UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2023

OR

o 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: 001-37722

AEGLEA BIOTHERAPEUTICS, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**46-4312787**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

221 Crescent Street
Building 23, Suite 105
Waltham, MA 02453

(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (617) 651-5940

Former name, former address and former fiscal year, if changed since last report: N/A

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 Par Value Per Share	AGLE	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

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 x No o

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 x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large

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

Large accelerated filer	o	Accelerated filer	o
Non-accelerated filer	x	Smaller reporting company	x
		Emerging growth company	o

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. o

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

As of November 3, 2023, the registrant had 4,048,927 shares of common stock, $0.0001 par value per share, outstanding.

AEGLEA BIOTHERAPEUTICS, INC.

QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED SEPTEMBER 30, 2023

TABLE OF CONTENTS

NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 (this “Quarterly Report”) contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), and Section 27A of the Securities Act of 1933, as amended, (the "Securities Act"). All statements contained in this Quarterly Report, other than statements of historical fact are forward-looking statements. These forward-looking statements include statements regarding stockholder approval of the conversion rights of the Series A Preferred Stock (as defined herein), any future payouts under the CVR (as defined herein), our ability to achieve the expected benefits or opportunities and related timing with respect to our asset acquisition of Spyre Therapeutics, Inc. (“Spyre”) or to monetize any of our legacy assets, our future results of operations and financial position, business strategy, the length of time that we believe our existing cash resources will fund our operations, our market size, our potential growth opportunities, our preclinical and future clinical development activities, the efficacy and safety profile of our product candidates, the potential therapeutic benefits and economic value of our product candidates, the timing and results of preclinical studies and clinical trials, the expected impact of macroeconomic conditions, including inflationary pressures, rising interest rates, general economic slowdown or a recession, changes in monetary policy, the prospect of a shutdown of the U.S. federal government, volatile market conditions, financial institution instability, as well as geopolitical instability, including the ongoing military conflict in Ukraine, conflict in Israel and surrounding areas, and geopolitical tensions in China on our operations, and the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “predict,” “target,” “intend,” “could,” “would,” “should,” “project,” “plan,” “expect,” the negatives of these terms, and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Item 1A, “Risk Factors” and elsewhere in this Quarterly Report. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statement for any reason after the date of this Quarterly Report to conform these statements to actual results, to reflect changes in our expectations, or otherwise, except as required by law. You should read this Quarterly Report with the understanding that our actual results, levels of activity, performance, events, outcomes, and the timing of our results and outcomes, and other circumstances may be materially different from what we expect.

Unless the context indicates otherwise, as used in this Quarterly Report, the terms “Aeglea,” “the Company,” “we,” “us,” and “our” refer to Aeglea BioTherapeutics, Inc., a Delaware corporation, and its consolidated subsidiaries taken as a whole. “Aeglea” and all product candidate names are our common law trademarks. This Quarterly Report contains additional trade names, trademarks and service marks of other companies, which are the property of their respective owners. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

All references to “our product candidates,” “our programs” and “our pipeline” in this Quarterly Report refer to the research programs with respect to which we have exercised the Option (as defined herein in Note 7) to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement (as defined herein in Note 1).

PART I. – Financial Information

Item 1. Financial Statements (Unaudited).

Aeglea BioTherapeutics, Inc.
Condensed Consolidated Balance Sheets
(Unaudited, in thousands, except share and per share amounts)

	September 30, 2023	December 31, 2022
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 90,592	$ 34,863
Marketable securities	113,007	20,848
Development receivables	163	375
Prepaid expenses and other current assets	2,187	6,172
Total current assets	205,949	62,258
Restricted cash	1,307	1,553
Property and equipment, net	—	3,220
Operating lease right-of-use assets	—	3,430
Other non-current assets	9	683
TOTAL ASSETS	$ 207,265	$ 71,144
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 1,678	$ 677
CVR liability	7,510	—
Operating lease liabilities	—	625
Deferred revenue	—	517
Accrued and other current liabilities	15,861	12,837
Related party accounts payable	19,823	—
Total current liabilities	44,872	14,656
Non-current CVR liability	20,690	—
Non-current operating lease liabilities	—	4,004
Deferred revenue, net of current portion	—	2,179
TOTAL LIABILITIES	65,562	20,839
Commitments and Contingencies (Note 11)		
Series A non-voting convertible preferred stock, $0.0001 par value; 1,086,341 and no shares authorized as of September 30, 2023 and December 31, 2022, respectively; 1,086,339 and no shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	387,105	—
STOCKHOLDERS' (DEFICIT) EQUITY		
Preferred stock, $0.0001 par value; 8,913,659 shares and 10,000,000 authorized as of September 30, 2023 and December 31, 2022; no shares issued and outstanding as of September 30, 2023 and December 31, 2022	—	—
Common stock, $0.0001 par value; 20,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 4,048,687 shares and 2,614,014 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	7	6
Additional paid-in capital	455,957	475,971
Accumulated other comprehensive income (loss)	(132)	(48)
Accumulated deficit	(701,234)	(425,624)
TOTAL STOCKHOLDERS' (DEFICIT) EQUITY	(245,402)	50,305
TOTAL LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' (DEFICIT) EQUITY	$ 207,265	$ 71,144

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

Aeglea BioTherapeutics, Inc.
Condensed Consolidated Statements of Operations
(Unaudited, in thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue:				
Development fee and royalty	$ —	$ 174	$ 886	$ 2,161
Total revenue	—	174	886	2,161
Operating expenses (income):				
Research and development [1]	24,660	11,977	55,822	44,328
General and administrative	8,584	6,952	25,874	23,452
Acquired in-process research and development	(298)	—	130,188	—
Gain on sale of in-process research and development asset	(14,609)	—	(14,609)	—
Total operating expenses	18,337	18,929	197,275	67,780
Loss from operations	(18,337)	(18,755)	(196,389)	(65,619)
Other (expense) income:				
Interest income	1,251	288	2,021	427
Change in fair value of forward contract liability	(25,360)	—	(83,530)	—
Other income, net	2,342	24	2,262	25
Total other (expense) income	(21,767)	312	(79,247)	452
Loss before income tax expense	(40,104)	(18,443)	(275,636)	(65,167)
Income tax (expense) benefit	(3)	209	26	174
Net loss	$ (40,107)	$ (18,234)	$ (275,610)	$ (64,993)
Net loss per share, basic and diluted	$ (9.34)	$ (4.84)	$ (69.57)	$ (20.17)
Weighted-average common shares outstanding, basic and diluted	4,293,812	3,767,918	3,961,546	3,222,987

(1) Includes $19.4 million and $20.8 million in related party expenses for the three and nine months ended September 30, 2023, respectively and no related party expenses for the three and nine months ended September 30, 2022.

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

Aeglea BioTherapeutics, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited, in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net loss	$ (40,107)	$ (18,234)	$ (275,610)	$ (64,993)
Other comprehensive (loss) income:				
Foreign currency translation adjustment	(29)	(38)	(1)	(87)
Unrealized (loss) gain on marketable securities	(114)	74	(83)	(77)
Total comprehensive loss	$ (40,250)	$ (18,198)	$ (275,694)	$ (65,157)

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

Aeglea BioTherapeutics, Inc.
Condensed Consolidated Statements of Changes in
Convertible Preferred Stock and Stockholders' (Deficit) Equity
(Unaudited, in thousands)

	Nine Months Ended September 30, 2023							
	Series A Non-Voting Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balances - December 31, 2022	—	$ —	2,614	$ 6	$ 475,971	$ (48)	$ (425,624)	$ 50,305
Issuance of common stock in connection with employee stock purchase plan	—	—	2	—	18	—	—	18
Stock-based compensation expense	—	—	—	—	1,709	—	—	1,709
Foreign currency translation adjustment	—	—	—	—	—	10	—	10
Unrealized gain on marketable securities	—	—	—	—	—	32	—	32
Net loss	—	—	—	—	—	—	(18,422)	(18,422)
Balances - March 31, 2023	—	$ —	2,616	$ 6	$ 477,698	$ (6)	$ (444,046)	$ 33,652
Issuance of Series A non-voting convertible preferred stock in connection with private placement, net of financing costs	721	197,323	—	—	—	—	—	—
Issuance of common stock forward in connection with the asset acquisition of Spyre	—	—	—	—	3,768	—	—	3,768
Issuance of common stock in connection with exercise of pre-funded warrants	—	—	624	—	—	—	—	—
CVR distribution to common stockholders	—	—	—	—	(29,500)	—	—	(29,500)
Stock-based compensation expense	—	—	—	—	1,775	—	—	1,775
Foreign currency translation adjustment	—	—	—	—	—	18	—	18
Unrealized loss on marketable securities	—	—	—	—	—	(1)	—	(1)
Net loss	—	—	—	—	—	—	(217,081)	(217,081)
Balances - June 30, 2023	721	$ 197,323	3,240	$ 6	$ 453,741	$ 11	$ (661,127)	$ (207,369)
Issuance of Series A non-voting convertible preferred stock in connection with the asset acquisition of Spyre and settlement of related forward contract	365	189,741	—	—	—	—	—	—
Settlement of financing costs in connection with private placement of Series A non-voting convertible preferred stock	—	41	—	—	—	—	—	—
Issuance of common stock in connection with the asset acquisition of Spyre and settlement of related forward contract	—	—	518	1	(1)	—	—	—
Issuance of common stock in connection with exercise of pre-funded warrants	—	—	281	—	—	—	—	—
Issuance of common stock in connection with exercise of stock options and employee stock purchase plan			10	—	105	—	—	105
Stock-based compensation expense	—	—	—	—	2,112	—	—	2,112
Foreign currency translation adjustment	—	—	—	—	—	(29)	—	(29)
Unrealized loss on marketable securities	—	—	—	—	—	(114)	—	(114)
Net loss	—	—	—	—	—	—	(40,107)	(40,107)
Balances - September 30, 2023	1,086	$ 387,105	4,049	$ 7	$ 455,957	$ (132)	$ (701,234)	$ (245,402)

	Nine Months Ended September 30, 2022							
	Series A Non-Voting Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balances - December 31, 2021	—	$ —	1,974	$ 5	$ 425,765	$ (20)	$ (341,809)	$ 83,941
Issuance of common stock in connection with employee stock purchase plan	—	—	3	—	184	—	—	184
Stock-based compensation expense	—	—	—	—	2,101	—	—	2,101
Foreign currency translation adjustment	—	—	—	—	—	(13)	—	(13)
Unrealized loss on marketable securities	—	—	—	—	—	(120)	—	(120)
Net loss	—	—	—	—	—	—	(24,436)	(24,436)
Balances - March 31, 2022	—	$ —	1,977	$ 5	$ 428,050	$ (153)	$ (366,245)	$ 61,657
Issuance of common stock and pre-funded warrants in connection with registered direct offering, net of offering costs	—	—	430	1	42,872	—	—	42,873
Issuance of common stock in connection with exercise of pre-funded warrants	—	—	40	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	2,017	—	—	2,017
Foreign currency translation adjustment	—	—	—	—	—	(36)	—	(36)
Unrealized loss on marketable securities	—	—	—	—	—	(31)	—	(31)
Net loss	—	—	—	—	—	—	(22,323)	(22,323)
Balances - June 30, 2022	—	$ —	2,447	$ 6	$ 472,939	$ (220)	$ (388,568)	$ 84,157
Issuance of common stock and pre-funded warrants in connection with registered direct offering, net of offering costs	—	—	10	—	—	—	—	—
Issuance of common stock in connection with exercise of pre-funded warrants	—	—	—	—	(8)	—	—	(8)
Issuance of common stock in connection with employee stock purchase plan	—	—	3	—	38	—	—	38
Stock-based compensation expense	—	—	—	—	1,566	—	—	1,566
Foreign currency translation adjustment	—	—	—	—	—	(38)	—	(38)
Unrealized loss on marketable securities	—	—	—	—	—	74	—	74
Net loss	—	—	—	—	—	—	(18,234)	(18,234)
Balances - September 30, 2022	—	$ —	2,460	$ 6	$ 474,535	$ (184)	$ (406,802)	$ 67,555

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

Aeglea BioTherapeutics, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited, in thousands)

	Nine Months Ended September 30,	
	2023	**2022**
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	$ (275,610)	$ (64,993)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	744	1,182
Stock-based compensation	8,405	5,684
Acquired in-process research and development	130,188	—
Change in fair value of CVR liability	(1,300)	—
Change in fair value of forward contract liability	83,530	—
Gain on sale of in-process research and development asset	(14,609)	—
Lease ROU asset and leasehold improvement impairment loss	2,580	—
Loss on disposal of long-lived assets	915	—
Amortization of operating lease assets	220	292
Net accretion of discount on marketable securities	(612)	(175)
Other	18	351
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	3,310	(2,863)
Accounts payable	1,001	859
Deferred revenue	575	(897)
Development receivables	212	146
Operating lease liabilities	(2,326)	(297)
Accrued and other liabilities	(4,000)	(1,293)
Related party payable	(2,115)	—
Net cash used in operating activities	(68,874)	(62,004)
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash assumed from asset acquisition of Spyre	3,035	—
Proceeds from sale of in-process research & development asset	15,000	—
Purchases of property and equipment	—	(38)
Proceeds from sale of property and equipment	475	—
Purchases of marketable securities	(112,631)	(35,000)
Proceeds from maturities and sales of marketable securities	21,000	78,046
Net cash (used in) and provided by investing activities	(73,121)	43,008
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from issuance of Series A non-voting convertible preferred stock in connection with private placement, net of placement and other offering costs	197,364	—
Proceeds from issuance of common stock and pre-funded warrants in registered direct offering, net of offering costs	—	42,874
Proceeds from employee stock plan purchases and stock option exercises	123	222
Principal payments on finance lease obligation	(16)	(410)
Net cash provided by financing activities	197,471	42,686
Effect of exchange rate on cash, cash equivalents, and restricted cash	7	(152)
NET INCREASE IN CASH, CASH EQUIVALENTS, AND RESTRICTED CASH	55,483	23,538
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH		
Beginning of period	36,416	16,980
End of period	$ 91,899	$ 40,518
Supplemental Disclosure of Non-Cash Investing and Financing Information:		
Settlement of forward contract liability and issuance of Series A non-voting convertible preferred stock in connection with the asset acquisition of Spyre	$ 189,741	$ —

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

1. The Company and Basis of Presentation

Aeglea BioTherapeutics, Inc. (“Aeglea” or the “Company”) is a preclinical stage biotechnology company focused on developing next generation therapeutics for patients living with inflammatory bowel disease. The Company was formed as a Limited Liability Company ("LLC") in Delaware on December 16, 2013 under the name Aeglea BioTherapeutics Holdings, LLC and was converted from a Delaware LLC to a Delaware corporation on March 10, 2015. The Company operates in one segment and has its principal offices in Waltham, Massachusetts.

On April 12, 2023, based on the review of the inconclusive interim results from the Company's Phase 1/2 clinical trial of pegtarviliase for the treatment of classical homocystinuria and other business considerations, the Company announced that it had initiated a process to explore strategic alternatives to maximize stockholder value and engaged an independent exclusive financial advisor to support this process. In April 2023, the Company implemented a restructuring plan resulting in an approximate 83% reduction of the Company’s existing headcount. On September 8, 2023, Aeglea effected a reverse stock split of its common stock at a ratio of 1-for-25 (the “Reverse Split”). All share numbers related to the Company's common stock disclosed in these financial statements have been adjusted on a post-Reverse Split basis.

On June 22, 2023, the Company acquired, in accordance with the terms of the Agreement and Plan of Merger (the "Acquisition Agreement"), the assets from Spyre Therapeutics, Inc. ("Spyre"), as disclosed in Notes 7 and 8, a privately held biotechnology company advancing a pipeline of antibody therapeutics with the potential to transform the treatment of inflammatory bowel disease through a research and development option agreement ("Paragon Agreement") with Paragon Therapeutics ("Paragon"). The transaction was structured as a stock-for-stock transaction pursuant to which all of Spyre's outstanding equity interests were exchanged based on a fixed exchange ratio of 0.5494488 to 1 for consideration from Aeglea of 517,809 shares of common stock and 364,887 shares of Series A non-voting convertible preferred stock, par value of $0.0001 per share ("Series A Preferred Stock") (convertible on a 40 to 1 basis) in addition to the assumption of outstanding and unexercised stock options to purchase 2,734 shares of common stock from the Amended and Restated Spyre 2023 Equity Incentive Plan (the "Asset Acquisition"). The Aeglea common stock and Aeglea Series A Preferred Stock related to the Asset Acquisition were issued to the Spyre stockholders on July 7, 2023. For additional information, see Notes 7 and 8.

In connection with the Asset Acquisition, on June 26, 2023, the Company completed a private placement of shares of Series A Preferred Stock (the “PIPE”) to a group of investors (the “Investors”). The Company sold an aggregate of 721,452 shares of Series A Preferred Stock for an aggregate purchase price of approximately $210.0 million before deducting approximately $12.7 million in placement agent and other offering expenses (together with the Asset Acquisition, the “Transactions”). For additional information, see Note 9.

In connection with the Asset Acquisition and pursuant to a non-transferable contingent value right ("CVR") agreement (the “CVR Agreement”) a CVR was distributed to each Aeglea stockholder of record as of the close of business on July 3, 2023 (the "Legacy Stockholders"), but was not distributed to the holders of shares of common stock or Series A Preferred Stock issued to the former stockholders of Spyre or Investors in the Transactions. Holders of the CVRs will be entitled to receive cash payments from proceeds received by Aeglea for a three-year period, if any, related to the disposition or monetization of its legacy assets for a period of one-year following the closing of the Asset Acquisition. For additional information see Note 3.

Liquidity

As of September 30, 2023, the Company had an accumulated deficit of $701.2 million, and cash, cash equivalents, and marketable securities of $203.6 million. The Company has not generated any product revenues and has not achieved profitable operations. There can be no assurance that profitable operations will ever be achieved, and, if achieved, whether it can be sustained on a continuing basis. In addition, development activities, clinical and nonclinical testing, and commercialization of the Company’s product candidates will require significant additional financing before a commercial drug can be produced and marketed.

The Company is subject to a number of risks similar to other life science companies, including, but not limited to, risks related to the successful discovery, development, and commercialization of product candidates,

raising additional capital, development of competing drugs and therapies, protection of proprietary technology and market acceptance of the Company's product candidates. As a result of these and other factors and uncertainties, there can be no assurance of the Company's future success.

In April 2023, the Board of Directors (the "Board") approved a restructuring of the Company's workforce pursuant to which the Company's workforce was reduced by approximately 83% and the Company retained approximately 10 employees. Following a review of the interim results from its ongoing Phase 1/2 clinical trial of pegtarviliase for the treatment of classical homocystinuria and other business considerations, the Company explored strategic alternatives with the goal of maximizing stockholder value, including possible business combinations and/or a divestiture of the Company's clinical programs.

On June 22, 2023, the Company acquired, in accordance with the terms of the Acquisition Agreement, the net assets of Spyre, as disclosed in Notes 7 and 8. Additionally, the Company completed the PIPE.

In accordance with Accounting Standards Codification ("ASC") 205-40, Going Concern, the Company has evaluated and determined that there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the accompanying condensed consolidated financial statements included in this Quarterly Report are issued. The Company's Series A Preferred Stock agreement requires it to seek stockholder approval for the conversion of the Series A Preferred Stock to common stock. The Company has agreed to hold a stockholders' meeting to submit this matter to its stockholders for their consideration. In connection with this, the Company filed with the Securities and Exchange Commission ("SEC") a definitive proxy statement and other relevant materials. The special meeting of stockholders is scheduled for November 21, 2023. If the Company's stockholders do not timely approve the conversion of its Series A Preferred Stock into common stock, then the holders of its Series A Preferred Stock are entitled to require the Company to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A Preferred Stock, as described in the Certificate of Designation relating to the Series A Preferred Stock (see Note 9). The cash redemption is not in the Company's control and raises substantial doubt about the Company's ability to continue as a going concern. The accompanying condensed consolidated financial statements assume the Company will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Unaudited Interim Financial Information

The interim condensed consolidated financial statements included in this Quarterly Report on Form 10-Q are unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for a fair statement of the Company's financial position as of September 30, 2023, and its results of operations for the three and nine months ended September 30, 2023 and 2022, changes in convertible preferred stock and stockholders' (deficit) equity for the three and nine months ended September 30, 2023 and 2022, and cash flows for the nine months ended September 30, 2023 and 2022. The results of operations for the three and nine months ended September 30, 2023, are not necessarily indicative of the results to be expected for the year ending December 31, 2023 or for any other future annual or interim period. The December 31, 2022 balance sheet was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States ("U.S. GAAP"). These financial statements should be read in conjunction with the audited financial statements included in the Company's Form 10-K for the year ended December 31, 2022 (the "Annual Report") as filed with the SEC.

2. Summary of Significant Accounting Policies

Other than policies noted below, there have been no significant changes from the significant accounting policies and estimates disclosed in Note 2 of the "Notes to Consolidated Financial Statements" included in our Annual Report on Form 10-K for the year ended December 31, 2022.

These interim condensed consolidated financial statements have been prepared in accordance with U.S. GAAP and SEC instructions for interim financial information, and should be read in conjunction with the Company's Annual Report. Significant accounting policies and other disclosures normally provided have been omitted since such items are disclosed in the Company's Annual Report. The Company uses the same accounting policies in preparing quarterly and annual financial statements.

Convertible Preferred Stock Issued through PIPE

The Company records shares of convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The Company has applied the guidance in ASC 480-10-S99-3A as well as SEC Staff Announcement, Classification and Measurement of Redeemable Securities, and has therefore classified the Series A Preferred Stock outside of stockholders' (deficit) equity because, if conversion to common stock is not approved by the stockholders, the Series A Preferred Stock will be redeemable at the option of the holders for cash equal to the closing price of the common stock on the last trading day prior to the holder's redemption request. The Company has determined that the conversion and redemption are outside of the Company's control. Additionally, the Company has determined the conversion and redemption features do not require bifurcation as derivatives.

Acquisitions

The Company evaluates acquisitions of assets and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or asset acquisition by first applying a screen test to determine whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If so, the transaction is accounted for as an asset acquisition. If not, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs, which would meet the definition of a business. Significant judgment is required in the application of the test to determine whether an acquisition is a business combination or an acquisition of assets.

Acquisitions meeting the definition of business combinations are accounted for using the acquisition method of accounting, which requires that the purchase price be allocated to the net assets acquired at their respective fair values. In a business combination, any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill.

The Company measures and recognizes asset acquisitions that are not deemed to be business combinations based on the cost to acquire the assets, which includes pre-acquisition direct costs recorded in accrued professional and consulting fees. Goodwill is not recognized in asset acquisitions. When a transaction accounted for as an asset acquisition includes an in-process research and development ("IPR&D") asset, the IPR&D asset is only capitalized if it has an alternative future use other than in a particular research and development project. Otherwise, the cost allocated to acquire an IPR&D asset with no alternative future use is charged to expense at the acquisition date.

Contingent Value Rights

The Company evaluates its contracts to determine if those contracts qualify as derivatives under ASC 815, Derivatives and Hedging ("ASC 815"). For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair value and is then re-valued at each reporting date. Any changes in fair value are recorded as other income or expense for each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is probable within the next 12 months from the balance sheet date. The Company determined that certain contingent payments under the CVR Agreement qualified as derivatives under ASC 815, and as such, were recorded as a liability on the balance sheet. This value is then remeasured for future expected payout as well as the increase in fair value due to the time value of money. These gains or losses, if any, are recognized in the consolidated statements of operations and comprehensive loss within Other (expense) income, net.

The Company applies a scenario-based method and weighs them based on the possible achievement of certain milestones. The milestone payments are contingent on formal reimbursement decisions by national authorities in key European markets and pegzilarginase approval by the U.S. Food and Drug Administration ("FDA"), among other events. This fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined in ASC 820, Fair Value Measurement. The key assumptions used include the discount rate, probability of regulatory success, and reimbursement rates from certain government agencies. The estimated value of the CVR consideration is based upon available information and certain assumptions which the Company's management believes are reasonable under the circumstances. The ultimate payout under the CVRs may differ materially from the assumptions used in determining the fair value of the CVR consideration.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets, liabilities, and equity and the amount of revenues and expenses. Actual results could differ significantly from those estimates. The most significant estimates and assumptions that management considers in the preparation of the Company's financial statements relate to the valuation of consideration transferred in acquiring IPR&D; the discount rate, probabilities of success, and timing of estimated cash flows in the valuation of the CVR liability; inputs used in the Black-Scholes model for stock-based compensation expense; estimated future cash flows used in calculating the impairment of right-of-use lease assets; and estimated cost to complete performance obligations related to revenue recognition. The consideration transferred in acquiring IPR&D in connection with the acquisition of Spyre was comprised of shares of the Company's common stock and shares of Series A Preferred Stock. To determine the fair value of the equity transferred, the Company considered the per share value of the PIPE, which was an over-subscribed financing event involving a group of accredited investors.

Recently Adopted Accounting Pronouncement

The Company early adopted the Financial Accounting Standards Board's Accounting Standards Update 2020-06, Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), effective as of January 1, 2023 using the modified retrospective method. Among other amendments, ASU 2020-06 eliminates the cash conversion and beneficial conversion feature models in ASC 470-20 that required an issuer of certain convertible debt and preferred stock to separately account for embedded conversion features as a component of equity, as well as changes the accounting for diluted earnings-per-share for convertible instruments and contracts that may be settled in cash or stock. Additionally, ASU 2020-06 requires the if-converted method, which is more dilutive than the treasury stock method, be used for all convertible instruments. The Company applied ASU 2020-06 to all Series A Preferred Stock during fiscal year 2023, and, accordingly, the Company did not apply the cash conversion or beneficial conversion feature models in its analysis of the Series A Preferred Stock.

3. Fair Value Measurements

The Company measures and reports certain financial instruments as assets and liabilities at fair value on a recurring basis. The following tables set forth the fair value of the Company's financial assets and liabilities at fair value on a recurring basis based on the three-tier fair value hierarchy (in thousands):

	September 30, 2023			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$ 55,451	$ —	$ —	$ 55,451
Commercial paper	—	107,093	—	107,093
Corporate bonds	—	22,828	—	22,828
Total financial assets	$ 55,451	$ 129,921	$ —	$ 185,372
Liabilities:				
Parapyre Option Obligation	$ —	$ 2,952	$ —	$ 2,952
CVR liability	—	—	28,200	28,200
Total liabilities	$ —	$ 2,952	$ 28,200	$ 31,152

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$ 15,250	$ —	$ —	$ 15,250
Commercial paper	—	23,641	—	23,641
U.S. government securities	—	4,230	—	4,230
Corporate bonds	—	3,732	—	3,732
Total financial assets	$ 15,250	$ 31,603	$ —	$ 46,853

The Company measures the fair value of money market funds on quoted prices in active markets for identical assets or liabilities. The Level 2 assets include commercial paper, U.S. government securities and corporate bonds and are valued based on quoted prices for similar assets in active markets and inputs other than quoted prices that are derived from observable market data. The Company evaluates transfers between levels at the end of each reporting period.

The Parapyre Option Obligation (as defined in Note 6) is considered a Level 2 liability based on observable market data for substantially the full term of the liability. The Parapyre Option Obligation is measured each period using a Black-Scholes model to estimate the fair value of the option grant. Changes in the fair value of the Parapyre Option Obligation are recorded as stock-based compensation within Research and development expenses for non-employees who provided pre-clinical testing services.

The CVR liability value is based on significant inputs not observable in the market such as estimated cash flows, estimated probabilities of success, and risk-adjusted discount rates, which represent a Level 3 liability.

As of December 31, 2022, the Company had no financial liabilities outstanding measured at fair value.

Forward Contract Liability

In connection with the Asset Acquisition, the Company entered into a contract for the issuance of 364,887 shares of Series A Preferred Stock as part of the consideration transferred. This forward contract was classified as a liability because the underlying preferred shares were contingently redeemable. Further, the forward contract liability was considered a Level 2 liability based on observable market data for substantially the full term of the liability and was initially measured at its estimated fair value on the transaction date based on the underlying price per share on an as-converted basis of the Series A Preferred Stock issued in the PIPE. Subsequent remeasurement of the fair value of the forward contract liability through its settlement date was based on the market price of the Company's common stock, which represents the redemption value of the Series A Preferred Stock.

The fair value of the forward contract at the transaction date, June 22, 2023, was $106.2 million. The liability was settled with the issuance of the Series A Preferred Stock on July 7, 2023 for $189.7 million. For the three and nine months ended September 30, 2023, $25.4 million and $83.5 million, respectively, was recorded as Other (expense) income in the consolidated statements of operations in connection with the change in fair value of the forward contract liability.

The following table presents changes in the forward contract liability for the periods presented (in millions):

	Forward Contract Liability
Beginning balance as of June 22, 2023	$ 106.2
Change in fair value	58.1
Ending balance as of June 30, 2023	164.3
Change in fair value	25.4
Issuance of Series A Preferred Stock on July 7, 2023	(189.7)
Ending balance as of September 30, 2023	$ —

Parapyre Option Obligation

On June 22, 2023, in connection with the Asset Acquisition, the Company assumed the Parapyre Option Obligation which provided for an annual equity grant of options for Parapyre Holding LLC ("Parapyre") to purchase 1% of the then outstanding shares of Spyre's common stock, on a fully diluted basis, on the last business day of each calendar year during the term of the Paragon Agreement, at the fair market value determined by the board of directors of Spyre.

On September 29, 2023, the Company amended the Paragon Agreement to amend and restate certain terms of the option grant pertaining to the Parapyre Option Obligation, including but not limited to (i) defining that the annual equity grant of options is based on the outstanding shares of Aeglea's common stock, (ii) establishing the grant date as the last business day of each applicable calendar year, and (iii) defining the term of the options granted as ten years. The liability related to the Parapyre Option Obligation will be recorded pursuant to the amended Paragon Agreement. As of September 30, 2023, the pro-rated estimated fair value of the options to be granted on December 31, 2023, was approximately $3.0 million, of which $0.1 million was recognized as part of the liabilities assumed with the Asset Acquisition on June 22, 2023. For the three and nine months ended September 30, 2023, $2.7 million and $2.9 million, respectively, was recognized as stock compensation expense related to the Parapyre Option Obligation.

CVR Liability

In connection with the Asset Acquisition, a non-transferable contingent value right (a "CVR") was distributed to Aeglea stockholders of record as of the close of business on July 3, 2023, but was not distributed to holders of shares of Common Stock or Series A Preferred Stock issued to the Investors or former stockholders of Spyre in connection with the Transactions. Holders of the CVR will be entitled to receive certain cash payments from proceeds received by the Company for a three-year period, if any, related to the disposition or monetization of Aeglea's legacy assets for a period of one year following the closing of the Asset Acquisition.

The fair value of the CVR liability was determined using the probability weighted discounted cash flow method to estimate future cash flows associated with the sale of the legacy assets. Analogous to a dividend being declared/approved in one period and paid out in another, the liability was recorded at the date of approval, June 22, 2023, as a common stock dividend, returning capital to the Legacy Stockholders. Changes in fair value of the liability will be recognized as a component of Other income (expense) in the condensed consolidated statement of operations and comprehensive loss in each reporting period. The liability value is based on significant inputs not observable in the market such as estimated cash flows, estimated probabilities of success, and risk-adjusted discount rates, which represent a Level 3 measurement within the fair value hierarchy. The significant inputs used to estimate the fair value of the CVR liability were as follows:

	September 30, 2023
Estimated cash flow dates	11/28/23 - 06/22/26
Estimated probability of success	27% - 100%
Risk-adjusted discount rates	7.14% - 7.57%

The change in fair value between June 30, 2023 and September 30, 2023 was a $1.3 million decrease, and was primarily driven by changes in the likelihood of a successful disposition of pegtarviliase, changes in the expected timing of achievement of certain milestones, updates to expenses and deductions, partially offset by changes in the likelihood of certain milestones related to the favorable Committee for Medicinal Products Human Use ("CHMP") opinion received by Immedica Pharma AB ("Immedica").

The following table presents changes in the CVR liability for the periods presented (in thousands):

	CVR Liability
Beginning balance as of December 31, 2022	$ —
Fair value at CVR issuance	29,500
Changes in the fair value of the CVR liability since issuance	$ (1,300)
Ending Balance as of September 30, 2023	$ 28,200

4. Cash Equivalents and Marketable Securities

The following tables summarize the estimated fair value of the Company's cash equivalents and marketable securities and the gross unrealized gains and losses (in thousands):

	September 30, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash equivalents:				
Money market funds	$ 55,451	$ —	$ —	$ 55,451
Commercial paper	16,911	3	—	16,914
Total cash equivalents	$ 72,362	$ 3	$ —	$ 72,365
Marketable securities:				
Commercial paper	$ 90,272	$ —	$ (93)	$ 90,179
Corporate bonds	22,849	1	(22)	22,828
U.S. government securities	—	—	—	—
Total marketable securities	$ 113,121	$ 1	$ (115)	$ 113,007

	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash equivalents:				
Money market funds	$ 15,250	$ —	$ —	$ 15,250
Commercial paper	7,021	1	(2)	7,020
U.S. government securities	3,736	—	(1)	3,735
Total cash equivalents	$ 26,007	$ 1	$ (3)	$ 26,005
Marketable securities:				
Commercial paper	$ 16,644	$ 2	$ (25)	$ 16,621
Corporate bonds	3,738	—	(6)	3,732
U.S. government securities	495	—	—	495
Total marketable securities	$ 20,877	$ 2	$ (31)	$ 20,848

The following table summarizes the available-for-sale securities in an unrealized loss position for which an allowance for credit losses has not been recorded as of September 30, 2023 and December 31, 2022, aggregated by major security type and length of time in a continuous unrealized loss position:

	September 30, 2023					
	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Commercial paper	$ 78,820	$ (93)	$ —	$ —	$ 78,820	$ (93)
U.S. government securities	—	—	—	—	—	$ —
Corporate bonds	18,373	(22)	—	—	18,373	(22)
Total marketable securities	$ 97,193	$ (115)	$ —	$ —	$ 97,193	$ (115)

	December 31, 2022					
	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Commercial paper	$ 17,699	$ (27)	$ —	$ —	$ 17,699	$ (27)
U.S. government securities	3,735	(1)	—	—	3,735	$ (1)
Corporate bonds	3,732	(6)	—	—	3,732	(6)
Total marketable securities	$ 25,166	$ (34)	$ —	$ —	$ 25,166	$ (34)

The Company evaluated its securities for credit losses and considered the decline in market value to be primarily attributable to current economic and market conditions and not to a credit loss or other factors. Additionally, the Company does not intend to sell the securities in an unrealized loss position and does not expect it will be required to sell the securities before recovery of the unamortized cost basis. As of September 30, 2023 and December 31, 2022, an allowance for credit losses had not been recognized. Given the Company's intent and ability to hold such securities until recovery, and the lack of significant change in credit risk of these investments, the Company does not consider these marketable securities to be impaired as of September 30, 2023 and December 31, 2022.

The financial instruments that potentially subject the Company to a concentration of credit risk consist principally of cash deposits. Accounts at each of our three U.S. banking institutions are insured by the Federal Deposit Insurance Corporation (“FDIC”) up to $250,000 per depositor. At September 30, 2023 and December 31, 2022, the Company had $16.9 million and $23.5 million, respectively, of U.S. cash deposits in excess of the FDIC insured limit. Uninsured foreign cash deposits were immaterial for both periods.

There were no realized gains or losses on marketable securities for the three and nine months ended September 30, 2023 and 2022. Interest on marketable securities is included in interest income. Accrued interest receivable on available-for-sale debt securities at September 30, 2023 and December 31, 2022 was $0.4 million and $0.1 million, respectively.

The following table summarizes the contractual maturities of the Company’s marketable securities at estimated fair value (in thousands):

	September 30, 2023	December 31, 2022
Due in one year or less	$ 102,518	$ 20,848
Due thereafter	10,489	—
Total marketable securities	$ 113,007	$ 20,848

The Company may sell investments at any time for use in current operations even if they have not yet reached maturity. As a result, the Company classifies marketable securities, including securities with maturities beyond twelve months as current assets.

5. Accrued and Other Current Liabilities

Accrued and other current liabilities consist of the following (in thousands):

	September 30, 2023	December 31, 2022
Accrued compensation	$ 5,368	$ 4,589
Accrued contracted research and development costs	6,669	6,972
Accrued professional and consulting fees	3,484	946
Accrued other	340	330
Total accrued and other current liabilities	$ 15,861	$ 12,837

6. Related Party Transactions

Paragon and Parapyre Holding LLC each beneficially owns less than 5% of the Company's capital stock through their respective holdings of the Company's common stock and Series A Preferred Stock. Fairmount Funds Management LLC ("Fairmount") beneficially owns more than 5% of the Company's capital stock, has two seats on the Board and beneficially owns more than 5% of Paragon, which is a joint venture between Fairmount and Fair Journey Biologics. Fairmount appointed Paragon's board of directors and has the contractual right to approve the appointment of any executive officers. Parapyre is an entity formed by Paragon as a vehicle to hold equity in Spyre in order to share profits with certain employees of Paragon.

In connection with the Asset Acquisition, the Company assumed the rights and obligations of Spyre under the Paragon Agreement. Under the Paragon Agreement, Spyre is obligated to compensate Paragon for its services performed under each research program based on the actual costs incurred with mark-up costs pursuant to the terms of the Paragon Agreement. As of the date of the Asset Acquisition, Spyre had incurred total expenses of $19.0 million under the Paragon Agreement since inception, inclusive of a $3.0 million research initiation fee that was due upon signing of the Paragon Agreement and $16.0 million of reimbursable expenses under the Paragon Agreement for historical costs owed to Paragon. As of the acquisition date, $19.0 million was unpaid and was assumed by the Company through the Asset Acquisition.

For the three and nine months ended September 30, 2023, the Company recognized expenses related to services provided by Paragon subsequent to the Asset Acquisition totaling $19.4 million and $20.8 million, respectively, which were recorded as Research and development expenses in the consolidated statements of operations. As of September 30, 2023, $16.8 million was unpaid and was included in Related party payable on the Company's consolidated balance sheets.

For the three and nine months ended September 30, 2023, the Company made payments totaling $20.0 million to Paragon.

In July 2023, the Company exercised its option for the SPY001 program with the remaining three options for the SPY002, SPY003, SPY004 programs remaining outstanding. Following the execution of the license agreement with respect to the SPY001 program (the "SPY001 License Agreement"), the Company will be obligated to pay Paragon up to $22.0 million upon the achievement of specific development and clinical milestones for the first product under the SPY001 License Agreement that achieves such specified milestones.

The following is the summary of expenses related to the Paragon Agreement, which were ultimately settled in cash (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,		Financial Statement Line Item
	2023	2022	2023	2022	
Reimbursable costs under the Paragon Agreement	$ 16.7	$ —	$ 17.9	$ —	Research and development

Parapyre Option Obligation

The Paragon Agreement provided for an annual equity grant of options to purchase 1% of the then outstanding shares of Spyre's common stock, on a fully diluted basis, on the last business day of each calendar year, at the fair market value determined by the board of directors of Spyre (the "Parapyre Option Obligation").

In connection with the Asset Acquisition, the Company assumed the rights and obligations of Spyre under the Paragon Agreement, including the Parapyre Option Obligation. As a result, the Parapyre Option Obligation shall continue and Parapyre shall be entitled to receive the equivalent shares of the Company with the same terms. On September 29, 2023, the Company amended the Paragon Agreement to amend and restate certain terms of the option grant pertaining to the Parapyre Option Obligation, including but not limited to (i) defining that the annual equity grant of options is based on the outstanding shares of Aeglea's common stock, (ii) establishing the grant date as the last business day of each applicable calendar year, and (iii) defining the term of the options granted as ten years. See Notes 3 and 10 for disclosures related to the Parapyre Option Obligation. For the three and nine months ended September 30, 2023, $2.7 million and $2.9 million, respectively, was recognized as stock compensation expense related to the Parapyre Option Obligation.

The following is the summary of Related party accounts payable (in millions):

	September 30, 2023	December 31, 2022
Reimbursable costs under the Paragon Agreement	$ 16.8	$ —
Parapyre Option Obligation liability	3.0	—
Total related party accounts payable	$ 19.8	$ —

7. Asset Acquisition

On June 22, 2023, the Company acquired Spyre pursuant to the Acquisition Agreement, by and among the Company, Aspen Merger Sub I, Inc., a Delaware corporation and a wholly owned subsidiary of the Company ("First Merger Sub"), Sequoia Merger Sub II, LLC, a Delaware limited liability company and wholly owned subsidiary of the Company ("Second Merger Sub"), and Spyre. Pursuant to the Acquisition Agreement, First Merger Sub merged with and into Spyre, pursuant to which Spyre was the surviving corporation and became a wholly owned subsidiary of the Company (the "First Merger"). Immediately following the First Merger, Spyre merged with and into Second Merger Sub, pursuant to which Second Merger Sub became the surviving entity. Spyre was a pre-clinical stage biotechnology company that was incorporated on April 28, 2023 under the direction of Peter Harwin, a Managing Member of Fairmount, for the purpose of holding rights to certain intellectual property being developed by Paragon. Fairmount is a founder of Paragon.

The Company completed the Asset Acquisition of Spyre, in accordance with the terms of the Acquisition Agreement. Under the terms of the Acquisition Agreement, the Company issued 517,809 shares of common stock and 364,887 shares of Series A Preferred Stock to former Spyre security holders. In addition, outstanding and unexercised stock options to purchase 2,734 shares of common stock were assumed from the Amended and Restated Spyre 2023 Equity Incentive Plan.

At the acquisition date, the Company recorded forward contracts to represent the obligation to issue shares of the Company's common stock and shares of Series A Preferred Stock, respectively. The forward contract related to the common stock was recorded as Additional paid-in capital as the instrument is indexed to the Company's common stock. The forward contract related to the Series A Preferred Stock was recorded as a liability, as the underlying stock has a cash redemption feature. On July 7, 2023, both the shares of common stock and Series A Preferred Stock were issued and the forward contract liability associated with the Series A Preferred Stock was settled accordingly.

The Company concluded that the arrangement meets the definition of an asset acquisition rather than a business combination, as substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset, Spyre's option (the "Option") to exclusively license IPR&D. The Company determined that the Option to license IPR&D was a single asset as the Company's strategy relies on developing the entire portfolio of individual treatments to create combination treatments that simultaneously address different mechanisms of irritable bowel disease with a single treatment. The Company also determined that the pipeline candidates within the portfolio are similar in nature and risk profile. In addition, the Company did not obtain any substantive processes, assembled workforce, or employees capable of producing outputs in connection with the Asset Acquisition.

The Company determined that the cost to acquire the asset was $113.2 million which was recorded as acquired IPR&D. The fair value of the consideration issued consisted of the 364,887 shares of Series A Preferred Stock (14,595,480 shares of common stock on an as-converted basis) and 517,809 shares of common stock, valued at $291.08 per share and $7.277 per share, respectively.

The Asset Acquisition Costs are shown on the following table (in millions):

	June 22, 2023
Consideration transferred in Series A Preferred Stock and common stock	$ 110.0
Transaction costs incurred by Aeglea	3.2
Total cost to acquire asset	$ 113.2

The allocation of the purchase price to net assets acquired is as a follows:

	June 22, 2023
Acquired in-process research and development	$ 130.2
Cash acquired	3.0
Assumed liabilities	(20.0)
Total cost to acquire asset	$ 113.2

8. Paragon Agreement

In May 2023, Spyre entered into the Paragon Agreement with Paragon and Parapyre. In consideration for the Option granted under the Paragon Agreement, Spyre was obligated to pay Paragon an upfront cash amount of $3.0 million in research initiation fees. In addition, Spyre was obligated to compensate Paragon on a quarterly basis for its services performed under each research program based on the actual costs incurred with mark-up costs pursuant to the terms of the Paragon Agreement. As of the date of the Asset Acquisition, Spyre had incurred total expenses of $19.0 million under the Paragon Agreement since inception, which included the $3.0 million research initiation fee and $16.0 million of historical reimbursable expenses owed to Paragon. As of June 22, 2023, $19.0 million was unpaid and was assumed by the Company through the Asset Acquisition. Furthermore, the Paragon Agreement provided for an annual equity grant of options to purchase 1% of the then outstanding shares of Spyre's common stock, on a fully diluted basis, on the last business day of each calendar year, during the term of the Paragon Agreement, at the fair market value determined by the board of directors of Spyre.

As a result of the Asset Acquisition, the Company assumed the rights and obligations of Spyre under the Paragon Agreement, including the Parapyre Option Obligation. Pursuant to the Paragon Agreement, on a research program-by-research program basis following the finalization of the research plan for each respective research program, the Company is required to pay Paragon a nonrefundable fee in cash of $0.8 million. For the three and nine months ended September 30, 2023, the Company incurred $19.4 million and $20.8 million, respectively, in costs reimbursable to Paragon, which were recorded as Research and development expenses in the consolidated statements of operations.

For the three and nine months ended September 30, 2023, the Company made payments totaling $20.0 million to Paragon.

On July 12, 2023, the Company exercised its Option available under the Paragon Agreement with respect to the SPY001 research program and expects to enter into a SPY001 license agreement (the "SPY001 License Agreement"). The Company's Option available under the Paragon Agreement with respect to the SPY002, SPY003 and SPY004 programs remains unexercised.

Following the execution of the SPY001 License Agreement, the Company will be obligated to pay Paragon up to $22.0 million upon the achievement of specific development and clinical milestones for the first product under the SPY001 License Agreement that achieves such specified milestones. Upon execution of the SPY001 License Agreement, the Company expects to pay Paragon a $1.5 million fee for nomination of a development candidate, and the Company expects to be obligated to make a further milestone payment of $2.5 million upon the first dosing of a human patient in a Phase 1 trial. Subject to the execution of the Option with respect to the SPY002, SPY003 or SPY004 research programs, the Company expects to be obligated to make similar payments upon and following the execution of license agreements with respect to the these research programs, respectively.

9. Series A Non-Voting Convertible Preferred Stock

On June 22, 2023, the Company filed a Certificate of Designation of Preferences, Rights and Limitations of the Series A Preferred Stock with the Secretary of State of the State of Delaware (the “Certificate of Designation”) in connection with the Asset Acquisition and the PIPE.

Pursuant to the Certificate of Designation, holders of Series A Preferred Stock are entitled to receive dividends on shares of Series A Preferred Stock equal to, on an as-if-converted-to-common-stock basis, and in the same form as, dividends actually paid on shares of the Company's common stock. Except as provided in the Certificate of Designation or as otherwise required by law, the Series A Preferred Stock does not have voting rights. However, as long as any shares of Series A Preferred Stock are outstanding, the Company will not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Preferred Stock: (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock, or alter or amend the Certificate of Designation, amend or repeal any provision of, or add any provision to, the Company’s Certificate of Incorporation or its Bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of Preferred Stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series A Preferred Stock, regardless of whether any of the foregoing actions will be by means of amendment to the Certificate of Incorporation or by merger, consolidation, recapitalization, reclassification, conversion or otherwise, (b) issue further shares of Series A Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series A Preferred Stock, (c) prior to the stockholder approval of the conversion of the Series A Preferred Stock into shares of Common Stock in accordance with Nasdaq Stock Market Rules (the “Conversion Proposal”) or at any time while at least 30% of the originally issued Series A Preferred Stock remains issued and outstanding, consummate (x) any Fundamental Transaction (as defined in the Certificate of Designation) or (y) any merger or consolidation of the Company with or into another entity or any stock sale to, or other business combination in which our stockholders immediately before such transaction do not hold at least a majority of our capital stock immediately after such transaction or (d) enter into any agreement with respect to any of the foregoing. The Series A Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

The Company has agreed to hold a stockholders’ meeting to submit the following matters to its stockholders for their consideration: (i) the approval of the Conversion Proposal, and (ii) if deemed necessary or appropriate by the Company or as otherwise required by law or contract, the approval of an amendment to the Certificate of Incorporation to authorize sufficient shares of common stock for the conversion of the Series A Preferred Stock issued pursuant to the Acquisition Agreement. In connection with these matters, the Company filed with the SEC a definitive proxy statement and other relevant materials. The stockholder meeting has not occurred as of September 30, 2023. The Series A Preferred Stock is recorded outside of stockholders’ (deficit) equity because, if conversion to common stock is not approved by the stockholders, the Series A Preferred Stock will be redeemable at the option of the holders for cash equal to the closing price of the common stock per share of common stock underlying the Series A Preferred Stock, on the last trading day prior to the holder’s redemption request. As of September 30, 2023, the redemption value of the Company's outstanding Series A Preferred Stock was $532.3 million based on the closing stock price of the Company's common stock on September 30, 2023 of $12.25 per share. The Company has determined that the conversion and redemption features of the Series A Preferred Stock do not require bifurcation as derivatives.

Following stockholder approval of the Conversion Proposal, each share of Series A Preferred Stock will automatically convert into 40 shares of common stock, subject to certain limitations, including that a holder of Series A Preferred Stock is prohibited from converting shares of Series A Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (established by the holder between 0% and 19.99%) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion.

On June 26, 2023, the Company completed a private placement of 721,452 shares of Series A Preferred Stock in exchange for gross proceeds of $210.0 million, or net proceeds of $197.3 million, after deducting placement agent and other offering costs.

On July 7, 2023, the Company issued 364,887 shares of Series A Preferred Stock as part of its consideration transferred in connection with the Asset Acquisition that closed on June 22, 2023 which settled the related forward contract liability. For additional information, see Note 3.

On October 27, 2023, the Company filed a definitive proxy statement with the SEC to solicit approval of the Conversion Proposal, among other matters, at a special meeting of stockholders to be held on November 21, 2023.

10. Liabilities, Convertible Preferred Stock and Stockholders' (Deficit) Equity

Registered Direct Offering

In May 2022, the Company issued and sold 430,107 shares of common stock at an offering price of $40.00 per share and pre-funded warrants to purchase up to 694,892 shares of common stock at an offering price of $39.9975 per warrant (representing the price per share of common stock sold in the offering minus the $0.0025 exercise price per warrant) in a registered direct offering pursuant to a shelf registration statement on Form S-3. The net proceeds to the Company from this offering were approximately $42.9 million, after deducting placement agent fees and offering costs of $2.1 million.

Pre-Funded Warrants

In February 2019, April 2020 and May 2022, the Company issued pre-funded warrants to purchase the Company's common stock in underwritten public offerings at the offering price of the common stock, less the $0.0025 per share exercise price of each warrant. The warrants were recorded as a component of stockholders' (deficit) equity within additional paid-in capital and have no expiration date. Per the terms of the warrant agreements, the outstanding warrants to purchase shares of common stock may not be exercised if the holder's ownership of the Company's common stock would exceed 4.99% ("Maximum Ownership Percentage"), or 9.99% for certain holders. By written notice to the Company, each holder may increase or decrease the Maximum Ownership Percentage to any other percentage (not in excess of 19.99% for the majority of such warrants). The revised Maximum Ownership Percentage would be effective 61 days after the notice is received by the Company.

As of September 30, 2023, the following pre-funded warrants for common stock were issued and outstanding:

Issue Date	Expiration Date	Exercise Price	Number of Warrants Outstanding
February 8, 2019	None	$ 0.0025	—
April 30, 2020	None	$ 0.0025	—
May 20, 2022	None	$ 0.0025	250,000
Total pre-funded warrants			250,000

Stock-Based Compensation

2016 Equity Incentive Plan

The 2016 Equity Incentive Plan ("2016 Plan") provides for an automatic increase in the number of shares reserved for issuance thereunder on January 1 of each year for the remaining term of the plan (through 2028) equal to (a) 4.0% of the number of issued and outstanding shares of common stock on December 31 of the immediately preceding year, or (b) a lesser amount as approved by the Board each year. As a result of this provision, on January 1, 2023 and January 1, 2022, an additional 104,560 and 78,968 shares, respectively, became available for issuance under the 2016 Plan.

In July 2020, the Company granted 9,128 restricted stock units ("RSUs") to certain employees, with vesting terms subject to regulatory, commercial, and clinical milestones, in addition to a service condition. As of September 30, 2023, none of these RSUs had vested and all RSUs were forfeited since the performance milestones were not met within the required time frame. No stock-based compensation expense was recognized on these awards.

On June 22, 2023, concurrent with the closing of the Asset Acquisition, the Board approved an amendment of the 2016 Plan to eliminate the per-participant annual award limits originally intended to comply with the qualified performance-based compensation exception set forth in Section 162(m) of the Internal

Revenue Code, in light of the repeal of such exception pursuant to the Tax Cuts and Jobs Act of 2017. In addition, the Company approved 2,720,033 options contingent on stockholder approval to certain members of the Board, legacy Aeglea employees and consultants under the 2016 Plan. These awards are in excess of the shares available for issuance under the 2016 Plan and require stockholder approval before being granted. Accordingly, no expense has been recognized on these contingent awards since they are contingent on stockholder approval.

As of September 30, 2023, the 2016 Plan had 293,497 shares available for future issuance.

2018 Equity Inducement Plan

During the nine months ended September 30, 2023, the Board approved an increase of 2,800,000 in the number of shares reserved for issuance to the 2018 Equity Inducement Plan and granted 3,583,880 inducement awards to new hires. The grant-date fair value of these inducement awards will be recognized as expense on a pro-rata basis over the vesting period.

The awards have an exercise price equal to the grant date closing price of the Company's common stock, vest ratably over four years, and have a ten-year exercise period from the grant date.

Spyre 2023 Equity Incentive Plan

On June 22, 2023, in connection with the Asset Acquisition, the Company assumed the Amended and Restated Spyre 2023 Equity Incentive Plan (the "Spyre Equity Plan") and its outstanding and unexercised stock options, which were converted to options to purchase 2,734 shares of Aeglea common stock. The acquisition-date fair value of these grants will be recognized as an expense on a pro-rata basis over the vesting period.

Parapyre Option Obligation

On June 22, 2023, in connection with the Asset Acquisition, the Company assumed the Parapyre Option Obligation which provided for an annual equity grant of options to purchase 1% of the then outstanding shares of Spyre's common stock, on a fully diluted basis, on the last business day of each calendar year during the term of the Paragon Agreement, at the fair market value determined by the board of directors of Spyre. As a result of the Asset Acquisition the Parapyre Option Obligation shall continue and Parapyre shall be entitled to receive the equivalent shares of the Company with the same terms. As of September 30, 2023, the pro-rated estimated fair value of the options to be granted on December 31, 2023, was approximately $3.0 million, of which $0.1 million was recognized as part of the liabilities assumed with the Asset Acquisition. For the three and nine months ended September 30, 2023, $2.7 million and $2.9 million, respectively, was recognized as stock compensation expense related to the Parapyre Option Obligation. As of September 30, 2023, the unamortized expense related to the Parapyre Option Obligation was $2.1 million.

The following table summarizes the Company’s stock awards granted under all plans for each of the periods indicated:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2023		2022		2023		2022	
	Grants	Weighted Average Grant Date Fair Value	Grants	Weighted Average Grant Date Fair Value	Grants	Weighted Average Grant Date Fair Value	Grants	Weighted Average Grant Date Fair Value
Stock options	1,044,667	$ 14.50	50,806	$ 16.75	3,867,366	$ 9.65	153,686	$ 52.50

2016 Employee Stock Purchase Plan

Under the Company’s 2016 Employee Stock Purchase Plan (“2016 ESPP”), the Company issued and sold 2,496 shares for aggregate cash proceeds of less than $0.1 million during the nine months ended September 30, 2023. There were 6,073 shares issued and sold under the 2016 ESPP for aggregate cash proceeds of $0.2 million during the nine months ended September 30, 2022.

Stock-based Compensation Expense

Total stock-based compensation expense related to all plans was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Research and development [1]	$ 2,965	$ 639	$ 4,136	$ 2,031
General and administrative	1,820	926	4,269	3,653
Total stock-based compensation expense	$ 4,785	$ 1,565	$ 8,405	$ 5,684

[1] For the three and nine months ended September 30, 2023, $2.7 million and $2.9 million, respectively, was recognized as stock compensation expense related to the Parapyre Option Obligation. There were no such expenses for the three and nine months ended September 30, 2022.

The following table summarizes the weighted-average Black-Scholes option pricing model assumptions used to estimate the fair value of stock options granted under the Company's 2016 Plan, and the shares purchasable under the 2016 ESPP during the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
2016 Plan				
Expected term (in years)	6.08	6.02	6.04	5.96
Expected volatility	101%	85%	111%	83%
Risk-free interest	4.28%	3.16%	4.07%	2.43%
Dividend yield	—	—	—	—
2016 ESPP				
Expected term (in years)	0.50	0.50	0.49	0.49
Expected volatility	222%	95%	181%	84%
Risk-free interest	5.29	3.26	4.99%	1.95%
Dividend yield	—	—	—	—

11. Strategic License Agreements

On March 21, 2021, the Company entered into an exclusive license and supply agreement with Immedica (the "Immedica Agreement"). By entering into this agreement, the Company agreed to provide Immedica the following goods and services:

i. Deliver an exclusive, sublicensable, license and know-how (the "License") to develop and commercialize pegzilarginase (the "Product") in the territory comprising the members states of the European Economic Area ("EEA"), United Kingdom ("UK"), Switzerland, Andorra, Monaco, San Marino, Vatican City, Turkey, Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Bahrain, and Oman (the "Territory");

ii. Complete the global pivotal PEACE (Pegzilarginase Effect on Arginase 1 Deficiency Clinical Endpoints) Phase 3 trial ("PEACE Trial") and related Biologics License Application ("BLA") package to file with the FDA, which will be leveraged by Immedica in obtaining the necessary regulatory approvals in the Territory; and

iii. Perform a Pediatric Investigation Plan trial ("PIP Trial") in order for Immedica to be able to receive certain regulatory approvals within the Territory.

In addition, the Company and Immedica formed a Joint Steering Committee ("JSC") to provide oversight to the activities performed under the agreement; however, the substance of the Company's participation in the JSC did not represent an additional promised service, but rather, a right of the Company to protect its own interests in the arrangement.

Further, the Company agreed to supply to Immedica, and Immedica agreed to purchase from the Company, substantially all commercial requirements of the Product. The terms of the agreement did not provide for either (i) an option to Immedica to purchase the Product from the Company at a discount from the standalone selling price or (ii) minimum purchase quantities. Immedica was expected to bear (i) all costs and expenses for any development or commercialization of the Product in the Territory subject to the License exclusive of the Company's promised goods and services summarized above and (ii) all costs and fees associated with applying for regulatory approval of the Product in the Territory.

The Company received a non-refundable payment of $21.5 million and Immedica agreed to provide payment of 50% of the Company's costs incurred in performing the PIP Trial up to a maximum of $1.8 million. In addition, the Company had the ability to receive regulatory and commercial milestone payments. The Company was also entitled to receive royalties in the mid-20% range on net sales of the Product in the Territory. In July 2021, the Company modified the agreement with Immedica to provide certain additional services in relation to the PEACE Trial and BLA package performance obligation in exchange for the reimbursement of up to $3.0 million of the actual costs incurred in relation to such incremental services.

The Company concluded that Immedica met the definition to be accounted for as a customer because the Company was delivering intellectual property and other services within the Company's normal course of business, in which the parties are not jointly sharing the risks and rewards. Therefore, the Company concluded that the promises summarized above represent transactions with a customer within the scope of ASC 606. The Company determined that the following promises represent distinct promised services, and therefore, performance obligations: (i) the License, (ii) the PEACE Trial and BLA package, and (iii) the PIP Trial.

Specifically, in making these determinations, the Company considered the following factors:

- As of inception of the agreement, the Company had completed the Phase 1/2 clinical trial related to the Product and was conducting the PEACE Trial. Accordingly, the Company was not promising, nor expecting, to perform additional research and development activities pursuant to the agreement that would either significantly modify, customize or be considered highly interdependent or interrelated with pegzilarginase.
- The License represented functional intellectual property given the functionality of the License was not expected to change substantially as a result of the company's ongoing activities.
- The services necessary to complete the PEACE Trial, BLA package and PIP Trial could have been performed by other parties.

Given that Immedica was not obligated to purchase any minimum amount or quantities of Product, the supply of Product for commercial use to Immedica was determined to be an option for Immedica, rather than a performance obligation of the Company at contract inception and will be accounted for if and when exercised. The Company also determined that Immedica's option to purchase the Product did not create a material right as the expected pricing is not at a discount.

The Company determined that the upfront fixed payment amount of $21.5 million should be included in the transaction price. Additionally, the Company determined at inception of the arrangement that 50% of the probable estimated costs to be incurred in relation to the PIP Trial exceeded $1.8 million and included the full reimbursement amount of $1.8 million in the transaction price. Upon subsequent re-evaluation due to changing facts and circumstances, the Company determined the probable estimated costs were less than the maximum allowable reimbursement and a portion of the variable consideration was constrained, which did not materially impact the revenue recognized as of September 30, 2023. Additionally, upon the modification of the agreement in July 2021, the Company determined that the probable estimated costs to perform the additional services related to the PEACE Trial and BLA package exceeded the maximum allowable reimbursement of $3.0 million. Therefore, the Company included an estimated total of $3.6 million that was due in relation to the PIP Trial, PEACE Trial, and BLA package in the transaction price and concluded that it is probable that a significant reversal will not occur in the future. In total, the modified transaction price was determined to be $25.1 million.

The Company allocated $9.6 million and $3.5 million of the modified transaction price to the PEACE Trial and BLA package and PIP Trial performance obligations, respectively, based on the stand-alone selling prices ("SSP"), which were based on the estimated costs that a third-party would charge in performing such services on a stand-alone basis. The SSP for the License was established at inception of the arrangement using a residual value approach due to the uniqueness of and lack of observable data related to the License, and without a specific analog from which to make reliable estimates, resulting in an allocation of $12.0 million.

The potential regulatory milestone payments that the Company was eligible to receive were excluded from the transaction price, as the milestone amounts were fully constrained based on the probability of achievement, since the milestones related to successful achievement of certain regulatory approvals, which might not have been achieved. The Company determined that the royalties and commercial milestone payments related predominantly to the license of intellectual property and therefore should be excluded from the transaction price under the sales- or usage-based royalty exception under ASC 606. The Company intends to reevaluate the transaction price, including all constrained amounts, at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, the Company intends to adjust its estimate of the transaction price as necessary. The Company recognized the royalties and commercial milestone payments as revenue when the associated sales occurred, and relevant sales-based thresholds were met. The Company also assessed the arrangement with Immedica and concluded that a significant financing component does not exist.

The Company recognized revenue allocated to the License performance obligation at a point in time and upon transfer of the License. The Company completed the transfer of the know-how necessary for Immedica to benefit from the License in September 2021 and recognized $12.0 million of revenue at that time. The development fee allocated to the PEACE Trial, BLA package and PIP Trial performance obligations is recognized over time using an input method of costs incurred related to the performance obligations.

The Company recognized revenue of $0.9 million under the Immedica Agreement for the nine months ended September 30, 2023. There was no such revenue for the three months ended September 30, 2023. The total revenue generated in the nine months ended September 30, 2023 was attributable to the PEACE Phase 3 and PIP trials, drug supply, and royalties from an early access program in France. For the three and nine months ended September 30, 2022, the Company recognized revenue of $0.2 million and $2.2 million, respectively, related to the PEACE Trial and BLA package performance obligation. As of December 31, 2022, the Company recorded deferred revenue of $3.6 million associated with the Immedica Agreement, of which $2.4 million was classified as current. There was no such revenue associated with the Immedica Agreement as of September 30, 2023.

On July 27, 2023, the Company announced that it had entered into an agreement to sell the global rights to pegzilarginase to Immedica and concurrently terminated the Immedica Agreement. Remaining deferred revenue was recognized as part of the gain on disposal of the assets.

Contract Balances from Customer Contract

The timing of revenue recognition, billings and cash collections results in contract assets and contract liabilities on the Company's balance sheets. The Company recognizes license and development receivables based on billed services, which are derecognized upon reimbursement. When consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a contract, a contract liability is recorded. Contract liabilities are recognized as revenue after control of the goods or services is transferred to the customer and all revenue recognition criteria have been met.

The following table presents changes in the Company’s contract liabilities for the periods presented (in thousands):

Nine Months Ended September 30, 2023	December 31, 2022	Additions	Deductions	September 30, 2023
Contract liabilities:				
Deferred revenue	$ 2,696	$ 575	$ (3,271)	$ —

The Company had no contract assets during the nine months ended September 30, 2023 and 2022.

12. Sale of Pegzilarginase to Immedica

On July 27, 2023, the Company announced that it had entered into an agreement to sell the global rights to pegzilarginase, an investigational treatment for the rare metabolic disease Arginase 1 Deficiency, to Immedica for $15.0 million in upfront cash proceeds and up to $100.0 million in contingent milestone payments. The sale of pegzilarginase to Immedica superseded and terminated the previous license agreement between the Company and Immedica. On July 27, 2023, the carrying value of the asset was zero as it was internally

developed. Accordingly the Company recognized a $14.6 million gain within operating expenses, which is the full $15.0 million in upfront cash proceeds, net of transaction costs and the derecognition of pegzilarginase related nonfinancial assets and liabilities.

The milestone payments are contingent on formal reimbursement decisions by national authorities in key European markets and pegzilarginase approval by the FDA, among other events. The upfront payment and contingent milestone payments if paid, net of expenses and adjustments, will be distributed to holders of Aeglea's CVR pursuant to the CVR Agreement resulting from the Asset Acquisition.

13. Net Loss Per Share

The Company computes net loss attributable per common stockholder using the two-class method required for participating securities. The Company considers convertible. preferred stock to be participating securities. In the event that the Company paid out distributions, holders of convertible preferred stock would participate in the distribution.

The two-class method is an earnings (loss) allocation method under which earnings (loss) per share is calculated for common stock and participating security considering a participating security's rights to undistributed earnings (loss) as if all such earnings (loss) had been distributed during the period. The holders of Series A Preferred Stock do not have an obligation to fund losses and therefore the Series A Preferred Stock was excluded from the calculation of basic net loss per share. The Company included in the calculation of basic net loss per share, contingently issuable common shares related to the Asset Acquisition because they will be issued for no consideration due to the consideration already having been satisfied as of September 30, 2023.

Basic and diluted net loss per share is computed by dividing the net loss by the weighted-average number of common stock and pre-funded warrants outstanding during the period, without consideration of potential dilutive securities. The pre-funded warrants are included in the computation of basic net loss per share as the exercise price is negligible and they are fully vested and exercisable. For periods in which the Company generated a net loss, the Company does not include the potential impact of dilutive securities in diluted net loss per share, as the impact of these items is anti-dilutive. The Company has generated a net loss for all periods presented, therefore diluted net loss per share is the same as basic net loss per share since the inclusion of potentially dilutive securities would be anti-dilutive.

The following weighted-average equity instruments were excluded from the calculation of diluted net loss per share because their effect would have been anti-dilutive for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Options to purchase common stock	3,135,672	351,533	1,426,224	335,395
Unvested restricted stock units	—	6,000	252	7,315
Series A Preferred Stock (on an as-converted basis)	42,501,681	—	14,851,447	—

14. Restructuring Charges

Severance and Stock Compensation

On April 12, 2023, based on the review of the inconclusive interim results from the Company's Phase 1/2 clinical trial of pegtarviliase for the treatment of classical homocystinuria and other business considerations, the Company announced that it had initiated a process to explore strategic alternatives to maximize stockholder value and engaged an independent exclusive financial advisor to support this process.

As a result, the Company implemented a restructuring plan resulting in an approximate 83% reduction of the Company's existing headcount by June 30, 2023. The Company recognized restructuring expenses consisting of cash severance payments and other employee-related costs of nil and $6.4 million during the three and nine months ended September 30, 2023, respectively. Cash payments for employee related restructuring charges of $4.5 million were paid as of September 30, 2023. In addition, the Company recognized $1.0 million in non-cash stock-based compensation expense related to the accelerated vesting of stock-based awards for certain employees. The Company recorded these restructuring charges based on each employee's role to the

respective research and development and general and administrative operating expense categories on its condensed consolidated statements of operations and comprehensive loss.

The following table summarizes the changes in the Company's accrued restructuring balance (in thousands):

	Beginning Balance December 31, 2022	Charges	Payments	Ending Balance September 30, 2023
Severance liability	$ —	$ 6,448	$ (4,527)	$ 1,921

Sale of Assets

During the second quarter of 2023, the Company sold various lab equipment, consumables, and furniture and fixtures for total consideration of $0.5 million. After recording the disposal of all property and equipment net of proceeds, the Company recorded a $0.7 million and $0.2 million loss on disposal of long lived assets which is included in Research and development and General and administrative expenses, respectively.

Lease Right-of-use Asset and Leasehold Improvement Impairment

Effective June 30, 2023, the Company abandoned its leased office space in Austin, Texas. As a result, the Company recognized an impairment loss of $0.9 million related to the operating lease right-of-use asset and $1.7 million related to leasehold improvements. On August 7, 2023, the Company terminated its building lease in Austin, Texas. The negotiated termination agreement obligated the Company to pay the lessor a $2.0 million termination fee in exchange for releasing the Company of all further obligations under the lease.

All charges related to the restructuring activities were recognized during the second quarter of 2023. No further restructuring charges will be incurred under the restructuring plan. A summary of the charges related to the restructuring activities is as follows (in thousands):

	Severance Related Expenses	Stock Compensation Expenses	Loss on Disposal of Long Lived Assets	Lease Asset Impairment	Total Restructuring Costs
Research and development	$ 3,182	$ 123	$ 749	$ 1,405	$ 5,459
General and administrative	3,266	870	182	1,175	5,493
Total	$ 6,448	$ 993	$ 931	$ 2,580	$ 10,952

15. Novation of Manufacturing Agreements

Pursuant to a Novation Agreement dated September 19, 2023 (the “Novation Agreement”), by and between the Company, Paragon and WuXi Biologics (Hong Kong) Limited (“WuXi Biologics”), the Company novated (i) a Biologics Master Services Agreement (the “WuXi Biologics MSA”) and (ii) a Cell Line License Agreement (the “Cell Line License Agreement”).

Biologics Master Services Agreement

In April 2023, Paragon and WuXi Biologics entered into the WuXi Biologics MSA, which was subsequently novated to the Company by Paragon on September 19, 2023 pursuant to the Novation Agreement. The WuXi Biologics MSA governs certain development activities and GMP manufacturing and testing for the SPY001 program, as well as potential future programs, on a work order basis. Under the WuXi Biologics MSA, the Company is obligated to pay WuXi Biologics a service fee and all non-cancellable obligations in the amount specified in each work order associated with the agreement for the provision of services.

The WuXi Biologics MSA terminates on the later of (i) June 20, 2027 or (ii) the completion of services under all work orders executed by the parties prior to June 20, 2027, unless terminated earlier. The term of each work order terminates upon completion of the services under such work order, unless terminated earlier. The Company can terminate the WuXi Biologics MSA or any work order at any time upon 30 days' prior written

notice and immediately upon written notice if WuXi Biologics fails to obtain or maintain required material governmental licenses or approvals. Either party may terminate a work order (i) at any time upon six months' prior notice with reasonable cause, provided however that if WuXi Biologics terminates a work order in such manner, no termination or cancellation fees shall be paid by the Company and (ii) immediately for cause upon (a) the other party's material breach that remains uncured for 30 days after notice of such breach, (b) the other party's bankruptcy or (c) a force majeure event that prevents performance for a period of at least 90 days.

Cell Line License Agreement

In April 2023, Paragon and WuXi Biologics entered into the Cell Line License Agreement, which was subsequently novated to the Company by Paragon pursuant to the Novation Agreement. Under the Cell Line License Agreement, the Company received a non-exclusive, worldwide, sublicensable license to certain of WuXi Biologics's know-how, cell line, biological materials (the "WuXi Biologics Licensed Technology") and media and feeds to make, have made, use, sell and import certain therapeutic products produced through the use of the cell line licensed by WuXi Biologics under the Cell Line License Agreement (the "WuXi Biologics Licensed Products"). Specifically, the WuXi Biologics Licensed Technology is used in certain manufacturing activities in support of the SPY001 program.

In consideration for the license, the Company agreed to pay WuXi Biologics a non-refundable license fee of $0.2 million. Additionally, if the Company manufactures all of its commercial supplies of bulk drug product with a manufacturer other than WuXi Biologics or its affiliates, the Company is required to make royalty payments to WuXi Biologics of less than one percent of global net sales of WuXi Biologics Licensed Products manufactured by a third-party manufacturer (the "Royalty"). If the Company manufactures part of its commercial supplies of the WuXi Biologics Licensed Products with WuXi Biologics or its affiliates, then the Royalty will be reduced accordingly on a pro rata basis.

The Cell Line License Agreement will continue indefinitely unless terminated (i) by the Company upon six months' prior written notice and our payment of all undisputed amounts due to WuXi Biologics through the effective date of termination, (ii) by WuXi Biologics for a material breach by the Company that remains uncured for 60 days after written notice, (iii) by WuXi Biologics if the Company fails to make a payment and such failure continues for 30 days after receiving notice of such failure, or (iv) by either party upon the other party's bankruptcy.

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our unaudited condensed consolidated financial statements and related notes included in Part I, Item 1 of this Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023 (this "Quarterly Report") as well as the audited consolidated financial statements and notes and Management's Discussion and Analysis of Financial Condition and Results of Operations, included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission ("SEC") on March 2, 2023. This discussion and other parts of this Quarterly Report contain forward-looking statements that involve risks and uncertainties, such as statements regarding our expected results, outcomes, and the timing of these results and outcomes, plans, objectives, expectations and intentions. Our actual results and outcomes could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this Quarterly Report entitled "Risk Factors." As used in this Quarterly Report, unless the context suggests otherwise, "we," "us," "our," "the Company" or "Aeglea" refers to Aeglea BioTherapeutics, Inc. and its subsidiaries, including Spyre Therapeutics, LLC.

Acquisition of Spyre

On June 22, 2023, we acquired Spyre pursuant to the Acquisition Agreement, by and among the Company, Aspen Merger Sub I, Inc., a Delaware corporation and a wholly owned subsidiary of the Company ("First Merger Sub"), Sequoia Merger Sub II, LLC, a Delaware limited liability company and wholly owned subsidiary of the Company ("Second Merger Sub"), and Spyre. Pursuant to the Acquisition Agreement, First Merger Sub merged with and into Spyre, pursuant to which Spyre was the surviving corporation and became a wholly owned subsidiary of the Company (the "First Merger"). Immediately following the First Merger, Spyre merged with and into Second Merger Sub, pursuant to which the Second Merger Sub became the surviving entity. Spyre was a pre-clinical stage biotechnology company that was incorporated on April 28, 2023 under the direction of Peter Harwin, a Managing Member of Fairmount, for the purpose of holding rights to certain intellectual property being developed by Paragon. Fairmount is a founder of Paragon.

Through the Asset Acquisition, we received the Option to license the IPR&D related to four research programs. On July 12, 2023 we exercised the Option with respect to one of these research programs to exclusively license intellectual property rights related to such research program directed to antibodies that selectively bind to α4β7 integrin and methods of using these antibodies, including methods of treating inflammatory bowel disease ("IBD") using SPY001. If this research program is pursued non-provisionally and matures into issued patents, we would expect those patents to expire no earlier than 2044, subject to any disclaimers or extensions. The license agreement pertaining to such research program is currently being finalized on previously agreed terms. Furthermore, as of the Quarterly Report, the Option remains unexercised with respect to the IPR&D related to the three remaining research programs under the Paragon Agreement.

Overview

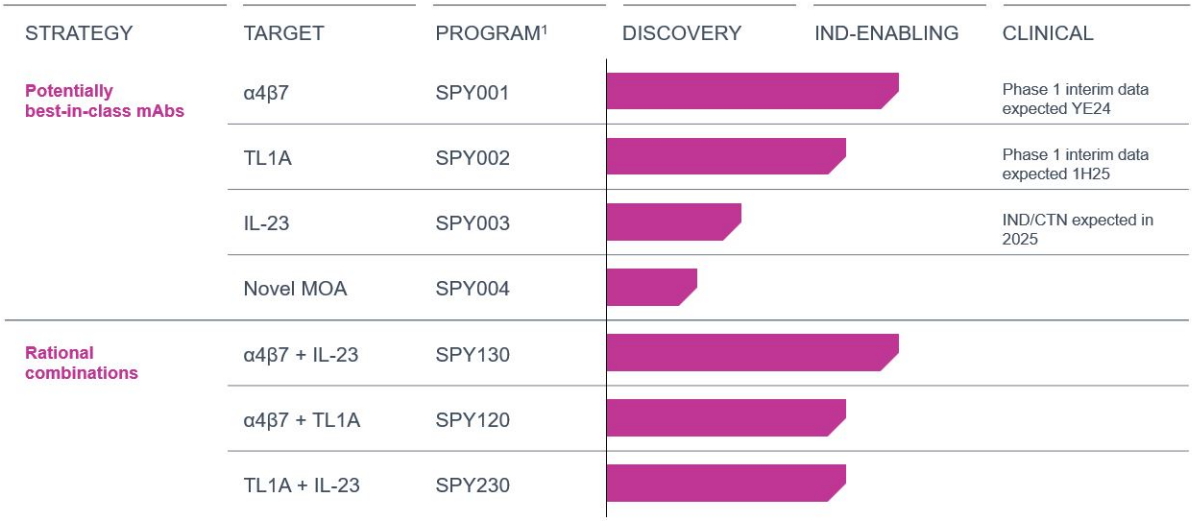
Following the Asset Acquisition, we have significantly reshaped the business into a preclinical stage biotechnology company focused on developing next generation therapeutics for patients living with IBD, including ulcerative colitis ("UC") and Crohn's disease ("CD"). Through the Paragon Agreement, our portfolio of novel and proprietary monoclonal antibody product candidates has the potential to address unmet needs in IBD care by improving efficacy, safety, and/or dosing convenience relative to products currently available or product candidates in development. We have engineered our product candidates with the aim to bind potently and selectively to their target epitopes and to exhibit extended pharmacokinetic half-lives. We plan to use combinations of our proprietary antibodies and patient enrichment strategies via patient selection approaches to enhance efficacy. We intend to deliver our product candidates through convenient, infrequently self-administered, subcutaneous ("SC") injections as a pre-filled pen.

In accordance with ASC 205-40, Going Concern, we have evaluated and determined that there are conditions and events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date the accompanying condensed consolidated financial statements included in this Quarterly Report are issued. If our stockholders do not timely approve the conversion of our Series A Preferred Stock, then the holders of our Series A Preferred Stock may be entitled to require us to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A

Preferred Stock, as described in our Certificate of Designation relating to the Series A Preferred Stock. The cash redemption is not under our control and raises substantial doubt about our ability to continue as a going concern. The accompanying condensed consolidated financial statements assume the Company will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Our Portfolio

We are advancing a broad pipeline of potentially best-in-class monoclonal antibodies ("mAbs") for the treatment of IBD in connection with the research programs with respect to which we have exercised the Option to exclusively license all of Paragon's right, title, and interest in, including all intellectual property license rights to, or have the Option to acquire such intellectual property and other rights to pursuant to the Paragon Agreement and plan to develop patient selection approaches for each program. The following table summarizes these programs:



[1]We exercised our Option to license worldwide rights from Paragon for the SPY001 program. We continue to hold the Option to license similar rights from Paragon for certain other programs. We expect the SPY003 license to be restricted to IBD, and we expect other potential program licenses related to the Option to be indication agnostic.

Although we hold the Option to acquire intellectual property license rights related to the SPY002, SPY003 and SPY004 programs, such Option remains unexercised.

For a discussion of the risks associated with our portfolio, see the section of this report entitled "Risk Factors."

SPY001 – anti-α4β7 mAb

Our most advanced product candidate, SPY001, is a highly potent, highly selective, and fully human monoclonal immunoglobulin G1 antibody designed to bind selectively to the α4β7 integrin. The α4β7 integrin is a protein found on the surface of immune cells known as lymphocytes. This integrin regulates the migration of lymphocytes to the gut where they contribute to the inflammatory process in IBD. By selectively binding to the α4β7 integrin, SPY001 is designed to prevent the interaction of these lymphocytes with MAdCAM-1, a molecule expressed on endothelial cells lining the blood vessels in the gut. This interaction is responsible for guiding lymphocytes from the bloodstream into the gut tissue, where they cause inflammation. By blocking the interaction between α4β7 integrin and MAdCAM-1, SPY001 aims to reduce the recruitment of lymphocytes to the gut, leading to a decrease in inflammation. Since it specifically targets the gut immune system, SPY001 is designed to help minimize systemic immunosuppressive effects unrelated to IBD pathology. SPY001 is currently progressing through IND-enabling studies and is expected to enter first-in-human ("FIH") studies in the first half of 2024. Interim data from a healthy volunteer study are expected by the end of 2024.

SPY002 – anti-TL1A mAb

Our co-lead product candidate, SPY002, is a highly potent, highly selective, and fully human mAb designed to bind to tumor necrosis factor-like ligand 1A (“TL1A”). TL1A is a protein that plays a role in regulating the immune system and is elevated in the gut tissue of individuals with IBD. TL1A interacts with its receptor, death receptor 3 (“DR3”), which is expressed in various immune cells, including T cells. This interaction triggers signaling pathways that contribute to inflammation and immune system activation, leading to IBD symptomology. SPY002 has been designed to block the interaction between TL1A and DR3 and thereby inhibit the downstream signaling events and dampen the inflammatory response. By neutralizing TL1A, we believe SPY002 has the potential to modulate the immune response in IBD patients, potentially reducing disease activity and promoting mucosal healing. Our extensive discovery campaign has identified lead clones which bind TL1A monomers and trimers with picomolar affinity and exhibit extended pharmacokinetic half-lives relative to competitive molecules in clinical development. We expect to begin FIH studies of the SPY002 program in the second half of 2024 with healthy volunteer interim data expected in the first half of 2025.

SPY003 – anti-IL-23 mAb

Our third program, SPY003, is a discovery stage program designed to bind to Interleukin 23 (“IL-23”). IL-23 is a cytokine that is produced by immune cells and is involved in immune response regulation. IL-23 promotes the survival, expansion, and activity of Th17 cells. Th17 cells produce other inflammatory cytokines, such as IL-17, which contribute to the inflammation seen in IBD. IL-23 also helps in the recruitment and activation of other immune cells, such as neutrophils, which further contribute to tissue damage in the gut. We are continuing our preclinical development efforts with the SPY003 program and an IND/CTN is expected in 2025.

SPY004 – novel MOA mAb

SPY004 is an undisclosed novel mechanism of action ("MOA") and incorporates half-life extension modifications.

Our combination programs – SPY120, SPY130, and SPY230

We aim to advance certain rational combinations of our therapeutic antibodies into clinical studies. SPY120 combines SPY001 (α4β7) and SPY002 (TL1A), SPY130 combines SPY001 (α4β7) and SPY003 (IL-23), and SPY230 combines SPY002 (TL1A) and SPY003 (IL-23). We believe these combinations target orthogonal biology and could lead to greater remission rates in IBD.

Our Precision Immunology Approach

We aim to develop genetic- or biomarker-based patient selection approaches across our portfolio of therapeutics to aid patients and physicians in selecting the optimal treatment regimen. We are in discussions with potential partners with access to large scale IBD biobanks to support CDx development across our portfolio.

Our Relationship with Paragon and Parapyre

Paragon and Parapyre each beneficially owns less than 5% of our capital stock through their respective holdings of our common stock and Series A Preferred Stock. Fairmount beneficially owns more than 5% of our capital stock, has two seats on our Board and beneficially owns more than 5% of Paragon, which is a joint venture between Fairmount and Fair Journey Biologics. Fairmount appointed Paragon's board of directors and has the contractual right to approve the appointment of any executive officers. Parapyre is an entity formed by Paragon as a vehicle to hold equity in Spyre in order to share profits with certain employees of Paragon.

In connection with the Asset Acquisition, Aeglea assumed the rights and obligations of Spyre under the Paragon Agreement. Under the Paragon Agreement, Aeglea is obligated to compensate Paragon on a quarterly basis for its services performed under each research program based on the actual costs incurred with mark-up costs pursuant to the terms of the Paragon Agreement. As of the date of the Asset Acquisition, Spyre had incurred total expenses of $19.0 million under the Paragon Agreement since inception, inclusive of a $3.0

million research initiation fee that was due upon signing of the Paragon Agreement and $16.0 million of reimbursable expenses under the Paragon Agreement for historical costs owed to Paragon. As of the acquisition date, $19.0 million was unpaid and was assumed by Aeglea through the Asset Acquisition. As of September 30, 2023, $0.5 million of the assumed Paragon liability remained unpaid.

For the three and nine months ended September 30, 2023, we recognized $19.4 million and $20.8 million, respectively, in research and development expenses that are due to Paragon under the Paragon Agreement. As of September 30, 2023, $16.8 million was unpaid and owed to Paragon under the Paragon Agreement.

In July 2023, we exercised our option for the SPY001 program, and the remaining three options for the SPY002, SPY003, SPY004 programs remain outstanding.

In connection with the Asset Acquisition, we assumed the Parapyre Option Obligation which provided for an annual equity grant of options to purchase 1% of the then outstanding shares of Spyre's common stock, on a fully diluted basis, on the last business day of each calendar year during the term of the Paragon Agreement, at the fair market value determined by the board of directors of Spyre. As a result of the Asset Acquisition the Parapyre Option Obligation shall continue and Parapyre shall be entitled to receive equivalent shares from us with the same terms. As of September 30, 2023, the pro-rated estimated fair value of the options was approximately $3.0 million, of which $0.1 million was recognized as part of the liabilities assumed with the Asset Acquisition. For the three and nine months ended September 30, 2023, $2.7 million and $2.9 million, respectively, was recognized as stock compensation expense related to the Parapyre Option Obligation.

Corporate Developments

In July 2023, we announced that we had entered into an agreement to sell the global rights to pegzilarginase, an investigational treatment for the rare metabolic disease Arginase 1 Deficiency, to Immedica for $15 million in upfront cash proceeds and up to $100 million in contingent milestone payments. The sale of pegzilarginase to Immedica superseded and terminated the previous license agreement between us and Immedica.

On August 30, 2023, our Board of Directors appointed Scott Burrows to succeed Jonathan Alspaugh as our Chief Financial Officer effective September 1, 2023. Mr. Burrows also succeeded Mr. Alspaugh as our principal financial officer and principal accounting officer on the effective date.

On September 1, 2023, Heidy Abreu King-Jones was appointed as Chief Legal Officer and Corporate Secretary.

On October 6, 2023, our Board of Directors appointed Dr. Cameron Turtle, our Chief Operating Officer, as our principal executive officer effective the same day.

Restructuring

During the second quarter of 2023, we implemented a restructuring plan based on the review of the inconclusive interim results from our Phase 1/2 clinical trial of pegtarviliase for the treatment of classical homocystinuria and other business considerations, as well as our plan to explore strategic alternatives. Under the restructuring plan, our workforce was reduced by 83%, various lab equipment, consumables, and furniture and fixtures were sold, and our corporate headquarters lease in Austin, TX was abandoned. All charges related to the restructuring activities was recognized during the second quarter of 2023. No further restructuring charges will be incurred under the restructuring plan.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. These estimates form the basis for judgments we make about the carrying values of our assets, liabilities and equity and the amount of revenues and expenses, which are not readily apparent from other sources. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. On an ongoing

basis, we evaluate our estimates and assumptions. Our actual results may differ materially from these estimates under different assumptions or conditions.

Our critical accounting policies are those policies which require the most significant judgments and estimates in the preparation of our condensed consolidated financial statements. The most significant estimates and assumptions that management considers in the preparation of our financial statements relate to accrued research and development costs; the valuation of consideration transferred in acquiring IPR&D; the discount rate, probabilities of success, and timing of estimated cash flows in the valuation of the CVR liability; inputs used in the Black-Scholes model for stock-based compensation expense; estimated future cash flows used in calculating the impairment of right-of-use lease assets; and estimated cost to complete performance obligations related to revenue recognition. The consideration transferred in acquiring IPR&D in connection with the acquisition of Spyre was comprised of our common stock and shares of Series A Preferred Stock. To determine the fair value of the equity transferred, we considered the per share value of the PIPE, which was an over-subscribed financing event involving a group of accredited investors. Our significant accounting policies are more fully described in Note 2 to our condensed consolidated financial statements appearing elsewhere in this quarterly report.

Other than as disclosed in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, there have been no significant changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in "Management's Discussion and Analysis of Financial Condition and Operations" included in our Annual Report on Form 10-K for the year ended December 31, 2022.

Results of Operations

Comparison of the Three Months Ended September 30, 2023 and 2022

The following table summarizes our results of operations for the three months ended September 30, 2023 and 2022, together with the changes in those items in dollars and as a percentage:

	Three Months Ended September 30,		Dollar Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenue:				
Development fee and royalty	$ —	$ 174	$ (174)	(100)%
Total revenue	—	174	(174)	(100)%
Operating expenses (income):				
Research and development	24,660	11,977	12,683	106 %
General and administrative	8,584	6,952	1,632	23 %
Acquired in-process research and development	(298)	—	(298)	*
Gain on sale of in-process research and development asset	(14,609)	—	(14,609)	*
Total operating expenses	18,337	18,929	(592)	*
Loss from operations	(18,337)	(18,755)	418	*
Interest income	1,251	288	963	*
Change in fair value of forward contract liability	(25,360)	—	(25,360)	*
Other income, net	2,342	24	2,318	*
Loss before income tax expense	(40,104)	(18,443)	(21,661)	*
Income tax (expense) benefit	(3)	209	(212)	*
Net loss	$ (40,107)	$ (18,234)	$ (21,873)	*

* Percentage not meaningful

Development Fee and Royalty Revenue. For the three months ended September 30, 2023, we did not recognize any revenue in connection with the Immedica Agreement. For the three months ended September 30,

2022, we recognized $0.2 million of development fee revenue in connection with the Immedica Agreement, which was attributable to the PEACE Phase 3 trial and BLA package.

Research and Development Expenses. Our Research and development expenses incurred during the three months ended September 30, 2023 primarily related to costs associated with advancing our IBD pipeline and with winding down our legacy rare disease clinical studies. Wind down costs include final patient visits, collection and analysis of final patient data, the creation and submission of final research reports, site and pharmacy closeouts, and formally closing the studies with regulatory agencies. Research and development expenses increased by $12.7 million, or 106%, to $24.7 million for the three months ended September 30, 2023, from $12.0 million for the three months ended September 30, 2022. The change in research and development expenses was primarily due to a $22.4 million increase in preclinical development and manufacturing expenses for our IBD pipeline, partially offset by a $10.0 million decrease in expenses associated with the legacy Aeglea rare disease pipeline.

General and Administrative Expenses. General and administrative expenses increased by $1.6 million, or 23%, to $8.6 million for the three months ended September 30, 2023, from $7.0 million for the three months ended September 30, 2022. The increase in general and administrative expenses was primarily due to a $1.1 million increase in legal costs and a $0.6 million increase in employee separation costs.

Gain on Sale of In-Process Research and Development Asset. Gain on sale of in-process research and development asset during the three months ended September 30, 2023 was due to the gain recognized on the sale of pegzilarginase to Immedica. There was no similar gain or loss during the three months ended September 30, 2022.

Change in Fair Value of Forward Contract Liability. Non-cash expenses associated with the change in fair value of the forward contract liability were $25.4 million for the three months ended September 30, 2023. This expense was due to the change in fair value of the underlying Series A Preferred Stock between June 30, 2023 and the forward contract's settlement on July 7, 2023. There was no similar expense during the three months ended September 30, 2022.

Comparison of the Nine Months Ended September 30, 2023 and 2022

The following table summarizes our results of operations for the nine months ended September 30, 2023 and 2022, together with the changes in those items in dollars and as a percentage:

	Nine Months Ended September 30,		Dollar Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenue:				
Development fee and royalty	$ 886	$ 2,161	$ (1,275)	(59)%
Total revenue	886	2,161	(1,275)	(59)%
Operating expenses (income):				
Research and development	55,822	44,328	11,494	26 %
General and administrative	25,874	23,452	2,422	10 %
Acquired in-process research and development	130,188	—	130,188	*
Gain on sale of in-process research and development asset	(14,609)	—	(14,609)	*
Total operating expenses	197,275	67,780	129,495	*
Loss from operations	(196,389)	(65,619)	(130,770)	*
Interest income	2,021	427	1,594	*
Change in fair value of forward contract liability	(83,530)	—	(83,530)	*
Other income, net	2,262	25	2,237	*
Loss before income tax expense	(275,636)	(65,167)	(210,469)	*
Income tax benefit	26	174	(148)	*
Net loss	$ (275,610)	$ (64,993)	$ (210,617)	*

* Percentage not meaningful

Development Fee and Royalty Revenue. For the nine months ended September 30, 2023, we recognized $0.9 million of revenue in connection with the Immedica Agreement. The revenue generated was attributable to the PEACE Phase 3 trial and drug supply and royalties from an early access program in France. For the nine months ended September 30, 2022, we recognized $2.2 million of development fee revenue in connection with the Immedica Agreement, which was attributable to the PEACE Phase 3 trial and BLA package.

Research and Development Expenses. Our research and development expenses incurred during the nine months ended September 30, 2023 were primarily related to clinical study costs associated with our legacy assets, costs associated with the wind down of those legacy assets, and costs associated with furthering our IBD pipeline candidates. Wind down costs included final patient visits, collection and analysis of final patient data, the creation and submission of final research reports, site and pharmacy closeouts, and formally closing the studies with regulatory agencies. Research and development expenses increased by $11.5 million, or 26%, to $55.8 million for the nine months ended September 30, 2023, from $44.3 million for the nine months ended September 30, 2022. The change in research and development expenses was primarily due to:

- a $23.6 million increase in preclinical development and manufacturing expenses for our IBD pipeline;
- a $2.4 million increase in restructuring costs net of savings; partially offset by
- a $14.5 million decrease in activities associated with the legacy Aeglea rare disease pipeline.

General and Administrative Expenses. General and administrative expenses increased by $2.4 million, or 10%, to $25.9 million for the nine months ended September 30, 2023, from $23.5 million for the nine months ended September 30, 2022. The increase in general and administrative expenses was primarily due to a $2.6 million increase in restructuring costs, net of restructuring savings, coupled with a $1.1 million increase in legal fees and a $0.5 million increase in employee separation costs, partially offset by a $1.8 million decrease in legacy commercial readiness activities.

Gain on Sale of In-Process Research and Development Asset. Gain on sale of in-process research and development asset during the nine months ended September 30, 2023 was due to the gain recognized on the sale of pegzilarginase to Immedica. There was no similar gain or loss during the nine months ended September 30, 2022.

Acquired In-process Research and Development Expenses. Acquired in-process research and development expenses were $130.2 million for the nine months ended September 30, 2023, as the Spyre transaction was determined by management to be an asset acquisition, in accordance with U.S. GAAP as the product candidates were determined to have no alternative future use. There was no similar expense during the nine months ended September 30, 2022.

Change in Fair Value of Forward Contract Liability. Non-cash expenses associated with the change in fair value of the forward contract liability were $83.5 million for the nine months ended September 30, 2023. This expense was due to the change in fair value of the underlying Series A Preferred Stock between June 22, 2023 and the forward contract's settlement on July 7, 2023. There was no similar expense during the nine months ended September 30, 2022.

Liquidity and Capital Resources

Sources of Liquidity

We are a preclinical stage biotechnology company with a limited operating history, and due to our significant research and development expenditures, we have generated operating losses since our inception and have not generated any revenue from the sale of any products. Since our inception and through September 30, 2023, we have funded our operations primarily by raising an aggregate of approximately $716.2 million of gross proceeds from the sale and issuance of convertible preferred stock and common stock, pre-funded warrants, the collection of grant proceeds, and the licensing of our product rights for commercialization of pegzilarginase in Europe and certain countries in the Middle East.

In July 2020, we filed and the SEC declared effective a shelf registration statement on Form S-3 (the "2020 Registration Statement") for the potential offering, issuance and sale by us of up to $400.0 million of our

common stock, preferred stock, debt securities, warrants, subscription rights and units consisting of all or some of these securities.

In March 2021, we entered into the Immedica Agreement, pursuant to which Immedica licensed from us the product rights for commercialization of pegzilarginase in the European Economic Area, United Kingdom, Switzerland, Andorra, Monaco, San Marino, Vatican City, Turkey, Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Bahrain, and Oman. In April 2021, we received an upfront payment of $21.5 million from Immedica. Under the terms of the Immedica Agreement, we were also eligible to receive regulatory and commercial milestone payments and entitled to receive royalties in the mid-20% range on the net sales of the Product in countries included in the Immedica Agreement. In July 2021, the Immedica Agreement was modified to include additional development services of up to $3.0 million, to support the PEACE Phase 3 trial and the BLA package performance obligation. On July 27, 2023, we announced that we had entered into an agreement to sell the global rights to pegzilarginase to Immedica for $15.0 million in upfront cash proceeds and up to $100.0 million in contingent milestone payments. The sale of the global rights to pegzilarginase to Immedica superseded and terminated the previous license agreement between us and Immedica.

In May 2022, we sold 430,107 shares of common stock and pre-funded warrants to purchase up to 694,892 shares of common stock in a registered direct offering (the "2022 RDO"), for gross proceeds of $45.0 million, resulting in net proceeds of $42.9 million after deducting placement agent fees and offering costs. The shares of common stock and pre-funded warrants sold in the 2022 RDO were offered pursuant to the 2020 Registration Statement.

Also in May 2022, we entered into a sales agreement (the "2022 Sales Agreement") with JonesTrading Institutional Services LLC, as sales agent, to issue and sell shares of our common stock for an aggregate offering price of $60.0 million under an at-the-market offering program with JonesTrading Institutional Services LLC. As of the date of the filing of this report, $60.0 million of our common stock remained available for sale pursuant to the 2022 Sales Agreement. Any sales of common stock to be sold under the 2022 Sales Agreement will be made pursuant to the 2020 Registration Statement.

In connection with the Asset Acquisition, in June 2023, we completed a PIPE transaction under which we sold shares of Series A Preferred Stock to a group of Investors. We sold an aggregate of 721,452 shares of Series A Preferred Stock for an aggregate purchase price of approximately $210.0 million, before deducting placement agent and other offering expenses of approximately $12.7 million.

Our primary use of cash is to fund the development of our product candidates, and advance our pipeline. This includes both the research and development costs and the general and administrative expenses required to support those operations. Since we are a preclinical stage biotechnology company, we have incurred significant operating losses since our inception and we anticipate such losses, in absolute dollar terms, to increase as we pursue clinical development of our product candidates, prepare for the potential commercialization of our product candidates, and expand our development efforts in our pipeline of nonclinical candidates.

Future Funding Requirements and Operational Plan

Due to our significant research and development expenditures, we have generated substantial losses in each period since inception. We have an accumulated deficit of $701.2 million as of September 30, 2023. We anticipate that we will continue to generate losses into the foreseeable future as we develop our product candidates, seek regulatory approval of those candidates and begin to commercialize any approved products. Until such time as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity or debt financings, research grants, collaborations, license and development agreements, or other sources. We currently have no debt, credit facility or additional committed capital. To the extent that we raise additional equity, the ownership interest of our stockholders will be diluted.

Based on our available cash, cash equivalents, and marketable securities of $203.6 million as of September 30, 2023, we have evaluated and determined that there are conditions and events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date the accompanying condensed consolidated financial statements included in this Quarterly Report are issued. Our Series A Preferred Stock agreement requires us to seek stockholder approval for the conversion of the Series A Preferred Stock to common stock. We have agreed to hold a stockholders' meeting to submit this matter to our stockholders for their consideration. In connection with this, we filed with the SEC a definitive proxy statement and other relevant materials. The special meeting of stockholders is scheduled for November

21, 2023. If our stockholders do not timely approve the conversion of our Series A Preferred Stock, then the holders of our Series A Preferred Stock may be entitled to require us to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A Preferred Stock, as described in the Certificate of Designation relating to the Series A Preferred Stock. The cash redemption is not under our control and raises substantial doubt about our ability to continue as a going concern. The accompanying condensed consolidated financial statements assume we will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Nine Months Ended September 30,	
	2023	**2022**
Net cash, cash equivalents, and restricted cash (used in) provided by:		
Operating activities	$ (68,874)	$ (62,004)
Investing activities	(73,121)	43,008
Financing activities	197,471	42,686
Effect of exchange rate on cash, cash equivalents, and restricted cash	7	(152)
Net increase in cash, cash equivalents, and restricted cash	$ 55,483	$ 23,538

Cash Used in Operating Activities

Cash used in operating activities for the nine months ended September 30, 2023 was $68.9 million and reflected a net loss of $275.6 million. Our net loss was offset in part by non-cash expenses of $130.2 million for acquired IPR&D, $83.5 million change in fair value of forward contract liability, $8.4 million in stock-based compensation, $2.6 million impairment loss on lease abandonment, $1.0 million in depreciation and amortization, and a $0.9 million loss on disposal of long-lived assets. The net change in operating assets and liabilities of $1.2 million was primarily due to a $2.3 million decrease in operating lease liabilities primarily due to the termination of the Las Cimas lease, a $4.0 million decrease in accrued and other liabilities and a $2.1 million decrease in related party payable, partially offset by a $3.3 million increase in prepaid expenses and other assets, a $1.0 million increase in accounts payable, a $0.6 million increase in deferred revenue, and a $0.2 million increase in development receivables.

Cash used in operating activities for the nine months ended September 30, 2022 was $62.0 million and reflected a net loss of $65.0 million. Our net loss was offset in part by non-cash expense of $5.7 million for stock-based compensation and $1.5 million for depreciation and amortization. The net change in operating assets and liabilities of $4.3 million was primarily related to a $2.9 million increase in prepaid expenses and other assets and a $1.3 million decrease in accrued and other liabilities.

Cash Provided by Investing Activities

Cash used in investing activities for the nine months ended September 30, 2023 was $73.1 million and primarily consisted of $112.6 million in purchases of marketable securities, partially offset by $21.0 million in maturities and sales of marketable securities, $15.0 million in proceeds from the sale of in-process research & development asset, and $3.0 million cash assumed from the Asset Acquisition.

Cash provided by investing activities for the nine months ended September 30, 2022 was $43.0 million and consisted of $78.0 million in maturities and sales of marketable securities, partially offset by $35.0 million in purchases of marketable securities.

Cash Provided by Financing Activities

Cash provided by financing activities for the nine months ended September 30, 2023 was $197.5 million, which primarily consisted of the net proceeds from the issuance of the Series A Preferred Stock in the PIPE.

Cash provided by financing activities for the nine months ended September 30, 2022 was $42.7 million, which primarily consisted of $42.9 million from the registered direct offering of our common stock and pre-funded warrants in May 2022, net of placement agent fees and offering costs, and $0.2 million from the sale of common stock under our 2016 Employee Stock Purchase Plan, partially offset by $0.4 million in principal payments made on our finance lease obligations.

Contractual Obligations and Other Commitments

Through the Asset Acquisition, we received the Option to license the IPR&D related to four research programs. On July 12, 2023, we exercised the Option with respect to one of these research programs. The exercise of the Option obligates us to pay Paragon up to $22.0 million based on specific clinical and regulatory milestones. As of September 30, 2023, none of the $22.0 million obligation was accrued for since the likelihood of achieving those milestones was not determined to be probable. As of the date of the filing of this Quarterly Report, the Option remains unexercised with respect to the three remaining research programs under the Paragon Agreement. Should the Option for these research programs be exercised, we would be obligated to pay Paragon up to $22.0 million per research program based on certain clinical and regulatory milestones.

We have entered into agreements in the normal course of business with contract research organizations for clinical trials and contract manufacturing organizations, and with vendors for nonclinical research studies and other services and products for operating purposes. These contractual obligations are cancelable at any time by us, generally upon 30 to 60 days' prior written notice to the vendor.

Recently Adopted Accounting Pronouncements

We early adopted the Financial Accounting Standards Board's Accounting Standards Update 2020-06, Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), effective as of January 1, 2023, using the modified retrospective method. Among other amendments, ASU 2020-06 eliminates the cash conversion and beneficial conversion feature models in ASC 470-20 that required an issuer of certain convertible debt and preferred stock to separately account for embedded conversion features as a component of equity, as well as changes the accounting for diluted earnings-per-share for convertible instruments and contracts that may be settled in cash or stock. Additionally, ASU 2020-06 requires the if-converted method, which is more dilutive than the treasury stock method, be used for all convertible instruments. We applied ASU 2020-06 to all Series A Preferred Stock during fiscal year 2023, and, accordingly, we did not apply the cash conversion or beneficial conversion feature models in our analysis of the Series A Preferred Stock.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risks in the ordinary course of our business. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of United States interest rates, particularly because our investments are in marketable securities. Our marketable securities are subject to interest rate risk and could fall in value if market interest rates increase. However, we believe that our exposure to interest rate risk is not significant as the majority of our investments are short-term in duration and have a low risk profile. A hypothetical 10% change in interest rates is not expected to have a material effect on the total market value of our investment portfolio. We have the ability to hold our marketable securities until maturity, and therefore, we would not expect our operating results or cash flows to be materially impacted by a change in market interest rates on our investments.

As of September 30, 2023, we held $203.6 million in cash, cash equivalents, and marketable securities, predominantly all of which was denominated in U.S. dollars, and consisted primarily of investments in money market funds, commercial paper, and corporate bonds.

We are also exposed to market risk related to changes in foreign currency exchange rates as a result of our entering into transactions denominated in currencies other than U.S. dollars. Due to the uncertain timing of expected payments in foreign currencies, we do not utilize any forward exchange contracts. All foreign transactions settle on the applicable spot exchange basis at the time such payments are made. For the nine months ended September 30, 2023, a majority of our expenditures were denominated in U.S. dollars. A hypothetical 10% change in foreign exchange rates during any of the periods presented would not have had a material impact on our consolidated financial statements.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated, as of the end of the period covered by this Quarterly Report on Form 10-Q, the effectiveness of our disclosure controls and procedures. Based on the foregoing evaluation of our disclosure controls and procedures, as of September 30, 2023, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act are recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended September 30, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. – Other Information

Item 1. Legal Proceedings

From time to time, we may become involved in legal proceedings relating to claims arising from the ordinary course of business. Our management believes that there are currently no claims or actions pending against us, the ultimate disposition of which could have a material adverse effect on our results of operations, financial condition or cash flows.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, operating results and prospects could be materially harmed. In that event, the price of our common stock could decline, and you could lose part or all of your investment.

Risk Factor Summary

Risks Related to Our Financial Condition and Capital Requirements

- There is no guarantee that our acquisition of Spyre will increase stockholder value.
- We will not be able to continue as a going concern if we are unable to raise additional capital when needed.
- We have never generated any revenue from product sales and may never be profitable.
- We anticipate that we will continue to incur significant losses for the foreseeable future.
- We may not be able to raise the capital that we need to support our business plans and raising additional capital may cause dilution to our stockholders and restrict our operations.

Risks Related to the Discovery, Development and Commercialization

- We face competition from companies that have developed or may develop competing programs.
- Our programs are in preclinical stages of development and may fail in development or suffer delays.
- We are substantially dependent on the success of the SPY001 and SPY002 programs.
- We may fail to achieve our projected development goals in the time frames we announce and expect.
- We may not be successful in our efforts to build a pipeline of programs with commercial value.
- Our studies and trials may not be sufficient to support regulatory approval of any of our programs.
- We may encounter difficulties enrolling patients in our future clinical trials.
- Preliminary or “topline” data from our clinical trials may change as more data becomes available.
- Our future clinical trials may reveal significant adverse events or side effects.
- We may fail to capitalize on more profitable or potentially successful programs than those we pursue.
- Any of our future approved products may not achieve regulatory approval, market acceptance or commercial success.
- Certain of our programs may compete with our other programs.
- The FDA may not accept data from clinical trials we conduct at sites outside the United States.

Risks Related to Government Regulation

- FDA and comparable foreign regulatory approval processes are lengthy and time-consuming and we may not be able to obtain, or may be delayed in obtaining, regulatory approvals for our programs.
- We may not be able to meet requirements for chemistry, manufacturing and control of our programs.
- Our programs may face competition sooner than anticipated.
- Even if we receive regulatory approval, we will be subject to extensive ongoing regulatory obligations.
- We may face difficulties from healthcare legislative reform measures.
- Our operations and arrangements with third-parties are subject to healthcare regulatory laws.
- We may be unable to offer programs at competitive prices.
- We may face criminal liability or other consequences for violations of U.S. and foreign trade regulations.
- Foreign governments may impose strict price controls, which may adversely affect our revenue.
- Any Fast Track Designation we may pursue may not hasten development or regulatory review.

Risks Related to Our Intellectual Property

- Our ability to protect our patents and other proprietary rights is uncertain.
- We may fail in obtaining or maintaining necessary rights to our programs.
- We may be subject to patent infringement claims or may need to file such claims.
- We may subject to claims of wrongful hiring of employees or wrongful use of confidential information.
- Our patents and our ability to protect our products may be impaired by changes to patent laws.
- Our patent protection could be reduced or eliminated for non-compliance with regulatory requirements.
- We may fail to identify or interpret relevant third-party patents.
- We may become subject to claims challenging the inventorship or ownership of our intellectual property.
- Patent terms may be inadequate to protect our competitive position of our programs.
- Our technology licensed from various third parties may be subject to retained rights.

Risks Related to Our Reliance on Third Parties

- We may fail to maintain collaborations and licensing arrangements with third parties that we rely on.
- Third-parties we rely on for preclinical studies and clinical trials may fail to carry out their contractual duties.
- We may be unable to use third-party manufacturing sites or our third-party manufacturers may encounter difficulties in production.

Risks Related to Employee Matters, Managing Growth and Other Risks Related to Our Business

- We may experience difficulties in managing the growth of our organization.
- We may fail to attract or retain highly qualified personnel.
- Our ability to operate in foreign markets is subject to regulatory burdens, risks and uncertainties.
- Our employees or third-parties may engage in misconduct or other improper activities.
- We may be impacted by security or data breaches or other improper access to our data.
- Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.
- We may fail to comply with privacy and data security regulations.
- We may fail to comply with environmental, health and safety laws and regulations.
- We may be subject to adverse legislative or regulatory tax changes.
- We may fail to realize the benefits of our business or product acquisitions or our strategic alliances.
- We may be impacted by the failure of financial institutions.

Risks Related to Our Common Stock

- We may fail to obtain stockholder approval of the conversion of our Series A Preferred Stock.
- We may fail to meet the continued listing requirements of The Nasdaq Capital Market and our common stock could be delisted.
- Our certificate of incorporation, Delaware law and certain contracts include anti-takeover provisions.
- Our certificate of incorporation and bylaws contain exclusive forum provisions.
- We do not anticipate paying any dividends in the foreseeable future.
- Future sales of shares by existing stockholders could cause our stock price to decline.
- Future sales and issuances of equity and debt could result in additional dilution to our stockholders.
- Our principal stockholders own a significant percentage of our stock.

General Risk Factors

- The market price of our Common Stock has historically been volatile and may drop in the future.
- We incur significant costs as associated with complying with public company reporting requirements.
- A lack of analyst coverage may cause a decline in our stock price or trading volume. We may fail to maintain proper and effective internal controls.

Risks Related to Our Financial Condition and Capital Requirements

There is no guarantee that our Asset Acquisition will increase stockholder value.

In June 2023, we acquired Spyre. We cannot guarantee that implementing the Asset Acquisition and related transactions will not impair stockholder value or otherwise adversely affect our business. The Asset Acquisition poses significant integration challenges between our businesses and management teams which

could result in management and business disruptions, any of which could harm our results of operation, business prospects, and impair the value of the Asset Acquisition to our stockholders.

We will need to raise additional capital, and if we are unable to do so when needed, we will not be able to continue as a going concern.

This Quarterly Report includes disclosures regarding our management's assessment of our ability to continue as a going concern. As of September 30, 2023, we had $203.6 million of cash, cash equivalents, and marketable securities. We will need to raise additional capital to continue to fund our operations and service our debt obligations in the future. If we are unable to raise additional capital when needed, we will not be able to continue as a going concern. If our stockholders do not timely approve the conversion of our Series A Preferred Stock, then the holders of our Series A Preferred Stock may be entitled to require us to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A Preferred Stock, as described in our certificate of designation relating to the Series A Preferred Stock. We expect we would have sufficient liquidity to settle a significant amount of the Series A Preferred Stock if required to do so. However, the cash redemption is not under our control and raises substantial doubt about our ability to continue as a going concern. The accompanying condensed consolidated financial statements assume the Company will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Developing our product candidates requires a substantial amount of capital. We expect our research and development expenses to increase in connection with our ongoing activities, particularly as we advance our product candidates through clinical trials. We will need to raise additional capital to fund our operations and such funding may not be available to us on acceptable terms, or at all, and such funding may become even more difficult to obtain due to rising interest rates and the current downturn in the U.S. capital markets and the biotechnology sector in general. Competition for additional capital among biotechnology companies may be particularly intense during this present economic downturn. We may be unable to raise capital through public offerings of our common stock and may need to turn to alternative financing arrangements. Such arrangements, if we pursue them, could involve issuances of one or more types of securities, including common stock, preferred stock, convertible debt, warrants to acquire common stock or other securities. These securities could be issued at or below the then prevailing market price for our common stock. In addition, if we issue debt securities, the holders of the debt would have a claim to our assets that would be superior to the rights of stockholders until the principal, accrued and unpaid interest and any premium or make-whole has been paid. Interest on any newly-issued debt securities and/or newly-incurred borrowings would increase our operating costs and reduce our net income (or increase our net loss), and these impacts may be material. If the issuance of new securities results in diminished rights to holders of our common stock, the market price of our common stock could be materially and adversely affected.

We do not currently have any products approved for sale and do not generate any revenue from product sales. Accordingly, we expect to rely primarily on equity and/or debt financings to fund our continued operations. Our ability to raise additional funds will depend, in part, on the success of our preclinical studies and clinical trials and other product development activities, regulatory events, our ability to identify and enter into licensing or other strategic arrangements, and other events or conditions that may affect our value or prospects, as well as factors related to financial, economic and market conditions, many of which are beyond our control. There can be no assurances that sufficient funds will be available to us when required or on acceptable terms, if at all.

If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back, or discontinue the development or commercialization of our product candidates;
- seek strategic partnerships, or amend existing partnerships, for research and development programs at an earlier stage than otherwise would be desirable or that we otherwise would have sought to develop independently, or on terms that are less favorable than might otherwise be available in the future;
- dispose of technology assets, or relinquish or license on unfavorable terms, our rights to technologies or any of our product candidates that we otherwise would seek to develop or commercialize ourselves;

- pursue the sale of our company to a third party at a price that may result in a loss on investment for our stockholders; or
- file for bankruptcy or cease operations altogether (and face any related legal proceedings).

Any of these events could have a material adverse effect on our business, operating results and prospects.

Even if successful in raising new capital, we could be limited in the amount of capital we raise due to investor demand restrictions placed on the amount of capital we raise or other reasons. For example, as of the filing of this Quarterly Report, we are subject to the limitations set forth in Instruction I.B.6 of Form S-3.

Additionally, any capital raising efforts are subject to significant risks and contingencies, as described in more detail under the risk factor titled “Raising additional capital may cause dilution to our stockholders, restrict our operations, or require us to relinquish rights.”

We have never generated any revenue from product sales and may never be profitable.

We have no products approved for commercialization and have never generated any revenue from product sales. Our ability to generate revenue and achieve profitability depends on our ability, alone or with strategic collaborators, to successfully complete the development of, and obtain the regulatory and marketing approvals necessary to commercialize one or more of our product candidates. We do not anticipate generating revenue from product sales for the foreseeable future. Our ability to generate future revenue from product sales depends heavily on our success in many areas, including but not limited to:

- completing research and development of our product candidates;
- obtaining regulatory and marketing approvals for our product candidates for which we complete clinical trials;
- manufacturing product candidates and establishing and maintaining supply and manufacturing relationships with third parties that are commercially feasible, meet regulatory requirements and our supply needs in sufficient quantities to meet market demand for our product candidates, if approved;
- qualify for adequate coverage and reimbursement by government and third-party payors for any product candidates for which we obtain regulatory and marketing approval;
- marketing, launching, and commercializing product candidates for which we obtain regulatory and marketing approval, either directly or with a collaborator or distributor;
- gaining market acceptance of our product candidates as treatment options;
- addressing any competing products and technological and market developments;
- implementing internal systems and infrastructure, as needed;
- protecting and enforcing our intellectual property rights, including patents, trade secrets, and know-how;
- negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter;
- obtaining coverage and adequate reimbursement from third-party payors and maintaining pricing for our product candidates that supports profitability; and
- attracting, hiring, and retaining qualified personnel.

Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Our expenses could increase beyond expectations if we are required by regulatory authorities to perform clinical and other studies in addition to those that we anticipate. Even if we are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations. Portions of the research programs with respect to which we have exercised the Option to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement may be in-licensed from third parties, which make the commercial sale of such in-licensed products potentially subject to additional royalty and milestone payments to such third parties. We will

also have to develop or acquire manufacturing capabilities or continue to contract with contract manufacturers in order to continue development and potential commercialization of our product candidates. For instance, if the costs of manufacturing our drug product are not commercially feasible, we will need to develop or procure our drug product in a commercially feasible manner in order to successfully commercialize a future approved product, if any. Additionally, if we are not able to generate revenue from the sale of any approved products, we may never become profitable.

We have historically incurred losses, have a limited operating history on which to assess our business, and anticipate that we will continue to incur significant losses for the foreseeable future.

We are a biopharmaceutical company with a limited operating history. Since inception, we have incurred significant operating losses. For the three and nine months ended September 30, 2023, we reported a net loss of $40.1 million and $275.6 million, respectively. For the years ended December 31, 2022 and 2021, we reported a net loss of $83.8 million and $65.8 million, respectively. As of September 30, 2023, we had an accumulated deficit of $701.2 million. We will need to raise substantial additional capital to continue to fund our operations in the future. If our stockholders do not timely approve the conversion of our Series A Preferred Stock, then the holders of our Series A Preferred Stock may be entitled to require us to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A Preferred Stock, as described in our certificate of designation relating to the Series A Preferred Stock. The cash redemption is not under our control and raises substantial doubt about our ability to continue as a going concern. The accompanying condensed consolidated financial statements assume the Company will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on our financial condition and our ability to develop our product candidates. Changing circumstances may cause us to consume capital significantly faster or slower than we currently anticipate. If we are unable to acquire additional capital or resources, we will be required to modify our operational plans to complete future milestones and we may be required to delay, limit, reduce or eliminate development or future commercialization efforts of product candidates and/or programs. We have based these estimates on assumptions that may prove to be wrong, and we could exhaust our available financial resources sooner than we currently anticipate. We may be forced to reduce our operating expenses and raise additional funds to meet our working capital needs, principally through the additional sales of our securities or debt financings or entering into strategic collaborations.

We have devoted substantially all of our financial resources to identify, acquire, and develop our product candidates, including conducting clinical trials and providing general and administrative support for our operations. To date, we have funded our operations primarily from the sale and issuance of convertible preferred and common equity securities, pre-funded warrants, the collection of grant proceeds, and the licensing of our product rights for commercialization of pegzilarginase in Europe and certain countries in the Middle East. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to obtain funding through equity or debt financings, strategic collaborations, or grants. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We expect our losses to increase as our product candidates enter more advanced clinical trials. It may be several years, if ever, before we complete pivotal clinical trials or have a product candidate approved for commercialization. We expect to invest significant funds into the research and development of our current product candidates to determine the potential to advance these product candidates to regulatory approval.

If we obtain regulatory approval to market a product candidate, our future revenue will depend upon the size of any markets in which our product candidates may receive approval, and our ability to achieve sufficient market acceptance, pricing, coverage and adequate reimbursement from third-party payors, and adequate market share for our product candidates in those markets. Even if we obtain adequate market share for our product candidates, because the potential markets in which our product candidates may ultimately receive regulatory approval could be very small, we may never become profitable despite obtaining such market share and acceptance of our products.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future and our expenses will increase substantially if and as we:

- continue the preclinical development and initiate the clinical development of our product candidates;

- continue efforts to discover and develop new product candidates;
- continue the manufacturing of our product candidates or increase volumes manufactured by third parties;
- advance our product candidates into larger, more expensive clinical trials;
- initiate additional preclinical studies or clinical trials for our product candidates;
- seek regulatory and marketing approvals and reimbursement for our product candidates;
- establish a sales, marketing, and distribution infrastructure to commercialize any products for which we may obtain marketing approval and market for ourselves;
- seek to identify, assess, acquire, and/or develop other product candidates;
- make milestone, royalty, or other payments under third-party license agreements;
- seek to maintain, protect, and expand our intellectual property portfolio;
- pay penalties under our registration rights agreement for failing to timely register the applicable securities;
- seek to attract and retain skilled personnel; and
- experience any delays or encounter issues with the development and potential for regulatory approval of our clinical and product candidates such as safety issues, manufacturing delays, clinical trial accrual delays, longer follow-up for planned studies or trials, additional major studies or trials, or supportive trials necessary to support marketing approval.

Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

Raising additional capital may cause dilution to our stockholders, restrict our operations, or require us to relinquish rights.

Until such time, if ever, as we can generate substantial revenue from the sale of our product candidates, we expect to finance our cash needs through a combination of equity offerings, debt financings and license and development agreements. To the extent that we raise additional capital through the sale of equity securities or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our common stock. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may be required to relinquish valuable rights to our research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements with third parties when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to third parties to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

To the extent that we raise additional capital through the sale of equity, including pursuant to any sales under convertible debt or other securities convertible into equity, the ownership interest of our stockholders will be diluted, and the terms of these new securities may include liquidation or other preferences that adversely affect the rights of our stockholders. For instance, in June 2023, we sold 721,452 shares of our Series A Preferred Stock in the PIPE to the Investors for gross proceeds of approximately $210.0 million. Subject to receiving the requisite stockholder approval and certain beneficial ownership limitations set by each holder of Series A Preferred Stock, each share of Series A Preferred Stock will automatically convert into an aggregate of 40 shares of our Common Stock. We are required to solicit the consent of our stockholders with regard to conversion of the shares of Series A Preferred Stock which will be voted on at our upcoming special meeting of stockholders. If our stockholders fail to approve such matters, we may be subject to financial penalties that

could materially harm our business, including the forced settlement of shares of Series A Preferred Stock for cash, as described in the Certificate of Designation.

Debt financing, if available, would likely involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, making additional product acquisitions, or declaring dividends. If we raise additional funds through strategic collaborations or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates or future revenue streams or grant licenses on terms that are not favorable to us. We cannot be assured that we will be able to obtain additional funding if and when necessary to fund our entire portfolio of product candidates to meet our projected plans. If we are unable to obtain funding on a timely basis, we may be required to delay or discontinue one or more of our development programs or the commercialization of any product candidates or be unable to expand our operations or otherwise capitalize on potential business opportunities, which could materially harm our business, financial condition, and results of operations.

Risks Related to Discovery, Development and Commercialization

We face competition from entities that have developed or may develop programs for the diseases addressed by our programs.

The development and commercialization of drugs is highly competitive. Our programs, if approved, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. We compete with a variety of multinational biopharmaceutical companies, specialized biotechnology companies and emerging biotechnology companies, as well as academic institutions, governmental agencies, and public and private research institutions, among others. Many of the companies with which we are currently competing or will complete against in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industry may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites, patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our competitors have developed, are developing or will develop programs and processes competitive with our programs and processes. Competitive therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments. Our success will depend partially on our ability to develop and commercialize products that have a competitive safety, efficacy, dosing and/or presentation profile. Our commercial opportunity and success will be reduced or eliminated if competing products are safer, more effective, have a more attractive dosing profile or presentation or are less expensive than the products we develop, or if our competitors develop competing products or if biosimilars enter the market more quickly than we do and are able to gain market acceptance.

In addition, because of the competitive landscape for inflammatory and immunology ("I&I") indications, we may also face competition for clinical trial enrollment. Patient enrollment will depend on many factors, including if potential clinical trial patients choose to undergo treatment with approved products or enroll in competitors' ongoing clinical trials for programs that are under development for the same indications as our programs. An increase in the number of approved products for the indications we are targeting with our programs may further exacerbate this competition. Our inability to enroll a sufficient number of patients could, among others, delay our development timeline, which may further harm our competitive position.

Our programs are in preclinical stages of development and may fail in development or suffer delays that materially and adversely affect their commercial viability. If we or our current or future collaborators are unable to complete development of, or commercialize our programs, or experience significant delays in doing so, our business will be materially harmed.

We have no products on the market and all of our programs are in preclinical stages of development and have not been tested in humans. As a result, we expect it will be many years before we commercialize any program, if ever. Our ability to achieve and sustain profitability depends on obtaining regulatory approvals for, and successfully commercializing, our programs, either alone or with third parties, and we cannot guarantee you

that we will ever obtain regulatory approval for any of our programs. We have not yet demonstrated our ability to initiate or complete any clinical trials, obtain regulatory approvals, manufacture a clinical development or commercial scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Before obtaining regulatory approval for the commercial distribution of our programs, we or an existing or future collaborator must conduct extensive preclinical tests and clinical trials to demonstrate the safety and efficacy in humans of our programs and future product candidates.

We or our collaborators may experience delays in initiating or completing clinical trials. We or our collaborators also may experience numerous unforeseen events during, or as a result of, any current or future clinical trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize our current programs or any future programs, including:

- regulators or institutional review boards ("IRBs"), the FDA or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations ("CROs"), the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- clinical trials of any programs may fail to show safety or efficacy, produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional preclinical studies or clinical trials or we may decide to abandon product development programs;
- the number of subjects required for clinical trials of any programs may be larger than we anticipate, especially if regulatory bodies require completion of non-inferiority or superiority trials, enrollment in these clinical trials may be slower than we anticipate or subjects may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;
- we may elect to, or regulators, IRBs or ethics committees may require that we or our investigators, suspend or terminate clinical research or trials for various reasons, including noncompliance with regulatory requirements or a finding that the participants in our trials are being exposed to unacceptable health risks;
- the cost of clinical trials of any of our programs may be greater than we anticipate;
- the quality of our programs or other materials necessary to conduct clinical trials of our programs may be inadequate to initiate or complete a given clinical trial;
- our inability to manufacture sufficient quantities of our programs for use in clinical trials;
- reports from clinical testing of other therapies may raise safety or efficacy concerns about our programs;
- our failure to establish an appropriate safety profile for a program based on clinical or preclinical data for such programs as well as data emerging from other therapies in the same class as our programs; and
- the FDA or other regulatory authorities may require us to submit additional data such as long-term toxicology studies, or impose other requirements before permitting us to initiate a clinical trial.

Commencing clinical trials in the United States is subject to acceptance by the FDA of an IND, BLA or similar application and finalizing the trial design based on discussions with the FDA and other regulatory authorities. In the event that the FDA requires us to complete additional preclinical studies or we are required to

satisfy other FDA requests prior to commencing clinical trials, the start of our first clinical trials may be delayed. Even after we receive and incorporate guidance from these regulatory authorities, the FDA or other regulatory authorities could disagree that we have satisfied their requirements to commence any clinical trial or change their position on the acceptability of our trial design or the clinical endpoints selected, which may require us to complete additional preclinical studies or clinical trials, delay the enrollment of our clinical trials or impose stricter approval conditions than we currently expect. There are equivalent processes and risks applicable to clinical trial applications in other countries, including countries in the European Union ("EU").

We may not have the financial resources to continue development of, or to modify existing or enter into new collaborations for, a program if we experience any issues that delay or prevent regulatory approval of, or our ability to commercialize, our programs. We or our current or future collaborators' inability to complete development of, or commercialize our programs, or significant delays in doing so, could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We are substantially dependent on the success of our two most advanced programs, SPY001 and SPY002, and our anticipated clinical trials of such programs may not be successful.

Our future success is substantially dependent on our ability to timely obtain marketing approval for, and then successfully commercialize, our two most advanced programs, SPY001 and SPY002. We exercised our Option with respect to the SPY001 program on July 12, 2023 and we continue to hold the unexercised Option with respect to the SPY002 program. We are investing a majority of our efforts and financial resources into the research and development of these programs. We anticipate initiating a Phase 1 clinical trial in healthy volunteers of SPY001 in the first half of 2024 and of SPY002 in the second half of 2024, each subject to the filing of an IND or foreign equivalent and regulatory approval. The success of our programs is dependent on observing a longer half-life of our programs in humans than other mAbs currently marketed and in development as we believe this longer half-life has the potential to result in a more favorable dosing schedule for our programs, assuming they successfully complete clinical development and obtain marketing approval. This is based in part on the assumption that the longer half-life we have observed in non-human primates ("NHPs") will translate into an extended half-life of our programs in humans. To the extent we do not observe this extended half-life when we dose humans with our programs, it would significantly and adversely affect the clinical and commercial potential of our programs.

Our programs will require additional clinical development, evaluation of clinical, preclinical and manufacturing activities, marketing approval in multiple jurisdictions, substantial investment and significant marketing efforts before we generate any revenues from product sales. We are not permitted to market or promote these programs, or any other programs, before we receive marketing approval from the FDA and comparable foreign regulatory authorities, and we may never receive such marketing approvals.

The success of our programs will depend on a variety of factors. We do not have complete control over many of these factors, including certain aspects of clinical development and the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing, distribution and sales efforts of any future collaborator. Accordingly, we cannot assure you that we will ever be able to generate revenue through the sale of these programs, even if approved. If we are not successful in commercializing our SPY001 or SPY002 programs, or are significantly delayed in doing so, our business will be materially harmed.

If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of our programs may be delayed and our expenses may increase and, as a result, our stock price may decline.

From time to time, we estimate the timing of the anticipated accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials, such as the expected timing for the anticipated commencement of our Phase 1 clinical trials in IBD, as well as the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones are and will be based on numerous assumptions. The actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control. If we do not meet these milestones as publicly announced, or at all, the commercialization of our programs may be delayed or never achieved and, as a result, our stock price may decline. Additionally, delays relative to our projected timelines are likely to cause overall expenses to increase, which may require us to raise additional capital sooner than expected and prior to achieving targeted development milestones.

Our approach to the discovery and development of our programs is unproven, and we may not be successful in our efforts to build a pipeline of programs with commercial value.

Our approach to the discovery and development of the research programs with respect to which we have exercised the Option to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement leverages clinically validated mechanisms of action and incorporates advanced antibody engineering to optimize half-life and other properties designed to overcome limitations of existing therapies. Our programs are purposefully designed to improve upon existing product candidates and products while maintaining the same, well-established mechanisms of action. However, the scientific research that forms the basis of our efforts to develop programs using half-life extension technologies, including YTE and LS amino acid substitutions, is ongoing and may not result in viable programs. We have limited clinical data on product candidates utilizing YTE and LS half-life extension technologies, especially in I&I indications, demonstrating whether they are safe or effective for long-term treatment in humans. The long-term safety and efficacy of these technologies and the extended half-life and exposure profile of our programs compared to currently approved products is unknown.

We may ultimately discover that utilizing half-life extension technologies for our specific targets and indications and any programs resulting therefrom do not possess certain properties required for therapeutic effectiveness. We currently have only preclinical data regarding the increased half-life properties of our programs and the same results may not be seen in humans. In addition, programs using half-life extension technologies may demonstrate different chemical and pharmacological properties in patients than they do in laboratory studies. This technology and any programs resulting therefrom may not demonstrate the same chemical and pharmacological properties in humans and may interact with human biological systems in unforeseen, ineffective or harmful ways.

In addition, we may in the future seek to discover and develop programs that are based on novel targets and technologies that are unproven. If our discovery activities fail to identify novel targets or technologies for drug discovery, or such targets prove to be unsuitable for treating human disease, we may not be able to develop viable additional programs. We and our existing or future collaborators may never receive approval to market and commercialize any program. Even if we or an existing or future collaborator obtains regulatory approval, the approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. If the products resulting from the research programs with respect to which we have exercised the Option to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement prove to be ineffective, unsafe or commercially unviable, such programs would have little, if any, value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Preclinical and clinical development involves a lengthy and expensive process that is subject to delays and with uncertain outcomes, and results of earlier studies and trials may not be predictive of future clinical trial results. If our preclinical studies and clinical trials are not sufficient to support regulatory approval of any of our programs, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development of such program.

Before obtaining marketing approval from regulatory authorities for the sale of any program, we must complete preclinical studies and then conduct extensive clinical trials to demonstrate the safety and efficacy of our program in humans. Our clinical trials may not be conducted as planned or completed on schedule, if at all, and failure can occur at any time during the preclinical study or clinical trial process. For example, we depend on the availability of NHPs to conduct certain preclinical studies that we are required to complete prior to submitting an IND and initiating clinical development. There is currently a global shortage of NHPs available for drug development. This could cause the cost of obtaining NHPs for our future preclinical studies to increase significantly and, if the shortage continues, could also result in delays to our development timelines. Furthermore, a failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical studies and early-stage clinical trials may not be predictive of the success of later clinical trials. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their programs performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their programs. In addition, we expect to rely on patients to provide feedback on measures such as measures of quality of life, which are subjective and inherently difficult to evaluate. These measures can be influenced by factors outside of our control, and can vary widely from day to day for a particular patient, and from patient to patient and from site to site within a clinical trial.

We cannot be sure that the FDA will agree with our clinical development plan. We plan to use the data from our planned Phase 1 trials of our SPY001 and SPY002 programs in healthy volunteers to support Phase 2 trials in IBD and other I&I indications. If the FDA requires us to conduct additional trials or enroll additional patients, our development timelines may be delayed. We cannot be sure that submission of an IND, BLA or similar application will result in the FDA or comparable foreign regulatory authorities, as applicable, allowing clinical trials to begin in a timely manner, if at all. Moreover, even if these trials begin, issues may arise that could cause regulatory authorities to suspend or terminate such clinical trials. Events that may prevent successful or timely initiation or completion of clinical trials include: inability to generate sufficient preclinical, toxicology or other in vivo or in vitro data to support the initiation or continuation of clinical trials; delays in reaching a consensus with regulatory authorities on study design or implementation of the clinical trials; delays or failure in obtaining regulatory authorization to commence a trial; delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites; delays in identifying, recruiting and training suitable clinical investigators; delays in obtaining required IRB approval at each clinical trial site; delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our programs for use in clinical trials or the inability to do any of the foregoing; failure by our CROs, other third parties or us to adhere to clinical trial protocols; failure to perform in accordance with the FDA's or any other regulatory authority's good clinical practice requirements ("GCPs") or applicable regulatory guidelines in other countries; changes to the clinical trial protocols; clinical sites deviating from trial protocol or dropping out of a trial; changes in regulatory requirements and guidance that require amending or submitting new clinical protocols; selection of clinical endpoints that require prolonged periods of observation or analyses of resulting data; transfer of manufacturing processes to larger-scale facilities operated by a contract manufacturing organization (CMO) and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and third parties being unwilling or unable to satisfy their contractual obligations to us.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such clinical trials are being conducted, by the Data Safety Monitoring Board, if any, for such clinical trial or by the FDA or comparable foreign regulatory authorities. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical trial protocols, inspection of the clinical trial operations or trial site by the FDA or comparable foreign regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from the programs, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we are required to conduct additional clinical trials or other testing of our programs beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our programs, if the results of these trials are not positive or are only moderately positive or if there are safety concerns, our business and results of operations may be adversely affected and we may incur significant additional costs.

If we encounter difficulties enrolling patients in our future clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may experience difficulties in patient enrollment in our future clinical trials for a variety of reasons. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. The enrollment of patients in future trials for any of our programs will depend on many factors, including if patients choose to enroll in clinical trials, rather than using approved products, or if our competitors have ongoing clinical trials for programs that are under development for the same indications as our programs, and patients instead enroll in such clinical trials. Additionally, the number of patients required for clinical trials of our programs may be larger than we anticipate, especially if regulatory bodies require the completion of non-inferiority or superiority trials. Even if we are able to enroll a sufficient number of patients for our future clinical trials, we may have difficulty maintaining patients in our clinical trials. Our inability to enroll or maintain a sufficient number of patients would result in significant delays in completing clinical trials or receipt of marketing approvals and increased development costs or may require us to abandon one or more clinical trials altogether.

Preliminary, "topline" or interim data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures.

From time to time, we may publicly disclose preliminary or topline data from our preclinical studies and clinical trials, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data. We also make assumptions, estimations, calculations and conclusions as part of our analyses of these data without the opportunity to fully and carefully evaluate complete data. As a result, the preliminary or topline results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated or subsequently made subject to audit and verification procedures.

Any preliminary or topline data should be viewed with caution until the final data are available. From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available or as patients from our clinical trials continue other treatments. Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular program and our company in general. In addition, the information we choose to publicly disclose regarding a particular preclinical study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure. If the preliminary, topline or interim data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our programs may be harmed, which could harm our business, operating results, prospects or financial condition.

Our future clinical trials or those of our future collaborators may reveal significant adverse events or undesirable side effects not seen in our preclinical studies and may result in a safety profile that could halt clinical development, inhibit regulatory approval or limit commercial potential or market acceptance of any of our programs.

Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects, adverse events or unexpected characteristics. While our preclinical studies in NHPs have not shown any such characteristics to date, we have not yet initiated any clinical trials in humans. If significant adverse events or other side effects are observed in any of our future clinical trials, we may have difficulty recruiting patients to such trials, patients may drop out of our trials, or we may be required to abandon the trials or our development efforts of one or more programs altogether. We, the FDA or other applicable regulatory authorities, or an IRB, may suspend any clinical trials of any program at any time for various reasons, including a belief that subjects or patients in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential products developed in the biotechnology industry that initially showed therapeutic promise in early-stage studies and trials have later been found to cause side effects that prevented their further development. Other potential products have shown side effects in preclinical studies, which side effects do not present themselves in clinical trials in humans. Even if the side effects do not preclude the program from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance of the approved product due to its tolerability versus other therapies. In addition, an extended half-life could prolong the duration of undesirable side effects, which could also inhibit market acceptance. Treatment-emergent adverse events could also affect patient recruitment or the ability of enrolled subjects to complete our clinical trials or could result in potential product liability claims. Potential side effects associated with our programs may not be appropriately recognized or managed by the treating medical staff, as toxicities resulting from our programs may not be normally encountered in the general patient population and by medical personnel. Any of these occurrences could harm our business, financial condition, results of operations and prospects significantly.

In addition, even if we successfully advance our programs or any future program through clinical trials, such trials will only include a limited number of patients and limited duration of exposure to our programs. As a result, we cannot be assured that adverse effects of our programs will not be uncovered when a significantly larger number of patients are exposed to the program after approval. Further, any clinical trials may not be sufficient to determine the effect and safety consequences of using our programs over a multi-year period.

If any of the foregoing events occur or if one or more of the research programs with respect to which we have exercised the Option to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement prove to be unsafe, our entire pipeline could be affected, which would have a material adverse effect on our business, financial condition, results of operations and prospects.

We may expend our limited resources to pursue a particular program and fail to capitalize on programs that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus our research and development efforts on certain selected programs. For example, we are initially focused on our most advanced programs, SPY001 and SPY002. As a result, we may forgo or delay pursuit of opportunities with other programs that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs for specific indications may not yield any commercially viable programs. If we do not accurately evaluate the commercial potential or target market for a particular program, we may relinquish valuable rights to that program through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such program.

Any approved products resulting from our current programs or any future program may not achieve adequate market acceptance among clinicians, patients, healthcare third-party payors and others in the medical community necessary for commercial success and we may not generate any future revenue from the sale or licensing of such products.

Even if regulatory approval is obtained for a product candidate resulting from one of our current or future programs, they may not gain market acceptance among physicians, patients, healthcare payors or the medical community. We may not generate or sustain revenue from sales of the product due to factors such as whether the product can be sold at a competitive cost and whether it will otherwise be accepted in the market. There are several approved products and product candidates in later stages of development for the treatment of IBD. However, our programs incorporate advanced antibody engineering to optimize the half-life and formulation of antibodies; to date, no such antibody has been approved by the FDA for the treatment of IBD. Market participants with significant influence over acceptance of new treatments, such as clinicians and third-party payors, may not adopt a biologic that incorporates half-life extension for our targeted indications, and we may not be able to convince the medical community and third-party payors to accept and use, or to provide favorable reimbursement for, any programs developed by us or our existing or future collaborators. An extended half-life may make it more difficult for patients to change treatments and there is a perception that half-life extension could exacerbate side effects, each of which may adversely affect our ability to gain market acceptance. Market acceptance of our programs will depend on many factors, including factors that are not within our control.

Sales of medical products also depend on the willingness of clinicians to prescribe the treatment. We cannot predict whether clinicians, clinicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that our product is safe, therapeutically effective, cost effective or less burdensome as compared with competing treatments. If any current or future program is approved but does not achieve an adequate level of acceptance by such parties, we may not generate or derive sufficient revenue from that program and may not become or remain profitable.

Certain of our programs may compete with our other programs, which could negatively impact our business and reduce our future revenue.

We are developing product candidates for the same indication: IBD, and may in the future develop our programs for other I&I indications. Each such program targets a different mechanism of action. However, developing multiple programs for a single indication may negatively impact our business if the programs compete with each other. For example, if multiple programs are conducting clinical trials at the same time, they could compete for the enrollment of patients. In addition, if multiple programs are approved for the same indication, they may compete for market share, which could limit our future revenue.

We plan to conduct clinical trials for programs at sites outside the United States, and the FDA may not accept data from trials conducted in such locations.

We may choose to conduct one or more of our future clinical trials outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to conditions imposed by the FDA. For example, the clinical trial must be well designed and conducted and performed by qualified investigators in accordance with ethical principles. The trial population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will depend on its determination that the trials also complied with all applicable U.S. laws and regulations. If the FDA does not accept the data from any trial that we conduct outside the United States, it would likely result in the need for additional trials, which would be costly and time-consuming and would delay or permanently halt our development of the applicable product candidates. Even if the FDA accepted such data, it could require us to modify our planned clinical trials to receive clearance to initiate such trials in the United States or to continue such trials once initiated.

Further, conducting international clinical trials presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs that could restrict or limit our ability to conduct our clinical trials, the administrative burdens of conducting clinical trials under multiple sets of foreign regulations, foreign exchange fluctuations, diminished protection of intellectual property in some countries, as well as political and economic risks relevant to foreign countries.

Risks Related to Government Regulation

The regulatory approval processes of the FDA and other comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our programs, we will not be able to commercialize, or will be delayed in commercializing, our programs, and our ability to generate revenue will be materially impaired.

The process of obtaining regulatory approvals, both in the United States and abroad, is unpredictable, expensive and typically takes many years following commencement of clinical trials, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the programs involved. We cannot commercialize programs in the United States without first obtaining regulatory approval from the FDA. Similarly, we cannot commercialize programs outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities. Before obtaining regulatory approvals for the commercial sale of our programs, including our most advanced programs, SPY001 and SPY002, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that our programs are both safe and effective for each targeted indication. Securing regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Further, our programs may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval. The FDA and comparable foreign regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other data. Our programs could be delayed in receiving, or fail to receive, regulatory approval for many reasons, including: the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials; we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a program is safe and effective for its proposed indication; the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval; serious and unexpected drug-related side effects may be experienced by participants in our clinical trials or by individuals using drugs similar to our programs; we may be unable to demonstrate that a program's clinical and other benefits outweigh its safety risks; the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials; the data collected from clinical trials of our programs may not be acceptable or sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere, and we may be required to conduct additional clinical trials; the FDA or the applicable foreign regulatory authority may disagree regarding the formulation, labeling and/or the specifications of our programs; the FDA or comparable foreign regulatory

authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Of the large number of drugs in development, only a small percentage successfully complete the FDA or foreign regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our programs, which would significantly harm our business, results of operations and prospects.

If we were to obtain approval, regulatory authorities may approve any of our programs for fewer or more limited indications than we request, including failing to approve the most commercially promising indications, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a program with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that program. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our programs, we will not be able to commercialize, or will be delayed in commercializing, our programs and our ability to generate revenue will be materially impaired.

We may not be able to meet requirements for the chemistry, manufacturing and control of our programs.

In order to receive approval of our products by the FDA and comparable foreign regulatory authorities, we must show that we and our contract manufacturing partners are able to characterize, control and manufacture our drug products safely and in accordance with regulatory requirements. This includes synthesizing the active ingredient, developing an acceptable formulation, performing tests to adequately characterize the formulated product, documenting a repeatable manufacturing process, and demonstrating that our drug products meet stability requirements. Meeting these chemistry, manufacturing and control requirements is a complex task that requires specialized expertise. If we are not able to meet the chemistry, manufacturing and control requirements, we may not be successful in getting our products approved.

Our programs for which we intend to seek approval as biologics may face competition sooner than anticipated*.*

The Patient Protection and Affordable Act, as amended by the Healthcare and Education Reconciliation Act ("ACA") includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 ("BPCIA"), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a highly similar or “biosimilar” product may not be submitted to the FDA until four years following the date that the reference product was first approved by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first approved. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product.

We believe that any of our programs approved as biologics under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our programs to be reference products for competing products, potentially creating the opportunity for competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Even if we receive regulatory approval of our programs, we will be subject to extensive ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our programs.

Any regulatory approvals that we may receive for our programs will require the submission of reports to regulatory authorities and surveillance to monitor the safety and efficacy of the program, may contain significant

limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, and may include burdensome post-approval study or risk management requirements. For example, the FDA may require a risk evaluation and mitigation strategy ("REMS") in order to approve our programs, which could entail requirements for a medication guide, physician training and communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or comparable foreign regulatory authorities approve our programs, our programs and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export will be subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable foreign regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as on-going compliance with current cGMPs and GCPs for any clinical trials that we conduct following approval. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic, unannounced inspections by the FDA and other regulatory authorities for compliance with cGMPs.

If we or a regulatory authority discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facilities where the product is manufactured, a regulatory authority may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials, restrictions on the manufacturing process, warning or untitled letters, civil and criminal penalties, injunctions, product seizures, detentions or import bans, voluntary or mandatory publicity requirements and imposition of restrictions on operations, including costly new manufacturing requirements. The occurrence of any event or penalty described above may inhibit our ability to commercialize our programs and generate revenue and could require us to expend significant time and resources in response and could generate negative publicity.

We may face difficulties from healthcare legislative reform measures.

Existing regulatory policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our programs. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute our programs, if approved. Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. If our operations are found to be in violation of any of these laws or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, integrity oversight and reporting obligations to resolve allegations of non-compliance, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations. Further, defending against any such actions can be costly and time-consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

Even if we are able to commercialize any programs, due to unfavorable pricing regulations and/or third-party coverage and reimbursement policies, we may not be able to offer such programs at competitive prices which would seriously harm our business.

We intend to seek approval to market our programs in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our programs, we will be subject to rules and regulations in those jurisdictions. Our ability to successfully commercialize any programs that we may develop will depend in part on the extent to which reimbursement for these programs and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. These entities may create preferential access policies for a competitor's product, including a branded or generic/biosimilar product, over our products in an attempt to reduce their costs, which may reduce our commercial opportunity. Additionally, if any of our programs are approved and we are found to have improperly promoted off-label uses of those programs, we may become subject to significant liability, which would materially adversely affect our business and financial condition.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to or from recipients in the public or private sector. We may engage third parties to sell our products outside the United States, to conduct clinical trials, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenue, if any.

In some countries, particularly member states of the EU, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a therapeutic. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. To obtain coverage and reimbursement or pricing approvals in some countries, we or current or future collaborators may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our programs to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of any program approved for marketing is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business, financial condition, results of operations or prospects could be materially and adversely affected. Brexit could lead to legal uncertainty and potentially divergent national laws and regulations, including those related to the pricing of prescription pharmaceuticals, as the United Kingdom

("UK") determines which EU laws to replicate or replace. If the UK were to significantly alter its regulations affecting the pricing of prescription pharmaceuticals, we could face significant new costs.

If we decide to pursue a Fast Track Designation by the FDA, it may not lead to a faster development or regulatory review or approval process.

We may seek Fast Track Designation for one or more of our programs. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the product sponsor may apply for FDA Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular program is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program.

Risks Related to Our Intellectual Property

Our ability to protect our patents and other proprietary rights is uncertain, exposing us to the possible loss of competitive advantage.

We rely upon a combination of patents, trademarks, trade secret protection, confidentiality agreements and the Paragon Agreement to protect the intellectual property related to our programs and technologies and to prevent third parties from competing with us. Our success depends in large part on our ability to obtain and maintain patent protection for our platform technologies, programs and their uses, as well as our ability to operate without infringing on or violating the proprietary rights of others. We own and have licensed rights to pending patent applications and expect to continue to file patent applications in the United States and abroad related to our novel discoveries and technologies that are important to our business. However, we may not be able to protect our intellectual property rights throughout the world and the legal systems in certain countries may not favor enforcement or protection of patents, trade secrets and other intellectual property. Filing, prosecuting and defending patents on programs worldwide would be prohibitively expensive and our intellectual property rights in some foreign jurisdictions can be less extensive than those in the United States. As such, we may not have patents in all countries or all major markets and may not be able to obtain patents in all jurisdictions even if we apply for them. Our competitors may operate in countries where we do not have patent protection and can freely use our technologies and discoveries in such countries to the extent such technologies and discoveries are publicly known or disclosed in countries where we do have patent protection or pending patent applications.

Our pending and future patent applications may not result in patents being issued. Any issued patents may not afford sufficient protection of our programs or their intended uses against competitors, nor can there be any assurance that the patents issued will not be infringed, designed around, invalidated by third parties, or effectively prevent others from commercializing competitive technologies, products or programs. Even if these patents are granted, they may be difficult to enforce. Further, any issued patents that we may license or own covering our programs could be narrowed or found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad, including the United States Patent and Trademark Office (“USPTO”). Further, if we encounter delays in our clinical trials or delays in obtaining regulatory approval, the period of time during which we could market our programs under patent protection would be reduced. Thus, the patents that we may own and license may not afford us any meaningful competitive advantage.

In addition to seeking patents for some of our technology and programs, we may also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our collaborators, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. We may need to share our

proprietary information, including trade secrets, with future business partners, collaborators, contractors and others located in countries at heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors and those affiliated with or controlled by state actors. In addition, while the company undertakes efforts to protect its trade secrets and other confidential information from disclosure, others may independently discover trade secrets and proprietary information, and in such cases, we may not be able to assert any trade secret rights against such party. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Lastly, if our trademarks and trade names are not registered or adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

We may not be successful in obtaining or maintaining necessary rights to our programs through acquisitions and in-licenses.

Because our development programs currently do and may in the future require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license, or use these third-party proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary for our programs. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

While we normally seek to obtain the right to control prosecution, maintenance and enforcement of the patents relating to our programs, there may be times when the filing and prosecution activities for patents and patent applications relating to our programs are controlled by our current and future licensors or collaboration partners. If any of our current and future licensors or collaboration partners fail to prosecute, maintain and enforce such patents and patent applications in a manner consistent with the best interests of our business, including by payment of all applicable fees for patents covering our programs, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, our ability to develop and commercialize those programs may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensees, our current and future licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

Our current and future licensors may rely on third-party consultants or collaborators or on funds from third parties such that our current and future licensors are not the sole and exclusive owners of the patents we in-license. If other third parties have ownership rights to our current and future in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

It is possible that we may be unable to obtain licenses at a reasonable cost or on reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to redesign our technology, programs, or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected programs, which could harm our business, financial condition, results of operations, and prospects significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current technology, manufacturing methods, programs, or future methods or products resulting in either an injunction prohibiting our manufacture or future

sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

Disputes may arise between us and our current and future licensors regarding intellectual property subject to a license agreement, including: the scope of rights granted under the license agreement and other interpretation-related issues; whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement; our right to sublicense patents and other rights to third parties; our right to transfer or assign the license; the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our current and future licensors and us and our partners; and the priority of invention of patented technology.

We may be subject to patent infringement claims or may need to file claims to protect our intellectual property, which could result in substantial costs and liability and prevent us from commercializing our potential products.

Because the intellectual property landscape in the biotechnology industry is rapidly evolving and interdisciplinary, it is difficult to conclusively assess our freedom to operate and guarantee that we can operate without infringing on or violating third party rights. If certain of our programs are ultimately granted regulatory approval, patent rights held by third parties, if found to be valid and enforceable, could be alleged to render one or more of our programs infringing. If a third party successfully brings a claim against us, we may be required to pay substantial damages, be forced to abandon any affected program and/or seek a license from the patent holder. In addition, any intellectual property claims (e.g. patent infringement or trade secret theft) brought against us, whether or not successful, may cause us to incur significant legal expenses and divert the attention of our management and key personnel from other business concerns. We cannot be certain that patents owned or licensed by us will not be challenged by others in the course of litigation. Some of our competitors may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise funds and on the market price of our common stock.

Competitors may infringe or otherwise violate our patents, trademarks, copyrights or other intellectual property. To counter infringement or other violations, we may be required to file claims, which can be expensive and time-consuming. Any such claims could provoke these parties to assert counterclaims against us, including claims alleging that we infringe their patents or other intellectual property rights. In addition, in a patent infringement proceeding, a court or administrative body may decide that one or more of the patents we assert is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to prevent the other party from using the technology at issue on the grounds that our patents do not cover the technology. Similarly, if we assert trademark infringement claims, a court or administrative body may determine that the marks we have asserted are invalid or unenforceable or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In such a case, we could ultimately be forced to cease use of such marks. In any intellectual property litigation, even if we are successful, any award of monetary damages or other remedy we receive may not be commercially valuable.

Further, we may be required to protect our patents through procedures created to attack the validity of a patent at the USPTO. An adverse determination in any such submission or proceeding could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action.

In addition, if our programs are found to infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our future licensees and other parties with whom we have business relationships and we may be required to indemnify those parties for any damages they suffer as a result of these claims, which may require us to initiate or defend protracted and costly litigation on behalf of licensees and other parties regardless of the merits of such claims. If any of these claims succeed, we may be forced to pay damages on behalf of those parties or may be required to obtain licenses for the products they use.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other legal proceedings relating to our intellectual property rights, there is a risk that some

of our confidential information could be compromised by disclosure during this type of litigation or other proceedings.

***We may be subject to claims that we have wrongfully hired an employee from a competitor or that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties*.**

As is common in the biotechnology industry, in addition to our employees, we engage the services of consultants to assist us in the development of our programs. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other biotechnology or pharmaceutical companies including our competitors or potential competitors. We could in the future be subject to claims that we or our employees have inadvertently or otherwise used or disclosed alleged trade secrets or other confidential information of former employers or competitors. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may become subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement, or that we or these individuals have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of a former employer or competitor.

While we may litigate to defend ourselves against these claims, even if we are successful, litigation could result in substantial costs and could be a distraction to management. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our programs, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Moreover, any such litigation or the threat thereof may adversely affect our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would have an adverse effect on our business, results of operations and financial condition. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

Changes to patent laws in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of patent laws in the United States, including patent reform legislation such as the Leahy-Smith America Invents Act (the “Leahy-Smith Act”) could increase the uncertainties and costs surrounding the prosecution of our owned and in-licensed patent applications and the maintenance, enforcement or defense of our owned and in-licensed issued patents. The Leahy-Smith Act includes a number of significant changes to United States patent law. These changes include provisions that affect the way patent applications are prosecuted, redefine prior art, provide more efficient and cost-effective avenues for competitors to challenge the validity of patents, and enable third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent at USPTO-administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first-to-file system in which, assuming that the other statutory requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. As such, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. U.S. Supreme Court and U.S. Court of Appeals for the Federal Circuit rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations, including in the antibody arts. This combination of events has created uncertainty with respect to the validity and enforceability of patents once obtained. Depending on future actions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents

could change in unpredictable ways that could have a material adverse effect on our patent rights and our ability to protect, defend and enforce our patent rights in the future.

Geopolitical instability in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution or maintenance of patent applications and the maintenance, enforcement or defense of issued patents. For example, the United States and foreign government actions related to Russia's invasion of Ukraine may limit or prevent filing, prosecution and maintenance of patent applications in Russia. Government actions may also prevent maintenance of issued patents in Russia. These actions could result in abandonment or lapse of patents or patent applications, resulting in partial or complete loss of patent rights in Russia. If such an event were to occur, it could have a material adverse effect on our business. In addition, a decree was adopted by the Russian government in March 2022, allowing Russian companies and individuals to exploit inventions owned by patentees that have citizenship or nationality in, are registered in, or have predominately primary place of business or profit-making activities in the United States and other countries that Russia has deemed unfriendly without consent or compensation. Consequently, we would not be able to prevent third parties from practicing our inventions in Russia or from selling or importing products made using our inventions in and into Russia. Accordingly, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected. In addition, a European Unified Patent Court ("UPC") entered into force on June 1, 2023. The UPC is a common patent court that hears patent infringement and revocation proceedings effective for member states of the EU. This could enable third parties to seek revocation of a European patent in a single proceeding at the UPC rather than through multiple proceedings in each of the jurisdictions in which the European patent is validated. Although we do not currently own any European patents or applications, if we obtain such patents and applications in the future, any such revocation and loss of patent protection could have a material adverse impact on our business and our ability to commercialize or license our technology and products. Moreover, the controlling laws and regulations of the UPC will develop over time, and may adversely affect our ability to enforce or defend the validity of any European patents we may obtain. We may decide to opt out from the UPC any future European patent applications that we may file and any patents we may obtain. If certain formalities and requirements are not met, however, such European patents and patent applications could be challenged for non-compliance and brought under the jurisdiction of the UPC. We cannot be certain that future European patents and patent applications will avoid falling under the jurisdiction of the UPC, if we decide to opt out of the UPC.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuities fees and various other governmental fees on patents and/or patent applications are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent and/or patent application. The USPTO and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our programs, our competitive position would be adversely affected.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our programs in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a

pending application may be incorrect. For example, we may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

In addition, because some patent applications in the United States may be maintained in secrecy until the patents are issued, patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our issued patents or our pending applications, or that we were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering our products or technology similar to ours. Any such patent application may have priority over our patent applications or patents, which could require us to obtain rights to issued patents covering such technologies.

We may become subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our programs or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Our current and future licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors are not the sole and exclusive owners of the patents we in-licensed. For example, certain intellectual property we license from the University of Texas at Austin includes inventions that were made with U.S. government support. The U.S. government therefore has certain rights in such inventions under the applicable funding agreements and under applicable law. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Patent terms may be inadequate to protect the competitive position of our programs for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest United States non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our programs are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new programs, patents protecting such programs might expire before or shortly after such programs are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

Our technology licensed from various third parties may be subject to retained rights.

Our current or future licensors may retain certain rights under the relevant agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and

scholarly disclosures of information relating to the technology. It is difficult to monitor whether our licensors limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

Risks Related to Our Reliance on Third Parties

We rely on collaborations and licensing arrangements with third parties, including our arrangement with Paragon. If we are unable to maintain these collaborations or licensing arrangements, or if these collaborations or licensing arrangements are not successful, our business could be negatively impacted.

We currently rely on our collaborations and licensing arrangements with third parties, including Paragon, for a substantial portion of our discovery capabilities and in-licenses.

Collaborations or licensing arrangements that we enter into may not be successful, and any success will depend heavily on the efforts and activities of such collaborators or licensors. If any of our collaborators or licensors experiences delays in performance of, or fails to perform its obligations under their agreement with us, disagrees with our interpretation of the terms of such agreement or terminates their agreement with us, the research programs with respect to which we have exercised the Option to acquire intellectual property license rights to or have the Option to acquire intellectual property license rights to pursuant to the Paragon Agreement and development timeline could be adversely affected. If we fail to comply with any of the obligations under our collaborations or license agreements, including payment terms and diligence terms, our collaborators or licensors may have the right to terminate such agreements, in which event we may lose intellectual property rights and may not be able to develop, manufacture, market or sell the products covered by our agreements or may face other penalties under our agreements. Our collaborators and licensors may also fail to properly maintain or defend the intellectual property we have licensed from them, if required by our agreement with them, or even infringe upon, our intellectual property rights, leading to the potential invalidation of our intellectual property or subjecting us to litigation or arbitration, any of which would be time-consuming and expensive and could harm our ability to commercialize our programs. In addition, collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our programs and products if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours.

As part of our strategy, we plan to evaluate additional opportunities to enhance our capabilities and expand our development pipeline or provide development or commercialization capabilities that complement our own. We may not realize the benefits of such collaborations, alliances or licensing arrangements. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business.

We may face significant competition in attracting appropriate collaborators, and more established companies may also be pursuing strategies to license or acquire third-party intellectual property rights that we consider attractive. These companies may have a competitive advantage over us due to their size, financial resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Collaborations are complex and time-consuming to negotiate, document and execute. In addition, consolidation among large pharmaceutical and biotechnology companies has reduced the number of potential future collaborators. We may not be able to negotiate additional collaborations on a timely basis, on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our programs or bring them to market.

We currently rely, and plan to rely in the future, on third parties to conduct and support our preclinical studies and clinical trials. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our programs.

We have utilized and plan to continue to utilize and depend upon independent investigators and collaborators, such as medical institutions, CROs, contract testing labs and strategic partners, to conduct and

support our preclinical studies and clinical trials under agreements with us. We will rely heavily on these third parties over the course of our preclinical studies and clinical trials, and we control only certain aspects of their activities. As a result, we will have less direct control over the conduct, timing and completion of these preclinical studies and clinical trials and the management of data developed through preclinical studies and clinical trials than would be the case if we were relying entirely upon our own staff. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party contractors and CROs are required to comply with GCP regulations, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of our programs in clinical development. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with products produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our clinical trials will not be our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether they devote sufficient time and resources to our programs. These third parties may be involved in mergers, acquisitions or similar transactions and may have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other product development activities, which could negatively affect their performance on our behalf and the timing thereof and could lead to products that compete directly or indirectly with our current or future programs. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our programs.

We currently rely and expect to rely in the future on the use of manufacturing suites in third-party facilities or on third parties to manufacture our programs, and we may rely on third parties to produce and process our products, if approved. Our business could be adversely affected if we are unable to use third-party manufacturing suites or if the third-party manufacturers encounter difficulties in production.

We do not currently own any facility that may be used as our clinical-scale manufacturing and processing facility and must currently rely on CMOs to manufacture our programs. We have not yet caused our programs to be manufactured on a commercial scale and may not be able to do so for any of our programs, if approved. We currently have a sole source relationship for our supply of the SPY001 program. If there should be any disruption in such supply arrangement, including any adverse events affecting our sole supplier, it could have a negative effect on the clinical development of our programs and other operations while we work to identify and qualify an alternate supply source. We may not control the manufacturing process of, and may be completely dependent on, our contract manufacturing partners for compliance with cGMP requirements and any other regulatory requirements of the FDA or comparable foreign regulatory authorities for the manufacture of our programs. Beyond periodic audits, we have no control over the ability of our CMOs to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our programs or if it withdraws any approval in the future, we may need to find alternative manufacturing facilities, which would require the incurrence of significant additional costs and materially adversely affect our ability to develop, obtain regulatory approval for or market our programs, if approved. Similarly, our failure, or the failure of our CMOs, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of programs or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our programs or drugs and harm our business and results of operations.

Moreover, our CMOs may experience manufacturing difficulties due to resource constraints, supply chain issues, or as a result of labor disputes or unstable political environments. If any CMOs on which we will

rely fail to manufacture quantities of our programs at quality levels necessary to meet regulatory requirements and at a scale sufficient to meet anticipated demand at a cost that allows us to achieve profitability, our business, financial condition and prospects could be materially and adversely affected. In addition, our CMOs are responsible for transporting temperature controlled materials that can be inadvertently degraded during transport due to several factors, rendering certain batches unsuitable for trial use for failure to meet, among others, our integrity and purity specifications. We and any of our CMOs may also face product seizure or detention or refusal to permit the import or export of products. Our business could be materially adversely affected by business disruptions to our third-party providers that could materially adversely affect our anticipated timelines, potential future revenue and financial condition and increase our costs and expenses. Each of these risks could delay or prevent the completion of our preclinical studies and clinical trials or the approval of any of our programs by the FDA, result in higher costs or adversely impact commercialization of our programs.

Risks Related to Employee Matters, Managing Growth and Other Risks Related to Our Business

In order to successfully implement our plans and strategies, we will need to grow the size of our organization and we may experience difficulties in managing this growth.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of preclinical and clinical drug development, technical operations, clinical operations, regulatory affairs and, potentially, sales and marketing. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial personnel and systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team working together in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel.

We are highly dependent on our key personnel and anticipate hiring new key personnel. If we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

We are a preclinical stage biotechnology company with a limited operating history, and, as of September 30, 2023, we had 18 employees. We have been and will continue to be highly dependent on the research and development, clinical and business development expertise of our executive officers, as well as the other principal members of our management, scientific and clinical team. Any of our management team members may terminate their employment with us at any time. We do not maintain “key person” insurance for any of our executives or other employees.

Attracting and retaining qualified personnel will also be critical to our success, including with respect to any strategic transaction that we may pursue. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, facilitate regulatory approval of and commercialize product candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our discovery and nonclinical and clinical development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Our future growth may depend, in part, on our ability to operate in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize our programs in foreign markets for which we may rely on collaboration with third parties. We are not permitted to market or promote any of our programs before we receive regulatory approval from the applicable foreign regulatory authority, and may never receive such regulatory approval for any of our programs. To obtain separate regulatory approval in many other countries, we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our programs, and we cannot predict success in these jurisdictions. If we fail to comply with the regulatory requirements in international markets and receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our programs will be harmed and our business will be adversely affected. Moreover, even if we obtain approval of our programs and ultimately commercialize our programs in foreign markets, we would be subject to the risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and reduced protection of intellectual property rights in some foreign countries.

Our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, CMOs, suppliers and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, CMOs, suppliers and vendors acting for or on our behalf may engage in misconduct or other improper activities. We have adopted a code of conduct and ethics, but it is not always possible to identify and deter misconduct by these parties and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations.

Our internal computer systems, or those of any of our CROs, manufacturers, other contractors or consultants, third party service providers, or potential future collaborators, may fail or suffer security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of our proprietary or confidential data, employee data or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to our brand and material disruption of our operations.

Despite the implementation of security measures in an effort to protect systems that store our information, given their size and complexity and the increasing amounts of information maintained on our internal information technology systems and those of our third-party CROs, other contractors (including sites performing our clinical trials), third party service providers and supply chain companies, and consultants, these systems are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, contractors, consultants, business partners and/or other third parties, or from cyber-attacks by malicious third parties, which may compromise our system infrastructure or lead to the loss, destruction, alteration or dissemination of, or damage to, our data. To the extent that any disruption or security breach were to result in loss, destruction, unavailability, alteration or dissemination of, or damage to, our data or applications, or for it to be believed or reported that any of these occurred, we could incur liability and reputational damage and the development and commercialization of our programs could be delayed. Further, our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption in, or failure or security breach of, our systems or third-party systems where information important to our business operations or commercial development is stored.

Our fully-remote workforce may create additional risks for our information technology systems and data because our employees work remotely and utilize network connections, computers, and devices working at home, while in transit and in public locations. Additionally, business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies.

While we have implemented security measures designed to protect against security incidents, there can be no assurance that these measures will be effective. We may be unable in the future to detect vulnerabilities

in our information technology systems because such threats and techniques change frequently, are often sophisticated in nature, and may not be detected until after a security incident has occurred. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities. Applicable data privacy and security obligations may require us to notify relevant stakeholders of security incidents. Such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences.

We rely on third-party service providers and technologies to operate critical business systems to process sensitive information in a variety of contexts. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If our third-party service providers experience a security incident or other interruption, we could experience adverse consequences. While we may be entitled to damages if our third-party service providers fail to satisfy their privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award. In addition, supply-chain attacks have increased in frequency and severity, and we cannot guarantee that third parties' infrastructure in our supply chain or our third-party partners' supply chains have not been compromised.

If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may experience adverse consequences, such as government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims); indemnification obligations; negative publicity; reputational harm; monetary fund diversions; interruptions in our operations (including availability of data); financial loss; and other similar harms. Security incidents and attendant consequences may cause stakeholders (including investors and potential customers) to stop supporting our platform, deter new customers from products, and negatively impact our ability to grow and operate our business.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. We cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or to mitigate liabilities arising out of our privacy and security practices, that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. It is possible that we may have triggered an "ownership change" limitation. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership (some of which are outside of our control). As a result, if we earn net taxable income, our ability to use our pre-change NOLs and other pre-change tax attributes to offset U.S. federal taxable income or taxes may be subject to limitations, which could potentially result in increased future tax liability to us. Our NOLs and other tax attributes arising before our conversion from a Delaware limited liability company to a Delaware corporation in 2015 also may be limited by the Separate Return Limitation Year rule, which could increase our U.S. federal tax liability. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

We are subject to stringent and changing laws, regulations and standards, and contractual obligations relating to privacy, data protection, and data security. The actual or perceived failure to comply with such obligations could lead to government enforcement actions (which could include civil or criminal penalties), fines and sanctions, private litigation and/or adverse publicity and could negatively affect our operating results and business.

We, and third parties who we work with are or may become subject to numerous domestic and foreign laws, regulations, and standards relating to privacy, data protection, and data security, the scope of which is changing, subject to differing applications and interpretations, and may be inconsistent among countries, or conflict with other rules. We are or may become subject to the terms of contractual obligations related to

privacy, data protection and data security. Our obligations may also change or expand as our business grows. The actual or perceived failure by us or third parties related to us to comply with such laws, regulations and obligations could increase our compliance and operational costs, expose us to regulatory scrutiny, actions, fines and penalties, result in reputational harm, lead to a loss of customers, result in litigation and liability, and otherwise cause a material adverse effect on our business, financial condition and results of operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations may involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or commercialization efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

We may be subject to adverse legislative or regulatory tax changes that could negatively impact our financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect our stockholders or us. We assess the impact of various tax reform proposals and modifications to existing tax treaties in all jurisdictions where we have operations to determine the potential effect on our business and any assumptions we have made about our future taxable income. We cannot predict whether any specific proposals will be enacted, the terms of any such proposals or what effect, if any, such proposals would have on our business if they were to be enacted. For example, the United States recently enacted the Inflation Reduction Act of 2022, which implements, among other changes, a 1% excise tax on certain stock buybacks. In addition, beginning in 2022, the Tax Cuts and Jobs Act eliminated the previously available option to deduct research and development expenditures and requires taxpayers to amortize them generally over five years for research activities conducted in the United States and over 15 years for research activities conducted outside the United States. The U.S. Congress is considering legislation that would restore the current deductibility of research and development expenditures; however, we have no assurance that the provision will be repealed or otherwise modified. Such changes, among others, may adversely affect our effective tax rate, results of operation and general business condition.

We may acquire businesses or products, or form strategic alliances, in the future, and may not realize the benefits of such acquisitions.

We may acquire additional businesses or products, form strategic alliances, or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new programs or products resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. There is no assurance that, following any such acquisition, we will achieve the synergies expected in order to justify the transaction, which could result in a material adverse effect on our business and prospects.

We maintain our cash at financial institutions, often in balances that exceed federally-insured limits. The failure of financial institutions could adversely affect our ability to pay our operational expenses or make other payments.

Our cash held in non-interest-bearing and interest-bearing accounts exceeds the Federal Deposit Insurance Corporation ("FDIC") insurance limits. If such banking institutions were to fail, we could lose all or a portion of those amounts held in excess of such insurance limitations. For example, the FDIC took control of

Silicon Valley Bank on March 10, 2023. The Federal Reserve subsequently announced that account holders would be made whole. However, the FDIC may not make all account holders whole in the event of future bank failures. In addition, even if account holders are ultimately made whole with respect to a future bank failure, account holders' access to their accounts and assets held in their accounts may be substantially delayed. Any material loss that we may experience in the future or inability for a material time period to access our cash and cash equivalents could have an adverse effect on our ability to pay our operational expenses or make other payments, which could adversely affect our business.

Risks Related to Our Common Stock

Pursuant to the terms of the Acquisition Agreement, we are required to recommend that our stockholders approve the conversion of all outstanding shares of our Series A Preferred Stock into shares of our common stock. We cannot guarantee that our stockholders will approve this matter, and if they fail to do so we may be required to settle such shares in cash and our operations may be materially harmed.

Under the terms of the Securities Purchase Agreement, we agreed to use reasonable best efforts to call and hold a meeting of our stockholders to obtain the requisite approval for the conversion of all outstanding shares of Series A Preferred Stock issued in the Asset Acquisition and PIPE into shares of our common stock, as required by the Nasdaq listing rules, within 75 days from the closing of the PIPE and, if such approval is not obtained at that meeting, to seek to obtain such approval at an annual or special stockholders meeting to be held at least every 90 days thereafter until such approval is obtained, which would be time consuming and costly. Additionally, if our stockholders do not timely approve the conversion of our Series A Preferred Stock, then the holders of our Series A Preferred Stock may be entitled to require us to settle their shares of Series A Preferred Stock for cash at a price per share equal to the fair value of the Series A Preferred Stock at such time, as described in our Certificate of Designation relating to the Series A Preferred Stock. If we are forced to settle a significant amount of the Series A Preferred Stock, it could materially affect our results of operations, including raising a substantial doubt about our ability to continue as a going concern within one year from the issuance of this Quarterly Report.

Our failure to meet the continued listing requirements of The Nasdaq Capital Market could result in a delisting of our common stock.

Our common stock is currently listed on The Nasdaq Capital Market. To maintain the listing of our common stock on The Nasdaq Capital Market, we are required to meet certain listing requirements, including, among others, a minimum bid price of $1.00 per share (the "Minimum Bid Price Requirement").

If we fail to satisfy the continued listing requirements of The Nasdaq Capital Market, such as the corporate governance requirements or the Minimum Bid Price Requirement, The Nasdaq Capital Market may take steps to delist our common stock, which could have a materially adverse effect on our ability to raise additional funds as well as the price and liquidity of our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair our stockholders' ability to sell or purchase our common stock when they wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Minimum Bid Price Requirement, or prevent future non-compliance with The Nasdaq Capital Market's listing requirements.

On July 13, 2023, we received approval (the "Approval") from Nasdaq to transfer the listing of our common stock from The Nasdaq Global Market to The Nasdaq Capital Market (the "Transfer"). The Nasdaq Capital Market operates in substantially the same manner as The Nasdaq Global Market, but with less stringent listing requirements, although listed companies must meet certain financial requirements and comply with Nasdaq's corporate governance requirements. In connection with the Approval, we were granted an additional 180-calendar day grace period, or until January 8, 2024, to regain compliance with the Minimum Bid Price Requirement. As part of our Transfer application, we notified Nasdaq that in order to regain compliance with the Minimum Bid Price Requirement during the additional grace period, we intended to implement a reverse stock split at a ratio ranging from 1-for-10 shares up to a ratio of 1-for-25 shares, determined by our board of directors, which was approved by our stockholders on June 6, 2023. On September 8, 2023, we effected the reverse split of our common stock at a ratio of 1-for-25. On September 22, 2023, we received a letter from the

Listing Qualifications Staff of The Nasdaq Stock Market LLC notifying us that we had regained compliance with the Minimum Bid Price Requirement.

There can be no assurance that we will be successful in maintaining the listing of our common stock on The Nasdaq Capital Market. This could impair the liquidity and market price of our common stock. In addition, the delisting of our common stock from a national exchange could have a material adverse effect on our access to capital markets, and any limitation on market liquidity or reduction in the price of our common stock as a result of that delisting could adversely affect our ability to raise capital on terms acceptable to us, or at all.

Anti-takeover provisions in our charter documents and under Delaware law and the terms of some of our contracts could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.

Provisions in our Certificate of Incorporation and Bylaws may delay or prevent an acquisition or a change in management. These provisions include a prohibition on actions by written consent of our stockholders and the ability of our Board of Directors to issue Preferred Stock without stockholder approval. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law ("DGCL"), which prohibits stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Although we believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our Board of Directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove then current management by making it more difficult for stockholders to replace members of the Board of Directors, which is responsible for appointing the members of management.

In addition, the Certificate of Designation relating to our Series A Preferred Stock may delay or prevent a change in control of our company. At any time while at least 30% of the originally issued Series A Preferred Stock remains issued and outstanding, we may not consummate a Fundamental Transaction (as defined in the Certificate of Designation) or any merger or consolidation of the Company with or into another entity or any stock sale to, or other business combination in which our stockholders immediately before such transaction do not hold at least a majority of our capital stock immediately after such transaction, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Preferred Stock. This provision of the Certificate of Designation may make it more difficult for us to enter into any of the aforementioned transactions.

Our Certificate of Incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum certain types of actions and proceedings that may be initiated by our stockholders, and our Bylaws designate the federal courts of the United States as the exclusive forum for actions arising under the Securities Act, each of which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our Certificate of Incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders, any action asserting a claim arising pursuant to any provision of the DGCL, our Certificate of Incorporation or our Bylaws or any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein and the claim not being one which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery or for which the Court of Chancery does not have subject matter jurisdiction. Any person purchasing or otherwise acquiring any interest in any shares of our capital stock shall be deemed to have notice of and to have consented to this provision of our Certificate of Incorporation.

Our Bylaws provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act (a "Federal Forum Provision"). Our decision to adopt a Federal Forum Provision followed a decision by the Supreme Court of the State of Delaware holding that such provisions are facially valid under Delaware law. While there can be no assurance that federal or state courts will follow the holding of the Delaware Supreme Court or determine that the Federal Forum Provision should be enforced in a particular case, application of the Federal Forum Provision means that suits brought by our stockholders to enforce any

duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court.

These choice of forum provisions may limit our stockholders' ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. Stockholders who do bring a claim in the specified courts could face additional litigation costs in pursuing any such claim. The specified courts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find these provisions of our governance documents inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could have a material adverse effect on our business, financial condition or results of operations.

We do not anticipate that we will pay any cash dividends in the foreseeable future.

The current expectation is that we will retain our future earnings, if any, to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain, if any, for the foreseeable future.

Future sales of shares by existing stockholders could cause our stock price to decline.

Concurrently and in connection with the execution of the Acquisition Agreement, certain former Spyre securityholders, as of immediately prior to the Asset Acquisition, and certain of our directors and officers as of immediately prior to the Asset Acquisition entered into lock-up agreements with us, pursuant to which each such stockholder is subject to a 180-day lockup on the sale or transfer of shares of our common stock held by each such stockholder at the closing of the Asset Acquisition, including those shares received by former Spyre securityholders in the Asset Acquisition. Upon expiration of this 180-day lockup period, these shares will become eligible for sale in the public market.

On June 22, 2023, we also entered into a registration rights agreement (the "Registration Rights Agreement") with the Investors. Pursuant to the Registration Rights Agreement, we filed a resale registration statement with the SEC on August 7, 2023. We will use our reasonable best efforts to cause this registration statement to be declared effective by the SEC as soon as practicable. If, following receipt of approval of the Conversion Proposal, a registration statement covering the Registrable Securities (as defined in the Registration Rights Agreement) is not declared effective prior to the Effectiveness Deadline (as defined in the Registration Rights Agreement), among other events (each event, a "Registration Failure"), then we will be required to make pro rata payments to each Investor of the then outstanding Registrable Securities in an amount equal to one percent (1.0%) of the aggregate amount invested by such Investor for the Registrable Securities then held by such Investor for the initial day of a Registration Failure and for each thirty (30) day period thereafter until the Registration Failure is cured. If the registration statement is declared effective, the shares subject to the registration statement will no longer constitute restricted securities and may be sold freely in the public markets, subject to lapse on any related contractual restrictions related thereto of any Investor and, for shares of our common stock issuable upon the conversion of Series A Preferred Stock, the approval of our stockholders of such conversion. If our stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after legal restrictions on resale lapse, the trading price of our common stock could decline. In addition, shares of our common stock that are subject to our outstanding options will become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements and Rules 144 and 701 under the Securities Act.

Future sales and issuances of equity and debt could result in additional dilution to our stockholders.

We expect that we will need significant additional capital to fund our current and future operations, including to complete potential clinical trials for our product candidates. To raise capital, we may sell common stock, convertible securities, or other equity securities in one or more transactions at prices and in a manner we determine from time to time. As a result, our stockholders may experience additional dilution, which could cause our stock price to fall.

Pursuant to our equity incentive plans, we may grant equity awards and issue additional shares of our common stock to our employees, directors and consultants, and the number of shares of our common stock reserved for future issuance under certain of these plans will be subject to automatic annual increases in accordance with the terms of the plans. To the extent that new options are granted and exercised, or we issue additional shares of common stock in the future, our stockholders may experience additional dilution, which could cause our stock price to fall.

Our principal stockholders own a significant percentage of our stock and are able to exert significant control over matters subject to stockholder approval.

Our directors, officers, 5% stockholders, and their affiliates currently beneficially own a substantial portion of our outstanding voting stock. Therefore, these stockholders have the ability and may continue to have the ability to influence us through this ownership position. These stockholders may be able to determine some or all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors, amendments of organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our Common Stock that you may believe are in your best interest as one of our stockholders.

General Risk Factors

The market price of our Common Stock has historically been volatile, and the market price of our Common Stock may decline in the future.

The market price of our Common Stock has been, and may continue to be, subject to significant fluctuations. Market prices for securities of early-stage pharmaceutical, biotechnology, and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our Common Stock to fluctuate include:

- our ability to obtain regulatory approvals for our product candidates, and delays or failures to obtain such approvals;
- failure of any of our product candidates, if approved, to achieve commercial success;
- failure to maintain our existing third-party license and supply agreements;
- changes in laws or regulations applicable to our product candidates;
- any inability to obtain adequate supply of our product candidates or the inability to do so at acceptable prices;
- adverse regulatory authority decisions;
- introduction of new products, services, or technologies by our competitors;
- failure to meet or exceed financial and development projections we may provide to the public and the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators, and the investment community;
- announcements of significant acquisitions, strategic collaborations, joint ventures, or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- additions or departures of key personnel;
- significant lawsuits, including patent or stockholder litigation;
- if securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our business and stock;
- changes in the market valuations of similar companies;

- general market or macroeconomic conditions, including global inflationary pressures, rising interest rates, general economic slowdown or a recession, changes in monetary policy, instability in financial institutions and the prospect of a shutdown of the U.S. federal government;
- geopolitical instability, including the ongoing military conflict in Ukraine, conflict in Israel and surrounding areas, and geopolitical tensions in China;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- announcements by commercial partners or competitors of new commercial products, clinical progress or the lack thereof, significant contracts, commercial relationships, or capital commitments;
- the introduction of technological innovations or new therapies that compete with our potential products; changes in the structure of health care payment systems; and
- period-to-period fluctuations in our financial results.

Moreover, the capital markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock.

In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

We incur costs and demands upon management as a result of complying with the laws and regulations regulating public companies.

We incur significant legal, accounting, and other expenses associated with public company reporting requirements. We also incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act, as well as rules implemented by the SEC and Nasdaq. These rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly. These rules and regulations may also make it difficult and expensive for us to obtain directors' and officers' liability insurance. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our Board or as our executive officers, which may adversely affect investor confidence and could cause our business or stock price to suffer.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business, or our market, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that equity research analysts publish about us and our business. Equity research analysts may elect not to provide research coverage of our common stock and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our common stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of us or fails to publish reports on us regularly, demand for our common stock could decrease, which in turn could cause our stock price or trading volume to decline.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock may be negatively affected.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and the rules and regulations of Nasdaq. The Sarbanes-Oxley Act requires, among other things, that we maintain

effective disclosure controls and procedures and internal control over financial reporting. We must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our annual report filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. This requires that we incur substantial professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. We may experience difficulty in meeting these reporting requirements in a timely manner for each period.

We may or any subsequent testing by our independent registered public accounting firm may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if we are unable to maintain proper and effective internal controls, it could result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis, which could require a restatement, cause us to be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities, cause investors to lose confidence in our financial information, or cause our stock price to decline.

As a public company, we incur significant legal, accounting, insurance, and other expenses, and our management and other personnel have and will need to continue to devote a substantial amount of time to compliance initiatives resulting from operating as a public company.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibits filed or furnished as part of this Quarterly Report on Form 10-Q are set forth below.

Exhibit Number	Description	Form	File No	Date of Filing	Exhibit No.	Filed Herewith
2.1	Agreement and Plan of Merger, dated June 22, 2023, by and among Aeglea BioTherapeutics, Inc. Aspen Merger Sub I, Inc., Sequoia Merger Sub II, LLC and Spyre Therapeutics, Inc.	8-K	001-37722	06/23/2023	2.1	
3.1	Restated Certificate of Incorporation	S-1/A	333-205001	9/14/2015	3.2	
3.2	Certificate of Amendment to the Restated Certificate of Incorporation of Aeglea BioTherapeutics, Inc., effective September 8, 2023	8-K	001-37722	9/8/2023	3.1	
3.3	Amended and Restated Bylaws	8-K	001-37722	12/19/2022	3.1	
3.4	Certificate of Designation of Series A Non-Voting Convertible Preferred Stock	8-K	001-37722	06/23/2023	3.1	
10.1#	Asset Purchase Agreement, dated July 27, 2023, by and between Aeglea BioTherapeutics, Inc. and Immedica Pharma AB	10-Q	001-37722	08/11/2023	10.9	
10.2+	Offer Letter by and between the Company and Scott Burrows, dated as of August 10, 2023	8-K	001-37722	09/05/2023	10.1	
10.3+	Separation and Consulting Agreement and General Release of Claims by and between the Company and Jonathan Alspaugh, dated as of September 22, 2023	8-K	001-37722	09/25/2023	10.1	
10.4#	Biologics Master Services Agreement, effective June 20, 2022, by and between Paragon Therapeutics, Inc. and WuXi Biologics (Hong Kong) Limited	S-1/A	333-273769	10/10/2023	10.1	
10.5#	Cell Line License Agreement, effective June 20, 2022, by and between Paragon Therapeutics, Inc. and WuXi Biologics (Hong Kong) Limited	S-1/A	333-273769	10/10/2023	10.2	
10.6	Novation Agreement, dated September 19, 2023, by and between Paragon Therapeutics, Inc., Aeglea BioTherapeutics, Inc. and WuXi Biologics (Hong Kong) Limited	S-1/A	333-273769	10/10/2023	10.3	
10.7#	Amended and Restated Antibody Discovery and Option agreement, dated September 29, 2023, by and between Paragon Therapeutics, Inc., Parapyre Holding LLC and Spyre Therapeutics, LLC	S-1/A	333-273769	10/10/2023	10.5	
10.8	Lease Termination Agreement dated August 7, 2023, between Aeglea BioTherapeutics, Inc. and Las Cimas Owner LP	S-1/A	333-273769	10/10/2023	10.21	

Exhibit Number	Description	Form	File No	Date of Filing	Exhibit No.	Filed Herewith
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934					X
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934					X
32.1(1)	Certification of the Principal Executive and Financial Officers pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	The cover page from this Quarterly Report formatted in Inline XBRL and contained in Exhibit 101					

+ Indicates management contract or compensatory plan.
# Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.
(1) The certifications on Exhibit 32 hereto are deemed furnished and not “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section. Such certifications will not be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: November 9, 2023

AEGLEA BIOTHERAPEUTICS, INC.

By: /s/ Scott Burrows

Scott Burrows

Chief Financial Officer

(Principal Financial Officer, Principal Accounting Officer and Duly Authorized Signatory)

Exhibit 31.1

Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Cameron Turtle, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aeglea BioTherapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2023

/s/ Cameron Turtle

Cameron Turtle

Chief Operating Officer

(Principal Executive Officer)

Exhibit 31.2

Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Scott Burrows, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aeglea BioTherapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2023

/s/ Scott Burrows

Scott Burrows

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

Certifications of the
Principal Executive Officer and Principal Financial Officer
Pursuant To 18 U.S.C. Section 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 Aeglea BioTherapeutics, Inc. (the "Company") for the quarterly period ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Cameron Turtle, Chief Operating Officer of the Company, and Scott Burrows, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to our knowledge:

1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 9, 2023

/s/ Cameron Turtle

Cameron Turtle
Chief Operating Officer
(Principal Executive Officer)

/s/ Scott Burrows

Scott Burrows
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)