its carrying value. As of September 30, 2024, the Company did not identify potential triggering events that could indicate that the fair value of the entity is less than its carrying value and determined there were no such events that occurred.

8) LEASES

The Company currently has operating leases for office in the borough of Manhattan in New York, New York, and Cambridge, Massachusetts, which expire in 2026 and 2028, respectively.

In addition, in October 2022, the Company entered into a sublease with a subsidiary of Bristol-Myers Squibb Company, as sublessor ("Sublessor"), for office, laboratory and research and development space of approximately 45,500 square feet in Somerville, Massachusetts. The sublease provided for base rental payments of approximately $ 0.5 million per month as well as monthly payments for parking and the Company's share of traditional lease expenses, including certain taxes, operating expenses and utilities. The Company paid the Sublessor a security deposit in the form of

a letter of credit in the amount of approximately $ 4.1 million.

On May 3, 2024, the Company received a notice from the Sublessor regarding past due rent payments of approximately $ 2.3 million, including amounts related to property taxes and common area maintenance costs, that the Company did not pay for the months of February, March, April and May 2024. Failure to pay the past due rent payments in full, plus approximately $ 70,000 in late fees and interest, within five business days from the date of the notice constitutes an event of default under the sublease.

The Company also did not pay the rent for June, July or August 2024 and, as of August 1, 2024, owed approximately $ 4.0 million in the aggregate in past due rent. On August 5, 2024, the Sublessor drew down on the letter of credit for the full $ 4.1 million to cover the approximately $ 4.0 million of past due rent payments, plus interest and penalties.

On August 9, 2024, the Company and Sublessor entered into a sublease termination agreement, effective August 31, 2024. The sublease was originally scheduled to expire in 2033. Pursuant to the sublease termination agreement, the Company agreed to the following: to surrender and vacate the premises; that the Company's right, title and interest in all furniture, fixtures and laboratory equipment at the premises will become the property of the sublessor; and that both parties will be released of their obligations under the sublease. As a result of the sublease termination, the Company recognized a gain on lease termination of approximately $ 1.6 million for the three and nine months ended September 30, 2024, which includes a loss on disposal of fixed assets of approximately $ 0.5 million.

For the three and nine months ended September 30, 2024 and 2023, the net operating lease expenses were as follows (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Operating lease expense	$ 1,110	$ 1,623	$ 4,380	$ 1,758
Sublease income	(21)	(21)	(63)	(63)
Variable lease expense	225	6	887	18
Total lease expense	$ 1,314	$ 1,608	$ 5,204	$ 1,713

The tables below show the beginning balances of the operating ROU assets and lease liabilities as of January 1, 2024 and the ending balances as of September 30, 2024, including the changes during the period (in thousands).

	Operating Lease ROU Assets
Operating lease ROU assets at January 1, 2024	$ 32,781
Adjustment to ROU asset for remeasurement of Somerville Sublease liability	4,245
Write-off of Somerville Sublease ROU asset	(34,857)
Amortization of operating lease ROU assets	(1,450)
Operating lease ROU assets at September 30, 2024	$ 719

	Operating Lease Liabilities
Operating lease liabilities at January 1, 2024	$ 35,070
Adjustment to lease liability due to remeasurement of Somerville Sublease	4,245
Accretion of interest for Somerville Sublease	2,465
Write-off of Somerville Sublease liability	(36,924)
Principal payments on operating lease liabilities	(4,121)
Operating lease liabilities at September 30, 2024	735
Less non-current portion	534
Current portion at September 30, 2024	$ 201

As of September 30, 2024, the Company's operating leases had a weighted-average remaining life of 3.3 years with a weighted-average discount rate of 10.23 %. The maturities of the operating lease liabilities are as follows (in thousands):

	As of September 30, 2024
2024	$ 69
2025	274
2026	267
2027	163
2028	82
Total payments	855
Less imputed interest	(120)
Total operating lease liabilities	$ 735

9) ACCRUED EXPENSES

Accrued expenses at September 30, 2024 and December 31, 2023 consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Professional fees	$ 290	$ 239
Legal fees	267	643
Accrued compensation	108	109
Convertible notes interest	38	176
Somerville facility	-	218
Other	463	508
Total accrued expenses	$ 1,166	$ 1,893

10) RELATED PARTY TRANSACTIONS

Agreements with Factor Bioscience Inc. and Affiliates

As of September 30, 2024, the Company had entered into the agreements described below with Factor Bioscience Inc. and/or Dr. Matthew Angel. These agreements have been deemed related party transactions because the Company's former chief executive officer, Dr. Angel, is the chairman and chief executive officer of Factor Bioscience Inc. and a director of its subsidiary, Factor Bioscience Limited ("Factor Limited" and together with Factor Bioscience Inc. and its other affiliates, "Factor Bioscience"). Dr. Angel resigned as the Company's chief executive officer effective December 31, 2023.

In September 2022, the Company entered into a Master Services Agreement (the "MSA") with Factor Bioscience, pursuant to which Factor Bioscience agreed to provide services to the Company as agreed between the Company and Factor Bioscience and as set forth in one or more work orders under the MSA, including the first work order included in the MSA ("WO1"). The MSA contains customary confidentiality provisions and representations and warranties of the parties, and the MSA may be terminated by either party upon 30 days' prior notice, subject to any superseding termination provisions contained in a particular work order.

Under WO1, Factor Bioscience agreed to provide the Company with mRNA cell engineering research support services, including access to certain facilities, equipment, materials and training, and the Company agreed to pay Factor Bioscience an initial fee of $ 5.0 million, payable in 12 equal monthly installments of approximately $ 0.4 million. Of the $ 5.0 million, the Company allocated $ 3.5 million to the License Fee Obligation (as defined below). Following the initial 12-month period, the Company agreed to continue paying Factor Bioscience the monthly fee of $ 0.4 million until such time as WO1 is terminated. Upon entering into the MSA, the Company paid a deposit of $ 0.4 million, which will be applied to the last month of WO1.

Under the terms of an amendment to WO1, the Company may terminate WO1 on or after the second anniversary of the date of the MSA, subject to providing Factor Bioscience with 75 days' prior notice if such notice is provided no later than June 30, 2024. On June 26, 2024, the Company provided Factor Bioscience with its notice to terminate WO1, which became effective on September 9, 2024.

In connection with entering into the MSA, Factor Limited entered into a waiver agreement with Eterna LLC, pursuant to which Factor Limited agreed to waive payment of $ 3.5 million otherwise payable to it (the "License Fee Obligation") in October 2022 by Eterna LLC under the exclusive license agreement entered into in April 2021 among Eterna LLC, Novellus Limited and Factor Limited (the "Original Factor License Agreement"). Under the waiver agreement, the License Fee Obligation is waived conditionally on the Company paying Factor Bioscience a minimum of $ 3.5 million due under the MSA.

Because the License Fee Obligation was conditionally waived until the Company paid Factor Bioscience a minimum of $ 3.5 million under the MSA, the Company recorded a liability of $ 3.5 million. As of September 30, 2024, there was no License Fee Obligation liability remaining.

In September 2022, Novellus Inc. ("Novellus") and the Company entered into a Second Amendment to the Limited Waiver and Assignment Agreement (the "Waiver and Assignment Agreement") with Drs. Matthew Angel and Christopher Rohde (the "Founders") whereby the Company agreed to be responsible for all future, reasonable and substantiated legal fees, costs, settlements and judgments incurred by the Founders, the Company or Novellus for certain claims and actions and any pending or future litigation brought against the Founders, Novellus and/or the Company by or on behalf of the Westman and Sowyrda legal matters described in Note 10 (the "Covered Claims"). The Founders will continue to be solely responsible for any payments made to satisfy a judgement or settlement of any pending or future wage act claims. Under the Waiver and Assignment Agreement, the Founders agreed that they are not entitled to, and waived any right to, indemnification or advancement of past, present or future legal fees, costs, judgments, settlement or other liabilities they may have been entitled to receive from the Company or Novellus in respect of the Covered Claims. The Company and the Founders will share in any recoveries up to the point at which the parties have been fully compensated for legal fees, costs and expenses incurred, with the Company retaining any excess recoveries. The Company has the sole authority to direct and control the prosecution, defense and settlement of the Covered Claims.

In November 2022, following the expiration of one of the milestone deadlines for certain regulatory filings required under the Third Amended and Restated Exclusive License Agreement between Novellus Limited and Factor Limited entered into in November 2020 (the "Novellus-Factor License Agreement"), which permitted Factor Limited to terminate the license granted to Novellus Limited thereunder, the Company entered into the first amendment to the Original Factor License Agreement (as amended, the "2021 Factor License Agreement"), pursuant to which, among other things, Factor Limited granted to Eterna LLC an exclusive, sublicensable license under certain patents owned by Factor Limited (the "Factor Patents") for the purpose of identifying and pursuing certain opportunities to grant to third parties sublicenses to the Factor Patents. The Original Factor License Agreement also (i) terminated the Novellus-Factor License Agreement, (ii) confirmed Factor Limited's grant to Eterna LLC of the rights and licenses Novellus Limited previously granted to Eterna LLC under the Novellus-Factor License Agreement on the same terms and conditions as granted by Novellus Limited to Eterna LLC under such agreement, (iii) confirmed that the sublicense granted by Novellus Limited in accordance with the Novellus-Factor License Agreement to NoveCite, Inc., a company which the Company has a 25 % non-controlling interest ("NoveCite"), survived termination of the Novellus-Factor License Agreement; and (iv) removed Novellus Limited from the Original Factor License Agreement and the license agreement entered into on October 6, 2020 between Novellus Limited and NoveCite, Inc, as amended, and replaced Novellus Limited with Factor Limited as the direct licensor to Eterna LLC and NoveCite under such agreements, respectively.

On February 20, 2023, the Company, entered into an exclusive license agreement (the "Feb 2023 Factor Exclusive License Agreement") with Factor Limited, pursuant to which Factor Limited granted to the Company an exclusive, sublicensable, worldwide license under certain patents owned by Factor Limited for the purpose of, among other things, identifying and pursuing certain opportunities to develop products in respect of such patents and to otherwise grant to third parties sublicenses to such patents. The Feb 2023 Factor Exclusive License Agreement, which terminated and superseded the Amended Factor License Agreement, was subsequently terminated and superseded by the A&R Factor License Agreement (as defined below).

On November 14, 2023, the Company entered into an amended and restated exclusive license agreement (the "A&R Factor License Agreement") with Factor Limited to replace in its entirety the exclusive license agreement between the parties dated February 20, 2023 and the amendment thereto. Under the A&R Factor License Agreement, Factor Limited granted to the Company an exclusive, sublicensable license under certain patents owned by Factor Limited (the "Factor Patents"). The A&R Factor License Agreement also provides for, among other things, the expansion of the Company's license rights to include (i) the field of use of the Factor Patents to include veterinary uses (ii) know-how that is necessary or reasonably useful to practice to the licensed patents, (iii) the ability to sublicense through multiple tiers (as opposed to only permitting a direct sublicense) and (iv) the transfer of technology to the Company, subject to the use restrictions in the A&R Factor License Agreement. The A&R Factor License Agreement was subsequently terminated and superseded by the Factor L&C Agreement discussed below.

On September 24, 2024, the Company entered into the Factor L&C Agreement, effective as of September 9, 2024, with Factor Limited. The Factor L&C Agreement terminated the A&R Factor License Agreement as well as the Purchased License that Exacis entered into with Factor Bioscience

on November 4, 2020, which the Company acquired pursuant to the Exacis Purchase Agreement with Exacis and certain stockholders of Exacis on April 26, 2023.

Under the Factor L&C Agreement, the Company has obtained exclusive licenses in the fields of cancer, autoimmune disorders, and rare diseases with respect to certain licensed technology and has the right to develop the licensed technology directly or enter into co-development agreements with partners who can help bring such technology to market. The Factor L&C Agreement also provides for certain services and materials to be provided by Factor Bioscience to facilitate the development of the licensed technology and to enable the Company to scale up production at third party facilities.

The initial term of the Factor L&C Agreement is one year after the effective date, and it automatically renews yearly thereafter. The Company may terminate the Factor L&C Agreement for any reason upon 90 days' written notice to Factor Bioscience, and the parties otherwise have customary termination rights, including in connection with certain uncured material breaches and specified bankruptcy events.

Pursuant to the Factor L&C Agreement, the Company will pay Factor Bioscience approximately $ 0.2 million per month for the first twelve months, approximately $ 0.1 million per month for the first nine months toward patent costs, certain milestone payments, royalty payments on net sales of commercialized products and sublicensing fee payments.

Exacis Asset Acquisition

On April 26, 2023, the Company closed the Exacis Acquisition. See Note 3 for additional information.

The Exacis Acquisition was deemed a related party transaction because, at the time of the acquisition, (i) Dr. Gregory Fiore was both the chief executive officer of Exacis and a member of the Company's board of directors, (ii) Dr. Angel was both the Company's chief executive officer and chairman of Exacis' scientific advisory board, and (iii) an affiliate of Factor Bioscience was the majority stockholder of Exacis.

Consulting Agreement with Former Director

In May 2023, the Company entered into a consulting agreement with Dr. Fiore, whereby Dr. Fiore agreed to provide business development consulting services to the Company for a monthly retainer of $ 20,000 . The consulting agreement was terminable for any reason by either party upon 15 days' written notice. The Company terminated the consulting agreement, effective July 31, 2023. Dr. Fiore served on the Company's board of directors from June 2022 to October 4, 2023.

July 2023, December 2023 and September 2024 Financings

Investors in the July 2023 convertible note financing included Brant Binder, Richard Wagner, Charles Cherington and Nicholas Singer, and investors in the December 2023 convertible note financing and the September 2024 financing included Messrs. Cherington and Singer. Each of them participated in the applicable financing under the same terms and subject to the same conditions as all the other investors. See Note 5 and Note 17 for additional information regarding the financings. Mr. Binder served on the Company's board of directors from July 6, 2023 to August 8, 2023, Mr. Wagner served on the Company's board of directors from July 6, 2023 to August 8, 2023, Mr. Cherington served on the Company's board of directors from March 2021 to July 6, 2023, and Mr. Singer served on the Company's board of directors from June 2022 to July 6, 2023.

11) COMMITMENTS AND CONTINGENCIES

Litigation Matters

The Company is involved in litigation and arbitrations from time to time in the ordinary course of business. Legal fees and other costs associated with such actions are expensed as incurred. In addition, the Company assesses the need to record a liability for litigation and contingencies. The Company reserves for costs relating to these matters when a loss is probable, and the amount can be reasonably estimated.

Novellus, Inc. v. Sowyrda et al., C.A. No. 2184CV02436-BLS2

On October 25, 2021 Novellus, Inc. filed a complaint in the Superior Court of Massachusetts, Suffolk County, against former Novellus, Inc. employees Paul Sowyrda and John Westman and certain other former investors in Novellus LLC (Novellus, Inc.'s former parent company prior to our acquisition of Novellus, Inc.), alleging breach of fiduciary duty, breach of contract and civil conspiracy. Eterna acquired Novellus, Inc. on July 16, 2021. On May 27, 2022 Novellus, Inc. amended the complaint to withdraw all claims against all defendants except Paul Sowyrda and John Westman. On July 1, 2022, Westman filed a motion to compel arbitration or in the alternative, to stay the litigation pending the disposition of certain litigation in the Court of Chancery for the State of Delaware filed by Mr. Sowyrda against Novellus LLC, Dr. Christopher Rohde, Dr. Matthew Angel, Leonard Mazur and Factor Bioscience, Inc. captioned *Zelickson et al., v. Angel et al.,* C.A. 2021-1014-JRS and by Westman against Novellus LLC captioned *Westman v. Novellus LLC*, C.A. No. 2021-0882-NAC (together, the "Delaware Actions"). On July 1, 2022, Sowyrda answered the complaint and asserted counterclaims against Novellus, Inc, and third-party defendants Dr. Matthew Angel and Dr. Christopher Rohde alleging violations of the Massachusetts Wage Act, Massachusetts Minimum Fair Wage Law, the Fair Labor Standards Act, breach of contract, unjust enrichment and quantum meruit. Sowyrda also joined in Westman's motion to stay the case pending the Delaware Actions. Novellus, Inc.'s claims and Mr. Sowyrda's counterclaims relate to alleged conduct that took place before Eterna acquired Novellus, Inc.

On November 15, 2022, prior to a decision on Westman's and Sowyrda's motion to compel or stay, the parties agreed to voluntarily dismiss and consolidate the Delaware Actions with this action. On December 15, 2022, Sowyrda filed an Amended Answer to the Amended Complaint, asserted affirmative defenses and filed Amended Counterclaims against Dr. Angel, Dr. Rohde, Novellus LLC, Novellus Inc., Factor Bioscience Inc., and Eterna Therapeutics Inc. (collectively, the "Counterclaim Defendants") alleging against various Counterclaim Defendants breach of contract, breaches of the implied duty of good faith and fair dealing, breaches of fiduciary duty, breaches of the operating agreement, aiding and abetting breaches of fiduciary duty, tortious interference with contract, equitable accounting, violations of the Massachusetts Wage Act, Massachusetts Minimum Fair Wage Law, the Fair Labor Standards Act, unjust enrichment, and quantum meruit. Also on December 15, 2022, Westman filed an answer to the Amended Complaint and asserted similar counterclaims against the same Counterclaim Defendants. Westman and Sowyrda each asserted claims for indemnification and/or advancement against Novellus, Inc. On January 11, 2023, Westman and Sowyrda served a joint motion to enforce their advancement and/or indemnification rights against Novellus Inc. Novellus Inc. vigorously opposes this motion and served its opposition on January 27, 2023. On February 8, 2023, Westman and Sowyrda served a reply in support of their motion to enforce indemnification/advancement rights, and submitted the motion to the Court. Novellus Inc. answered Westman and Sowyrda's counterclaims on January 27, 2023, denying liability. The remaining Counterclaim Defendants served a motion to dismiss most of the remaining counterclaims on January 27, 2023. The Court entered an order granting the Counterclaim Defendants' motion to dismiss and denying Sowyrda and Westman's motion to enforce on June 15, 2023. The Court's order dismissed all of Westman's claims against Counterclaim Defendants except his claim for indemnification, and all of Sowyrda's claims except his claim for indemnification and his

employment-related claims, which Counterclaim Defendants did not move to dismiss. On July 6, 2023, Westman and Sowyrda filed a petition for interlocutory review with a single justice of the Massachusetts Appeals Court, seeking to overturn the judge's decision granting the Counterclaim Defendants' motion to dismiss most of the remaining counterclaims, but not the decision denying Westman and Sowyrda's motion to enforce advancement rights. On July 25, 2023, the parties to the appeal filed a joint motion to the single justice in the appellate court to stay the appeal to allow for amended counterclaims to be filed by Counterclaim Plaintiffs and a motion to dismiss to be filed by Counterclaim Defendants. Counterclaim Plaintiffs filed an initial set of amended counterclaims on August 15, 2023. Counterclaim Plaintiffs amended and refiled their amended counterclaims on September 29, 2023. Counterclaim Defendants served their motion to dismiss all of the amended counterclaims, except for Sowyrda's employment-related claims, on October 13, 2023. On June 13, 2024, the motion to dismiss was denied and the court set a schedule for discovery limited to a threshold factual issue. Discovery as to all other issues pertaining to the counterclaims was stayed. On July 15, 2024, Westman and Sowyrda requested that the single justice in the appellate court continue to stay the appeal pending the outcome of the limited discovery ordered by the Court. On July 31, 2024, Counterclaim Defendants and Sowyrda informed the Court that they had reached a settlement and requested that all claims pending between them be dismissed with prejudice, and on August 9, 2024, the Court approved the motion for approval of dismissal of all such claims with prejudice. Pursuant to the Court's order, Counterclaim Defendants are engaged in limited discovery with Westman.. The next Court conference is scheduled for November 18, 2024.

Under applicable Delaware law and Novellus Inc.'s organizational documents, the Company may be required to advance or reimburse certain legal expenses incurred by former officers and directors of Novellus, Inc. in connection with the foregoing Westman and Sowyrda matters. However, a future advance or reimbursement is not currently probable nor can it be reasonably estimated.

eTheRNA Immunotherapies NV and eTheRNA Inc. v. Eterna Therapeutics Inc. C.A. No. 123CV11732

On July 31, 2023, eTheRNA Immunotherapies NV and eTheRNA Inc. filed a complaint against the Company alleging the following claims: (1) federal trademark infringement; (2) federal unfair competition; (3) Massachusetts state common law trademark infringement; (4) Massachusetts state unfair competition. On April 2, 2024, the parties settled the claims and stipulated to dismiss the complaint with prejudice. Per the settlement agreement entered into between the parties on March 19, 2024, the Company plans to phase-out its current use of the ETERNA trademark by October 31, 2024.

On October 6, 2024, the parties entered into an addendum to the settlement agreement extending the deadline for phasing out the Company's use of the ETERNA trademark until March 31, 2025. If the Company continues to use the Eterna Therapeutics name as of April 1, 2025, it will be obligated to pay € 667 per day that it continues to do so.

Licensing Agreements

On September 24, 2024, the Company entered into the Factor L&C Agreement. See Note 10 for details of this agreement.

Retirement Savings Plan

The Company established a defined contribution plan, organized under Section 401(k) of the Internal Revenue Code, which allows employees to defer up to 90 % of their pay on a pre-tax basis. Beginning on January 1, 2023, the Company began matching employees' contributions at a rate of 100 % of the first 3 % of the employee's contribution and 50 % of the next 2 % of the employee's contribution, for a maximum Company match of 4 %.

12) STOCK-BASED COMPENSATION

Stock Options

During the nine months ended September 30, 2024 and 2023, the Company granted options to purchase the number of shares of the Company's common stock set forth in the table below (in thousands):

	Nine months ended September 30,	
	2024	**2023**
Stock options granted	2,375	237

There were no stock options granted during either of the three months ended September 30, 2024 or 2023.

On January 1, 2024, Sanjeev Luther was appointed as President, Chief Executive Officer and a director of the Company. Upon his appointment, he was granted a non-qualified stock option to purchase approximately 1,685,000 shares of the Company's common stock. The stock option has an exercise price of $ 1.80 per share, which was equal to the fair market value (as defined in the 2020 Restated Equity Incentive Plan) of the Company's common stock on the date of grant, will vest over four years , with 25 % of the shares vesting on the first anniversary of the grant date and the remaining 75 % of the shares vesting in equal monthly installments over the three years thereafter, in each case, subject to continued service. The stock option was granted pursuant to the terms of Mr. Luther's employment agreement and as a material inducement to his joining the Company in accordance with Nasdaq Listing Rule 5635(c)(4).

On April 26, 2024, the vesting terms of Mr. Luther's stock option award were amended so that the option vests over three years , with 25 % of the shares vesting on the first anniversary of the grant date and the remaining 75 % of the shares will vest in equal monthly installments over the remaining two years, in each case, subject to continued service.

Since the only modification to Mr. Luther's stock option award was to the vesting terms, there was no change to the fair value of the stock option and the total compensation cost was unchanged. However, the total compensation cost will be recognized over three years rather than four years, and as a result, the Company recognized approximately $ 0.1 million in additional stock-based compensation expense during the nine months ended September 30, 2024 as a result of the modification.

The Company recognizes stock-based compensation expense for stock options granted to employees, directors and certain consultants. The Company estimates the fair value of stock options using the Black-Scholes option pricing model. The fair value of stock options granted is recognized as expense over the requisite service period on a straight-lined basis.

The following weighted-average assumptions were used for stock options granted during the nine months ended September 30, 2024 and 2023:

	Nine months ended September 30,

	2024	2023
Weighted average risk-free rate	4.45%	3.82%
Weighted average volatility	97.91%	95.15%
Dividend yield	0.00%	0%
Expected term	5.85 years	5.44 years

The per-share weighted average grant-date fair value of stock options granted during the nine months ended September 30, 2024 and 2023 were as follows:

	Nine months ended September 30,	
	2024	2023
Weighted average grant date fair value	$ 1.44	$ 2.99

Vesting of all stock options is subject to continuous service with the Company through the applicable vesting date. As of September 30, 2024, there were approximately 2,516,000 shares of the Company's common stock subject to outstanding stock options.

Restricted Stock Units

The Company recognizes the fair value of RSUs as expense on a straight-line basis over the requisite service period. For performance-based RSUs, the Company begins recognizing the expense once the achievement of the related performance goal is determined to be probable.

Outstanding RSUs are settled in an equal number of shares of common stock on the vesting date of the award. An RSU award is settled only to the extent vested. Vesting generally requires the continued employment or service by the award recipient through the applicable vesting date. Because RSUs are settled in an equal number of shares of common stock without any offsetting payment by the recipient, the measurement of cost is based on the quoted market price of the stock at the measurement date, which is the grant date.

In lieu of paying cash to satisfy withholding taxes due upon the settlement of vested RSUs, at the Company's discretion, an employee may elect to have shares of common stock withheld that would otherwise be issued at settlement, the value of which is equal to the amount of withholding taxes payable. During the three and nine months ended September 30, 2024 and 2023, less than 1,000 RSUs vested. As of September 30, 2024, there were less than 1,000 RSUs outstanding.

The Company did no t grant RSUs during either of the three or nine months ended September 30, 2024 and 2023.

Stock-Based Compensation Expense

For the three and nine months ended September 30, 2024 and 2023, the Company recognized stock-based compensation expense as follows (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Research and development	$ 13	$ 57	$ 74	$ 177
General and administrative	392	117	1,036	900
Total	$ 405	$ 174	$ 1,110	$ 1,077

13) WARRANTS

As discussed in Notes 5 and 6, respectively, the Company has previously issued the note warrants and the Q1-22 warrants. The Company also has the December 2022 warrants outstanding from a private placement completed in the fourth quarter of 2022.

As of September 30, 2024, the Company has the following warrants outstanding:

	Warrants Outstanding (in thousands)	Exercise Price	Expiration Date	Classification
Q1-22 warrants	343	$ 38.20	September 9, 2027	Liability
December 2022 Warrants	4,370	$ 1.43	June 2, 2028	Equity
July 2023 Note Warrants	6,094	$ 1.43	July 14, 2028	Equity
December 2023 Note Warrant issued December 15, 2023	8,115	$ 1.43	December 15, 2028	Equity
December 2023 Note Warrant issued January 11, 2024	1,464	$ 1.43	January 11, 2029	Equity
	20,386			

As of September 30, 2024, the weighted average remaining contractual life of the warrants outstanding was 3.95 years and the weighted average exercise price was $ 2.05 .

On October 29, 2024, all of the warrants except for the Q1-22 warrants and approximately 142,000 of the December 2022 Warrants were exchanged for common stock at a rate of one-half share of common stock for every one warrant share pursuant to the Exchange Transactions. See Note 5 and 17 for more information regarding the Exchange Transactions.

14) NET LOSS PER SHARE

The Company calculates basic and diluted net loss per share attributable to common stockholders in conformity with the two-class method required for participating securities. The convertible notes contractually entitle the holders thereof to participate in dividends but does not contractually require the holders to participate in the Company's losses. As such, the two-class method is not applicable during periods with a net loss.

Basic net loss per share is calculated by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is calculated by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding plus dilutive securities. Shares of

common stock issuable upon exercise, conversion or vesting of outstanding stock options, RSUs, warrants and shares of Series A convertible preferred stock are considered potential shares of common stock and are included in the calculation of diluted net loss per share using the treasury method when their effect is dilutive. The outstanding convertible notes are also considered potential shares of common stock and are included in the calculation of diluted net loss per share using the "if-converted" method, and the more dilutive of either the two-class method or the if-converted method is reported. Diluted net loss per share is the same as basic net loss per share for periods in which the effect of potentially dilutive shares of common stock is antidilutive.

The following table presents the number of shares subject to outstanding warrants, stock options, RSUs, Series A convertible preferred stock and convertible notes that were excluded from the computation of diluted net loss per share of common stock for the three and nine months ended September 30, 2024 and 2023, as their effect was anti-dilutive (in thousands):

	Three and nine months ended September 30,	
	2024	2023
Warrants	20,386	10,807
Convertible Notes converted into common stock	16,106	3,087
Stock options	2,516	510
Preferred stock converted into common stock	31	12
RSUs	-	1
Total potential common shares excluded from computation	39,039	14,417

15) STANDBY EQUITY PURCHASE AGREEMENT

On April 5, 2023, the Company entered into the ELOC with Lincoln Park, pursuant to which Lincoln Park committed to purchase up to $ 10.0 million of the Company's common stock, subject to the terms and conditions contained in the appliable agreements. Such sales of common stock by the Company, if any, are subject to certain limitations set forth in the purchase agreement, and may occur from time to time, at the Company's sole discretion, over a period of up to 24 -months, commencing April 25, 2023, which was the date on which each of the conditions to Lincoln Park's purchase obligations set forth in the purchase agreement were initially satisfied. In consideration of Lincoln Park's entry into the purchase agreement, the Company issued to Lincoln Park approximately 74,000 shares of common stock as commitment shares. The value of the commitment shares was recorded as a period expense and included in other expense, net, in the accompanying condensed consolidated statements of operations for the three and nine months ended September 30, 2023.

In April 2023, the Company filed a registration statement on Form S-1 to register the sale from time to time of up to 2,930,237 shares of the Company's common stock by Lincoln Park, including the approximately 74,000 commitment shares, which was declared effective on April 24, 2023 (the "ELOC S-1").

During the three and nine months ended September 30, 2023, the Company issued and sold approximately 214,000 shares of common stock under the ELOC, including the approximately 74,000 commitment shares, for gross proceeds of $ 0.3 million. No shares were sold under the ELOC during the three or nine months ended September 30, 2024. As of September 30, 2024, there were approximately 2,716,000 shares remaining to be sold under the ELOC that are registered for resale by Lincoln Park under the ELOC S-1.

16) RECENT ACCOUNTING PRONOUNCEMENTS

No new Accounting Standards Updates have been issued by the Financial Accounting Standards Board since January 1, 2024 that would apply to the Company that are not disclosed in the 2023 10-K.

17) SUBSEQUENT EVENT

As discussed in Note 5, on September 24, 2024, the Company entered into the September 2024 Transactions. On October 29, 2024, the Company held its Annual Meeting, whereby the Company's stockholders approved the September 2024 Transactions, and as a result, the following occurred:

- Under the Common Stock Private Placement, the Company issued approximately 1,402,000 shares of common stock and pre-funded warrants to purchase 115,000 shares of common stock and received approximately $ 1.1 million in gross proceeds from the issuance of such securities. The pre-funded warrants have an exercise price of $ 0.005 per share, are exercisable at any time and will not expire until exercised in full.

- Under the Bridge Notes, approximately $ 3.0 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $ 0.50 into approximately 6,244,000 shares of the Company's common stock and approximately $ 0.9 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $ 0.50 into pre-funded warrants to purchase 1,764,000 shares of common stock. The pre-funded warrants have an exercise price of $ 0.005 per share, are exercisable at any time and will not expire until exercised in full.

- Under the Exchange Transactions, (i) the holders of the warrants exchanged approximately 19,902,000 warrants for approximately 9,951,000 shares of the Company's common stock at an exchange ratio of one-half of a share of common stock for every one share of common stock issuable upon exercise of the applicable warrant (rounded up to the nearest whole number), and (ii) the holders of the convertible notes exchanged all their convertible notes for approximately 28,351,000 shares of the Company's common stock at an exchange ratio equal to (A) the sum expressed in U.S. dollars of (1) the principal amount of the applicable convertible note, plus (2) all accrued and unpaid interest thereon through the date the applicable convertible note is exchanged plus (3) all interest that would have accrued through, but not including, the maturity date of applicable convertible note if it was outstanding from the date such convertible note is exchanged through its maturity date, divided by (B) $ 1.00 (rounded up to the nearest whole number). The Company issued approximately 38,302,000 shares of our common stock at the closing of the Exchange Transactions.

In total, the Company issued approximately 45.9 million shares of common stock and 1.9 million pre-funded warrants on October 29, 2024 pursuant to the September 24, 2024 Transactions and had 51.4 million shares of common stock issued and outstanding.

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

You should read this discussion together with the unaudited interim condensed consolidated financial statements, related notes, and other financial information included elsewhere in this Quarterly Report on Form 10-Q together with our audited consolidated financial statements, related notes, and other information contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 filed with the Securities and Exchange Commission (the "SEC") on March 14, 2023, as amended by the Form 10-K/A filed with the SEC on March 18, 2024 (as amended, the "2023 10-K"). The following discussion contains or is based on assumptions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed under "Risk Factors," in this report and in Part I, Item 1A of the 2023 10-K and as described from time to time in our other filings with the SEC. These risks could cause our actual results to differ materially from those anticipated in these forward-looking statements.

Overview

We are a preclinical-stage cell therapy company. Our vision is to improve the lives of patients with difficult-to-treat diseases through innovative, effective, and safe, but accessible cellular therapies, and our mission is to develop allogenic off-the-shelf cellular therapies, leveraging induced pluripotent stem cell ("iPSC")-derived mesenchymal stem cells ("iMSCs") to target solid tumors.

Our lead product ERNA-101 is allogenic IL-7 and IL-15-secreting iMSCs. ERNA-101 capitalizes on the intrinsic tumor-homing ability of MSCs to slip through the tumor's defenses and to deliver potent pro-inflammatory factors directly to the tumor microenvironment ("TME"), limiting systemic exposure and potential toxicity while unleashing potent anti-cancer immune responses including enhancement of T-cell anti-tumor activity. Our initial focus is to develop ERNA-101 in triple negative breast cancer and platinum-resistant, tp53-mutant ovarian cancer. We collaborated with the University of Texas MD Anderson Cancer Center to investigate the ability of ERNA-101 to induce and modulate antitumor immunity in ovarian cancer and breast cancer model. We are expecting to complete the Investigational New Drug ("IND") enabling studies and IND submission by 2026. We are also planning to investigate anti-inflammatory cytokine (e.g. IL-10)-secreting iMSCs in inflammatory/auto-immune disorders like Rheumatoid arthritis. We are actively seeking strategic partnerships to co-develop or out-license therapeutic assets and engage with potential collaborators to expand developmental opportunities.

Recent Developments

Private Placement

On October 29, 2024, we closed a private placement in which we sold an aggregate of 1,401,994 shares of our common stock and pre-funded warrants to purchase 115,000 shares of our common stock at a purchase price of $0.75 per share of common stock and $0.745 per pre-funded warrant. We received approximately $1.1 million in gross proceeds from the issuance of such securities. For additional information regarding this private placement, see Note 5 to the accompanying condensed consolidated financial statements.

Exchange Transactions

Also on October 29, 2024, in accordance with exchange agreements we entered into with the holders of certain of our warrants and convertible notes, we issued an aggregate of 38,302,029 shares of our common stock in exchange for: (i) warrants to purchase an aggregate of approximately 4.4 million shares of our common stock that we issued in December 2022 with an exercise price of $1.43 per share; (ii) $8.7 million in the aggregate principal amount of convertible notes that we issued in July 2023 and warrants to purchase an aggregate of approximately 6.1 million shares of our common stock that we issued in July 2023 with an exercise price of $1.43 per share; (iii) $9.2 million in the aggregate principal amount of convertible notes that we issued in December 2023 and warrants to purchase an aggregate of approximately 9.6 million shares of our common stock that we issued in December 2023 with an exercise price of $1.43 per share.

The holders of the warrants described in the paragraph above exchanged all their warrants for shares of our common stock at an exchange ratio of 0.5 of a share of common stock for every one share of common stock issuable upon exercise of the applicable warrant (rounded up to the nearest whole number), and the holders of the convertible notes described in the paragraph above exchanged all their convertible notes for shares of our common stock at an exchange ratio equal to (A) the sum expressed in U.S. dollars of (1) the principal amount of the applicable convertible note, plus (2) all accrued and unpaid interest thereon through the date the applicable convertible note is exchanged plus (3) all interest that would have accrued through, but not including, the maturity date of applicable convertible note if it was outstanding from the date such convertible note is exchanged through its maturity date, divided by (B) $1.00 (rounded up to the nearest whole number).

For additional information regarding the exchange transactions, see Note 5 to the accompanying condensed consolidated financial statements.

Conversion of Bridge Notes

On September 24, 2024, we closed a private placement in which we sold an aggregate principal amount of approximately $3.9 million of 12.0% senior convertible notes (the "bridge notes").

On October 29, 2024, in accordance with the terms of the bridge notes, approximately $3.0 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $0.50 into 6,244,237 shares of our common stock, and approximately $0.9 million of the principal amount of the bridge notes plus all accrued and unpaid interest thereon, plus such amount of interest that would have accrued on the principal amount through December 24, 2024, was automatically converted at a conversion price of $0.50 into pre-funded warrants to purchase 1,764,000 shares of our common stock.

For additional information regarding the private placement and conversion of the bridge notes, see Note 5 to the accompanying condensed consolidated financial statements.

In total, the Company issued approximately 45.9 million shares of common stock and 1.9 million pre-funded warrants on October 29, 2024 pursuant to the private placement, the exchange transactions and the conversion of the bridge notes discussed above and had 51.4 million shares of common stock issued and outstanding.

Agreements with Factor Bioscience

License Agreement

On September 24, 2024, we entered into the Exclusive License and Collaboration Agreement ("the Factor L&C Agreement") with Factor Bioscience Limited ("Factor Limited"). The Factor L&C Agreement terminated the Amended and Restated Factor License Agreement (the "A&R Factor License Agreement") entered into on November 14, 2023 as well as an exclusive license agreement we acquired from Dilos Bio (formerly known as Exacis Biotherapeutics Inc. ("Exacis")) under an asset purchase agreement in April 2023.

Under the Factor L&C Agreement, we have obtained an exclusive license in the fields of cancer, autoimmune disorders, and rare diseases with

respect to certain licensed technology and we have the right to develop the licensed technology directly or enter into co-development agreements with partners who can help bring such technology to market. The Factor L&C Agreement also provides for certain services and materials to be provided by Factor to facilitate our development of the licensed technology and to enable us to scale up production at third party facilities.

The initial term of the Factor L&C Agreement is one year after the effective date, and it automatically renews yearly thereafter. We may terminate the Factor L&C Agreement for any reason upon 90 days' written notice to Factor, and the parties otherwise have customary termination rights, including in connection with certain uncured material breaches and specified bankruptcy events.

Pursuant to the Factor L&C Agreement, we will pay Factor $0.2 million per month for the first twelve months, $0.1 million per month for the first nine months toward patent costs, certain milestone payments, royalty payments on net sales of commercialized products and sublicensing fee payments.

Lineage Assignment Agreement

On September 24, 2024, we entered into an agreement with Factor Bioscience Inc. ("Factor") whereby we assigned the exclusive option and license agreement (the "Lineage Agreement") to Factor (the "Lineage Assignment Agreement"). Our rights and obligations under the agreement are now Factor's responsibility.

Payments related to the Lineage Agreement will now be subject to the Lineage Assignment Agreement, which provides for Factor paying us thirty percent (30%) of all amounts it actually receives from Lineage in the event that Lineage exercises its Option Right. Upon receipt of payment for the customization activities set forth in the Lineage Agreement, Factor will pay the Company twenty percent (20%) of all amounts Factor receives from Lineage.

Termination of Sublease

In October 2022, we entered into a sublease for office and laboratory space in Somerville, Massachusetts. In connection with entering into the sublease, we delivered a security deposit in the form of a letter of credit in the amount of $4.1 million. The letter of credit was collateralized with $4.1 million of cash deposited in a restricted account.

On August 5, 2024, the sublessor drew down on the letter of credit for the full $4.1 million to cover the approximately $4.0 million of past due rent payments for February 2024 through August 2024, plus interest and penalties.

On August 9, 2024, we and the sublessor entered into a sublease termination agreement pursuant to which the parties agreed to terminate the sublease effective August 31, 2024. Pursuant to the sublease termination agreement, we agreed to surrender and vacate the premises, all of our right, title and interest in all furniture, fixtures and laboratory equipment at the premises will become the property of the sublessor, and both parties will be released of their obligations under the sublease. As a result of the sublease termination, we recognized a gain on lease termination of approximately $1.6 million for the three and nine months ended September 30, 2024, and we expect to save approximately $72 million in base rental payments, parking, operating expenses, taxes and utilities that we would have paid over the remaining lease term.

Nasdaq Matters

On March 19, 2024, we received a notice from the Listing Qualifications Staff ("Staff") of The Nasdaq Stock Market LLC ("Nasdaq") stating that we were not in compliance with the Nasdaq listing rule 5550(b)(1) (the "Minimum Stockholders' Equity Rule") because we reported stockholders' equity of less than $2.5 million as of December 31, 2023. The notice had no immediate effect on our Nasdaq listing. In May 2024, we submitted a plan to Nasdaq advising of actions we have taken or will take to regain compliance with the Minimum Stockholders' Equity Rule. Nasdaq accepted our plan and granted us a 180-day extension, or through September 16, 2024, to regain compliance with the Minimum Stockholders' Equity Rule. On September 17, 2024, we received a notice from the Staff stating that the Staff has determined that we did not meet the terms of the extension to confirm or demonstrate compliance with the Minimum Stockholders' Equity Rule by September 16, 2024, and, as a result, unless we request an appeal of such determination by September 24, 2024, trading of our common stock will be suspended at the opening of business on September 26, 2024, and a Form 25-NSE will be filed with the SEC, which will remove our securities from listing and registration on Nasdaq. On September 24, 2024,we submitted a timely request for a hearing with the Nasdaq's Hearings Panel to appeal the Staff's determination. The request stayed the suspension of trading of our common stock and the filing of the Form 25-NSE pending the Hearing Panel's decision. The hearing was scheduled for November 12, 2024.

After giving effect to (i) the reclassification of the debt represented by the convertible notes to equity as a result of the exchange of the convertible notes that occurred on October 29, 2024, (ii) the receipt of net proceeds we received in the October 2024 private placement of our common stock and pre-funded warrants to purchase shares of our common stock, and (iii) the reclassification of the debt represented by the bridge notes to equity as a result of the conversion of the bridge notes into shares of our common stock or pre-funded warrants to purchase shares of our common stock, and after taking into account the savings resulting from the termination of our former sublease, our stockholders' equity exceeds $2.5 million on a proforma basis as of September 30, 2024, which we communicated in our pre-hearing submission of materials to the Hearing Panel on October 23, 2024. Additionally, due to issuing over 45.9 million shares of common stock from the transactions described above and having a total of 51.4 million shares of common stock issued and outstanding as of October 29, 2024, the market value of our listed securities has exceeded the minimum of $35 million under Nasdaq Listing Rule 5550(b)(2) for ten consecutive trading days. As a result, the Staff informed the Company that is has regained compliance with Nasdaq Listing Rule 5550(b) and our stock will continue to be listed and traded on Nasdaq. Accordingly, the Hearing Panel cancelled the November 12, 2024 hearing.

Basis of Presentation

Revenue

In February 2023, we entered into the Lineage Agreement with Lineage, under which we granted Lineage an option to obtain an exclusive sublicense to certain of our technology for preclinical, clinical and commercial purposes in exchange for a non-refundable up-front payment to us of $0.3 million. In August 2023, Lineage requested that we begin developing certain induced pluripotent stem cell lines in exchange for a cell line customization fee. Lineage paid us $0.4 million towards the customization fee, which we were recognizing ratably over the customization period. On September 24, 2024, we entered into the Lineage Assignment Agreement with Factor Inc. to assign all our rights and obligations under that the Lineage Agreement to Factor Inc. Payments to us related to the Lineage Agreement will now be subject to the Lineage Assignment Agreement, which provides for Factor Inc. paying the us thirty percent (30%) of all amounts it receives from Lineage in the event that Lineage obtains a sublicense from Factor Inc. Upon receipt of future payments for the customization activities set forth in the Lineage Agreement, Factor Inc. will pay the us twenty percent (20%) of all amounts Factor Inc. receives from Lineage. Because we have no further obligations under the agreement with Lineage, we have fully recognized as revenue amounts previously recorded in deferred revenue of approximately $0.5 million for the three and nine months ended September 30, 2024. For additional information, see Note 4 to the accompanying condensed consolidated financial statements. We have no other revenue generating contracts at this time.

Cost of Revenues

We recognize direct labor and supplies associated with generating our revenue as cost of revenues. As provided for in the A&R Factor License Agreement discussed in Note 10 to the accompanying condensed consolidated financial statements, we were obligated to pay Factor Limited 20% of any amounts we receive from a customer that was related to the licensed technology under the A&R Factor License Agreement, which we also recognize as a cost of revenue.

Research and Development Expenses

We expense our research and development costs as incurred. Our research and development expenses consist of costs incurred for company-sponsored research and development activities, as well as support for selected investigator-sponsored research. Upfront payments and milestone payments we make for the in-licensing of technology are expensed as research and development in the period in which they are incurred if the technology is not expected to have any alternative future uses other than the specific research and development project for which it was intended.

The major components of research and development costs include salaries and employee benefits, stock-based compensation expense, supplies and materials, preclinical study costs, expensed licensed technology, consulting, scientific advisors and other third-party costs, and allocations of various overhead costs related to our research and development efforts.

We have contracted with third parties to perform various studies. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. We accrue for third party expenses based on estimates of the services received and efforts expended during the reporting period. If the actual timing of the performance of the services or the level of effort varies from the estimate, the accrual is adjusted accordingly. The expenses for some third-party services may be recognized on a straight-line basis if the expected costs are expected to be incurred ratably during the period. Payments under the contracts depend on factors such as the achievement of certain events or milestones, the successful enrollment of patients, the allocation of responsibilities among the parties to the agreement, and the completion of portions of the clinical study or trial or similar conditions.

General and Administrative Expenses

Our general and administrative expenses consist primarily of salaries, benefits and other costs, including equity-based compensation, for our executive and administrative personnel, legal and other professional fees, travel, insurance, and other corporate costs.

Results of Operations

Comparison of the Three and Nine Months Ended September 30, 2024 and 2023

	Three months ended September 30,			Nine months ended September 30,		
	2024	2023	Change	2024	2023	Change
Revenue	$ 487	$ 51	$ 436	$ 581	$ 51	$ 530
Cost of revenues	(60)	120	(180)	96	170	(74)
Gross income (loss)	547	(69)	616	485	(119)	604
Operating expenses:						
Research and development	1,001	1,387	(386)	3,446	4,560	(1,114)
General and administrative	3,381	4,049	(668)	11,592	10,231	1,361
Gain on lease termination	(1,576)	-	(1,576)	(1,576)	-	(1,576)
Acquisition of Exacis in-process research and development	-	-	-	-	460	(460)
Total operating expenses	2,806	5,436	(2,630)	13,462	15,251	(1,789)
Loss from operations	(2,259)	(5,505)	3,246	(12,977)	(15,370)	2,393
Other (expense) income, net:						
Loss on extinguishment of debt	(22,440)	-	(22,440)	(22,440)	-	(22,440)
Incremental fair value of bridge note derivative liability	(1,038)	-	(1,038)	(1,038)	-	(1,038)
Change in fair value of warrant liabilities	831	20	811	897	166	731
Change in fair value of contingent consideration	-	-	-	66	118	(52)
Loss on non-controlling investment	-	-	-	-	(59)	59
Interest expense, net	(1,686)	(113)	(1,573)	(3,269)	(88)	(3,181)
Other expense, net	-	(1)	1	-	(281)	281
Total other expense, net	(24,333)	(94)	(24,239)	(25,784)	(144)	(25,640)
Loss before income taxes	(26,592)	(5,599)	(20,993)	(38,761)	(15,514)	(23,247)
(Provision) benefit for income taxes	(11)	8	(19)	(18)	(1)	(17)
Net loss	$ (26,603)	$ (5,591)	$ (21,012)	$ (38,779)	$ (15,515)	$ (23,264)

Revenue

During the three and nine months ended September 30, 2024, we fully accelerated the recognition of approximately $0.5 million of deferred revenue related to nonrefundable payments we received from Lineage due to the Lineage Assignment Agreement we entered into on September 24, 2024 with Factor Inc. discussed earlier. For the three and nine months ended September 30, 2023, the revenue we recognized was related to customization activities performed for Lineage.

Cost of Revenue

During the nine months ended September 30, 2024, our cost of revenues included direct labor and materials to perform the customization cell line activities for Lineage. During the three months ended September 30, 2024, we recognized a credit for amounts previously accrued related to customization cell line activities that were no longer due as a result of entering into the Lineage Assignment Agreement with Factor Inc. During the three and nine months ended September 30, 2023, we recognized direct labor and materials related to the customization activities as well as the 20% license fee due to Factor Limited related to upfront payments received from Lineage under the customer agreement.

Research and Development Expenses

	Three months ended September 30,		
	2024	2023	Change
(in thousands)			
Professional fees	$ 64	$ 225	$ (161)
Payroll-related	58	134	(76)
MSA/license fees	767	813	(46)
Stock-based compensation	13	57	(44)
Other expenses, net	99	158	(59)
Total research and development expenses	$ 1,001	$ 1,387	$ (386)

	Nine months ended September 30,		
	2024	2023	Change
(in thousands)			
Professional fees	$ 152	$ 675	$ (523)
Stock-based compensation	74	177	(103)
Payroll-related	444	504	(60)
MSA/license expense	2,392	2,438	(46)
Other expenses, net	384	766	(382)
Total research and development expenses	$ 3,446	$ 4,560	$ (1,114)

Total research and development expenses decreased by approximately $0.4 million and $1.1 million for the three and nine months ended September 30, 2024, respectively, compared to the three months ended September 30, 2023, primarily due to decreased professional fees due to a reduction in consultant services, payroll-related expenses and stock-based compensation from a reduction in headcount, MSA/license fees as a result of the new L&C Agreement and other expenses related to closing down a clinical trial we ended in 2022.

General and Administrative Expenses

	Three months ended September 30,		
	2024	2023	Change
(in thousands)			
Professional fees	$ 1,125	$ 1,726	$ (601)
Occupancy expense	1,267	1,563	(296)
Insurance	93	209	(116)
Stock-based compensation	392	117	275
Payroll-related	367	254	113
Other expenses, net	137	180	(43)
Total general and administrative expenses	$ 3,381	$ 4,049	$ (668)

	Nine months ended September 30,		
	2024	2023	Change
(in thousands)			
Occupancy expense	$ 5,068	$ 1,606	$ 3,462
Stock-based compensation	1,036	900	136
Professional fees	3,409	5,054	(1,645)
Insurance	405	936	(531)
Payroll-related	1,234	1,312	(78)
Other expenses, net	440	423	17
Total general and administrative expenses	$ 11,592	$ 10,231	$ 1,361

Our general and administrative expenses decreased by approximately $0.7 million for the three months ended September 30, 2024 compared to the three months ended September 30, 2023 primarily due to decreases in professional fees related to legal services and consultants, rent expense due to the termination of our Somverville sublease effective August 31, 2024 and a reduction in insurance premiums. These decreases were offset by increases in payroll-related expense and stock-based compensation due to an increase in headcount as well as an inducement stock option grant given to our chief executive officer in January 2024 compared to the three months ended September 30, 2023.

Our general and administrative expenses increased by approximately $1.4 million for the nine months ended September 30, 2024 compared to the nine months ended September 30, 2023 primarily due to increased occupancy expense related to the Somerville sublease that we began to incur in July 2023 as well as increased stock-based compensation due to the chief executive officer's inducement stock option grant. The increase in occupancy expense was partially offset by decreases in professional fees related to legal services and consultants, insurance expense due to lower premiums and payroll-related expenses resulting from a decrease severance expense during the nine months ended September 20, 2024 compared to the nine months ended September 30, 2023.

Gain on Lease Termination

On August 9, 2024, we and the sublessor of our Somerville sublease entered into a sublease termination agreement effective August 31, 2024. Pursuant to the sublease termination agreement, we agreed to surrender and vacate the premises, all of our right, title and interest in all furniture, fixtures and laboratory equipment at the premises will become the property of the sublessor, and both parties will be released of their obligations under the sublease. As a result of the sublease termination, we recognized a gain on lease termination of approximately $1.6 million for the three and nine months ended September 30, 2024 in the accompanying condensed consolidated statement of operations. There was no similar transaction during the three or nine months ended September 30, 2023.

Acquisition of Exacis In-Process Research and Development

In April 2023, we acquired from Exacis substantially all of its intellectual property assets, including all of its right, title and interest in and to the Purchased License. The Purchased License was determined to be an in-process research and development ("IPR&D") asset that has no alternative future use and no separate economic value from its original intended purpose, which is expensed in the period the cost is incurred. As a result, we expensed the fair value of the Purchased License of approximately $0.5 million during the three and nine months ended September 30, 2023. For additional information, see Note 3 to the accompanying consolidated financial statements included in this report. There was no similar transaction during the three or nine months ended September 30, 2024.

Loss on Extinguishment of Debt

We recognized a $22.4 million loss on extinguishment of debt for the three and nine months ended September 30, 2024 related to the Exchange Agreements and common stock private placement entered into on September 24, 2024. There was no similar transaction during the three or nine months ended September 30, 2023. See Note 5 to the accompanying condensed consolidated financial statements for more information on the Exchange Transaction.

Fair Value Adjustments to Bridge Notes Derivative Liability

We recognized expense of $1.6 million related to the initial measurement at September 24, 2024 of the incremental fair value of the bridge notes derivative liability over the carrying value due to bifurcation of the conversion feature from the bridge notes. This was offset by a $0.6 million credit for the change in fair value of the bridge notes derivative liability due to remeasuring the liability as of September 30, 2024. There was no similar transaction during the three or nine months ended September 30, 2023. See Note 5 to the accompanying condensed consolidated financial statements for more information on the bridge notes.

Change in Fair Value of Warrant Liabilities

We recognized credits of less than $0.8 million and $0.9 million for the three and nine months ended September 30, 2024 for the change in the fair value of warrant liabilities, which includes certain warrants that were reclassified to a liability on September 24, 2024. The credits were due to a decrease in the market price of our common stock as of September 30, 2024.

For the three and nine months ended September 30, 2023, we recognized credits of less than $0.1 million and $0.2 million, respectively, for the change in the fair value of warrant liabilities due to a decrease in the market price of our common stock as of September 30, 2023. See Note 5 to the accompanying condensed consolidated financial statements for more information on the reclassification of the warrants.

Change in Fair Value of Contingent Consideration

On the closing date of the acquisition of assets from Exacis in April 2023, we recognized a contingent consideration liability of $0.2 million for future payments that may be payable to Exacis, which was included as part of the $0.5 million fair value of the Purchased License asset and expensed as IPR&D for the nine months ended September 30, 2023. This contingent consideration liability is remeasured at each period end, and any change in the fair value of the contingent liability is recognized in the statement of operations. As of September 30, 2023, we remeasured the contingent liability and recognized a credit of $0.1 million for the nine months ended September 30, 2023 due to the decrease in the fair value of the contingent consideration liability. As of September 30, 2024, we remeasured the contingent liability and recognized a credit of $0.1 million for the nine months ended September 30, 2024 due to the decrease in the fair value of the contingent consideration liability. There were no amounts recognized for either of the three months ended September 30, 2023 or 2024.

Loss on Non-Controlling Investment

We account for our 25% non-controlling investment in NoveCite, Inc. ("NoveCite") under the equity method. We have not guaranteed any obligations of NoveCite, nor are we otherwise committed to providing further financial support for NoveCite. Therefore, we only record 25% of NoveCite's losses up to our investment carrying amount. As a result, we did not recognize additional losses related to NoveCite for the three or nine months ended September 30, 2024 or the three months ended September 30, 2023. We recognized a loss of approximately $0.1 million for the nine months ended September 30, 2023.

Interest Expense, net

We recognized an increase in interest expense for the three and nine months ended September 30, 2024 of approximately $1.6 million and $3.2 million, respectively, primarily due to interest expense and amortization of debt issuance costs associated with the 2023 convertible note financings and bridge notes when compared to the three and nine months ended September 30, 2023. As a result of the closing of the Exchange Transactions on October 29, 2024, we expect our future interest expense to be significantly decreased.

Other Expense, net

During the nine months ended September 30, 2023, we recognized $0.3 million of other expense, all of which related to the value of the commitment shares issued to Lincoln Park Capital Fund, LLC ("Lincoln Park") under a standby equity purchase agreement (the "ELOC") we entered into in April 2023 as well as other associated fees. We did not recognize any such expense during the three or nine months ended September 30, 2024 and a de minimus amount of other expense during the three months ended September 30, 2023.

Provision for Income Taxes

During 2024, we expect to incur state income tax liabilities related to our operations. We have established a full valuation allowance for all deferred tax assets, including our net operating loss carryforwards, since we could not conclude that we were more likely than not able to generate future taxable income to realize these assets. The effective tax rate differs from the statutory tax rate due primarily to our full valuation allowance.

Liquidity and Capital Resources

As of September 30, 2024, we had cash of approximately $4.3 million, of which approximately $3.9 million was from proceeds from the bridge notes received on September 24, 2024, and we had an accumulated deficit of approximately $225.8 million. We have to date incurred operating losses, and we expect these losses to continue in the future. For the three and nine months ended September 30, 2024, we incurred a net loss of $26.6 million and $38.8 million, respectively. For the nine months ended September 30, 2024, we used $12.3 million of cash in operating activities.

On October 29, 2024, we also received approximately $1.1 million upon the closing of the common stock private placement. Other than the proceeds raised under the bridge notes and the common stock private placement, our sole source of liquidity is through sales of our common stock under the ELOC, pursuant to which Lincoln Park committed to purchase up to $10.0 million of our common stock. Such sales of common stock by us, if any, are subject to certain conditions and limitations set forth in the ELOC, including a condition that we may not direct Lincoln Park to purchase any shares of common stock under the ELOC if such purchase would result in Lincoln Park beneficially owning more than 4.99% of our issued and outstanding shares of common stock. Sales under the ELOC may occur from time to time, at our sole discretion, through April 2025. To date, we have issued and sold approximately 214,000 shares of our common stock to Lincoln Park, including approximately 74,000 commitment shares, and have received approximately $0.3 million in gross proceeds from such sales. We sold no shares under the ELOC during the nine months ended September 30, 2024.

Based on our current financial condition and forecasts of available cash, we will not have sufficient capital to fund our operations for the 12 months following the issuance date of the accompanying condensed consolidated financial statements. We can provide no assurance that we will be able to obtain additional capital when needed, on favorable terms, or at all. If we cannot raise capital when needed, on favorable terms or at all, we will need to reevaluate our planned operations and may need to reduce expenses, file for bankruptcy, reorganize, merge with another entity, or cease operations. If we become unable to continue as a going concern, we may have to liquidate our assets, and might realize significantly less than the values at which they are carried on our financial statements, and stockholders may lose all or part of their investment in our common stock. See the risk factor in Item 1A of Part II of our 2023 10-K titled, “We will require substantial additional capital to fund our operations and execute our business strategy, and we may not be able to raise adequate capital on a timely basis, on favorable terms, or at all.”

Historically, the cash used to fund our operations has come from a variety of sources and predominantly from sales of shares of our common stock and of convertible notes. We will continue to evaluate and plan to raise additional funds to support our working capital needs through public or private equity offerings, debt financings, strategic partnerships, out-licensing our intellectual property or other means. There can be no assurance that capital will be available when needed or that, if available, it will be obtained on terms favorable to us and our stockholders. Our ability to raise capital through sales of our common stock will depend on a variety of factors including, among others, market conditions, the trading price and volume of our common stock, and investor sentiment. In addition, macroeconomic factors and volatility in the financial market, which may be exacerbated in the short term by concerns over inflation, interest rates, impacts of the wars in Ukraine and the Middle East, strained relations between the U.S. and several other countries, and social and political discord and unrest in the U.S., among other things, may make equity or debt financings more difficult, more costly or more dilutive to our stockholders.

In addition, equity or debt financings may have a dilutive effect on the holdings of our existing stockholders, and debt financings may subject us to restrictive covenants, operational restrictions and security interests in our assets. If we raise capital through collaborative arrangements, we may be required to relinquish some rights to our technologies or grant sublicenses on terms that are not favorable to us.

We prepared the accompanying condensed consolidated financial statements on a going concern basis, which assumes that we will realize our assets and satisfy our liabilities in the normal course of business. As discussed above, there is substantial doubt about our ability to continue as a going concern because we do not have sufficient cash to satisfy our working capital needs and other liquidity requirements over at least the next 12 months from the date of issuance of the accompanying condensed consolidated financial statements. The accompanying condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and reclassification of assets or the amounts and classifications of liabilities that may result from the outcome of the uncertainty of our ability to remain a going concern.

In addition, while we are not presently pursuing product development, we may do so in the future. Developing product candidates, conducting clinical trials and commercializing products requires substantial capital, and we would need to raise substantial additional funds if we were to pursue the development of one or more product candidates.

Cash Flows

Cash flows from operating, investing and financing activities, as reflected in the accompanying condensed consolidated statements of cash flows, are summarized as follows:

	For the nine months ended September 30,		
(in thousands)	**2024**	**2023**	**Change**
Cash (used in) provided by:			
Operating activities	$ (12,291)	$ (15,747)	$ 3,456
Investing activities	(365)	-	(365)
Financing activities	5,250	8,852	(3,602)
Net decrease in cash and cash equivalents	$ (7,406)	$ (6,895)	$ (511)

Net Cash Used in Operating Activities

There was a decrease of approximately $3.5 million in cash used in operating activities for the nine months ended September 30, 2024 compared to the same period in 2023. This change was due to a decrease in cash used in operating assets and liabilities of $2.0 million primarily related to a reduction in amounts due for the buildout costs of the Somerville facility and a $1.4 million decrease in net loss, after giving effect to adjustments made for non-cash transactions, for the nine months ended September 30, 2024 compared to the same period in 2023.

Net Cash Used in Investing Activities

We used approximately $0.3 million to pay for the purchases of property and equipment during the nine months ended September 30, 2024. There were no investing activities during the nine months ended September 30, 2023.

Net Cash Provided by Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2024 includes approximately $5.3 million of gross proceeds received from the convertible note financings that occurred in January 2024 and September 2024. Net cash provided by financing activities for the nine months ended September 30, 2023 includes approximately $8.7 million of gross proceeds from convertible note financings and $0.3 million of proceeds received from selling approximately 214,000 shares to Lincoln Park under the ELOC. The Company did not sell any shares under the ELOC during the nine months ended September 30, 2024.

Critical Accounting Estimates

There were no significant changes in our critical accounting estimates during the three months ended September 30, 2024 from those described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of the 2023 10-K.

Recent Accounting Pronouncements

No new Accounting Standards Updates have been issued by the Financial Accounting Standards Board since January 1, 2024 that would apply to us that are not disclosed in the 2023 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Under the rules and regulations of the SEC, as a smaller reporting company we are not required to provide the information otherwise required by this item.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act, designed to ensure that information required to be disclosed in our reports filed pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosures.

In designing and evaluating the disclosure controls and procedures, we recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and we were required to apply our judgment in evaluating the cost-benefit relationship of possible controls and procedures. We have carried out an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q under the supervision, and with the participation, of our management, including our President and Chief Executive Officer (who serves as our principal executive officer) and our Senior Vice President of Finance (who serves as our principal financial officer) of the effectiveness of the design and operation of our disclosure controls and procedures.

Based on that evaluation, our Chief Executive Officer and Senior Vice President of Finance concluded that our disclosure controls and procedures were not effective as of the end of the period covered by this Quarterly Report on Form 10-Q in providing reasonable assurance of achieving the desired control objectives due primarily to the material weakness discussed below.

Management's Plan for Remediation of Material Weakness in Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed 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.

We were unable to timely file our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022 with the SEC due to identifying errors in our financial statements reported in our Annual Report on Form 10-K for the years ended December 31, 2021 and 2020 during our preparation of the financial statements for the quarter ended March 31, 2022. Management concluded that the errors were the result of accounting personnel's lack of technical proficiency in complex matters. On June 30, 2022, we filed an amendment to our Annual Report on Form 10-K for the years ended December 31, 2021 and 2020 to correct the errors in our financial statements for the years ended December 31, 2021 and 2020 and for the quarters ended June 30, 2020, September 30, 2020, March 31, 2021, June 30, 2021 and September 30, 2021.

Management has implemented measures designed to ensure that the deficiencies contributing to the ineffectiveness of our internal control over financial reporting are remediated, such that the internal controls are designed, implemented and operating effectively. The remediation actions to date include:

- enhancing the business process controls related to reviews over technical, complex, and non-recurring transactions;
- providing additional training to accounting personnel; and
- using an external accounting advisor to review management's conclusions on technical, complex and non-recurring matters.

The material weakness cannot be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. As of September 30, 2024, we continue to season and enhance such controls to ensure that they will continue to operate effectively for a sufficient period of time before management can make conclusions on the operating effectiveness.

We are committed to developing a strong internal control environment, and we believe the remediation efforts that we have implemented and will implement will result in significant improvements in our control environment. Our management will continue to monitor and evaluate the relevance of our risk-based approach and the effectiveness of our internal controls and procedures over financial reporting on an ongoing basis and is committed to taking further action and implementing additional enhancements or improvements, as necessary.

Changes in Internal Control over Financial Reporting

Except for the actions intended to remediate the material weakness as described above, there was no change in our internal control over financial reporting during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

The information set forth under "Note 11—Commitments and Contingencies—Legal Matters" to the accompanying condensed consolidated financial statements included in this Quarterly Report on Form 10-Q is incorporated in this Item 1 by reference.

From time to time, we may become involved in legal proceedings arising in the ordinary course of business. Except as described above, are not party to any material legal proceedings.

Item 1A. Risk Factors.

An investment in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described in our 2023 10-K, in addition to other information in this report, when evaluating our business and before deciding whether to purchase, hold or sell shares of our common stock. Each of these risks and uncertainties, as well as additional risks and uncertainties not presently known to us or that we currently consider immaterial, could harm our business, financial condition, results of operations and/or growth prospects, as well as adversely affect the market price of our common stock, in which case you may lose all or part of your investment. There have been no material changes to the risk factors described in the 2023 10-K.

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

The securities issued in connection with the closing of each of the September 2024 Transactions were exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), under Section 3(a)(9) of the Securities Act, Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D of the Securities Act. Each of the investors in the common stock private placement and the bridge notes represented to the Company that it is an accredited investor within the meaning of Rule 501(a) of Regulation D and that it is acquiring the securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. Each party to an Exchange Agreement represented to the Company that it has not paid or given, and will not pay or give, to any person, any commission or other remuneration, directly or indirectly, for soliciting the exchange of securities thereunder. None of the securities offered in the September 2024 Transactions were offered through any general solicitation by the Company or its representatives. This report is not an offer to sell or a solicitation of an offer to buy any of the securities described herein.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. *Mine Safety Disclosures.*

Not Applicable.

Item 5. *Other Information*.

(a) None.

(b) None.

(c) During the quarter covered by this report, none of our directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) adopted or terminated any Rule 10b5-1 trading arrangement (as defined in Item 408(a)(1)(i) of Regulation S-K) or any non-Rule 10b5-1 trading arrangement (as defined in Item 408(c) of Regulation S-K).

Item 6. *Exhibits*

Exhibit	Description	Incorporated By Reference
10.1	Securities purchase agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.1 to Form 8k filed on September 25, 2024
10.2	Form of pre-funded warrant issuable under the securities purchase agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.2 to Form 8k filed on October 29, 2024
10.3	Form of exchange agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the parties thereto	Exhibit 10.3 to Form 8k filed on September 25, 2024
10.4	Note purchase agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.4 to Form 8k filed on September 25, 2024
10.5	Form of 12.0% senior convertible note issued under the note purchase agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.5 to Form 8k filed on September 24, 2024
10.6	Form of pre-funded warrant issuable upon conversion of 12.0% senior convertible notes issued under the note purchase agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.3 to Form 8k filed on October 29, 2024
10.7	Form of support agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the stockholder parties thereto	Exhibit 10.7 to Form 8k filed on September 24, 2024
10.8	Form of lock-up agreement, dated as of September 24, 2024, between Eterna Therapeutics Inc. and the stockholder parties thereto	Exhibit 10.8 to Form 8k filed on September 24, 2024
10.9	Registration Rights Agreement, dated October 29, 2024, between Eterna Therapeutics Inc. and the purchaser parties thereto	Exhibit 10.1 to Form 8-K Filed on October 29, 2024
10.10	Exclusive License and Collaboration Agreement, effective as of September 9, 2024, with Factor Bioscience Limited	Filed herewith
10.11	Sublease Termination Agreement, dated August 9, 2024, between Eterna Therapeutics Inc. and E.R. Squibb & Sons, L.L.C.	Filed herewith
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith

101	Inline XBRL Document Set for the financial statements and accompanying notes in Part I, Item 1, of this Quarterly Report on Form 10-Q.	Filed herewith

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 hereunto duly authorized.

ETERNA THERAPEUTICS INC.

Date: November 12, 2024

By: */s/ Sanjeev Luther*
Sanjeev Luther
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 12, 2024

By: */s/ Sandra Gurrola*
Sandra Gurrola
Senior Vice President of Finance
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.10

EXCLUSIVE LICENSE AND COLLABORATION AGREEMENT

This Exclusive License and Collaboration Agreement ("Agreement") is made and entered into as of September 9, 2024 ("Effective Date"), by and between Factor Bioscience Limited, a company organized and existing under the laws of Ireland ("Licensor"), and Eterna Therapeutics Inc., a corporation organized and existing under the laws of the State of Delaware ("Licensee"). Licensor and Licensee may each be referred to in this Agreement individually as a "Party" and collectively as the "Parties."

WHEREAS, Licensor and Licensee previously entered into that certain Amended and Restated Exclusive License Agreement dated November 14, 2023 (the "Original Agreement"), pursuant to which Licensor granted Licensee certain rights to certain licensed patents (as identified in the Original Agreement);

WHEREAS, the Parties desire to terminate the Original Agreement and replace it in its entirety with this Agreement;

WHEREAS, the Parties desire to, as of the Effective Date, terminate the Exclusive License Agreement entered into as of November 4, 2020, by and between Exacis Inc. ("Exacis") and Licensor ("the Exacis Agreement") and assigned to Licensee pursuant to that certain Asset Purchase Agreement entered into as of April 26, 2023, by and among Licensee, Exacis, and certain stockholders of Exacis;

WHEREAS, Licensor desires to collaborate with Licensee, and Licensee desires to collaborate with Licensor, in developing data to demonstrate the efficacy of the Licensed Patents and Licensor Know-How to help identify promising candidates for drug development that can be developed by Licensee directly or that can be sublicensed to third parties for further development;

WHEREAS, Licensee desires to develop and commercialize Licensed Products (as defined herein), and Licensee desires to receive from Licensor certain exclusive rights to the Licensed Patents and Licensor Know-How, in order that Licensee may develop and commercialize Licensed Products; and

WHEREAS, in furtherance of the foregoing, Licensor agrees to grant such rights to Licensee, and Licensee agrees to diligently proceed to develop and make commercially available Licensed Products in accordance with this Agreement for commercial exploitation in the Field and in the Territory (as defined herein);

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and obligations undertaken herein, Licensor and Licensee agree as follows:

Section 1

Definitions

1.1 "*Additional Active Ingredient*" means, with respect to a Combination Product, an active therapeutic ingredient other than any of the Base Product Families.

1.2 "*Affiliate*" means, with respect to a Party, any Person that controls, is controlled by, or is under common control with such Party. For the purposes of this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of fifty percent (50%) or more of the voting stock of such entity, or by contract or otherwise. For the purposes of this definition and this Agreement, and for the avoidance of doubt, (a) Factor Bioscience Limited, Factor Bioscience Pty Ltd, Factor Bioscience LLC, and Factor Bioscience Inc. (collectively, the "*Factor Bio Entities*") are each deemed not to be Affiliates of any of Eterna Therapeutics Inc., Eterna Therapeutics LLC, and Novellus Therapeutics Limited (collectively, the "*Eterna Entities*"), and (b) the Eterna Entities are each deemed not to be Affiliates of any of the Factor Bio Entities.

1.3 "*Applicable Law*" means all statutes, ordinances, regulations, rules or orders of any kind whatsoever of any agency, bureau, branch, office, court, commission, authority, department, ministry, official or other instrumentality of, or being vested with public authority under any law of, any country, state or local authority or any political subdivision thereof, or any association of countries that may be in effect from time to time and applicable to the activities contemplated by this Agreement.

1.4 "*Base Product Families*" means products consisting of iMSCs made using the Technology that are engineered to express (i) IL 7 and IL 15, (ii) IL 10, and/or (iii) IL 12, in each case made pursuant to the SOPs in Exhibit B.

1.5 "*BLA*" means a Biologic License Application (as more fully described in U.S. 21 C.F.R. Part 601.20 or its successor regulation), as may be amended from time to time, or any analogous application or submission with any Regulatory Authority outside of the United States.

1.6 "*Combination Product*" means a Licensed Product that includes or otherwise is administered with one or more Additional Active Ingredients.

1.7 "*Commercially Reasonable Efforts*" means, with respect to the performance of activities hereunder by or on behalf of Licensee, the carrying out of such activities using commercial and business efforts and resources comparable to the efforts and resources that a life sciences company engaged in the development, manufacture and commercialization of products similar to the Licensed Products would typically devote to such activities.

1.8 "*Confidential Information*" means all nonpublic information disclosed by one Party to the other during the negotiation of or under this Agreement in any manner, whether orally, visually, electronically, in writing or in other tangible or intangible form. Notwithstanding any provision of this Agreement to the contrary, and without limiting the foregoing (a) Licensor Know-How and Know-How included in Party Improvements developed by Licensor will be deemed to be Licensor Confidential Information and Licensee Know-How and Know-How included in Party Improvements developed by Licensee will be deemed Licensee Confidential Information, unless such information is subject to an exception described in Section 7.1 and (b) all Materials, together with any derivatives and progeny thereof, will be deemed to be Licensor Confidential Information.

1.9 "*Control*" or "*Controlled by*" means, in the context of a license to or ownership of Intellectual Property, the ability on the part of a Party to grant access to or a license or sublicense of such Intellectual Property as provided for herein without violating the terms of any agreement or other arrangement between such Party and any Third Party existing at the time such Party would be required hereunder to grant such access or license or sublicense.

1.10 "*Cover*" means that the use, manufacture, sale, offer for sale, research, development, commercialization, or importation of the subject matter in question (including a chemical or biologic agent, or a process) by an unlicensed entity would infringe a granted Valid Claim (or, in the case of a pending Valid Claim that has not yet been granted, would infringe such Valid Claim if it were to be granted in its then-current form) of a Licensed Patent.

1.11 "*Effective Date*" has the meaning set forth in the preamble of this Agreement.

1.12 "*Existing License Agreements*" means each agreement set forth in Exhibit E to this Agreement.

1.13 "*Exploit*" and "*Exploitation*" mean to make, have made, manufacture, use, sell, have sold, offer for sale, commercialize, distribute, import and/or export.

1.14 "*FD&C Act*" means the United States Federal Food, Drug, and Cosmetic Act, as amended.

1.15 "*Field*" means the prevention and/or treatment of: (i) rare diseases (meaning any disease which affects less than 200,000 persons in the United States); (ii) auto-immune diseases; and (iii) cancer, in each case (i)-(iii), in humans.

1.16 "*First Commercial Sale*" means with respect to a Licensed Product and a country, the first sale for value of such Licensed Product in such country after Regulatory Approval for the sale of such Licensed Product has been obtained in such country.

1.17 "*Improvement(s)*" means any invention, discovery, advancement, development, or creation which: (a) is invented, developed, authored, created, or reduced to practice by or on behalf of Licensor, Licensee, or Sublicensee(s) or jointly by Licensor and/or Licensee and/or Sublicensee(s), or any of their respective Affiliates (or any of their respective personnel or agents, including any employee, officer, advisor, or independent contractor employed or engaged by (or otherwise having an obligation to assign inventions to) them) pursuant to this Agreement; and (b) is an improvement, modification or enhancement to one or more of the Base Product Families or Licensed Products.

1.18 "*Improvement Patents*" means the Patents claiming any of the Improvements, and any reissue, divisional, continuation, continuation-in-part or reexamination certificate thereof.

1.19 "*IND*" means an Investigational New Drug Application (as defined in the FD&C Act) with respect to a product, or equivalent application or submission for approval to conduct human clinical investigations filed with or submitted to a Regulatory Authority anywhere in the world in conformance with the requirements of such Regulatory Authority, and any amendments thereto.

1.20 "*Initial Term*" has the meaning set forth in Section 4.1.

1.21 "*Intellectual Property*" means (a) Patents, (b) Know-How, (c) copyrights and registrations and applications for registration thereof, including all moral rights, (d) proprietary rights in Know-How or other information, (e) other proprietary rights relating to any of the foregoing (including remedies against infringement thereof and rights of protection of interest therein under the laws of all jurisdictions) and (f) copies and tangible embodiments of any of the foregoing.

1.22 "*Know-How*" means (a) any proprietary data, results, technology, and nonpublic information of any type whatsoever, in any tangible or intangible form, including know-how, trade secrets, practices, techniques, methods, processes, inventions, developments, specifications, formulations, formulae, in each case of any type or kind (patentable or otherwise), software, algorithms, marketing reports and plans, market research, expertise, technology, test data (including pharmacological, biological, chemical, biochemical, toxicological, preclinical and clinical test data), analytical and quality control data, stability data, other study data, and procedures, that is not otherwise disclosed or claimed in the Licensed Patents, and (b) the Materials; but excluding any chemical or biological materials other than the Materials.

1.23 "*Licensed Patents*" means (a) all patents and patent applications listed in Exhibit D on the Effective Date, (b) all Party Improvement Patents that are developed solely by Licensor, (c) solely with respect to patent applications initially filed after the Effective Date that claim priority to an Original Patent (i) substitutions, divisions, continuations, and continuations-in-part of the Original Patents and (ii) reissues, reexaminations, utility models or designs, renewals or extensions (including any supplementary protection certificates) of any Original Patent, and (d) patents that issue from a patent application included in clause (a), clause (b), or clause (c) and any confirmation patent or registration patent to any such issued patent. As used in this definition, "*Original Patents*" means the patents and patent applications included in clause (a) or clause (b).

1.24 "*Licensed Products*" means any products manufactured, used, leased, sold, offered for sale, imported, or exported by or on behalf of Licensee which, (a) consist of one or more of the Base Product Families for use in the Field; and (b) (i) absent the licenses contained herein, would infringe a Valid Claim of the Licensed Patents or (ii) are generated through use or application of Licensor Know-How. For avoidance of doubt, a Licensed Product may include Additional Active Ingredient(s) or be sold in combination with one or more products or components, provided, however, that the licenses granted to Licensee hereunder extend only to such Licensed Product (including when used in any Combination Product) and not such component or Additional Active Ingredient alone if not otherwise administered with one or more of the Base Product Families.

1.25 "*Licensee Background IP*" means Intellectual Property rights that Licensee either (i) owned, controlled, or had rights with respect to prior to the Effective Date (excluding Patents and Know-How licensed by Licensor to Licensee under the Original Agreement); or (ii) develops, or acquires ownership, control, or rights with respect to, during the Term of this Agreement but which are not Improvements.

1.26 "*Licensee Know-How*" means Know-How Controlled by Licensee before or during the Term of this Agreement.

1.27 "*Licensor Background IP*" means Intellectual Property rights that Licensor either (i) owned, controlled, or had rights with respect to prior to the Effective Date; or (ii) develops, or acquires ownership, control, or rights with respect to, during the term of this Agreement but which is not an Improvement.

1.28 "*Licensor Know-How*" means (a) Know-How Controlled by Licensor as of the Effective Date that is necessary for the Exploitation of a Licensed Product in the Field, including but not limited to the Know-How identified in Exhibit B and (b) Know-How included in Party Improvements to the extent developed solely by Licensor.

1.29 "*Licensor's Laboratories*" means the laboratory facilities occupied by Licensor at 1035 Cambridge Street, Cambridge MA 02141.

1.30 "*MAA*" means any new drug application or other marketing authorization application, in each case, filed with the applicable Regulatory Authority in a country or other regulatory jurisdiction, which application is required to commercially market or sell a pharmaceutical product (including a biopharmaceutical product) in such country or jurisdiction (and any amendments thereto), including all New Drug Applications (NDA) or equivalent submitted to the FDA in the United States in accordance with the PHSA, BLA submitted to the FDA in the United States in accordance with the FD&C Act, or any analogous application or submission with any Regulatory Authority outside of the United States.

1.31 "*Major Market*" means any of France, Italy, Japan, Germany, South Korea, Spain, or the United Kingdom.

1.32 "*Materials*" has the meaning set forth in Section 3.1.4.

1.33 "*Net Sales*" means, with respect to any Licensed Product, the gross amounts invoiced by Licensee, its Affiliates, or their respective distributors (each, a "*Selling Party*") to Third Parties (that are not a Related Party) for sales or other commercial dispositions of such Licensed Product after deducting, if not previously deducted, from the amount invoiced, the following insofar as they specifically pertain or are allocable to the sale or other disposition of such Licensed Product and are included in such gross amount invoiced or are otherwise actually incurred, allowed or paid, in each case as determined in accordance with IFRS:

a) discounts (including trade, quantity and cash discounts) and other customary credits, charge-back payments and rebates and any other similar allowances actually given to any Third Parties in the ordinary course of business;
b) product returns, refunds, chargeback, rebates, credits or allowances given or made by reasons of, if any, on account of recalls, claims, spoil, damaged goods, expiration of useful life or otherwise, rejections or returns of items previously sold (including Licensed Products returned in connection with recalls or withdrawals);
c) retroactive price reductions or billing corrections;
d) Third Party hospital buying group/group purchasing organization administration fees or managed care organization rebates actually given;
e) rebates and similar payments made with respect to sales paid for by any Governmental or Regulatory Authority such as patient assistance or other similar programs;
f) a fixed amount of one percent (1%) of gross sales to cover reasonable and customary insurance, freight, shipping, handling, and other transportation costs incurred by a Selling Party in shipping Licensed Products to a Third Party;
g) import taxes, export taxes, excise taxes, sales tax, value-added taxes, consumption taxes, duties or other taxes levied on, absorbed, determined or imposed with respect to such sales (excluding taxes assessed directly against the income derived from such sales) and government charges directly related to the sales, delivery or use of Licensed Product;
h) any sales-based contributions actually made for "Contributions for Drug Induced Suffering", "Contribution for Measure for Drug Safety" or any other contributions for aiding drug suffering in the amount determined by and payable to PMDA; and
i) reasonable deduction to reflect amounts previously included in Net Sales of Licensed Product that are written off as uncollectible after reasonable collection efforts, in accordance with standard practices of Licensee, provided that if any such amounts are subsequently collected, then such amounts shall be added back to Net Sales for such Licensed Product.

Any of the items set forth above that would otherwise be deducted from the invoice price in the calculation of Net Sales but which are separately charged to, and paid by, Third Parties shall not be deducted from the invoice price in the calculation of Net Sales. In the case of any sale or transfer of Licensed Products other than in an arm's length transaction exclusively for cash, such as barter or counter-trade, Net Sales shall be determined by referencing Net Sales at which substantially similar quantities of Licensed Products are sold in an arm's length transaction for cash in the same country.

There shall be no double counting in determining the foregoing deductions from gross amounts invoiced to calculate "Net Sales" hereunder. The calculations set forth in this definition shall be determined from books and records maintained in accordance with IFRS consistently applied.

Notwithstanding the foregoing, with respect to transfers of Licensed Products for use in Clinical Trials, non-clinical development activities or other development activities, Net Sales shall be determined on, and only on, the first sale by a Selling Party to a non-Related Party unless such Selling Party is the last entity in the distribution chain for the Licensed Product.

Notwithstanding the foregoing, the following will not be included in Net Sales: (1) samples of Licensed Product used to promote additional Net Sales, in amounts consistent with normal business practices of Licensee or its Affiliates where the Licensed Product is supplied without charge or at or below the actual manufacturing cost thereof (without allocation of indirect costs or any mark-up) determined in accordance with IFRS; and (2) disposal or use of Licensed Products in Clinical Trial or under compassionate use, patient assistance, named patient use, or test marketing programs or non-registrational studies or other similar programs or studies where the Licensed Product is supplied without charge or at the actual manufacturing cost thereof (without allocation of indirect costs or any mark-up) determined in accordance with IFRS.

If a Licensed Product is sold as part of a Combination Product in a country in the Territory, Net Sales for the Licensed Product included in such Combination Product in such country will be calculated as follows:

i. if the Licensed Product is sold separately in such country and the Additional Active Ingredient(s) in the Combination Product are sold separately in finished form in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product in such country by the fraction A/(A+B), where A is the weighted (by sales volume) average gross invoice price of the Licensed Product when sold separately in finished form in such country and B is the weighted (by sales volume) average gross invoice price of the Additional Active Ingredient(s) included in the Combination Product when sold separately in finished form in such country;
ii. if the Licensed Product is sold separately in finished form in such country but the Additional Active Ingredient(s) in the Combination Product are not sold separately in finished form in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product in such country by the fraction A/D, where A is the weighted (by sales volume) average gross invoice price of the Licensed Product when sold separately in finished form in such country and D is the weighted (by sales volume) average gross invoice price of the Combination Product in finished form in such country;
iii. if the Licensed Product is not sold separately in finished form in such country but the Additional Active Ingredient(s) in the Combination Product are sold separately in finished form in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product by the fraction 1- (B/D), where B is the weighted (by sales volume) average gross invoice price of the Additional Active Ingredient(s) in the Combination Product when sold separately in finished form in such country and D is the weighted (by sales volume) average gross invoice price of the Combination Product in finished form in such country; or
iv. if neither the Licensed Product nor the Additional Active Ingredient(s) in the Combination Product are sold separately in finished form in such country, the Parties shall determine Net Sales for the Licensed Product in such Combination Product by mutual agreement based on the relative contribution of the Licensed Product and each Additional Active Ingredient to the Combination Product, and shall take into account in good faith any applicable allocations and calculations that may have been made for the same period in other countries.

1.34 "*Out-of-Pocket Costs*" means costs and expenses paid to Third Parties (or payable to third parties and accrued in accordance with GAAP) other than Affiliates or employees.

1.35 "*Party Improvements*" means Improvements developed solely by Licensor, solely by Licensee, or jointly by Licensor and Licensee.

1.36 *Party Improvement Patents*" means Improvement Patents developed solely by Licensor, solely by Licensee, or jointly by Licensor and Licensee. During the Term, all Party Improvement Patents that are developed solely by Licensor shall be set forth in Exhibit D, as updated from time to time pursuant to the terms of this Agreement. During the Term, all Party Improvement Patents that are not solely developed by Licensor shall be set forth in Exhibit F, as updated from time to time pursuant to the terms of this Agreement.

1.37 "*Patent Expenses*" means all reasonable fees, costs, and expenses (including attorneys' fees) paid or incurred in the preparation, filing, prosecution, issuance, and/or maintenance of the Licensed Patents.

1.38 "*Patent*" means any patent and provisional and non-provisional patent application, together with all priority applications, additions, divisions, continuations, continuations-in-part, substitutions, and reissues claiming priority thereto, as well as any reexamination, post-grant proceeding, utility model, certificate of invention and design patent, application, registration and application, extension, registration, patent term extension, supplemental protection certificate, renewal and the like with respect to any of the foregoing and all foreign counterparts thereof.

1.39 "*Phase 1 Clinical Trial*" means a Clinical Trial (or any arm thereof) of a pharmaceutical product (including a biopharmaceutical product) with the endpoint of determining initial tolerance, safety, metabolism, pharmacokinetic, or pharmacodynamic information in single dose, single ascending dose, multiple dose, or multiple ascending dose regimens, that satisfies the requirements of U.S. federal regulation 21 C.F.R. § 312.21(a) and its successor regulation or equivalents in other jurisdictions.

1.40 "*Phase 2 Clinical Trial*" means a Clinical Trial (or any arm thereof) of a pharmaceutical product (including a biopharmaceutical product) with the endpoint of evaluating its effectiveness for a particular Indication or Indications in one or more specified doses or its short term tolerance and safety, as well as its pharmacokinetic and pharmacodynamic information in patients with the Indications under study, that is prospectively designed to generate sufficient data (if successful) to commence a Phase 3 Clinical Trial for such product, and that satisfies the requirements of U.S. federal regulation 21 C.F.R. § 312.21(b) and its successor regulation or equivalents in other jurisdictions.

1.41 "*Phase 3 Clinical Trial*" means a Clinical Trial (or any arm thereof) of a pharmaceutical product (including a biopharmaceutical product) on a sufficient number of patients, which trial the FDA or equivalent Regulatory Authority in other jurisdictions permits to be conducted under an open IND and is designed to: (a) establish that such pharmaceutical product is safe and efficacious for its intended use; (b) define warnings, precautions and adverse reactions that are associated with such pharmaceutical product in the dosage range to be prescribed; and (c) support the filing of an MAA with a Regulatory Authority for such pharmaceutical product, and that satisfies the requirements of U.S. federal regulation 21 C.F.R. § 312.21(c) and its successor regulation or equivalents in other jurisdictions.

1.42 "*Regulatory Approval*" means all technical, medical and scientific licenses, registrations, authorizations and approvals (including approvals of new drug applications, supplements and amendments, pre- and post- approvals, pricing and Third Party reimbursement approvals, and labeling approvals) of any Regulatory Authority that are necessary for the use, development, manufacture, and commercialization of a pharmaceutical product in a regulatory jurisdiction.

1.43 "*Regulatory Authority*" means, with respect to a given country, any national (e.g., the FDA), supra-national (e.g., the European Commission, the Council of the European Union, or the European Medicines Agency), regional, state or local regulatory agency, department, bureau, commission, council or other governmental authority involved in the granting of a Regulatory Approval.

1.44 "*Sublicense*" has the meaning set forth in Section 2.3.

1.45 "*Sublicensee*" has the meaning set forth in Section 2.3.

1.46 "*Sublicense Fees*" means any and all consideration paid to Licensee, or any of its Affiliates, by a Sublicensee as consideration for a sublicense of, or other right, license, option, privilege, or immunity with respect to, any Licensed Product, Licensed Patent, or Licensor Know-How granted to Licensee hereunder, including license fees, upfront payments, milestone payments, and royalties payable on sales of Licensed Products. For avoidance of doubt, "Sublicense Fees" shall exclude any consideration for the issuance of equity interests in Licensee to the extent such equity is issued at or below fair market value.

1.47 "*Sublicensee Improvements*" means Improvements developed by Sublicensee, whether solely or jointly with Licensor and/or Licensee.

1.48 "*Sublicensee Improvement Patents*" means Improvement Patents developed by Sublicensee, whether solely or jointly with Licensor and/or Licensee.

1.49 "*Technology*" means the platforms, products, and process(es) of Licensor that are used for converting iPSCs to iMSCs, and for converting iMSCs to Base Product Families.

1.50 "*Term*" means the period of time beginning on the Effective Date and ending as specified in Section 4 hereof.

1.51 "*Territory*" means worldwide.

1.52 "*Third Party*" means any person or entity other than Licensor, Licensee or their respective Affiliates.

1.53 "*Third Party Patent*" means any Patent owned or controlled by a Third Party that is necessary to avoid infringement of such Patent in the manufacture, use, offer for sale, sale, or importation of Licensed Products.

1.54 "*Valid Claim*" means (a) a claim of a granted and unexpired Licensed Patent that (i) has not been rejected, revoked, or held to be invalid or unenforceable by a court or other authority of competent jurisdiction, from which decision no appeal can be further taken or (ii) has not been finally abandoned, disclaimed or admitted to be invalid or unenforceable through reissue or disclaimer; or (b) a claim included in a pending patent application which is a Licensed Patent that (i) has not been pending for more than seven (7) years from the effective date of filing for such patent application (provided, however that for purposes of clarity, in the event such pending claim subsequently is subsequently granted, then such claim shall again be a Valid Claim as of the date of grant of such claim) or (ii) has not been finally determined to be unallowable by the applicable governmental authority (from which no appeal is or can be taken).

Section 2

Grant of Licenses

2.1 License Grant. Subject to the terms and conditions of this Agreement, Licensor, on behalf of itself and any successors and/or assigns, hereby grants to Licensee an exclusive (even as to Licensor and its Affiliates), non-transferable (except as provided in Section 9.3), royalty-bearing license, with the right to grant sublicenses pursuant to Section 2.4, under the Licensed Patents to make, have made, use, sell, offer for sale, lease, import, export, or otherwise Exploit Licensed Products in the Field throughout the Territory. Subject to the terms and conditions of this Agreement, Licensor, on behalf of itself and any successors and/or assigns, hereby grants to Licensee an exclusive (even as to Licensor and its Affiliates), non-transferable (except as provided in Section 9.3) license, with the right to grant sublicenses pursuant to Section 2.4, under the Licensor Know-How to make, have made, use, sell, offer for sale, lease, import, export, or otherwise Exploit Licensed Products in the Field throughout the Territory.

2.2 License Grant by Licensor of Jointly Developed and Licensee Developed Improvements . Subject to the terms and conditions of this Agreement, Licensor, on behalf of itself and any successors and/or assigns, hereby grants to Licensee an exclusive, (even as to Licensor and its Affiliates), royalty-free, fully paid up, irrevocable license, with the right to grant sublicenses pursuant to Section 2.4, under any Party Improvement Patents that are jointly developed by the Parties, or solely developed by Licensee, to make, have made, use, sell, offer for sale, lease, import, export, or otherwise Exploit Licensed Products in the Field throughout the Territory. Subject to the terms and conditions of this Agreement, Licensor, on behalf of itself and any successors and/or assigns, hereby grants to Licensee an exclusive, (even as to Licensor and its Affiliates), royalty-free, fully paid up, irrevocable license, with the right to grant sublicenses pursuant to Section 2.4, under any Know-How included in Party Improvements that is jointly developed by the Parties or solely developed by Licensee to make, have made, use, sell, offer for sale, lease, import, export, or otherwise Exploit Licensed Products in the Field throughout the Territory.

2.3 Affiliates. The Parties recognize that each Party may perform some or all of its obligations under this Agreement through Affiliates or contractors designated by such Party ("*Contractors*"); provided, however, that each Party shall remain responsible for and be guarantor of the performance by its Affiliates and Contractors and shall cause its Affiliates and Contractors to comply with the provisions of this Agreement in connection with such performance. Each Party hereby expressly waives any requirement that the other Party exhaust any right, power or remedy, or proceed against an Affiliate or Contractor, for any obligation or performance hereunder prior to proceeding directly against such Party. Wherever in this Agreement a Party delegates responsibility to an Affiliate or Contractor (i) such Affiliate or Contractor may not make decisions inconsistent with this Agreement, amend the terms of this Agreement or act contrary to its terms in any way, (ii) such delegation shall not relieve such Party of any of its obligations under this Agreement, and (iii) any breach of the terms and conditions of this Agreement by any Affiliate or Contractor shall be deemed a direct breach by such Party of such terms and conditions.

2.4 Sublicenses. Licensee may grant sublicenses (each, a " *Sublicense*") of its licensed rights under Sections 2.1 and 2.2 to one or more sublicensees (each, a "*Sublicensee*") so long as: (a) each Sublicense is in writing, and includes other industry standard provisions for the development and/or commercialization of Licensed Products, including, without limitation, reasonable diligence requirements, patent marking requirements, development and commercialization reporting requirements, and insurance requirements, in each case if and to the extent such provisions would customarily be included in such a sublicense based on then-current industry standards; (b) the terms of each Sublicense are consistent with applicable terms and conditions of this Agreement and the Existing License Agreements, (c) each Sublicense is negotiated by Licensee in good faith, for a proper commercial purpose, on reasonable arm's-length commercial terms, (d) each Sublicense names Licensor as a third-party beneficiary thereof; and (e) the applicable Sublicensee has, or has the ability to acquire, adequate resources (including scientific, technical and financial) to perform its obligations under such sublicense, as reasonably determined by Licensee at the time of entry into the Sublicense. Licensee will be responsible for requiring compliance by the applicable Sublicensee of each such Sublicense entered into by Licensee and for reasonably enforcing the terms of such Sublicenses, including, without limitation, requiring such applicable Sublicensee to make any of the payments provided for thereunder. Licensee will provide Licensor with a complete, confidential copy of each such Sublicense executed by Licensee and any amendments thereto within thirty (30) days of the execution of said Sublicense or any such amendments thereto and will promptly notify Licensor of the termination of any such Sublicense. Licensee's grant of any Sublicense to any Sublicensee shall not relieve Licensee of any of its obligations under this Agreement, except to the extent that Licensee is, in accordance with the terms and conditions of this Agreement, excused from paying milestones and royalties with respect to Licensed Product development and sales by the Sublicensee under such Sublicense. Any breach of the terms and conditions of this Agreement by any Sublicensee shall be deemed a direct breach by Licensee of such terms and conditions. Licensee shall not enter into Sublicenses structured to avoid payment of fees to Licensor.

2.5 Restricted Entities. During the Term of this Agreement, Licensor shall not engage in discussions, negotiations or similar communications with the companies listed in Exhibit C, including such companies' Affiliates, regarding licenses, collaboration, co-development or any other type of agreement relating to the Licensed Products in the Field without the prior written permission of Licensee. At no time during the Term of this Agreement shall Licensor have the right to license or sublicense Licensed Products under the Licensed Patents or Licensor Know-How in the Field while the Licensee has the exclusive rights under this Agreement with respect to such Licensed Products, Licensed Patents, and Field. For the avoidance of doubt, Licensee's sublicense rights are not limited to this list of potential sublicensees, and, subject to Section 2.4, the existence of this list in no way limits Licensee's right to sublicense under this Agreement.

2.6 Multi-Tier Sublicensing. Subject to Section 2.4, each Sublicensee and Licensee has the right to sublicense the rights granted to it under Sections 2.1 and 2.2 to any Contractor pursuant to a written agreement to subcontract the responsibility to perform, on such Sublicensee's or Licensee's behalf, activities for which it is responsible under the applicable license or sublicense agreement provided, however, that (a) the terms of such agreement are consistent with applicable terms and conditions of this Agreement and the Existing License Agreements and (b) as between the Parties, Licensee shall at all times remain responsible for, and shall be liable under this Agreement with respect to, any breach of this Agreement resulting directly or indirectly from the performance, or failure to perform, by any such Contractors.

2.7 Retained Rights; Requirements.

2.6.1 Retained Rights. Notwithstanding any provision of this Agreement to the contrary, any and all licenses granted to Licensee under this Agreement are subject to (a) Licensor's and its Affiliates' right to use and otherwise perform activities, and to permit academic, government, and not-for-profit institutions or agencies to use and otherwise perform activities, under the Licensed Patents and Licensor Know-How (i) in the Field for non-commercial research, academic, educational, and all other non-commercial purposes, and (ii) outside of the Field for all commercial and non-commercial purposes, (b) Licensor's and its Affiliates' right to use and otherwise perform activities under the Licensed Patents and Licensor Know-How (i) to conduct research and development activities for Licensor and/or its Affiliates on behalf of itself (or themselves) to generate improvements and other new Patents and Know-How, (ii) for the provision of services to Licensee and/or Sublicensees, and (iii) for the provision of services to other Third Parties, including commercial contract research, development or manufacturing services, to the extent such services do not breach Licensees exclusive rights under this Agreement, and (c) any licenses or other rights granted by Licensor to Third Parties under the Existing License Agreements. All rights and interests not expressly granted to Licensee under this Agreement are reserved by Licensor (the "*Reserved Interests*") for itself, its Affiliates, its licensors and its and their respective licensees and sublicensees. It shall not be a breach of this Agreement for Licensor, acting directly or indirectly, to practice or Exploit its Reserved Interests in any manner anywhere in the Territory.

2.6.2 Right to Publish. Subject to this Section 2.6.2, any and all licenses granted hereunder are subject to the right of (a) Licensor to review Licensee's proposed publications of scientific findings related to the Licensed Patents, Licensor Know-How, and/or Party Improvements (collectively, "*Licensor Content*") and (b) Licensee to review Licensor's proposed publications of scientific findings related to the Licensed Products in the Field (collectively, "*Licensee Content*" and, together with Licensor Content, "*Publication Content*"). If the publishing Party "*Publishing Party*" desires to submit any publication related to the other Party's ("*Reviewing Party's*") Publication Content (each, a "*Proposed Publication*"), then the Publishing Party will provide the Reviewing Party with prior written notice of such Proposed Publication and a copy of such Proposed Publication. The Reviewing Party will use reasonable efforts to complete its review of such Proposed Publication promptly, and in any event will complete its review within thirty (30) days of receipt of the Proposed Publication (or ten (10) days in case of abstracts) (the "*Review Period*"), provided that the Reviewing Party shall be deemed to have given its consent if the Reviewing Party does not complete its review within the Review Period. The Reviewing Party shall notify the Publishing Party of any of such Reviewing Party's Confidential Information that is contained in such Proposed Publication. In response to such notification, the Publishing Party will promptly delete any of the Reviewing Party's Confidential Information from the Proposed Publication that the Reviewing Party has identified during the Review Period. The Reviewing Party will have the right to delay submission of the Proposed Publication for up to an additional thirty (30) days if the Reviewing Party determines, in its sole discretion, that publication of the Proposed Publication would have negative effects on the Reviewing Party's Patent rights. In the event that the Reviewing Party decides to delay submission of the Proposed Publication, the Reviewing Party shall inform Publishing Party of such decision within the Review Period, and the Parties shall reasonably cooperate in order to resolve any concerns with the Proposed Publication within such Review Period (as may be extended if the publication has already been submitted).

2.6.3 U.S. Federal Funding. Any and all licenses granted under patents supported by U.S. federal funding are subject to the rights, conditions, and limitations imposed by U.S. law (see 35 U.S.C. §202 et seq. and regulations pertaining thereto), including: (a) the royalty-free, non-exclusive license granted to the U.S. government; and (b) the requirement that any products covered by an issued claim and sold in the U.S. will be substantially manufactured in the United States. Each Party agrees to inform the other Party of those Party Improvements that are developed, reduced to practice or invented by such Party's personnel and agents or the personnel or agents of such Party's Affiliates (or that are Controlled by such Party or its personnel or agents or the personnel or agents of its Affiliates) during the Term and beyond with the support (either entirely or in part) of U.S. federal funding, and to provide all information and documentation to Licensor that Licensor may request to secure patent rights for those inventions, including, but not limited to, grant numbers, contract numbers, and names of granting and contracting institutions and organizations.

2.7 No Grant of Other Know-How or Patent Rights . Each Party understands and acknowledges that the other Party owns its own Intellectual Property and all rights therein. Except as otherwise expressly provided in this Agreement, under no circumstances shall a Party hereto, as a result of this Agreement, obtain any ownership interest or license, or be deemed to obtain any ownership interest or license, in or to any technology, Know-How, Patents, products, or materials of the other Party, including, but not limited to, items Controlled or developed by the other Party, at any time during this Agreement. This Agreement does not create, and shall under no circumstances be construed or interpreted as creating, an obligation on the part of either Party to grant any license to the other Party other than as expressly set forth herein. Any further contract or license agreement between Licensor and Licensee shall be in writing. No licenses are implied by Licensor to Licensee or by Licensee to Licensor. Except as explicitly set forth in this Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any license or other right to any Intellectual Property of such Party or its Affiliates.

Section 3

Collaboration between the Parties, Deliverables, and Payments

3.1 Know-How Documentation and Technology Transfer . The Parties will cooperate as set forth in this Section 3.1 to assist Licensee in the understanding and implementation of the Licensed Patents and Licensor Know-How set forth in Exhibit B.

3.1.1 Technical Assistance at No Charge . Licensor shall, upon the written request (including via email) of Licensee made from time to time during the Initial Term of this Agreement (or such shorter period as is specified herein), provide to personnel of Licensee (or Sublicensees or Contractors) the following technical assistance:

a. Reasonable access to Licensor's protocol binders and other documentation to the extent the same constitutes Licensor Know-How set forth in Exhibit B and in the form (physical or electronic) in which Licensor retains such binders and other documentation;
b. Reasonable input and support to assist Licensee in Licensee's efforts to assemble the documentation of Licensor Know-How as set forth in Exhibit B;
c. Reasonable access to Licensor's Laboratories to allow Licensee, its Sublicensees and its Contractors to observe lab processes, to enable Licensee and its Sublicensees and Contractors to learn in person how to practice the Licensor Know-How set forth in Exhibit B; and
d. Reasonable access to the results of work conducted by Licensor or its Affiliates under U.S. federal contract number HT94252310787.

3.1.2 Technical Assistance at an Hourly Rate . To the extent additional technical assistance is required by Licensee beyond the services described in Section 3.1.1, at the written request of Licensee (including by email), the Parties will negotiate in good faith the terms of one or more separate agreements pursuant to which Licensor would provide additional technical assistance. Such additional technical assistance may include, without limitation, the following:

a. Provision of reasonable technical input, reviews and commentary on SOPs, batch records and other written documentation needed to transfer the Licensor Know-How set forth in Exhibit B to Licensee, its Sublicensees and its Contractors;
b. Reasonable access to Licensor personnel to attend meetings at Licensee's request to assist Licensee to document the Licensor Know-How set forth in Exhibit B;
c. Reasonable support for SOP revision, updating, and troubleshooting when Licensee and/or its Contractors implement the SOPs; and
d. Reasonable training and knowledge transfer to Licensee its Sublicensees, and its Contractors to the extent reasonably necessary to enable Licensee to practice the Licensor Know-How set forth in Exhibit B.

3.1.3 In the event Licensee requests that Licensor provide any of the access or assistance described in Section 3.1.1 or Section 3.1.2 (collectively, "*Technical Assistance*"), such Technical Assistance shall be provided subject to the following conditions:

a. Licensee shall notify Licensor in writing (including via email) of the dates on which Licensee requests Technical Assistance, and submit a schedule of the proposed subjects, estimated man hours, dates and locations (which may be Licensor's Laboratories) for Licensor to provide the requested Technical Assistance.

b. Licensor shall promptly advise Licensee whether it can furnish the requested Technical Assistance consistent with the proposed schedule and, if not, propose a reasonable alternative.
c. Licensor shall not be required to provide Licensee with more than one hundred twenty (120) man hours of support in connection with the no charge Technical Assistance described in Section 3.1.1.
d. Licensor shall have no obligation under Section 3.1.1 to (i) create or generate any new data, results, materials or other Licensor Know-How or (ii) translate, convert or otherwise modify any Licensor Know-How into any form other than the form in which Licensor maintains it for its own use.
e. Licensor shall perform the requested Technical Assistance using the same degree of care, skill, and diligence with which it performs, or would perform, similar activities for its own sake.
f. Licensor shall only be required to provide Licensee with the access described above during reasonable business hours and to the extent such access does not impede or distract from Licensor's normal business operations. All materials received and information observed by Licensee and its representatives in connection with such access shall be deemed Licensor Confidential Information that is subject to Licensee's obligations under Section 7.

3.1.4 As soon as reasonably practicable after the Effective Date, Licensor shall provide Licensee with the materials listed in Exhibit B (collectively, the "*Materials*"). Licensee will not (a) use the Materials for any purpose other than the exercise of its license rights under this Agreement, (b) provide any Third Party with access to any Materials other than as permitted under Section 2.3, or (c) use or authorize the use of any Materials on or in human beings. The Parties will negotiate in good faith the terms of one or more separate agreements pursuant to which Licensor would provide iPSC/iMSC cell lines/targeted proteins that may be reasonably requested by Licensee, in accordance with reasonable time frames for production and at a fair market price.

3.1.5 In order to facilitate the ongoing collaboration under this Section 3.1, during the Initial Term the Parties shall meet monthly (either in person or by videoconference) for a 1.5 hour meeting at which (a) each Party will provide an overview of its development activities relating to the Technology, the Licensed Products in the Field and any associated Improvements and (b) the Parties will discuss any new Technical Assistance requests and the status of any existing Technical Assistance requests. All information disclosed by either Party in connection with any such meetings will be subject to the provisions of Section 7.

3.2 Licensee Diligence Obligations. Licensee (either directly or through its Sublicensees) will use Commercially Reasonable Efforts to develop and secure Regulatory Approval for at least one (1) Licensed Product. Without limiting the foregoing, Licensee must achieve the following milestones ("*Milestones*"): (a) within five (5) years after the Effective Date, Licensee shall submit an IND for a Licensed Product, and (b) within twenty four (24) months after submission of the IND, Licensee shall have dosed the first patient with a Licensed Product in a Phase I Clinical Trial in the United States or in a Major Market Country. It shall be deemed a material breach of this Agreement and Licensor may elect to terminate this Agreement in its entirety if any of the following occur: (i) Licensee has not submitted an IND for any Licensed Product on or before the date that is five (5) years after the Effective Date, (ii) Licensee has not dosed a patient with any Licensed Product in a Phase I Clinical Trial in the United States or in a Major Market Country on or before the date that is twenty four (24) months after submission of the IND, or (iii) Licensee otherwise breaches any of its diligence obligations under this Section 3.2. Licensee (either directly or through its Sublicensees) will use Commercially Reasonable Efforts to commercialize each Licensed Product in each jurisdiction where it receives Regulatory Approval.

3.3 Payments. In consideration of the rights granted to Licensee under this Agreement, Licensee agrees to pay to Licensor the following fees, as further detailed in Exhibit A:

3.3.1 Payment During the Initial Term. Licensee shall pay the fixed monthly amount specified in Exhibit A, paragraph 1.a, during the Initial Term.

3.3.2 Existing Amounts Payable. Licensee shall pay the existing accrued amounts as specified in Exhibit A, paragraph 1.b.

3.3.3 Patent Costs. Licensee shall pay the amounts set forth in Exhibit A, paragraph 1.c.

3.3.4 Development Milestone Fees Related to Licensed Products . Licensee shall pay Licensor based on achievement by Licensee or its Affiliates (but not Sublicensees) of the development milestones identified in paragraph 2 of Exhibit A, and in accordance with the payment schedule and other conditions set forth therein.

3.3.5 Royalty. Commencing upon the First Commercial Sale of a Licensed Product by Licensee or its Affiliates (but not Sublicensees), in any country in the Territory, on a calendar quarter and country by country basis, Licensee shall pay to Licensor a Royalty on Net Sales of such Licensed Product in the amount set forth in Exhibit A, paragraph 3.

3.3.6 Sublicense Income . Licensee shall pay to Licensor the Sublicense Fees specified in Exhibit A, paragraph 4.

3.3.7 Priority Review Voucher Sale Payments . Licensee shall pay to Licensor the Priority Review Voucher Sale Payments specified in Exhibit A, paragraph 5.

3.3.8 Currency; Currency Conversion. Licensee shall pay in U.S. dollars all amounts due to Licensor pursuant to this Agreement. All payments due to Licensor hereunder shall be made by wire transfer of immediately available funds into an account designated by Licensor. For the purpose of converting any local currency into U.S. dollars to determine any amounts payable under this Agreement, the rate of exchange to be applied shall be the average rate of exchange in effect during the twenty (20) business days immediately preceding the day on which such amounts become due and payable under this Agreement as reported in the Wall Street Journal.

3.3.9 Audit and Inspection Rights. Licensee and its Affiliates will maintain complete and accurate records in sufficient detail to permit Licensor to confirm the accuracy of the calculation of payments under this Agreement. Upon reasonable prior notice, such records shall be available during regular business hours (without undue disruption of Licensee's business) for a period of three (3) years from the end of the calendar year to which they pertain for examination by an independent accountant selected by the Licensor and reasonably acceptable to Licensee, for the sole purpose of verifying the accuracy of the reports and payments furnished by Licensee pursuant to this Agreement. Audits may not be requested more than once per year, and no period may be audited more than once. Any such auditor shall enter into a confidentiality agreement with Licensee, and shall not disclose Licensee's Confidential Information, except to the extent such disclosure is necessary to verify the accuracy of the reports furnished by Licensee or the amount of payments due by Licensee to Licensor under this Agreement. The auditor may not be compensated on a commission, bonus, or any other payment that depends on the result of the audit or amounts due or paid as a result of the audit. Any undisputed amounts shown to be owed but unpaid shall be paid within thirty (30) days from the accountant's report, plus interest (as set forth in Section 3.3.11) from the original due date. Licensor shall bear the full cost of such audit.

3.3.10 Taxes. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the efforts of the Parties under this Agreement. The Parties agree to cooperate with one another and use commercially reasonable efforts to reduce or eliminate tax withholding or similar obligations in respect of payments made by a Party to the other Party under this Agreement. To the extent Licensee is required to deduct and withhold taxes on any payment to Licensor hereunder, Licensee shall pay the amounts of such taxes to the proper governmental authority in a timely manner and promptly transmit to Licensor an official tax certificate or other evidence of such withholding sufficient to enable Licensor to claim such payment of taxes. Licensor shall provide Licensee with any tax forms that may be reasonably necessary in order for Licensee to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. Each Party shall provide the other with reasonable assistance to enable the recovery, as permitted by Applicable Laws, of withholding taxes, value added taxes, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding tax or value added tax.

3.3.11 Late Payment. If Licensor does not receive payment of any sum due to it on or before the due date (each, a " *Late Payment*"), Licensee shall pay to Licensor an amount equal to two percent (2%) of such Late Payment ("*Late Payment Penalty*"), and such Late Payment shall not be considered paid in full until Licensor has received from Licensee both the full amount of such Late Payment and the Late Payment Penalty. For the avoidance of doubt, payment by Licensee within sixty (60) days past the due date will not be considered a Late Payment subject to a Late Payment Penalty.

3.3.12 Offset for Third Party Royalties. If either Licensee or any of its Sublicensees is required to pay a royalty to a Third Party as a result of the manufacture, use, sale, distribution, importation, or other Exploitation of a Licensed Product for a license or other authorization under a Third Party Patent, then Licensee shall be entitled to, on a country-by-country basis, offset against any royalty payable to Licensor under this Agreement an amount equal to fifty percent (50%) of such royalty paid to such Third Party with respect to such sales, provided that in no event will any offset under this Section 3.3.12 reduce the royalties payable by Licensee for a given Licensed Product in a given country in any given calendar quarter to less than fifty percent (50%) of the amounts otherwise payable by Licensee for such Licensed Product in such country in such calendar quarter pursuant to paragraph 3 of Exhibit A.

Section 4

Term, Renewal, Termination, and Survival

4.1. The term of this Agreement shall begin on the Effective Date and, unless earlier terminated pursuant to this Section 4, endure until the one (1) year anniversary of the Effective Date (the "*Initial Term*"). Thereafter, the term shall be renewed for sequential one (1) year periods (each a "Renewal Term") unless (a) a notice of nonrenewal is provided in writing by Licensee to Licensor at least ninety (90) days prior to the expiration of the Initial Term or the then-current Renewal Term, (b) this Agreement is earlier terminated pursuant to this Section 4, or (c) Licensee is subject to bankruptcy proceedings under Chapter 7 of the U.S. Bankruptcy Code and is in breach of this Agreement due to failure to timely pay any amount due under this Agreement. The Initial Term together with any applicable Renewal Terms are referred to herein as the "*Term*".

4.2. Either Party may, without prejudice to any other remedies available to it at law or in equity, terminate this Agreement upon written notice to the other Party in the event that the other Party (the "*Breaching Party*") shall have materially breached or defaulted in the performance of any of its obligations. The Breaching Party shall have thirty (30) days after written notice thereof was provided to the Breaching Party by the non-breaching Party to remedy such default. If the Breaching Party has failed to cure any such breach or default prior to the expiration of such thirty (30) day period, the non-breaching Party shall have the right to terminate the Agreement, which termination shall become effective by sending a written notice of termination to the Breaching Party. Notwithstanding any provision of this Agreement to the contrary, a Party's right to terminate under this Section 4.2 shall not be subject to the provisions set forth in Section 8, shall not expire, and any such termination shall take effect upon written notice to the other Party without application of any cure period otherwise provided under this Agreement (except the cure period set forth in the second sentence of this Section 4.2 or the grace period set forth in Section 3.3.11).

4.3. Either Party shall have the right to terminate this Agreement upon written notice as a result of the filing or institution of bankruptcy, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors by the other Party; provided that such termination shall be effective only if such proceeding is not dismissed within ninety (90) days after the filing thereof.

4.4. Licensee may terminate this Agreement at any time upon ninety (90) days prior written notice.

4.5. Without limiting Licensor's rights under Section 4.2, except to the extent unenforceable under Applicable Law, Licensor may terminate this Agreement by written notice to Licensee in the event of a breach of Section 9.9 by Licensee, its Affiliates or their respective Sublicensees or in the event that Licensee, its Affiliates, or any of their respective Sublicensees challenges, in any formal proceeding, the validity, patentability, enforceability, scope, construction or inventorship of any of the Licensed Patents or assists any Third Party in any such challenge (each, a "*Patent Challenge*"). If a Sublicensee brings any such Patent Challenge or assists a Third Party in bringing any such Patent Challenge (except as required under a court order or subpoena), then Licensor will send a written demand to Licensee to terminate such sublicense. If Licensee fails to so terminate such sublicense within thirty (30) days after Licensor's demand, Licensor may terminate this Agreement. In any country(ies) where Licensor may not terminate this Agreement in the event of a Patent Challenge, if: (a) Licensee or any of its Affiliates bring a Patent Challenge against Licensor; (b) Licensee or any of its Affiliates assists a Third Party in bringing a Patent Challenge against Licensor (except as required under a court order or subpoena); or (c) any Sublicensee brings a Patent Challenge or assists a Third Party in bringing a Patent Challenge (except as required under a court order or subpoena), Licensor sends a written demand to Licensee to terminate such sublicense, and Licensee fails to so terminate such sublicense within thirty (30) days after Licensor's demand, and such Patent Challenge is not successful (*i.e.,* the Licensed Patent(s) subject to such Patent Challenge retain Valid Claims), then all payments payable by Licensee to Licensor under this Agreement shall be doubled. In the event that such a Patent Challenge is successful, Licensee will have no right to recoup any payments made during the period of such Patent Challenge.

4.6. Upon termination or expiration of this Agreement for any reason, Licensee's rights to the Licensed Patents and Licensor Know-How (inclusive of Licensed Products), which have been granted hereunder and all use thereof will terminate except for rights that are subject to a Sublicense at the time of such termination or expiration. All Sublicenses granted by Licensee shall survive the Term and, unless terminated consistent with the applicable terms of the Sublicense, shall continue until the expiration of the last to expire Valid Claim of a Licensed Patent in any applicable jurisdiction in the Territory. For the avoidance of doubt, Licensee would remain obligated to pay Sublicense Fees on any such surviving Sublicenses. If this Agreement is terminated or expires for any reason, and if Licensee requests that a given Sublicense be transferred to Licensor (a "*Transferred Sublicense*"), then such Transferred Sublicense shall be considered a direct license from Licensor to the Sublicensee under such Transferred Sublicense, unless such Sublicensee is (a) an Affiliate of Licensee, (b) in material default of any provision of this Agreement or the applicable Sublicense, or (c) the basis for termination of this Agreement is due to such Sublicensee's actions or inactions ((a)-(c), an "*Ineligible Sublicensee*"); provided that such Sublicensee agrees in writing that (i) Licensor is entitled to enforce all relevant provisions of the Sublicense, including payment provisions, directly against such Sublicensee, and (ii) Licensor shall not assume, and shall not be responsible to such Sublicensee for, any representations, warranties or obligations (including, without limitation, any obligations to provide services or information) of Licensee to such Sublicensee, other than to permit such Sublicensee to exercise any rights to the Licensed Patents and Licensor Know-How to the extent consistent with the terms of this Agreement.

4.7. Expiration or termination of this Agreement will not release either Party from any obligation that matured prior to the effective date of such expiration or termination. Upon expiration or termination of this Agreement for any reason, any unpaid amounts payable to Licensor (including all unpaid amounts under Section 3.3.1, Section 3.3.2 and Section 3.3.3) shall become due and payable no later than sixty (60) days following the effective date of such expiration or termination, and payment thereof shall remain an ongoing obligation of Licensee until such amount is paid in full. Notwithstanding any provision of this Agreement to the contrary, Licensee's obligation to pay Sublicense Fees to Licensor that accrue with respect to each Sublicense prior to expiration or termination of such Sublicense remains in effect, provided however that to the extent any Sublicensee becomes a direct licensee of Licensor pursuant to Section 4.6, Licensee shall have no further obligation to pay any Sublicense Fees once such Sublicensee has entered into a direct license with Licensor with respect to such Transferred Sublicense.

4.8. The following provisions will survive termination or expiration of this Agreement: Sections 1; 2.2; 2.6; 2.7; 3.3 including Exhibit A (with respect to any payments that accrue prior to termination or expiration); 4.5; 4.6; 4.7; 4.8; 5.1; 6.3; 6.4; 6.5; 6.6; 6.7; 6.8; 7; 8; 9.1; 9.2; 9.4; 9.5; 9.6; 9.7; 9.9; 9.10; 9.11; 9.12; and 9.13.

Section 5

Intellectual Property Rights

5.1 Rights in Improvements and Improvement Patents.

a. Background IP. The Parties acknowledge that each enters this Agreement having its own Intellectual Property that is independent of this Agreement. Nothing in this Agreement should affect, or is intended to affect, Licensor's ownership or control of Licensor Background IP or Licensee's ownership or control of Licensee Background IP
b. Except as otherwise set forth in this Section 5, any Intellectual Property (including Sublicensee Improvements and Sublicensee Improvement Patents) developed during the term of this Agreement by or on behalf of a Party or Sublicensee shall be owned by the Party or Parties or Sublicensee whose employee(s), contractor(s), or agents would be deemed to be the inventor(s) under U.S. patent laws.

i. Subject to the licenses granted to Licensee under Sections 2.1 and 2.2 of this Agreement, Licensor shall be the sole owner of all right, title, and interest in and to all Party Improvements and Party Improvement Patents, including, without limitation, all related certificates of correction, reissue certificates, and supplementary protection certificates, and all other rights granted under 35 U.S.C. § 307, 35 U.S.C. § 318, 35 U.S.C. § 328, and 35 U.S.C. § 254-257.
ii. Licensee shall assign and hereby does assign (and shall ensure that all of its Affiliates assign), to Licensor all right, title and interest in and to all Party Improvements and Party Improvement Patents. Licensee shall execute and assist (and ensure that its Affiliates execute and assist) with any and all applications, assignments, or other instruments which Licensor deems necessary to perfect the foregoing assignment and/or to evidence, apply for, obtain, maintain, defend or enforce Patent or other Intellectual Property protection in any and all countries worldwide with respect to Party Improvements and Party Improvement Patents assigned to Licensor as set forth above or to protect otherwise Licensor's interest therein.

c. If either Party (directly or through its personnel) creates or discovers any Party Improvement, then such Party shall promptly provide the other Party with written notice describing such Party Improvement in reasonable detail (each such notice, an "*Improvement Notice*"). Any Party Improvements developed solely by Licensor shall automatically be included in the Licensed Patents and Licensor Know-How under the license granted in Section 2.1 and added by the Parties to Exhibits D and B, respectively. Any Party Improvements that are not developed solely by Licensor shall automatically be included in the license granted in Section 2.2 and added by the Parties to Exhibit F. Upon written request by either Party from time to time, Licensee and Licensor agree promptly to update (a) Exhibit B and Exhibit D of this Agreement, respectively, to reflect the inclusion of (i) Know-How included in Party Improvements to the extent developed solely by Licensor and (ii) Party Improvement Patents to the extent developed solely by Licensor and (b) Exhibit F to reflect (i) Know-How included in Party Improvements to the extent developed solely by Licensee or jointly by Licensee and Licensor and (ii) Party Improvement Patents to the extent developed solely by Licensee or jointly by Licensee and Licensor.

5.2 Third-Party Infringement and Claims of Infringement. Each of the Parties shall promptly, but in any event no later than thirty (30) days after receipt of notice thereof, notify the other Party in writing in the event of any claims by a Third Party of alleged patent infringement by either Party or Affiliates or sublicensees or subcontractors with respect to the manufacture, use, sale, offer for sale or importation of, as applicable, the Licensed Products (each, an "*Infringement Claim*"). Any such Infringement Claim shall be handled as follows:

a. Subject to, and without limiting Licensee's indemnification obligations under this Agreement, in the case of any Infringement Claim against only the Licensee, or against both Licensee and Licensor, in each with respect to the Licensed Products, Licensee shall be deemed to be the "*Controlling Party*" for purposes of such Infringement Claim.
b. Subject to, and without limiting Licensee's indemnification obligations under this Agreement, if such Infringement Claim is alleged or commenced solely against Licensor, then Licensor shall be deemed to be the "*Controlling Party*" for purposes of such Infringement Claim *provided, however*, that Licensor will not be obligated to enter into negotiations with such Third Party to obtain rights for Licensee under the applicable Patent.
c. The other Party ("non-Controlling Party")shall reasonably assist the Controlling Party in its role as the Controlling Party;

d. The Controlling Party shall assume control of the defense of such infringement claim, including the selection of counsel. The non-Controlling Party, upon request of the Controlling Party, agrees to join in any such litigation at the Controlling Party's expense, and in any event to reasonably cooperate with the Controlling Party at the Controlling Party's expense. The non-Controlling Party will have the right to consult with the Controlling Party concerning such infringement claim and to participate in and be represented by independent counsel in any litigation in which such non-Controlling Party is a party at its own expense. The Controlling Party shall have the exclusive right to settle any Infringement Claim without the consent of the other Party, unless such settlement may reasonably be expected to have a material adverse impact on the other Party (in which case the consent of such other Party shall be required, such consent not to be unreasonably withheld). Without limiting the foregoing, for purposes of this Section 5.2, any settlement that would involve the waiver of rights (including the rights to receive payments) of such other Party shall be deemed a material adverse impact and shall require the consent of such other Party, such consent not to be unreasonably withheld.

e. If a Party shall become engaged in or participate in any suit described in this Section, the other Party shall cooperate, and shall cause its and its Affiliates' employees to cooperate, with such Party in all reasonable respects in connection therewith, including giving testimony and producing documents lawfully requested, and using its reasonable efforts to make available to the other, at no cost to the other (other than reimbursement of actually incurred, reasonable out-of-pocket travel and lodging expenses), such employees who may be helpful with respect to such suit, investigation, claim, or other proceeding.

5.3. Enforcement of Licensed Patents against Third Party infringement shall be subject to the following:

a. If either Party becomes aware of any infringement by a Third Party of any Licensed Patent in the Field anywhere in the Territory (" *Third Party Infringement*"), then such Party will notify the other Party in writing within thirty (30) days to that effect.
b. Licensor will have the first right (but not the obligation) to take the appropriate steps to enforce or defend any Licensed Patent against Third Party Infringement, and may take steps including the initiation, prosecution, and control of any suit, proceeding, or other legal action by counsel of its own choice. Licensor shall bear the costs of such enforcement or defense, as applicable. Notwithstanding the foregoing, Licensee will have the right, at its own expense, to be represented in any such action by counsel of its own choice.
c. In the event that Licensor does not choose to enforce against Third Party Infringement within 180 days of notice of such infringement, Licensee shall have the right (but not the obligation) to take the appropriate steps to enforce or defend any Licensed Patent against infringement by a Third Party, and may take steps including the initiation, prosecution, and control of any suit, proceeding, or other legal action by counsel of its own choice. Licensee shall bear the costs of such enforcement or defense, as applicable. Notwithstanding the foregoing, Licensor will have the right, at its own expense, to be represented in any such action by counsel of its own choice.
d. If one Party brings any suit, action or proceeding under this Section, the other Party agrees to be joined as party plaintiff if necessary to prosecute the suit, action, or proceeding and to give the first Party reasonable authority to file and prosecute the suit, action, or proceeding; provided, however, that neither Party will be required to transfer any right, title, or interest in or to any property to the other Party or any other party to confer standing on a Party hereunder.
e. The Party not pursuing the suit, action, or proceeding hereunder will provide reasonable assistance to the other Party, including by providing access to relevant documents and other evidence and making its employees available, subject to the other Party's reimbursement of any Out-of-Pocket Costs incurred by the non-enforcing or defending Party in providing such assistance.
f. Licensee shall not, without the prior written consent of Licensor (in its sole discretion), enter into any compromise or settlement relating to any claim, suit, or action that it brought under this Section that admits the invalidity or unenforceability of any Licensed Patent, or requires Licensor to pay any sum of money, or otherwise adversely affects the rights of Licensor with respect to such Licensed Patents, the Licensed Products, or Licensor's rights hereunder (including the rights to receive payments).
g. Any settlements, damages or other monetary awards (a Recovery) recovered pursuant to a suit, action, or proceeding brought pursuant to this Section will be allocated first to the costs and expenses (including attorney's fees) of the Parties, and the remainder, if any, will (i) in the event that Licensor enforces or defends the Third Party Infringement, be allocated to Licensor, and (ii) in the event Licensee enforces or defends the Third Party Infringement, be considered Sublicense Fees and shared between Licensee and Licensor in accordance with Exhibit A.

5.4. Patent Prosecution. As between the Parties, Licensor shall be responsible for preparing, filing, prosecuting, and maintaining all patent applications and patents included in the Licensed Patents in the Territory. Licensor shall not abandon any Licensed Patent that has issued on or before the Effective Date without prior written approval of Licensee. With respect to Licensed Patents that have not issued on or before the Effective Date, if Licensor elects to abandon any such Licensed Patent, it will (a) provide Licensee with ten (10) business days' prior written notice of its intent to abandon such Licensed Patent and (b) consider in good faith any comments Licensee may provide regarding such proposed abandonment. Licensor shall select patent counsel to conduct such activities regarding the Licensed Patents, shall keep Licensee reasonably informed of prosecution activities for Licensed Patents, and shall provide Licensee an opportunity to provide comments, which Licensor will consider in good faith. During the first nine (9) months of the Initial Term, Licensor shall participate in monthly meetings with Licensee and Licensor's selected patent counsel to discuss patent prosecution activities and decisions with respect to the Licensed Patents. With the sole exception of the payments identified in Exhibit A, all Licensed Patent expenses shall be borne by Licensor.

Section 6

Warranties, Representations, Disclaimers, and Indemnities

6.1 Each Party ("*Representing Party*") hereby represents, warrants and covenants to the other Party that:

a. As of the Effective Date, the execution and performance of the Representing Party's obligations under this Agreement do not conflict with, cause a default under, or result in a breach of or violate any existing contractual obligation that may be owed by the Representing Party to any Affiliate or Third Party, nor will the Representing Party, during the Term of this Agreement, take any action, inaction or enter into agreement that would conflict with, cause a default under, result in a breach of or violate (i) any existing contractual obligation that is owed to the other Party under this Agreement or (ii) with respect to Licensee, the terms of the Existing License Agreements;
b. The Representing Party has full power and authority to execute, deliver and perform this Agreement and that this Agreement constitutes the legally binding and valid obligation of The Representing Party, enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, moratorium and other laws affecting creditors' rights generally;
c. As of the Effective Date, there is no action or suit pending against the Representing Party or any of its Affiliates that questions the validity of this Agreement or the right of the Representing Party to enter into this Agreement or consummate the transactions contemplated hereby, and neither the Representing Party nor any of its Affiliates is a party to any litigation, arbitration, mediation or other similar legal proceeding relating to the activities contemplated by this Agreement; and
d. As of the Effective Date, the Representing Party is not in breach of this Agreement and to its knowledge, the other Party is not in breach of this Agreement.

6.2 Licensor makes the following warranties and representations to Licensee as of the Effective Date:

a. Licensor is the owner or licensee of the Licensed Patents and/or has the right to grant rights, licenses, privileges, releases, non-assertions, and immunities under or relating to the Licensed Patents.
b. There are no liens, conveyances, mortgages, assignments, encumbrances, other licenses, or other agreements (other than the Existing License Agreements) which would prevent or impair the full and complete exercise of the rights, licenses, privileges, releases, non-assertions, and immunities granted by Licensor to Licensee, its respective successors and assigns, customers, whether immediate or remote, and suppliers with respect to the Licensed Patents pursuant to the specific terms and conditions of this Agreement.
c. Licensor is not aware of any reason that the Licensed Patents are invalid, however, nothing herein contained shall be construed as a warranty by Licensor that the Licensed Patents are valid.
d. Except as previously disclosed to Licensee, Licensor is not aware of any reason that the inventions claimed or covered by the Licensed Patents would be deemed: (i) as having been conceived, discovered, developed or otherwise made in connection with any research activities funded, in whole or in part, by the federal government of the United States of America or any agency thereof; (ii) a "subject invention" as that term is described in 35 U.S.C. Section 201(e) and (iii) otherwise subject to the provisions of the Patent and Trademark Law Amendments Act of 1980, as amended, codified at 35 U.S.C. §§ 200-212, as amended, as well as any regulations promulgated pursuant thereto, including in 37 C.F.R. Part 401 (the "Bayh-Dole Act").

6.3 Except as expressly provided in Section 6.1 or Section 6.2, nothing in this Agreement will be construed as (a) a warranty or representation by Licensor as to the validity or scope of any of the Licensed Patents, (b) a warranty or representation by Licensor that anything made, used, sold or otherwise disposed of under the licenses granted in this Agreement, or the practice of the Licensed Patents or Licensor Know-How will or will not infringe Patents or other Intellectual Property of Third Parties, or (c) an obligation of Licensor to bring or prosecute actions or suits against Third Parties for infringement of Licensed Patents.

6.4 EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, LICENSOR IS PROVIDING THE LICENSED PATENTS AND LICENSOR KNOW-HOW "AS IS." EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER LICENSOR NOR LICENSEE MAKES ANY REPRESENTATIONS, EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR AS TO THE VALIDITY OF ANY PATENTS, AND LICENSOR DOES NOT ASSUME ANY RESPONSIBILITY WHATSOEVER WITH RESPECT TO USE, SALE, OR OTHER DISPOSITION OF PRODUCTS INCORPORATING OR MADE BY USE OF THE LICENSED PATENTS OR LICENSOR KNOW-HOW IN CONNECTION WITH THIS AGREEMENT.

6.5 Indemnification by Licensee.

a. Licensee will indemnify, defend and hold harmless Licensor, its Affiliates and their respective directors, officers, employees, consultants, and agents, and their respective successors, heirs, and assigns (each a "*Licensor Indemnitee*"), against all Third Party suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses (including legal expenses, investigative expenses, and reasonable attorneys' fees), including claims resulting from or connected to the death of or injury to any person or persons, or any damage to property, resulting from, arising out of, or otherwise attributable to Licensee's or, as applicable Licensee's Affiliate's or Sublicensee's: (i) negligence or misconduct in connection with this Agreement, (ii) failure to materially comply with Applicable Laws or the terms of this Agreement, including any material breach of Licensee's express representations and warranties set forth in this Agreement, or (iii) Exploitation of Licensed Products or the exercise of the licenses granted under this Agreement, including the sublicensing, production, manufacture, sale, use, lease, consumption, administration, shipping, storage, transfer, advertisement of the Licensed Patents, Licensor Know-How, or Licensed Products, or any activity arising from or in connection with any right or obligation of Licensee hereunder, except in each case to the extent resulting from, arising out of, or otherwise attributable to Licensor's failure to comply with Applicable Laws or the terms of this Agreement.
b. Licensor will promptly give notice to Licensee of any suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses which might be covered by this Section 6.5 and Licensee will have the right to defend the same, including selection of counsel and control of the proceedings; provided that Licensee will not, without the written consent of Licensor, settle or consent to the entry of any judgment with respect to any such Third Party claim (i) that does not release the applicable Licensor Indemnitee(s) from all liability with respect to such Third Party claim or (ii) which may materially adversely affect Licensor or the Licensor Indemnitees or under which Licensor or the applicable Licensor Indemnitee(s) would incur any obligation or liability, other than one as to which Licensee has an indemnity obligation hereunder. Licensor agrees to fully cooperate and aid such defense. Licensor at all times reserves the right to select and retain counsel of its own at its own expense to defend Licensor's interests.

6.6 Indemnification by Licensor.

a. Licensor will indemnify, defend and hold harmless Licensee, its Affiliates and their respective directors, officers, employees, consultants, and agents, and their respective successors, and assigns (each a "*Licensee Indemnitee*"), against all Third Party suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses (including legal expenses, investigative expenses, and reasonable attorneys' fees) resulting from, arising out of, or otherwise attributable to Licensor's (i) negligence or misconduct in connection with this Agreement, or (ii) failure to materially comply with Applicable Laws or the terms of this Agreement, including any material breach of Licensor's express representations and warranties set forth in this Agreement, except to the extent resulting from, arising out of, or otherwise attributable to Licensee's failure to comply with Applicable Laws or the terms of this Agreement.
b. Licensee will promptly give notice to Licensor of any suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses which might be covered by this Section 6.6 and Licensor will have the right to defend the same, including selection of counsel and control of the proceedings; provided that Licensor will not, without the written consent of Licensee, settle or consent to the entry of any judgment with respect to any such Third Party claim (i) that does not release the Licensee Indemnitee(s) from all liability with respect to such Third Party claim or (ii) which may materially adversely affect Licensee or the Licensee Indemnitee or under which Licensee or the applicable Licensee Indemnitee would incur any obligation or liability, other than one as to which Licensor has an indemnity obligation hereunder. Licensee agrees to fully cooperate and aid such defense. Licensee at all times reserves the right to select and retain counsel of its own at its own expense to defend Licensee's interests.

6.7 TO THE FULLEST EXTENT PERMITTED BY LAW, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY OR ANY OTHER PERSON FOR ANY INJURY TO OR LOSS OF GOODWILL, REPUTATION, BUSINESS PRODUCTION, REVENUES, PROFITS, ANTICIPATED PROFITS, CONTRACTS, OR OPPORTUNITIES (REGARDLESS OF HOW THESE ARE CLASSIFIED AS DAMAGES), OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, PUNITIVE, OR ENHANCED DAMAGES, WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PRODUCT LIABILITY, OR OTHERWISE (INCLUDING THE ENTRY INTO, PERFORMANCE, OR BREACH OF THIS AGREEMENT), REGARDLESS OF WHETHER SUCH LOSS OR DAMAGE WAS FORESEEABLE AND THE PARTY AGAINST WHOM LIABILITY IS CLAIMED HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED REMEDY OF ITS ESSENTIAL PURPOSE. THE FOREGOING LIMITATIONS WILL NOT: (A) APPLY TO INFRINGEMENT BY A PARTY OF THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS OR A PARTY'S BREACH OF SECTIONS 7 OR 9.9, OR (B) LIMIT A PARTY'S INDEMNIFICATION OBLIGATIONS UNDER THIS SECTION 6.

6.8 Both Parties shall maintain in full force and effect during the Term and for a period of three (3) years after expiration or termination of this Agreement, worker's compensation, general liability and professional liability, clinical trial liability, and product liability insurance coverage, all in such amounts and with such scope of coverages as are reasonably sufficient to cover its respective obligations under this Agreement and as are customary in the life

sciences and pharmaceutical industries. Upon written request of a Party, the other Party, shall provide evidence of such insurance to the requesting Party. Each Party shall be named as an additional insured with respect to such insurance policies held by the other Party, and each Party shall ensure that the other Party will receive no less than fourteen (14) days' prior notice of any cancelation, non-renewal or material change in such insurance coverage.

Section 7

Confidentiality and Publicity

7.1 Confidential Information. Each Party shall maintain the Confidential Information of the other Party in strict confidence, and will not disclose, divulge or otherwise communicate such Confidential Information to others, or use it for any purpose, except pursuant to, and in order to carry out, the terms and objectives of this Agreement, or with the express written consent of the Party who provided such Confidential Information. Each Party will maintain the confidentiality of the other Party's Confidential Information using methods and practices that are substantially similar to those that the receiving Party uses to maintain the confidentiality of its own confidential information, but in no event less than a reasonable degree of care. Except as may be authorized in advance in writing by the disclosing Party, the receiving Party will only grant access to the Confidential Information to its employees and agents as necessary to carry out activities under this Agreement and such employees and agents will have entered into non-disclosure agreements consistent with the terms of this Section 7.1. The obligations of confidentiality described above will not pertain to that part of any Confidential Information to the extent that it is supported by competent written proof that:

a. such information was lawfully in the receiving Party's possession or control prior to the time it received the information from the disclosing Party (except to the extent received in confidence under the Original Agreement);
b. such information was developed by the receiving Party independently of and without reference to the Confidential Information of the disclosing Party;
c. such information was, at the time it was disclosed to or obtained by the receiving Party, or thereafter became, available to the public through no act or omission of the Party holding such information; or
d. such information was lawfully obtained by the receiving Party from a Third Party that has the right to disclose such information free of any obligations of confidentiality.

In addition, a receiving Party may disclose such Confidential Information to the limited extent required to do so by Applicable Law or a proper legal, governmental or other competent authority, or by the rules of any securities exchange on which any security issued by either Party is traded, or included in any filing or action taken by the receiving Party to obtain or maintain government clearance or approval to market a subject Licensed Product. Except where impracticable, such required Party shall give the other Party reasonable advance notice of such disclosure requirement and shall afford the other Party a reasonable opportunity to oppose, limit or secure confidential treatment for such required disclosure, or, where it is impracticable to give an advance notice, such required Party shall give the other Party reasonable notice promptly after such required disclosure. In the event of any such required disclosure, the required Party shall disclose only that portion of the Confidential Information legally required to be disclosed.

In addition, either Party may disclose Confidential Information, including this Agreement, and the terms hereof (including providing a copy hereof, redacted as appropriate) to any bona fide potential licensor, licensee, partner or permitted Sublicensee or successor to said Party's interest under this Agreement, to a bona fide potential lender from which said Party is considering borrowing money, to a bona fide potential collaborator in connection with development or commercialization of Licensed Products, to any bona fide financial investor from which said Party may take money, to any insurance broker, business, financial or scientific consultants, attorneys, and accountants; provided, however, in any such case said Party shall first obtain a written obligation of confidentiality, non-disclosure and non-use no less stringent than those imposed in this Section 7.1 (or in the case of attorneys or other professionals, an equivalent professional duty of confidentiality) from the bona fide potential licensor, licensee, partner, permitted Sublicensee or successor, bona fide potential lender, bona fide potential collaborator, bona fide financial investor, insurance broker, business, financial or scientific consultant, attorney or accountant.

7.2 Use of Names. Neither Party may identify the other Party in any promotional advertising or other promotional materials to be disseminated to the public or any portion thereof, or use the name of any staff member or employee of the other Party or any trademark, service mark, trade name, symbol or logo that is associated with the other Party, without the other Party's prior written consent. Notwithstanding the foregoing, and for the avoidance of doubt, without the consent of the other Party either Party may comply with disclosure requirements of all Applicable Laws relating to its business, including United States and state securities laws. Each Party may include the other Party's name, logo, and a brief description of such other Party on said Party's website.

7.3 Press Releases. The Parties shall mutually agree upon the timing and content of any press releases or other public announcement relating to this Agreement and the transactions contemplated herein, provided, however, that either Party or its Affiliates may disclose the relevant terms of this Agreement to the extent required to comply with the rules and regulations promulgated by the U.S. Securities and Exchange Commission or any equivalent governmental agency or Applicable Law in any country in the Territory, provided that such Party shall use reasonable efforts to redact sensitive information and shall submit a confidential treatment request in connection therewith, after consultation with the other Party.

Section 8

Dispute Resolution

8.1 In the event of any dispute or disagreement between Licensor and Licensee as to the interpretation of any provision of this Agreement or any other related document (or the performance of any obligations hereunder or thereunder), the matter, upon written request of either Licensor or Licensee, shall be referred to representatives of Licensor and Licensee for decision, each such Party being represented by an Executive Officer (the "***Representatives***"). The Representatives shall promptly meet and use good faith efforts to resolve the dispute. If the Representatives do not mutually agree upon a decision within thirty (30) calendar days (as extended by the last sentence of this Section 8.1) after reference of the matter to them, the Parties shall submit to mediation by a single independent mediator, with expertise and experience applicable to the subject matter of the dispute, mutually agreeable to the Parties and in accordance with procedures as may be mutually agreed in writing by the Parties. If the dispute is not resolved pursuant to such mediation (including if the Parties are unable to mutually agree on the selection of a mediator or the relevant procedures for such mediation), then each of the Licensor and Licensee shall be free to exercise the remedies available to it under Section 8.2. Each of the Licensor and Licensee may extend the period of time for negotiation among the Representatives for an additional period of thirty (30) calendar days on one (1) occasion per dispute.

8.2 If the Licensor and Licensee are unable to resolve such dispute pursuant to Section 8.1, the dispute shall be submitted to binding arbitration (without any recourse to the federal or state courts except to enforce any arbitral award or, within forty five (45) days of an Arbitrator's rendering of a final decision, to appeal such final decision based solely on a claim that the Arbitrator engaged in gross misconduct or made a material error or miscalculation in his or her decision) in accordance with the rules of JAMS ("***JAMS***") then in force (except as expressly modified below), and the arbitration hearings shall be held before a single arbitrator ("***Arbitrator***") in Boston, Massachusetts. The Licensor and Licensee agree to appoint an Arbitrator who is knowledgeable in the biotechnology and/or life sciences industries. If the Licensor and Licensee cannot agree upon an Arbitrator within ten (10) days after a demand for

arbitration has been filed with the JAMS by either of them, either or both of the participating Licensor and Licensee may request the JAMS to name a panel of five (5) candidates to serve as Arbitrator. The participating Licensor and Licensee shall each, in successive rounds (with the Party demanding the arbitration having the first chance to strike a name), strike one name off this list until only one name remains, and such last-named person shall be the Arbitrator. In the event that the dispute involves a claim of more than $5,000,000, then instead of one Arbitrator, there shall be three (3) Arbitrators who are knowledgeable in the biotechnology and/or life sciences industries, with each Party selecting one (1) Arbitrator and the two (2) Arbitrators so chosen, shall select a third arbitrator, who shall serve as the chair of the arbitration panel.

8.3 The Arbitrator shall be required to (a) follow the substantive rules of the Commonwealth of Massachusetts and Federal law, as applicable, (b) have all testimony be transcribed, and (c) accompany his or her award with findings of fact and a statement of reasons for the decision. The Arbitrator(s) shall have the authority to permit discovery for no more than thirty (30) days, to the extent deemed appropriate by the Arbitrator(s), upon reasonable request of a participating Party. The Arbitrator(s) shall have no power or authority to (i) add to or detract from the written agreement of the Parties set forth herein, (ii) modify or disregard any provision of this Agreement or any of the other related documents, or (iii) address or resolve any issue not submitted by the Parties. The Arbitrator(s) shall hold proceedings during a period of no longer than thirty (30) calendar days promptly following conclusion of discovery, and the Arbitrator(s) shall render a final decision within thirty (30) days following conclusion of the hearings. The Arbitrator(s) shall have the power to grant injunctive relief (without the necessity of a Party posting a bond) in the event a Party has violated the confidentiality provisions set forth in this Agreement, but shall have no power to award punitive and/or exemplary damages in the event of a breach. In the event of any conflict between the commercial arbitration rules then in effect and the provisions of this Agreement, the provisions of this Agreement shall prevail and be controlling.

8.4 Either Licensor or Licensee may, without waiving any remedy under this Agreement, apply to the Arbitrator(s) for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Licensor or Licensee also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights regarding the Intellectual Property or Confidential Information of that Party pending the arbitration award. The Arbitrator(s) shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damages.

8.5 Licensor and Licensee shall share in the actual and direct costs of the engagement of the Arbitrator, but the prevailing Party(ies) in the arbitration shall be reimbursed by the non-prevailing Party(ies) for the prevailing Party's fees and costs of arbitration (e.g., the costs, fees and expenses of outside experts and counsel retained by the prevailing Party). If Licensor or Licensee is not deemed by the Arbitrator to be the primary prevailing Party, then each Party will pay its own costs, fees and expenses (including attorneys' fees) and an equal share of the Arbitrator(s)' fees and any administrative fees of arbitration.

8.6 Unless otherwise mutually agreed upon by the Parties in writing, any Excluded Claims may be brought in the federal court located in the District of Massachusetts, if federal jurisdiction is available, or, alternatively, in the state courts in Boston, Massachusetts. Each of the Parties hereby submits to the jurisdiction of such courts for the purpose of any such litigation; *provided, however*, that a final judgment in any such litigation shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each Party irrevocably and unconditionally agrees not to assert (a) any objection which it may ever have to the laying of venue of any such litigation in such courts, (b) any claim that any such litigation brought in any such court has been brought in an inconvenient forum, and (c) any claim that such court does not have jurisdiction with respect to such litigation. As used in this Section 10.6, the term "*Excluded Claim*" means a dispute, controversy or claim that concerns: (x) the scope, construction, validity or infringement of a Patent or copyright; or (y) any antitrust, antimonopoly or competition law or regulation, whether or not statutory; or (z) Licensee's or, as applicable, Licensee's Affiliates or Sublicensee(s), Exploitation of Licensed Products or use of the Licensed Patents or Licensor Know-How in any manner that is not expressly authorized under this Agreement.

8.7 Except to the extent necessary to confirm an award or as may be required by law, neither a Party nor an Arbitrator may disclose the existence, content, or results of the arbitration without the prior written consent of the other Parties, except to its directors and officers, subject to the exceptions for other Confidential Information as set forth in Section 7.

8.8 In no event shall arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable Commonwealth of Massachusetts statute of limitations.

Section 9

Other Provisions

9.1 If any of the provisions of this Agreement shall contravene the laws of any country, it is agreed that such invalidity or illegality shall not invalidate this Agreement, but instead this Agreement shall be construed as if it did not contain the provision(s) claimed or held to be invalid or illegal in the particular jurisdiction concerned, insofar as such construction does not materially affect the substance of this Agreement, and the rights and obligations of the parties hereto shall be construed and enforced accordingly. In the event, however, that such claimed invalidity or illegality shall substantially alter the relationship between the parties hereto, materially affecting adversely the interest of either party in such jurisdiction, then the parties hereto shall negotiate an alternative provision not conflicting with such laws so as to maintain, to the degree reasonably possible, the business and economic benefits and liabilities as initially set forth herein.

9.2 This Agreement sets forth the entire understanding of the parties relating to the subject matter hereof and cancels and supersedes all other agreements or understandings leading up to the execution of this Agreement, except as expressly stated otherwise. Without limiting the foregoing, as of the Effective Date, the Parties hereby terminate the Original Agreement in its entirety except that (a) all payment obligations that have accrued under the Original Agreement but that remain unpaid by Licensee as of the Effective Data (i) shall survive and be deemed payment obligations under this Agreement, and (ii) Licensee shall pay Licensor all such accrued amounts no later than ten (10) days following the Effective Date and (b) Sections 1, 2.4, 3.4, 5.1-5.3, 6.3-6.5, 8.1 (with respect to Improvements and Improvement Patents (as defined in the Original Agreement) that were created or discovered on or before March 31, 2024), 8.6, 9.1-9.2, 10, and 11of the Original Agreement shall survive such termination and apply to the activities of the Parties under the Original Agreement prior to the Effective Date. For the avoidance of doubt, ownership of Party Improvements and Party Improvement Patents that were created or discovered on or following April 1, 2024 shall be determined in accordance with Section 5.1 of this Agreement. The Parties acknowledge and agree that the Original Agreement amended and restated in its entirety the Prior Agreement (as such term is defined in the Original Agreement). The Parties further acknowledge and agree that, notwithstanding any provision of this Agreement to the contrary, the Exacis Agreement is hereby terminated as of the Effective Date. No amendment or modification of this Agreement shall be valid or binding upon the parties unless made in writing and signed on behalf of the parties by their respective duly authorized representatives. In the event of any conflict between the terms and provisions of this Agreement and those of any Exhibit or other document, the following order of precedence will govern: (a) first, this Agreement, excluding its Exhibits; (b) second, the Exhibits to this Agreement as of the Effective Date; and (c) third, any other documents incorporated herein by reference.

9. 3 In the event of a transfer or assignment of one or more of the Licensed Patents by Licensor, the assignee thereof shall take such assignment subject to the rights, licenses, privileges, releases, non-assertions, and immunities granted under this Agreement. This Agreement will be binding upon and will inure to the benefit of each Party and each Party's respective transferees, successors and assigns, pursuant to the provisions set forth below. Neither Party may transfer or assign this Agreement (i) without the prior written consent of the other Party, provided that if such transfer or assignment is to an

Affiliate of such Party, such consent shall not be unreasonably withheld, conditioned or delayed, or (ii) as otherwise provided in this Section 9.3. In the event that a Third Party (the "*Acquiring Party*") acquires all or substantially all of a Party's business, capital stock or assets, whether by sale, merger, change of control, operation of law or otherwise (an "*Acquisition*"), the rights granted to such Party under this Agreement shall inure to the benefit of the Acquiring Party. For the avoidance of doubt, in the event of an Acquisition, the Acquiring Party will be responsible for all payments and other obligations set forth in this Agreement, including, but not limited to, all payments set forth herein, and any obligations that matured prior to the Acquisition date. Upon an Acquisition, payment thereof shall remain an ongoing obligation of the Acquiring Party until such amount is paid in full. Any attempted assignment in contravention of this Section 9.3 will be null and void.

9.4 No act, delay, or omission by any party shall be deemed a waiver of any right, power, or remedy of such party unless such waiver is in writing, and then only to the extent set forth therein. All remedies, either under this Agreement or by law or otherwise afforded to a party, shall be cumulative and not alternative. No waiver of any provision, right or remedy under this Agreement on any one occasion shall constitute a waiver of any other provision, right, or remedy on said occasion or the same or any other provision, right, or remedy on any other occasion.

9.5 This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

9.6 All rights, licenses, privileges, releases, non-assertions, and immunities granted under or pursuant to this Agreement by Licensor to Licensee are, and shall otherwise be deemed to be, for the purpose of Section 365(n) of the United States Bankruptcy Code, as amended ("the Bankruptcy Code"), licenses of rights to "intellectual property" as defined under Section 101 (35A) of the Bankruptcy Code. The parties hereto agree that Licensee, as licensee of such rights under this Agreement, shall retain and may fully exercise all of their rights and elections under the Bankruptcy Code. The parties hereto further agree that, if a Bankruptcy Code case is commenced by or against Licensor and this Agreement is rejected as provided in the Bankruptcy Code, then Licensor (in any capacity, including debtor-in-possession) and their successors and assigns (including, without limitation, a Bankruptcy Code trustee) shall take such steps as are necessary to permit Licensee to exercise all of their rights under this Agreement. All rights, powers, and remedies of Licensee provided under this Section are in addition to and not in substitution for any and all other rights, powers, and remedies now or hereafter existing at law or in equity (including, without limitation, the Bankruptcy Code) in the event of any such commencement of a bankruptcy proceeding by or against Licensor. Licensee, in addition to the rights, powers and remedies expressly provided herein, shall be entitled to exercise all other such rights and powers and resort to all other such remedies as may now or hereafter exist at law or in equity (including the Bankruptcy Code) in such event.

9.7 Any notice required to be given pursuant to the provisions of this Agreement will be in writing and will be deemed to have been given at the time when actually received as a consequence of any effective method of delivery, including but not limited to hand delivery, or electronic transmission, including PDF (portable document format), delivery by a professional courier service or delivery by first class, certified or registered mail (postage prepaid) addressed to the Party for whom intended at the address below, or at such changed address as the Party will have specified by written notice in accordance with this Section 9.6; *provided, however*, that any notice of change of address will be effective only upon actual receipt.

If to Licensor:

Factor Bioscience Limited
c/o Factor Bioscience Inc.
Attn: Matt Angel, Chief Executive Officer
1035 Cambridge Street, Suite 17B
Cambridge, MA 02141
Matt.angel@factorbio.com

With copy to which shall not constitute notice:

Wilson Sonsini Goodrich & Rosati PC
Attn: Mark W. Bellomy
One Boston Place
201 Washington Street, Ste. 2000
Boston, MA 02108
mbellomy@wsgr.com

If to Licensee:

Eterna Therapeutics, Inc.
Attn: Sanjeev Luther, President & Chief Executive Officer
1035 Cambridge Street, Suite 18A
Cambridge MA 02141
Sanjeev.luther@eternatx.com

With copy to which shall not constitute notice:

Haug Partners, LLP
Attn: Edgar Haug
745 5th Avenue
New York, NY 10151
ehaug@haugpartners.com

or to such other address as the party to receive such notice shall have designated by written notice to the other party hereto.

9.8 During the Term, neither Licensor nor Licensee, without the prior written consent of the other Party, shall directly or indirectly solicit for employment any employee of the other Party or any of its Affiliates, or any person who has terminated his or her employment with the other Party or any of its Affiliates within the previous twelve (12)-month period prior to any purported solicitation; *provided*, *however,* the foregoing will not prevent Licensor or Licensee from employing any such person who contacts such Party on his or her own initiative without any direct or indirect solicitation by or encouragement from the soliciting or hiring person. General advertising which is not directed at any specific employee of a Party will not be deemed solicitation, and hiring of employees of such Party which are solicited in this manner will not be a breach of this provision.

9.9 Licensee on behalf of itself, its Affiliates and Sublicensees hereby covenants and agrees that it shall not make, write or publish any statement, assertion or claim that disclaims, disparages, denies, questions or otherwise challenges or casts doubt upon the validity, enforceability, scope, construction or inventorship of any Patent Controlled by Licensor (including, but not limited to, any pending or issued claim(s) within the Licensed

Patents). The provisions set forth in this Section 9.9 shall take effect on the Effective Date, shall not require any further consideration or performance of Licensor, and shall survive the expiration or termination of this Agreement for three (3) years from the date or expiration or termination of this Agreement. If any part of this Section 9.9 shall be deemed illegal or unenforceable by a court of competent jurisdiction, that part shall be deemed automatically deleted (or modified to the minimum extent deemed necessary by such court to make such provision enforceable and to give effect to the original intention of the Parties pursuant to Section 9.1), such deletion being made as narrowly as possible (and, if possible, only in said jurisdiction) to maintain, as much as possible, the intent of this Section 9.9, and the remainder of this Section 9.9 shall, with related definitions, remain in full force and effect.

9.10 The substantive law governing this Agreement (which shall be applied in the arbitration) shall be, with respect to disputes involving general contract or trade secret matters, the internal laws of the Commonwealth of Massachusetts, and with respect to matters involving patents, the United States Patent Act, and as to copyright matters, the United States Copyright Act, each as amended from time to time. Any award rendered by the Arbitrator(s) shall be final, conclusive and binding upon the Parties to this Agreement, and judgment thereon may be entered and enforced in any state or federal court of competent jurisdiction.

9.11 Licensor and Licensee are independent contractors under this Agreement. Nothing contained in this Agreement will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

9.12 No Preferential Treatment, Fraudulent Conveyance, Insolvency.

a. The Parties have not entered into this Agreement to provide any preferential treatment under section 547 of the Bankruptcy Code or any other applicable insolvency law.
b. Neither the execution or delivery of this Agreement or the consummation of the transactions hereunder were entered into with the intent by either Party to effectuate a transaction that may be avoided under section 548(a) of the Bankruptcy Code, the Uniform Fraudulent Transfer Act (the "*UFTA*"), the Uniform Voidable Transactions Act (" *UVTA*") or any other applicable insolvency law. The Parties received reasonably equivalent value in exchange for the obligations provided hereunder. The transactions contemplated hereunder are not subject to avoidance under section 548(a) of the Bankruptcy Code, the UFTA, or any applicable insolvency law.
c. As of the Effective Date, neither Party intends to file for protection or seek relief under title 11 of the Bankruptcy Code or any similar federal or state law providing for the relief of debtors. As of the Effective Date, neither Party is insolvent (as such term is defined in the Bankruptcy Code or any other Applicable Law relating to insolvency).

9.13 This Agreement has been prepared jointly by the Parties and shall not be strictly construed against either Party. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision. Licensee hereby acknowledges that Licensor owns and/or has in-licensed the Licensed Patents and Licensor Know-How, and the use of the term "license" hereunder with reference to the rights granted to Licensee is understood by the Parties to mean either a direct license of Licensor's ownership interest in the subject Licensed Patents or Licensor Know-How or a sublicense of Licensor's in-licensed interest in the subject Licensed Patents or Licensor Know-How, as applicable. The headings of each Section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular Section. Except where the context otherwise requires, the use of any gender shall be applicable to all genders, and the word "or" is used in the inclusive sense (and/or). The term "including" as used herein means including, without limiting the generality of any description preceding such term.

[Remainder of page left blank intentionally.]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

Factor Bioscience Limited

By: */s/ Matt Angel*
Name: Matt Angel, PhD
Title: Chief Executive Officer

Eterna Therapeutics Inc.

By: */s/ Sanjeev Luther*
Name: Sanjeev Luther
Title: President and Chief Executive Officer.

Exhibit 10.11

SUBLEASE TERMINATION AGREEMENT

This Sublease Termination Agreement (this "Agreement") is dated as of August 9, 2024, by and between E.R. SQUIBB & SONS, L.L.C., a Delaware limited liability company ("Sublessor"), and ETERNA THERAPEUTICS INC., a Delaware corporation, ("Sublessee").

R E C I T A L S:

WHEREAS, Sublessor and Sublessee entered into a Sublease Agreement dated the 18 th day of October, 2022 (the "Sublease"), whereby Sublessee subleased approximately 45,500 rentable square feet on the ninth (9th) floor of 250 Water Street, Cambridge Crossing, Somerville, Massachusetts (the "Building"), more particularly described in the Sublease (the "Premises").

WHEREAS, Sublessor and Sublessee have agreed to terminate the Sublease on the terms and conditions provided below.

A G R E E M E N T:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is mutually acknowledged by the Sublessor and Sublessee, the parties agree as follows:

1. Recitals. The foregoing recitals are true and accurate and incorporated herein by reference.

2. Termination of the Lease. Notwithstanding anything to the contrary contained in the Sublease, Sublessor and Sublessee hereby agree that the Sublease shall terminate and be of no further force and both parties shall be released of any and all obligations thereunder effective as of 11:59pm on August 31, 2024 ("Termination Date").

3. Surrender of the Premises. Sublessee hereby agrees to vacate the Premises and surrender and deliver exclusive possession of the Premises to Sublessor on or before the Termination Date in accordance with the provisions of the Sublease.

4. Furniture, Fixtures & Equipment. Effective as of the Termination Date, all of Sublessee's right, title and interest in all furniture, fixtures and laboratory equipment that are currently on the Premises ("FF&E"), listed on Exhibit A attached hereto and made a part hereof, shall become the property of Sublessor.

5. Representations and Warranties of Sublessee. Sublessee represents and warrants to Sublessor that

(a) Sublessee has not heretofore assigned or sublet any portion of its interest in the Sublease;
(b) no other person, firm or entity has any right, title or interest in the Sublease;
(c) Sublessee has the full right, legal power and actual authority to enter into this Agreement and to terminate the Sublease without the consent of any person, firm or entity;
(d) Sublessee has full right, title and interest in and to the FF&E,

(e) the FF&E is free and clear of any liens, outstanding balances due, amounts owed and claims thereto, as documented in Exhibit B – Proof of Ownership, and
(f) Sublessee has the full right, legal power and actual authority to bind Sublessee to the terms and conditions hereof.
(g) Sublessee further represents and warrants to Sublessor that as of the date hereof there are no, and as of the Termination Date there shall not be any, mechanic's liens or other liens encumbering all or any portion of the Premises, by virtue of any act or omission on the part of Sublessee, its predecessors, contractors, agents, employees, successors or assigns, as documented in Exhibit C – Final Lien Waivers. Notwithstanding Section 1 above, the representations and warranties set forth in this Section 4 shall survive the Termination Date and Sublessee shall be liable to Sublessor for any inaccuracy or any breach thereof.

6. Governing Law. This Agreement shall be governed and construed under the laws of the Commonwealth of Massachusetts.

7. Binding Effect. This Agreement shall inure to the benefit of, and shall be binding upon, the parties hereto and their respective legal representatives, successors and assigns.

8. Time is of the Essence. Time is of the essence of this Agreement and the provisions contained herein.

9. Further Assurances. Sublessor and Sublessee hereby agree to execute such further documents or instruments as may be necessary or appropriate to carry out the intention of this Agreement.

IN WITNESS WHEREOF, Sublessor and Sublessee have executed this First Amendment as of the date first above written.

SUBLESSOR:

E.R. SQUIBB & SONS, L.L.C.,
a Delaware limited liability company

By: */s/ Mitchell Weitz*
Mitchell Weitz
Vice President, Real Estate and Workplace Services

SUBLESSEE:

ETERNA THERAPEUTICS INC.,
A Delaware Corporation

By: */s/ Dorothy Clarke*

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sanjeev Luther, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Eterna Therapeutics 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 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:

(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: November 12, 2024

/s/ Sanjeev Luther
Sanjeev Luther
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sandra Gurrola, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Eterna Therapeutics 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 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:

(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: November 12, 2024

/s/ Sandra Gurrola
Senior Sandra Gurrola
Vice President of Finance
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Eterna Therapeutics Inc. for the quarterly period ended September 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge on the date hereof:

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 Eterna Therapeutics Inc. for the period presented therein.

Date: November 12, 2024

/s/ Sanjeev Luther
Sanjeev Luther
President and Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Eterna Therapeutics Inc. for the quarterly period ended September 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to her knowledge on the date hereof:

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 Eterna Therapeutics Inc. for the period presented therein.

Date: November 12, 2024

/s/ Sandra Gurrola
Sandra Gurrola
Senior Vice President of Finance
(Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.