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 June 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: 001-40551

Acumen Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	36-4108129
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
427 Park St., Charlottesville, Virginia	22902
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (434) 297-1000

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common stock, par value $0.0001 per share	ABOS	The Nasdaq Global Select Market

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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	x

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 August 4, 2023, the registrant had 57,868,512 shares of common stock, $0.0001 par value per share, outstanding.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q including statements regarding our future results of operations or financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will” or “would” or the negative of these words or other similar terms or expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- the sufficiency of our existing cash and cash equivalents and marketable securities to fund our future operating expenses and capital expenditure requirements;
- our ability to obtain funding for our operations, including funding necessary to develop and commercialize ACU193, subject to necessary regulatory approvals;
- the ability of our clinical trials to demonstrate the safety and efficacy of ACU193, and other positive results;
- the therapeutic potential of ACU193, including its potential for improved safety and efficacy, as compared to other monoclonal antibodies approved and/or in development, as well as the expectations concerning the INTERCEPT-AD trial;
- the success, cost and timing of our development activities, nonclinical studies and clinical trials;
- the timing and focus of our future clinical trials, and the reporting of data from those trials;
- our plans relating to commercializing ACU193, subject to obtaining necessary regulatory approvals;
- our ability to attract and retain key scientific and clinical personnel;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our reliance on third parties to conduct clinical trials of ACU193, and for the manufacture of ACU193 for nonclinical studies and clinical trials;
- the success of competing therapies that are or may become available;
- our plans and ability to obtain or protect our intellectual property rights, including extensions of existing patent terms where available or the use of data market exclusivity to provide protection from generic or biosimilar versions of our product;
- the scope of protection we are able to establish and maintain for intellectual property rights covering ACU193 and technology;
- potential claims relating to our intellectual property;
- existing regulations and regulatory developments in the United States and other jurisdictions;
- our ability to obtain and maintain regulatory approval of ACU193, and any related restrictions, limitations and/or warnings in the label of any approved product candidate;
- our plans relating to the further development and manufacturing of ACU193, including additional therapeutic indications which we may pursue;
- our ability to develop and maintain our corporate infrastructure, including our ability to design and maintain an effective system of internal controls;
- our financial performance; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

You should not rely on forward-looking statements as predictions of future events. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described under the header “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the Securities and Exchange Commission, or the SEC, on March 27, 2023 (the Annual Report), and in our other filings with the SEC, as

updated by the risk factors set forth in Part II, Item 1A “Risk Factors” of this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained herein. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made, and we undertake no obligation to update them to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q or to reflect new information or the occurrence of unanticipated events, except as required by law.

Unless the context otherwise indicates, references in this report to the terms “Acumen,” “the Company,” “we,” “our” and “us” refer to Acumen Pharmaceuticals, Inc.

We may announce material business and financial information to our investors using our investor relations website (www.investors.acumenpharm.com). We therefore encourage investors and others interested in Acumen to review the information that we make available on our website, in addition to following our filings with the SEC, webcasts, press releases and conference calls. Our website and information included in or linked to our website are not part of this Quarterly Report on Form 10-Q.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

Acumen Pharmaceuticals, Inc.
Condensed Balance Sheets
(in thousands, except share and per share data)

	June 30, 2023 (unaudited)	December 31, 2022
ASSETS		
Current assets		
Cash and cash equivalents	$ 77,248	$ 130,101
Marketable securities, short-term	67,633	47,504
Prepaid expenses and other current assets	4,657	2,724
Total current assets	149,538	180,329
Marketable securities, long-term	27,311	15,837
Property and equipment, net	136	165
Deferred offering costs	183	—
Right-of-use asset	29	105
Other assets	208	151
Total assets	$ 177,405	$ 196,587
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 2,026	$ 1,640
Accrued clinical trial expenses	4,102	2,717
Accrued expenses and other current liabilities	2,374	3,350
Operating lease liability	29	105
Total current liabilities	8,531	7,812
Total liabilities	8,531	7,812
Commitments and contingencies (Note 6)		
Stockholders' equity		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized and no shares issued and outstanding as of June 30, 2023 and December 31, 2022	—	—
Common stock, $0.0001 par value; 300,000,000 shares authorized and 41,025,062 shares issued and outstanding as of June 30, 2023 and December 31, 2022	4	4
Additional paid-in capital	362,860	359,949
Accumulated deficit	(193,344)	(170,427)
Accumulated other comprehensive loss	(646)	(751)
Total stockholders' equity	168,874	188,775
Total liabilities and stockholders' equity	$ 177,405	$ 196,587

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

Acumen Pharmaceuticals, Inc.
Condensed Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Operating expenses				
Research and development	$ 9,133	$ 7,321	$ 17,846	$ 13,306
General and administrative	4,345	3,090	8,767	6,312
Total operating expenses	13,478	10,411	26,613	19,618
Loss from operations	(13,478)	(10,411)	(26,613)	(19,618)
Other income (expense)				
Interest income, net	1,884	260	3,716	337
Other income (expense), net	(16)	—	(20)	1
Total other income	1,868	260	3,696	338
Net loss	(11,610)	(10,151)	(22,917)	(19,280)
Other comprehensive gain (loss)				
Unrealized gain (loss) on marketable securities	(122)	(151)	105	(734)
Comprehensive loss	$ (11,732)	$ (10,302)	$ (22,812)	$ (20,014)
Net loss per common share, basic and diluted	$ (0.28)	$ (0.25)	$ (0.56)	$ (0.48)
Weighted-average shares outstanding, basic and diluted	41,025,062	40,497,087	41,025,062	40,485,244

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

Acumen Pharmaceuticals, Inc.
Condensed Statements of Changes in Stockholders' Equity
(in thousands)
(unaudited)

For the Three Months Ended June 30, 2023

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance as of March 31, 2023	41,025,062	$ 4	$ 361,339	$ (181,734)	$ (524)	$ 179,085
Unrealized gain on marketable securities	—	—	—	—	(122)	(122)
Stock-based compensation	—	—	1,521	—	—	1,521
Net loss	—	—	—	(11,610)	—	(11,610)
Balance as of June 30, 2023	41,025,062	$ 4	$ 362,860	$ (193,344)	$ (646)	$ 168,874

For the Three Months Ended June 30, 2022

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance as of March 31, 2022	40,473,270	$ 4	$ 353,599	$ (136,700)	$ (814)	$ 216,089
Unrealized loss on marketable securities	—	—	—	—	(151)	(151)
Stock options exercised for cash	23,242	—	17	—	—	17
Cashless stock options exercise	4,746	—	—	—	—	—
Stock-based compensation	—	—	715	—	—	715
Net loss	—	—	—	(10,151)	—	(10,151)
Balance as of June 30, 2022	40,501,258	$ 4	$ 354,331	$ (146,851)	$ (965)	$ 206,519

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

Acumen Pharmaceuticals, Inc.
Condensed Statements of Changes in Stockholders' Equity
(in thousands)
(unaudited)

For the Six Months Ended June 30, 2023

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2022	41,025,062	$ 4	$ 359,949	$ (170,427)	$ (751)	$ 188,775
Unrealized gain on marketable securities	—	—	—	—	105	105
Stock-based compensation	—	—	2,911	—	—	2,911
Net loss	—	—	—	(22,917)	—	(22,917)
Balance as of June 30, 2023	41,025,062	$ 4	$ 362,860	$ (193,344)	$ (646)	$ 168,874

For the Six Months Ended June 30, 2022

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2021	40,473,270	$ 4	$ 352,981	$ (127,571)	$ (231)	$ 225,183
Unrealized loss on marketable securities	—	—	—	—	(734)	(734)
Stock options exercised for cash	23,242	—	17	—	—	17
Cashless stock options exercise	4,746	—	—	—	—	—
Stock-based compensation	—	—	1,333	—	—	1,333
Net loss	—	—	—	(19,280)	—	(19,280)
Balance as of June 30, 2022	40,501,258	$ 4	$ 354,331	$ (146,851)	$ (965)	$ 206,519

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

Acumen Pharmaceuticals, Inc.
Condensed Statements of Cash Flows
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities		
Net loss	$ (22,917)	$ (19,280)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	29	10
Stock-based compensation expense	2,911	1,333
Amortization of premiums and accretion of discounts on marketable securities, net	(634)	384
Amortization of right-of-use asset	76	66
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(1,933)	3,282
Other assets	(57)	(92)
Accounts payable	384	580
Accrued clinical trial expenses	1,385	448
Operating lease liability	(76)	(66)
Accrued expenses and other current liabilities	(1,013)	(1,432)
Net cash used in operating activities	(21,845)	(14,767)
Cash flows from investing activities		
Purchases of marketable securities	(52,131)	(12,129)
Proceeds from maturities and sales of marketable securities	21,268	15,860
Purchases of property and equipment	—	(45)
Net cash provided by (used in) investing activities	(30,863)	3,686
Cash flows from financing activities		
Payments for deferred offering costs	(145)	(31)
Proceeds from exercise of stock options	—	17
Net cash used in financing activities	(145)	(14)
Net change in cash and cash equivalents	(52,853)	(11,095)
Cash and cash equivalents at the beginning of the period	130,101	122,162
Cash and cash equivalents at the end of the period	$ 77,248	$ 111,067
Supplemental disclosure of noncash investing and financing activities		
Deferred offering costs in accrued expenses and other current liabilities	$ 36	$ 207
Deferred offering costs in accounts payable	$ 2	$ —
Right-of-use assets obtained in exchange for operating lease liabilities	$ —	$ 233
Purchases of property and equipment in accounts payable	$ —	$ 42

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

Acumen Pharmaceuticals, Inc.
Notes to Condensed Financial Statements
(unaudited)

NOTE 1. DESCRIPTION OF ORGANIZATION AND BUSINESS OPERATIONS

Acumen Pharmaceuticals, Inc. ("Acumen" or the "Company") was incorporated in 1996 in the state of Delaware. Acumen is a clinical-stage biopharmaceutical company developing a novel disease-modifying approach to target what the Company believes to be a key underlying cause of Alzheimer's disease ("AD"). Alzheimer's disease is a progressive neurodegenerative disease of the brain that leads to loss of memory and cognitive functions and ultimately results in death. The Company's scientific founders pioneered research on soluble amyloid-beta oligomers ("AßOs"), which are globular assemblies of the amyloid-beta ("Aß") peptide that are distinct from Aß monomers and amyloid plaques. Based on decades of research and supporting evidence, AßOs have gained increasing scientific acceptance as primary toxins involved in the initiation and propagation of AD pathology. The Company is currently focused on advancing a targeted immunotherapy drug candidate, ACU193, through clinical development following Phase 1 results in "early AD" patients (patients with mild cognitive impairment or mild dementia due to Alzheimer's pathology) that were announced in July 2023. ACU193 is a recombinant humanized immunoglobulin gamma 2 ("IgG2") monoclonal antibody ("mAb") that was designed to selectively target AßOs, has demonstrated functional and protective effects in in vitro assays, and has demonstrated in vivo safety and pharmacologic activity in multiple animal species, including transgenic mouse models for AD.

The Company is subject to the uncertainty of whether the Company's intellectual property will develop into successful commercial products.

Public Offering

On July 21, 2023, the Company issued 16,774,193 shares of its common stock, $0.0001 par value per share ("Common Stock"), in a public offering (the "Offering") at a price to the public of $7.75 per share. The aggregate estimated net proceeds from the Offering, after underwriting discounts and commissions and other offering expenses are $122.2 million. In addition, the Company granted the underwriters an option to purchase up to an additional 2,516,128 shares of Common Stock at the public offering price less underwriting discounts and commissions, which the underwriters have until August 17, 2023 to exercise.

Liquidity and Capital Resources

The Company has incurred operating losses since inception and expects to continue to incur significant operating losses for the foreseeable future and may never become profitable. As of June 30, 2023 and December 31, 2022, the Company had an accumulated deficit of $193.3 million and $170.4 million, respectively, and working capital of $141.0 million and $172.5 million, respectively. Management believes that the Company has sufficient cash to continue operating activities for beyond 12 months from issuance of these condensed financial statements.

Future capital requirements will depend upon many factors, including the timing and extent of spending on research and development and market acceptance of the Company's products. The Company expects that it will need to obtain additional financing to complete clinical trials and launch and commercialize any product candidates for which it receives regulatory approval. Until such time, if ever, the Company can generate revenue sufficient to achieve profitability, the Company expects to finance its operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. There can be no assurance that such financing will be available on terms acceptable to the Company, or at all. To the extent that the Company raises additional capital through the sale of equity or convertible debt securities, the ownership interest of its stockholders will be diluted, and the terms of these securities may include liquidation of other preferences that adversely affect the rights of common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting the Company's ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If the Company is unable to maintain sufficient financial resources, its business, financial condition and results of operations will be materially and adversely affected. The Company may be required to delay, limit, reduce or terminate its product discovery and development activities or future commercialization efforts.

The Company initiated a Phase 1 clinical trial of ACU193 in the second quarter of 2021, which the Company named "INTERCEPT-AD." This trial enrolled 65 patients with "early AD." INTERCEPT-AD is a U.S.-based, multi-center, randomized, double-blind, placebo-controlled clinical trial with overlapping single ascending dose and multiple ascending dose cohorts evaluating patients with early AD. Topline results were announced in July 2023.

Acumen Pharmaceuticals, Inc.
Notes to Condensed Financial Statements
(unaudited)

NOTE 2. BASIS OF PRESENTATION, SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. In the opinion of management, the unaudited condensed financial statements reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the balances and results for the periods presented. Certain information and note disclosures normally included in the Company's annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. These unaudited condensed financial statement results are not necessarily indicative of results to be expected for the full fiscal year or any future period.

A description of the Company's significant accounting policies is included in the Company's Annual Report. Other than as described below, there have been no material changes in the Company's significant accounting policies to those previously disclosed in the Company's Annual Report.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements, as well as the reported amounts of expenses during the reporting periods. These estimates and assumptions are based on the Company's historical experience, and on various other factors that management believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources.

Actual results may differ from these estimates under different assumptions or conditions. To the extent there are material differences between the estimates and actual results, the Company's future results of operations will be affected.

Reclassifications

Certain prior year amounts have been reclassified for consistency with the current period presentation. Accrued clinical trial expenses are presented as a separate line on the statements of cash flows, whereas these accrued expenses were previously included in accrued expenses and other current liabilities. This reclassification had no effect on the reported results of operations.

Stock-based Compensation

The Company expenses stock-based compensation to employees, non-employees and board members over the requisite service period based on the estimated grant date fair value of the awards and actual forfeitures. The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model, which requires the use of a number of complex assumptions including the fair value of the Common Stock, expected volatility, risk-free interest rate, expected dividends, and the expected term of the option. The fair value of restricted stock units is the closing market price of the Common Stock on the date of the grant. The assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment. Stock-based awards with graded-vesting schedules are recognized on a straight-line basis over the requisite service period for the last separately vesting portion of the award. All stock-based compensation costs are recorded in research and development expense or general and administrative expense in the statements of operations and comprehensive loss based upon the

respective employee's or non-employee's role within the Company. Forfeitures are recorded as they occur. See also *Note 8. Stock-based Compensation* below.

Recently Adopted Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which was codified with its subsequent amendments as Accounting Standards Codification ("ASC") 326. ASC 326 seeks to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments, including trade receivables, and other commitments to extend credit held by a reporting entity at each reporting date. The amendments require an entity to replace the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects current expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The updated guidance was effective for the Company on January 1, 2023. The Company's marketable securities portfolio consists entirely of available-for-sale debt securities and, as such, the adoption of this guidance did not have a material impact on its financial statements and disclosures upon adoption, but it did require the Company to provide additional disclosures related to its available-for-sale debt securities in a continuous unrealized loss position.

NOTE 3. MARKETABLE SECURITIES

The Company's marketable securities consisted of the following (in thousands):

	June 30, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale securities, short-term				
Corporate debt securities	$ 45,410	$ —	$ (238)	$ 45,172
Asset-backed securities	3,002	—	(29)	2,973
U.S. treasury securities	19,609	—	(121)	19,488
Total available-for-sale securities, short-term	68,021	—	(388)	67,633
Available-for-sale securities, long-term				
Corporate debt securities	27,569	—	(258)	27,311
Total available-for-sale securities, long-term	27,569	—	(258)	27,311
Total available-for-sale securities	$ 95,590	$ —	$ (646)	$ 94,944

	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale securities, short-term				
Corporate debt securities	$ 30,174	$ —	$ (249)	$ 29,925
Asset-backed securities	3,006	—	(102)	2,904
U.S. treasury securities	15,032	—	(357)	14,675
Total available-for-sale securities, short-term	48,212	—	(708)	47,504
Available-for-sale securities, long-term				
Corporate debt securities	15,880	—	(43)	15,837
Total available-for-sale securities, long-term	15,880	—	(43)	15,837
Total available-for-sale securities	$ 64,092	$ —	$ (751)	$ 63,341

The following tables summarize the amount of unrealized losses, defined as the amount by which the amortized cost exceeds fair value, and the related fair value of available-for-sale marketable securities with unrealized losses, which have

been segregated into two categories: those that have been in a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 or more months.

	June 30, 2023					
	Less than 12 Months		Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	$ 65,895	$ (449)	$ 5,609	$ (47)	$ 71,504	$ (496)
Asset-backed securities	—	—	2,973	(29)	2,973	(29)
U.S. treasury securities	7,577	(26)	11,910	(95)	19,487	(121)
Total	$ 73,472	$ (475)	$ 20,492	$ (171)	$ 93,964	$ (646)

	December 31, 2022					
	Less than 12 Months		Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	$ 29,515	$ (58)	$ 16,247	$ (234)	$ 45,762	$ (292)
Asset-backed securities	—	—	2,904	(102)	2,904	(102)
U.S. treasury securities	3,026	(7)	11,649	(350)	14,675	(357)
Total	$ 32,541	$ (65)	$ 30,800	$ (686)	$ 63,341	$ (751)

As of June 30, 2023, the Company's available-for-sale securities classified as short-term mature in one year or less and the Company's available-for-sale securities classified as long-term mature within less than two years. As noted in the table above, certain of the Company's available-for-sale marketable securities as of June 30, 2023 have been in an unrealized loss position for more than 12 months; however, those losses were not significant and were primarily due to changes in interest rates, including market credit spreads, and not due to increased credit risks associated with specific securities. Accordingly, no credit losses were recognized on these securities during the three and six months ended June 30, 2023. There were no realized gains or losses for the three and six months ended June 30, 2023 and 2022. The Company does not intend to sell these securities and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases, which may be at maturity.

NOTE 4. FAIR VALUE MEASUREMENTS

The Company's financial assets and liabilities subject to fair value measurement on a recurring basis and the level of inputs used for such measurements were as follows (in thousands):

	Fair value measurements at reporting date using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value at June 30, 2023
Assets included in:				
Cash and cash equivalents				
Money market securities	$ 75,423	$ —	$ —	$ 75,423
Marketable securities				
Corporate debt securities	—	72,483	—	72,483
Asset-backed securities	—	2,973	—	2,973
U.S. treasury securities	—	19,488	—	19,488
Total fair value	$ 75,423	$ 94,944	$ —	$ 170,367

Acumen Pharmaceuticals, Inc.
Notes to Condensed Financial Statements
(unaudited)

	Fair value measurements at reporting date using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value at December 31, 2022
Assets included in:				
Cash and cash equivalents				
Money market securities	$ 129,100	$ —	$ —	$ 129,100
Marketable securities				
Corporate debt securities	—	45,762	—	45,762
Asset-backed securities	—	2,904	—	2,904
U.S. treasury securities	—	14,675	—	14,675
Total fair value	$ 129,100	$ 63,341	$ —	$ 192,441

The carrying values reported in the Company's condensed balance sheets for cash (excluding cash equivalents which are recorded at fair value on a recurring basis), accounts payable, accrued clinical trial expenses and accrued expenses and other current liabilities are reasonable estimates of their fair values due to the short-term nature of these items.

The fair value of the Company's money market funds is determined using quoted market prices in active markets for identical assets.

The fair value for the available-for-sale marketable securities is determined based on valuation models using inputs that are observable either directly or indirectly (Level 2 inputs), such as quoted prices for similar assets or liabilities, yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures.

NOTE 5. SUPPLEMENTAL FINANCIAL INFORMATION

Prepaid expenses and other current assets consisted of the following (in thousands):

	June 30, 2023	December 31, 2022
Prepaid raw materials	$ 2,678	$ 199
Research and development service agreements	1,509	1,077
Dues and subscriptions	227	105
Prepaid insurance	35	1,106
Other	208	237
Total prepaid expenses and other current assets	$ 4,657	$ 2,724

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

	June 30, 2023	December 31, 2022
Compensation and other employee liabilities	$ 1,365	$ 2,008
Research and development	904	1,211
Legal	85	—
Other	20	131
Total accrued expenses and other current liabilities	$ 2,374	$ 3,350

NOTE 6. COMMITMENTS AND CONTINGENCIES

The Company is not a party to any material legal proceedings and is not aware of any pending or threatened claims. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

In November 2022, the Company entered into a License Agreement ("Agreement") with Lonza Sales AG ("Lonza") for a worldwide non-exclusive license to use certain Lonza technology in its research and development and drug manufacturing activities. Under the terms of the Agreement, in consideration of the licenses and consents granted to the Company, the Company is required to make an annual payment to Lonza (i) in Swiss Francs in the low six-digits where the Company manufactures ACU193 and (ii) in Swiss Francs in the mid six-digits per sublicense upon the anniversary date of the Agreement where a third party manufactures ACU193. In addition, if the Company generates Net Sales, as defined in the Agreement, of ACU193, the Company will be obligated to pay Lonza a royalty of low single digits based upon what entity manufactures ACU193 at that time.

NOTE 7. STOCKHOLDERS' EQUITY

Authorized Shares

As of June 30, 2023, the total number of shares of capital stock authorized to be issued per the Company's Amended and Restated Certificate of Incorporation is 310,000,000, with 10,000,000 shares designated as preferred stock with a par value of $0.0001, and 300,000,000 shares designated as Common Stock. Each share of Common Stock is entitled to one voting right.

Shelf Registration and Equity Offerings

On July 1, 2022, the Company filed a shelf registration statement on Form S-3 (the "Registration Statement"). Pursuant to the Registration Statement, the Company may offer and sell securities having an aggregate public offering price of up to $200.0 million. In connection with the filing of the Registration Statement, the Company also entered into a sales agreement (the "Sales Agreement") with BofA Securities, Inc. ("BofA") and Stifel, Nicolaus & Company, Incorporated ("Stifel"), as sales agents, pursuant to which the Company may issue and sell shares of Common Stock for an aggregate offering price of up to $50.0 million under an at-the-market offering program (the "ATM"), which is included in the $200.0 million of securities that may be offered pursuant to the Registration Statement. On April 23, 2023, the Company entered into an amendment to the Sales Agreement (as amended, the "Amended Sales Agreement") to add BTIG, LLC ("BTIG") as a sales agent under the Amended Sales Agreement (BTIG, together with BofA and Stifel, the "Sales Agents"). Pursuant to the Amended Sales Agreement, the Company will pay the Sales Agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of Common Stock. The Company is not obligated to make any sales of shares of Common Stock under the ATM. The Company did not sell any shares of its Common Stock under the ATM during the six months ended June 30, 2023.

On July 21, 2023, the Company issued 16,774,193 shares of Common Stock in the Offering for estimated net proceeds of $122.2 million. See *Note 1. Description of Organization and Business Operations*.

NOTE 8. STOCK-BASED COMPENSATION

2021 Equity Incentive Plan

The 2021 Equity Incentive Plan (the "2021 Plan"), which provides for the grant of incentive stock options to employees, and the grant of nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of stock awards to employees, directors and consultants, became effective on June 30, 2021. The 2021 Plan is a successor to the Company's Amended and Restated Stock Performance Plan that was adopted by the Company's Board of Directors (the "Board") and stockholders on April 8, 2013 (as amended from time to time, most recently on November 20, 2020, the "2013 Plan"). Following the effectiveness of the 2021 Plan, no further grants may be made under the 2013 Plan; however, any outstanding equity awards granted under the 2013 Plan continue to be governed by the terms of the 2013 Plan. As of June 30, 2023, there were 3,324,116 options outstanding under the 2013 Plan.

Initially, the maximum number of shares of Common Stock that may be issued under the 2021 Plan was 7,698,282 shares, which is the sum of (1) 3,550,000 new shares, plus (2) 667,104 shares that remained available for issuance under the

Company's 2013 Plan at the time the 2021 Plan became effective, plus (3) any shares subject to outstanding stock options or other stock awards that were granted under the 2013 Plan that, on or after the 2021 Plan became effective, terminate or expire prior to exercise or settlement, are settled in cash, are forfeited or repurchased because of the failure to vest, or are reacquired or withheld to satisfy a tax withholding obligation or the purchase or exercise price in accordance with the terms of the 2013 Plan. In addition, the number of shares of Common Stock reserved for issuance under the 2021 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2022 through January 1, 2031, in an amount equal to 5% of the total number of shares of Common Stock outstanding on December 31 of the fiscal year before the date of each automatic increase, or a lesser number of shares determined by the Board prior to the applicable January 1. On January 1, 2023, the Board increased the number of shares of Common Stock reserved for issuance under the 2021 Plan by 2,051,253 shares.

The maximum number of shares of Common Stock that may be issued upon the exercise of incentive stock options under the 2021 Plan is 12,000,000. As of June 30, 2023, 11,773,198 shares were authorized for issuance under the 2021 Plan and 3,905,390 shares remained available for issuance under the 2021 Plan.

The Company recorded stock-based compensation expense in the following expense categories of its condensed statements of operations for the periods shown (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
General and administrative	$ 1,058	$ 510	$ 2,016	$ 962
Research and development	463	205	895	371
Total stock-based compensation	$ 1,521	$ 715	$ 2,911	$ 1,333

Stock Options

The Black-Scholes option-pricing model was used to estimate the fair value of stock options granted during the six months ended June 30, 2023 and 2022 with the following weighted average assumptions:

	Six Months Ended June 30,	
	2023	2022
Risk-free interest rate	3.47% - 4.13%	1.71% - 3.38%
Expected term (in years)	5.5 - 6.1	5.8 - 6.1
Expected volatility	90%	90%
Expected dividend yield	0%	0%

The weighted average grant date fair value of options granted during the six months ended June 30, 2023 and 2022, was $4.46 per share and $3.58 per share, respectively.

Stock options granted after December 31, 2017 generally vest monthly over a range of 12 to 48 months or vest monthly over a total of 48 months following a one-year cliff and all have a 10-year contractual term. During the six months ended June 30, 2023, the Company also issued option awards to its Board that vest in full on the first anniversary of the grant date. Stock options granted prior to December 31, 2017 were either fully vested upon grant or generally vested monthly over a range of three to 24 months and also have a 10-year term. The Company became publicly traded in July 2021 and lacks sufficient company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies. Due to the lack of historical exercise history, the expected term of the Company's stock options has been determined using the "simplified" method for awards. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is zero based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

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The following table reflects summarized stock option activity:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2023	5,610,893	$ 3.36		
Granted	1,793,600	$ 5.90		
Forfeited	(12,000)	$ 3.23		
Expired	(2,104)	$ 22.39		
Outstanding at June 30, 2023	7,390,389	$ 3.97	8.1	$ 12,580
Vested and exercisable at June 30, 2023	3,285,716	$ 2.80	7.2	$ 8,819

As of June 30, 2023, total unrecognized compensation costs related to unvested stock option awards was approximately $14.2 million, which the Company expects to recognize over a weighted-average period of approximately 2.7 years.

Restricted Stock Units

In January 2023, the Company granted a restricted stock unit ("RSU") award to each of its then current employees. These RSU awards vest in equal annual installments on the first three anniversaries of the grant date.

	Number of Shares	Weighted Average Grant Date Fair Value
Unvested as of January 1, 2023	—	$ —
Granted	328,500	$ 6.11
Unvested at June 30, 2023	328,500	$ 6.11

As of June 30, 2023, total unrecognized compensation costs related to unvested RSUs was approximately $1.7 million, which the Company expects to recognize over a weighted-average period of approximately 2.6 years.

Employee Stock Purchase Plan

The 2021 Employee Stock Purchase Plan (the "ESPP"), which permits employees to purchase shares of Common Stock, became effective on June 30, 2021. A total of 375,000 shares of Common Stock were initially reserved for sale under the ESPP. The number of shares of Common Stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2023 and through January 1, 2031, by the lesser of (1) 1% of the total number of shares of Common Stock outstanding on the last day of the fiscal year before the date of the automatic increase, and (2) 800,000 shares; provided that before the date of any such increase, the Board may determine that such increase will be less than the amount set forth in clauses (1) and (2). On January 1, 2023, the Board increased the number of shares of Common Stock reserved for issuance under the ESPP by 410,251 shares. As of June 30, 2023, there are a total of 1,189,983 shares authorized for issuance under the ESPP and there have been no purchases of shares under the ESPP.

NOTE 9. NET LOSS PER SHARE

The Company computes net loss per common share using the two-class method required for participating securities. Basic and diluted net loss per share was the same for each period presented as the inclusion of all potential common stock outstanding would have been anti-dilutive. Potentially dilutive securities not included in the calculation of diluted net loss

per common share, because to do so would be anti-dilutive, include shares issuable upon the exercise of stock options and unvested RSUs as follows:

	Six Months Ended June 30,	
	2023	2022
Shares issuable upon exercise of stock options	7,390,389	5,228,037
Unvested RSUs	328,500	—
Total	7,718,889	5,228,037

NOTE 10. SUBSEQUENT EVENTS

See discussion regarding the July 2023 sale of Common Stock pursuant to the Offering discussed above in *Note 1. Description of Organization and Business Operations*.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and in the audited financial statements and notes thereto as of and for the year ended December 31, 2022 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, included in our Annual Report. This discussion, particularly information with respect to our future results of operations or financial condition, business strategy and plans and objectives of management for future operations, includes forward-looking statements that involve risks and uncertainties as described under the heading "Special Note Regarding Forward-Looking Statements" in this Quarterly Report on Form 10-Q. You should review the disclosure under the heading "Risk Factors" in the Annual Report for a discussion of important factors that could cause our actual results to differ materially from those described in or implied by these forward-looking statements.

Overview

We are a clinical-stage biopharmaceutical company developing a novel disease-modifying approach to target what we believe to be a key underlying cause of Alzheimer's disease, or AD. Alzheimer's disease is a progressive neurodegenerative disease of the brain that leads to loss of memory and cognitive functions and ultimately results in death. Our scientific founders pioneered research on soluble amyloid-beta oligomers, or AßOs, which are globular assemblies of the amyloid-beta, or Aß, peptide that are distinct from Aß monomers and amyloid plaques. Based on decades of research and supporting evidence, AßOs have gained increasing scientific acceptance as primary toxins involved in the initiation and propagation of AD pathology. We are currently focused on advancing a targeted immunotherapy drug candidate, ACU193. ACU193 is a recombinant humanized immunoglobulin gamma 2, or IgG2, monoclonal antibody, or mAb, that was designed to selectively target AßOs, has demonstrated functional and protective effects in in vitro assays, and has demonstrated in vivo safety and pharmacologic activity in multiple animal species, including transgenic mouse models for AD.

We initiated a Phase 1 clinical trial of ACU193 in the second quarter of 2021, which we named "INTERCEPT-AD." This trial enrolled 65 participants with "early AD." INTERCEPT-AD is a U.S.-based, multi-center, randomized, double-blind, placebo-controlled clinical trial with overlapping single ascending dose, or SAD, and multiple ascending dose, or MAD, cohorts evaluating patients with early AD. The overall objective of the trial is to evaluate the safety and tolerability of ACU193 and to establish clinical proof of mechanism of ACU193 administered intravenously. The primary trial endpoints are focused on safety and immunogenicity. An important safety measure is the use of magnetic resonance imaging, or MRI, to assess the presence or absence of amyloid-related imaging abnormalities, or ARIA. Secondary endpoints include pharmacokinetics in plasma and cerebrospinal fluid, or CSF, and target engagement as evidenced by detection of ACU193 bound to AßOs in CSF. Clinical scales typically used in AD trials as well as computerized cognitive testing and arterial spin labelling with MRI scans (which can be used to assess cerebral blood flow) are included as exploratory measures.

In July 2023, we announced topline results from INTERCEPT-AD, which demonstrated that ACU193 met the primary and secondary objectives of this study in 60 participants with early Alzheimer's disease. Dose levels were 2, 10, 25 and 60 mg/kg for one to three doses administered intravenously.

- An analysis of change in amyloid plaque load, as measured by positron emission tomography, PET, SUVr, demonstrated a rapid, dose-related mean decrease at the higher dose levels studied. ACU193 (60 mg/kg every 4 weeks [Q4W] and 25 mg/kg every 2 weeks [Q2W]) showed a statistically significant reduction in amyloid plaque load as determined by amyloid PET after 6-12 weeks (from baseline to endpoint within cohorts ($p = 0.01$)). This finding provides evidence that ACU193 is active in the brain.
- ACU193 was well-tolerated throughout the SAD and MAD dose cohorts. Three treatment-emergent serious adverse events were observed after administration of ACU193; all were deemed not related or unlikely related to ACU193. The most common treatment-emergent adverse events from all dose groups combined were ARIA-E (10.4%), ARIA-H (hemorrhage) (8.3%), COVID-19 (6.3%), hypersensitivity (6.3%), bronchitis (4.2%), headache (4.2%), fall (4.2%) and post LP syndrome (4.2%). The overall rate of ARIA-E was 10.4%, which included one case of symptomatic ARIA-E (2.1%). Of note, no apolipoprotein E, or APOE4, homozygote patients exhibited ARIA-E (n=6 treated).
- Pharmacokinetic, or PK, results in CSF demonstrated statistically significant dose proportionality. Serum PK was dose-related without drug accumulation, and CSF PK was dose- and dose-regimen proportional. Levels of ACU193 detected in CSF in all cohorts were in excess of endogenous levels of AßOs reported in CSF. Evidence

of treatment emergent immunogenicity was observed; anti-drug antibodies were consistently low titer and preliminary assessment revealed no apparent effect on serum PK. These data support monthly dosing of ACU193.

- Statistically significant, dose-related central target engagement was observed as measured by ACU193-AßO complex, establishing the first target engagement assay developed that is specific to an AßO-targeting antibody. An exposure response relationship (Emax) model revealed near maximal target engagement with repeated dosing at 25 mg/kg and 60 mg/kg.
- Exploratory measures of potential acute drug effects including assessment of cognition, as determined by a computerized cognitive battery, and changes in cerebral blood flow, as determined by arterial spin labelling with magnetic resonance imaging (Siemens MRI), did not show discernible effects from the immediate administration of ACU193. This was not unexpected due to the short duration and small sample size of INTERCEPT-AD. Additional biofluids for assessment of biomarkers of downstream neurodegeneration were collected during the study and analyses are in progress. These results will be presented at a later date and are not expected to show significant changes due to the short duration and small sample size of the trial.

The full results of the INTERCEPT-AD study will be presented at a future medical congress and submitted for publication in a peer-reviewed clinical journal. This data will assist in our plans to further investigate the development of a subcutaneous administration of ACU193. Additionally, an interaction with the U.S. Food and Drug Administration, or FDA, is anticipated in the fourth quarter of 2023 to discuss the trial results to assess next steps for the clinical development of ACU193 and determine the feasibility of and timeline for progressing to a Phase 2/3 clinical study. We plan to initiate the Phase 2 portion of the study in the first half of 2024.

We have incurred net losses and negative cash flows from operations since our inception. Our net losses were $22.9 million and $19.3 million for the six months ended June 30, 2023 and 2022, respectively. As of June 30, 2023, we had an accumulated deficit of $193.3 million and working capital of $141.0 million. Our net losses and cash flows from operations may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of nonclinical studies, clinical trials and our expenditures on other research and development activities. We expect our expenses and operating losses will increase substantially for the foreseeable future as we advance ACU193 in clinical trials, seek to expand our product candidate portfolio through developing additional product candidates, grow our clinical, regulatory and quality capabilities, and incur additional costs associated with operating as a public company. It is likely that we will seek third-party collaborators for the future, late stage clinical development and commercialization of ACU193 or any other product candidate that is approved for marketing. Should we seek to commercialize our products at our own expense, this would require us to incur significant additional expenses for marketing, sales, manufacturing and distribution.

We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates. In addition, if we obtain regulatory approval for our product candidates and do not enter into a third-party commercialization partnership, we expect to incur significant expenses related to developing our commercialization capability to support product sales, marketing, manufacturing and distribution activities.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity offerings and debt financings or other sources, such as potential collaboration agreements, strategic alliances and licensing arrangements. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on acceptable terms, or at all. However, global economic conditions have been worsening, with disruptions to, and volatility in, the credit and financial markets in the U.S. and worldwide, rising inflation and supply disruptions resulting from the effects of COVID-19, the ongoing conflict between Russia and Ukraine and related sanctions, and otherwise. If these conditions persist and deepen, we could experience an inability to access additional capital, or our liquidity could otherwise be impacted. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs and/or future commercialization efforts. Our failure to raise capital or enter into such agreements as, and when needed, could have a material adverse effect on our business, results of operations and financial condition.

As of June 30, 2023, we had cash and cash equivalents and marketable securities totaling $172.2 million and we received an additional estimated $122.2 million of net proceeds from the public offering of our common stock on July 21, 2023, or the Offering. Based on our current operating plan, we expect that our existing cash and cash equivalents and marketable securities, inclusive of the proceeds received in the Offering, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the second half of 2026 and we expect to achieve multiple clinical milestones during this period. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our

available capital resources sooner than we expect, including based on our decision to initiate other clinical trials or programs. See "—Liquidity and Capital Resources."

Components of Results of Operations

Operating Expenses

Our operating expenses consist of research and development expenses and general and administrative expenses.

Research and Development Expenses

Research and development costs primarily consist of direct costs associated with consultants and materials, biologic storage, third party, contract research organization, or CRO, costs and contract manufacturing organization, or CMO, expenses, salaries and other personnel-related expenses. Research and development costs are expensed as incurred. More specifically, these costs include:

- costs of funding research performed by third parties that conduct research and development and nonclinical and clinical activities on our behalf;
- costs of manufacturing drug supply and drug product;
- costs of conducting nonclinical studies and clinical trials of our product candidates;
- consulting and professional fees related to research and development activities, including stock-based compensation to non-employees;
- costs related to compliance with clinical regulatory requirements; and
- employee-related expenses, including salaries, benefits and stock-based compensation expense for our research and development personnel.

As we currently only have one product candidate, ACU193, in development, we do not separately track expenses by program. Further, we have historically relied primarily on consultants for research and development activities; however, our internal research and development personnel costs continue to increase relative to total research and development costs, currently representing approximately 25% of our total research and development expenses. Our research and development expenses increased substantially since initiating the clinical trial for our ACU193 program in 2021. We expect that our research and development expenses will increase substantially in connection with our clinical development activities for our ACU193 program.

General and Administrative Expenses

General and administrative expenses consist primarily of employee-related expenses, including stock-based compensation costs, as well as business insurance, management and business consultants and other related costs. General and administrative expenses also include professional fees for legal, accounting, auditing, tax and patent services, investor and public relations, board of directors' expenses, information technology, franchise taxes, rent, travel expenses and dues and subscriptions.

We expect that our general and administrative expenses will increase as our organization and headcount needed in the future grows to support continued research and development activities and potential commercialization of our product candidates. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, attorneys and accountants, among other expenses. Additionally, we expect to continue to incur increased expenses associated with being a public company, including costs of additional personnel, accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and Securities and Exchange Commission, or SEC, requirements, director and officer insurance costs, and investor and public relations costs.

Other Income (Expense)

Other income (expense) primarily includes interest income, net and other income, net. Following our initial public offering, or IPO, we made investments in marketable securities and the interest income earned, as well as the amortization and accretion of premiums and discounts are recorded in interest income, net. Other income, net generally consists of sublease income offset by fees incurred on our investments in marketable securities.

Results of Operations

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

The following table summarizes our results of operations for the three months ended June 30, 2023 and 2022 (in thousands):

	Three Months Ended June 30,		Change	
	2023	2022	$	%
Operating expenses				
Research and development	$ 9,133	$ 7,321	$ 1,812	25 %
General and administrative	4,345	3,090	1,255	41 %
Total operating expenses	13,478	10,411	3,067	29 %
Loss from operations	(13,478)	(10,411)	(3,067)	(29)%
Other income (expense)				
Interest income, net	1,884	260	1,624	*
Other expense, net	(16)	—	(16)	*
Total other income	1,868	260	1,608	*
Net loss	$ (11,610)	$ (10,151)	$ (1,459)	(14)%

* Not meaningful

Research and Development Expenses

Research and development expenses were $9.1 million and $7.3 million for the three months ended June 30, 2023 and 2022, respectively. The $1.8 million increase was primarily due to increases of $0.9 million in additional personnel expense, including a $0.3 million increase for non-cash stock compensation expense, $0.5 million for consulting costs, $0.3 million for contract manufacturing expenses, $0.2 million for storage costs, $0.1 million for our license agreement and $0.1 million for other miscellaneous expenses; all of which was partially offset by a $0.3 million decrease in other clinical trial expenses.

General and Administrative Expenses

General and administrative expenses were $4.3 million and $3.1 million for the three months ended June 30, 2023 and 2022, respectively. The $1.2 million increase was primarily due to increases of $1.2 million in personnel expenses, including a $0.5 million increase for non-cash stock compensation expenses, and $0.2 million in consulting expenses mainly related to business development; partially offset by a reduction of $0.2 million in insurance expense.

Other Income (Expense)

Other income was $1.9 million and $0.3 million for the three months ended June 30, 2023 and 2022, which was primarily related to net interest income on the Company’s portfolio of marketable securities. The $1.6 million increase was primarily due to higher interest rates. Other expense was de minimis for the three months ended June 30, 2023 and 2022.

Results of Operations

Comparison of the Six Months Ended June 30, 2023 and 2022

The following table summarizes our results of operations for the six months ended June 30, 2023 and 2022 (in thousands):

	Six Months Ended June 30,		Change	
	2023	2022	$	%
Operating expenses				
Research and development	$ 17,846	$ 13,306	$ 4,540	34 %
General and administrative	8,767	6,312	2,455	39 %
Total operating expenses	26,613	19,618	6,995	36 %
Loss from operations	(26,613)	(19,618)	(6,995)	(36)%
Other income (expense)				
Interest income, net	3,716	337	3,379	*
Other income (expense), net	(20)	1	(21)	*
Total other income	3,696	338	3,358	*
Net loss	$ (22,917)	$ (19,280)	$ (3,637)	(19)%

* Not meaningful

Research and Development Expenses

Research and development expenses were $17.8 million and $13.3 million for the six months ended June 30, 2023 and 2022, respectively. The $4.5 million increase was primarily due to our Phase 1 clinical trial which was initiated in 2021 and nonclinical research and development activity, and includes increases of $2.0 million for CRO costs specifically related to the clinical trial, $2.0 million in personnel costs, including a $0.5 million increase for non-cash stock compensation expenses, $0.5 million for consulting, $0.3 million for license agreement costs, $0.3 million for storage and $0.1 million for travel; all of which were partially offset by decreases of $0.3 million for other contract research expenses, $0.2 million for contract manufacturing and $0.2 million for other clinical trial expenses.

General and Administrative Expenses

General and administrative expenses were $8.8 million and $6.3 million for the six months ended June 30, 2023 and 2022, respectively. The $2.5 million increase was primarily due to increases of $2.4 million in personnel costs, including a $1.1 million increase for non-cash stock compensation expenses, $0.4 million for consulting mainly related to business development and human resources, and $0.1 million for travel; all of which were partially offset by a decrease of $0.4 million for insurance expense.

Other Income (Expense)

Other income was $3.7 million and $0.3 million for the six months ended June 30, 2023 and 2022, respectively; which was primarily related to net interest income on the Company's portfolio of marketable securities. The $3.4 million increase was primarily due to higher interest rates. Other income (expense), net was de minimis during the six months ended June 30, 2023 and 2022.

Liquidity and Capital Resources

We have incurred net losses since inception. We have not generated any revenue from product sales or any other sources other than grant revenue and have incurred significant operating losses. We have not yet commercialized any products and we do not expect to generate revenue from sales of any drug candidates for at least several years, if ever.

Our operations have been financed primarily by net proceeds from the sale and issuance of our common stock and convertible preferred stock, net proceeds from our initial public offering, or IPO, the issuance of notes, grant revenue and, during our collaboration with Merck & Co., Inc. which was in place from 2003 to 2011, certain payments received under our collaboration agreement.

On July 1, 2022, we filed a shelf registration statement on Form S-3, or the Registration Statement. Pursuant to the Registration Statement, we may offer and sell securities having an aggregate public offering price of up to $200.0 million. In connection with the filing of the Registration Statement, we also entered into a sales agreement, or the Sales Agreement, with BofA Securities, Inc. and Stifel, Nicolaus & Company, Incorporated, as sales agents, pursuant to which we may issue and sell shares of our common stock for an aggregate offering price of up to $50.0 million under an at-the-market offering program, or ATM, which is included in the $200.0 million of securities that may be offered pursuant to the Registration Statement. On April 23, 2023, we entered into an amendment to the Sales Agreement, or, as amended, the Amended Sales Agreement, to add BTIG, LLC as a sales agent under the Amended Sales Agreement. Pursuant to the Amended Sales Agreement, we will pay the sales agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of our common stock. We are not obligated to make any sales of shares of our common stock under the ATM. We did not sell any shares of our common stock under the ATM during the three months ended June 30, 2023.

On July 21, 2023, we issued 16,774,193 shares of our common stock in the Offering at a price to the public of $7.75 per share. The aggregate estimated net proceeds from the Offering, after underwriting discounts and commissions and other offering expenses, are $122.2 million. In addition, we granted the underwriters an option to purchase up to an additional 2,516,128 shares of our common stock at the public offering price less underwriting discounts and commissions, which the underwriters have until August 17, 2023 to exercise.

As of June 30, 2023, our cash and cash equivalents totaled $77.2 million. Additionally, we had $94.9 million of available-for-sale marketable securities as of June 30, 2023, which mature over the next 2 years. Based on our current operating plan, we expect that our existing cash and cash equivalents and marketable securities, inclusive of the proceeds received in the Offering, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the second half of 2026 and we expect to achieve multiple clinical milestones during this period. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect, including based on our decision to initiate other clinical trials or programs.

We enter into contracts in the normal course of business with CROs and CMOs for clinical trials, nonclinical research studies and testing, manufacturing and other services and products for operating purposes. These contracts do not contain any minimum purchase commitments and are generally cancellable by us after giving a certain amount of notice. Payments due upon cancellation consist only of payments for services provided and expenses incurred up to the date of cancellation.

Cash Flows

The following table summarizes our sources and uses of cash (in thousands):

	Six Months Ended June 30,	
	2023	2022
Net cash used in operating activities	$ (21,845)	$ (14,767)
Net cash provided by (used in) investing activities	(30,863)	3,686
Net cash used in financing activities	(145)	(14)
Net change in cash and cash equivalents	$ (52,853)	$ (11,095)

Operating Activities

Net cash used in operating activities increased by $7.1 million to $21.8 million for the six months ended June 30, 2023 from $14.8 million for the six months ended June 30, 2022. Increased net loss for the six months ended June 30, 2023, adjusted for non-cash expenses such as depreciation, stock-based compensation and amortization and accretion on marketable securities, was responsible for $3.1 million of the increase in cash used as compared to the prior period. Working capital changes, including increases in cash used for prepaid expenses and other current assets of $5.2 million, related primarily to prepaid research and development and raw materials, and accounts payable of $0.2 million were offset by increases in cash provided by accrued clinical trial expenses of $0.9 million and accrued expenses and other current liabilities of $0.4 million.

Investing Activities

Cash used in investing activities increased by $34.5 million to $30.9 million for the six months ended June 30, 2023 from cash provided by investing activities of $3.7 million for the six months ended June 30, 2022, and was primarily due to an

increase in purchases of marketable securities of $40.0 million; partially offset by an increase in maturities and sales of marketable securities of $5.4 million.

Financing Activities

Cash used in financing activities increased $0.1 million primarily due to an increase payments for deferred offering costs between the comparable six month periods.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue our research and development, conduct clinical trials, and seek marketing approval for our current and any of our future product candidates. Furthermore, we have and expect to incur additional costs associated with operating as a public company. It is likely that we will seek third-party collaborators for the future, late stage clinical development and commercialization of ACU193 or any other product candidate that is approved for marketing. Should we seek to commercialize our products at our own expense, this would require us to incur significant additional expenses for marketing, sales, manufacturing and distribution, which costs we may seek to offset through entry into collaboration agreements with third parties. As a result, we expect that we will need to obtain substantial additional funding in connection with our future operations. If we are unable to raise capital when needed or on acceptable terms, we could be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

Based on our current operating plan, we expect that our existing cash and cash equivalents and marketable securities, inclusive of the proceeds received in the Offering, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the second half of 2026 and we expect to achieve multiple clinical milestones during this period. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect, including based on our decision to initiate other clinical trials or programs. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of discovery, nonclinical development, laboratory testing and clinical trials for other potential product candidates we may develop, if any;
- the costs, timing and outcome of regulatory review of ACU193 or any future product candidates;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any collaboration agreements we might have at such time;
- the costs and timing of future commercialization activities, including product sales, marketing, manufacturing and distribution, for ACU193 or any future product candidates for which we receive marketing approval;
- the amount of revenue, if any, received from commercial sales of ACU193 or any future product candidates, should any of our product candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, obtaining, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- our headcount growth and associated costs as we expand our business operations and our research and development activities; and
- the costs of operating as a public company.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our longer-term cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, ownership interests may be diluted, and the terms of these securities may include liquidation or other preferences that could adversely affect the rights of our common stockholders. Any debt financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, that could adversely impact our ability to conduct our business.

If we raise funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt

financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Critical Accounting Policies, Significant Judgments and Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or U.S. GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements and the reported amounts of expenses incurred during the reporting periods. Our estimates and assumptions are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A description of our significant accounting policies is included in our Annual Report. Please read the unaudited condensed financial statements in conjunction with our audited financial statements and accompanying notes in our Annual Report.

Our critical accounting policies that require significant judgments and estimates are more fully described under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies, Significant Judgments and Use of Estimates” in our Annual Report and in Note 2 to our audited financial statements contained in our Annual Report. There have been no significant changes to our critical accounting policies that require significant judgments and estimates from those disclosed in our Annual Report.

Recent Accounting Pronouncements

Information regarding recent accounting pronouncements applicable to us, adopted and not yet adopted as of the date of this report, is included in Note 2 to our unaudited condensed financial statements located in “Part I – Financial Information, Item 1. Financial Statements” in this Quarterly Report on Form 10-Q.

Emerging Growth Company and Smaller Reporting Company Status

In April 2012, the Jumpstart Our Business Startups Act of 2012, or JOBS Act, was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We elected the extended transition period for complying with new or revised accounting standards, which delays the adoption of these accounting standards until they would apply to private companies.

In addition, as an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- an exception from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure about our executive compensation arrangements in our periodic reports, proxy statements and registration statements;
- exemptions from the requirements of holding non-binding advisory votes on executive compensation or golden parachute arrangements; and
- an exemption from compliance with the requirements of the Public Company Accounting Oversight Board regarding the communication of critical audit matters in the auditor’s report on financial statements.

We may take advantage of these provisions until we no longer qualify as an emerging growth company. We will cease to qualify as an emerging growth company on the date that is the earliest of: (i) December 31, 2025, (ii) the last day of the fiscal year in which we have more than $1.235 billion in total annual gross revenues, (iii) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th, or (iv) the date on which we have issued more than $1.0 billion of non-convertible debt over the prior three-year period. We may choose to take advantage of some but not all of these reduced reporting burdens. We have taken advantage of certain reduced reporting requirements in this Quarterly

Report on Form 10-Q and our other filings with the SEC. Accordingly, the information contained herein may be different than you might obtain from other public companies in which you hold equity interests.

We are also a "smaller reporting company," meaning that the market value of our shares held by non-affiliates is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either: (i) the market value of our shares held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than $700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

As a "smaller reporting company" as defined by Item 10 of Regulation S-K, the Company is not required to provide the information required by this item.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, 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 is 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 a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of June 30, 2023. Based on the evaluation of our disclosure controls and procedures, our management concluded that, as of June 30, 2023, our disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by us in this Quarterly Report on Form 10-Q was: (a) reported within the time periods specified by SEC rules and regulations, and (b) communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding any required disclosure.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended, that occurred during the fiscal quarter ended June 30, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Internal Controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not subject to any material legal proceedings. From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. We are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors.

Our business is subject to risks and events that, if they occur, could adversely affect our financial condition and results of operations and trading price of our securities. In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors described in Part I, Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2022. There have been no material changes to the risk factors as described in our Annual Report on Form 10-K for the year ended December 31, 2022.

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

(a) Recent Sales of Unregistered Equity Securities

None.

(b) Use of Proceeds

On June 30, 2021, our Registration Statement on Form S-1, as amended (File No. 333-256945), was declared effective in connection with our IPO, pursuant to which we sold an aggregate of 11,499,998 shares of our common stock, including the full exercise of the underwriters' option to purchase additional shares, at a price to the public of $16.00 per share. BofA Securities, Inc, Credit Suisse Securities (USA) LLC, and Stifel, Nicolaus & Company, Incorporated acted as joint lead book-running managers and UBS Securities LLC also acted as a book-running manager for the offering.

The IPO closed on July 6, 2021 with respect to 9,999,999 shares of common stock. On July 8, 2021, the offering closed with respect to an additional 1,499,999 shares purchased by the underwriters pursuant to the underwriters' option to purchase additional shares. The aggregate net proceeds from our IPO, after underwriting discounts and commissions, and other offering expenses of $15.4 million, were $168.6 million. In connection with our IPO, no payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates or to our affiliates. There has been no material change in the planned use of proceeds from our IPO as described in our prospectus filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on July 2, 2021.

(c) Issuer Purchases of Equity Securities

None.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

On August 8, 2023, we amended and restated our amended and restated employment agreement, or the Second A&R Employment Agreement, with Eric Siemers, MD, our Chief Medical Officer. Under the Second A&R Employment Agreement, Dr. Siemers' annual base salary was increased to $463,400, and he is required to devote substantially all of his business time and attention to the business of the Company. The Second A&R Employment Agreement is otherwise consistent with Dr. Siemers' previous amended and restated employment agreement, as described in our Current Report on

Form 8-K filed with the SEC on January 3, 2022, which is incorporated by reference herein.

The forgoing description of the Second A&R Employment Agreement is not complete and is qualified in its entirety by reference to the Second A&R Employment Agreement, which is filed as Exhibit 10.1 hereto and is incorporated by reference herein.

Item 6. Exhibits.

Exhibit Number	Description of Exhibit
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-40551), filed with the Securities and Exchange Commission on June 8, 2023).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-40551), filed with the Securities and Exchange Commission on March 15, 2023).
10.1*+	Amended and Restated Executive Employment Agreement, by and between the Registrant and Eric Siemers, MD.
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1#	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2#	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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 Incline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith
\+ Indicates management contract or compensatory plan.
\# These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and are not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

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

ACUMEN PHARMACEUTICALS, INC.

Date: August 8, 2023

By: /s/ Daniel O'Connell

Daniel O'Connell

President and Chief Executive Officer

(Principal Executive Officer)

Date: August 8, 2023

By: /s/ Matthew Zuga

Matthew Zuga

Chief Financial Officer and Chief Business Officer

(Principal Financial and Accounting Officer)

Exhibit 10.1

SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This **SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT** (the "***Agreement***") is entered into effective **August 8, 2023** (the "***Effective Date***"), by and between **Eric Siemers, MD** ("***Executive***") and **Acumen Pharmaceuticals, Inc.** (the "***Company***" and, together with Executive, the "***Parties***") and supersedes and replaces any prior consulting agreement or employment letter between the Parties and any of their affiliates, including but not limited to Executive's Amended and Restated Employment Agreement dated January 1, 2022 (the "***Prior Agreement***").

WHEREAS, the Company desires to continue to employ Executive and, in connection therewith, to compensate Executive for Executive's personal services to the Company; and

WHEREAS, Executive wishes to continue to be employed by the Company and provide personal services and certain covenants to the Company in return for certain compensation and benefits.

Accordingly, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 Position. Subject to the terms set forth herein, the Company agrees to continue to employ Executive, in the position of **Chief Medical Officer**, and Executive hereby accepts such continued employment. During the term of Executive's employment with the Company, Executive will devote Executive's best efforts and substantially all of his business time and attention to the business of the Company.

1.2 Duties. Executive will initially report to the Chief Executive Officer (the "**CEO**") of the Company. Executive shall perform his duties under this Agreement initially principally out of his personal residence and the Company's corporate offices in the greater Indianapolis metropolitan area or such other location as assigned by the Company and agreed upon by Executive. In addition, Executive shall make business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.3 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company's personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company's sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company's benefit plans as in effect from time to time during Executive's employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. Executive shall be entitled to paid vacation in accordance with the plans, policies, programs and practices of the Company applicable to its senior executives in effect from time to time, but in no event shall Executive be entitled to less than four (4) weeks of vacation per calendar year (pro-rated for any partial year of service). The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in

conflict with the Company's general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 Salary. Executive shall receive for services to be rendered hereunder an initial base salary of $463,400.00 on annualized basis, subject to review and adjustment from time to time by the Company, and payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("***Base Salary***").

2.2 Annual Discretionary Bonus. Executive shall be eligible for a discretionary annual calendar year performance bonus (the "***Annual Bonus***") with an annual target of forty percent (40%) of Executive's then-current Base Salary (the "***Target Amount***"). Whether or not Executive is eligible for any Annual Bonus will be dependent upon the actual achievement by Executive and the Company of the applicable individual and corporate performance goals, as determined by the Board. No amount of any Annual Bonus is guaranteed at any time and may be greater or lesser than the Target Amount and may be zero. Any Annual Bonus, if awarded, will be paid in a single installment paid at the same time annual bonuses are generally paid to other similarly-situated employees of the Company and in any event no later than March 1st of the calendar year following the calendar year to which the Annual Bonus is applicable, and will be subject to deductions and withholdings. Executive's Target Amount and the applicable individual and corporate performance goals to be achieved with respect to each calendar year Annual Bonus are subject to change in the discretion of the Board (or any authorized committee thereof).

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Board from time to time. The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the "***Code***"): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

2.4 Equity Awards. Executive shall be eligible to be considered for future equity awards as may be determined by the Board (or the Compensation Committee of the Board) in its discretion in accordance with the terms of any applicable equity plan or arrangement that may be in effect from time to time.

3. CONFIDENTIAL INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. As a condition of continued employment, Executive agrees to abide by the Employee Confidential Information, Inventions, Non-Solicitation and Non-Competition Agreement signed by Executive and attached as **Exhibit A** which may be amended by the parties from time to time without regard to this Agreement (the "***Confidential Information***

Agreement"). The Confidential Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Except with the prior written consent of the Company, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties; and (iii) such other activities as may be specifically approved in writing by the Company.

5. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive's performance of all the terms of this Agreement and as an Executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. TERMINATION OF EMPLOYMENT. The parties acknowledge that Executive's employment relationship with the Company is at-will. Either Executive or the Company may terminate the employment relationship for any reason whatsoever at any time, with or without Cause or advance notice. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination by the Company without Cause or Resignation by Executive for Good Reason (not in connection with a Change in Control).

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without Cause (as defined in Section 6.3(b) below) by giving notice as described in Section 8.1 of this Agreement. A termination pursuant to Section 6.5 below is not a termination without Cause for purposes of receiving the benefits described in this Section 6.1.

(b) In the event the Company terminates Executive's employment without Cause or Executive Resigns for Good Reason (as defined in Section 6.1(g) below), and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "***Separation from Service***"), then Executive shall be entitled to receive the Accrued Obligations (as defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, Executive shall be eligible to receive the following severance benefits (the "***Severance Benefits***"):

(i) The Company will pay Executive an amount equal to Executive's then current Base Salary for nine (9) months, less all applicable withholdings and

deductions, and paid in equal installments beginning on the Company's second regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter.

(ii) If Executive timely elects continued coverage under COBRA for Executive and Executive's dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue Executive's and his covered dependents' health insurance coverage in effect for Executive (and Executive's covered dependents) on the termination date until the earliest of: (A) twelve (12) months following the termination date (the "***COBRA Severance Period***"); (B) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (C) the date Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (A)-(C), (the "***COBRA Payment Period***"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on Executive's behalf would result in a violation of applicable law (including, but not limited to, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section, the Company shall pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding, for the remainder of the COBRA Payment Period. Nothing in this Agreement shall deprive Executive of his rights under COBRA or ERISA for benefits under plans and policies arising under his employment by the Company.

(c) Executive will be paid all of the Accrued Obligations (as defined in Section 6.1(d) below) on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. If eligible to receive the Severance Benefits pursuant to Section 6.1(b) of this Agreement, Executive will only receive such Severance Benefits if: (i) within the time period provided in the separation agreement (which shall be no longer than 60 days following the date of Executive's Separation from Service), Executive has signed and delivered to the Company a separation agreement that includes, among other terms, an effective general release of claims in favor of the Company and its affiliates and representatives, in the form presented by the Company (the "***Release***"), which cannot be revoked in whole or part by such date (the date that the Release can no longer be revoked is referred to as the "***Release Effective Date***"); and (ii) if Executive holds any other positions with the Company, he resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with his post-termination obligations under this Agreement and the Confidential Information Agreement; and (v) Executive complies with the terms of the Release, including, without limitation, any non-disparagement, confidentiality and cooperation provisions contained in Release. In the event that the time period for Executive to consider the Release begins in one calendar year and ends the following calendar year, the Release Effective Date shall not be deemed to occur until such second calendar year.

(d) For purposes of this Agreement, "***Accrued Obligations***" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard

expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this Section 6.1 are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

(g) "***Good Reason***" for purposes of this Agreement shall mean the occurrence of any of the following conditions without Executive's consent, after Executive's provision of written notice to the Company of the existence of such condition (which notice must be provided as described in Section 8.1 within thirty (30) days of the initial existence of the condition and must specify the particular condition in reasonable detail), provided that the Company has not first provided notice to Executive of its intent to terminate Executive's employment: (i) a material reduction in Executive's duties, responsibilities or authorities, provided, however, that neither the conversion of the Company to a subsidiary, division or unit of an acquiring entity, or Executive's reporting relationships following a Change in Control (as defined in the Company's 2021 Equity Incentive Plan or any successor plan), nor a change in title as agreed to by Executive, will be deemed a "material reduction" in and of itself or material adverse alteration in, Executive's position, title, duties, or responsibilities; (ii) a material (greater than 10%) reduction by the Company of Executive's Base Salary (except in the case of either an across the board reduction in salaries or a temporary reduction due to financial exigency); or (iii) the relocation of Executive's principal place of employment by twenty-five (25) or more miles from Executive's then-current principal place of employment. Notwithstanding the foregoing, Good Reason shall only exist if the Company is provided a thirty (30) day period to cure the event or condition giving rise to Good Reason, and it fails to do so within that cure period (and, additionally, Executive must resign for such Good Reason condition by giving notice as described in Section 8.1 within thirty (30) days after the period for curing the violation or condition has ended).

6.2 Termination by the Company without Cause or Resignation by Executive for Good Reason (in connection with a Change in Control).

(a) In the event that Executive's employment is terminated without Cause or Executive resigns for Good Reason within three (3) months prior to or twelve (12) months following the effective date of a Change in Control ("***Change in Control Measurement Period***") of the Company, then Executive shall be entitled to the Accrued Obligations and, subject to Executive's full compliance with the conditions and obligations in Section 6.1(c) above, including but not limited to the Release requirement and Executive's continued compliance with obligations to the Company under Executive's Confidential Information Agreement, then Executive will be eligible for the following "***CIC Severance Benefits***:"

(i) The Company will pay Executive an amount equal to

Executive's then current Base Salary for twelve (12) months, less all applicable withholdings and deductions, paid in equal installments beginning on the Company's second regularly scheduled payroll date following the Release Effective Date, with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter;

(ii) If Executive timely elects continued coverage under COBRA for Executive and Executive's dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue Executive's and his/her covered dependents' health insurance coverage in effect for Executive (and Executive's covered dependents) on the termination date until the earliest of: (A) twelve (12) months following the termination date; (B) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (C) the date Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (A)-(C), (the "***CIC COBRA Payment Period***"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on Executive's behalf would result in a violation of applicable law (including, but not limited to, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section, the Company shall pay Executive on the last day of each remaining month of the CIC COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding, for the remainder of the CIC COBRA Payment Period. Nothing in this Agreement shall deprive Executive of his/her rights under COBRA or ERISA for benefits under plans and policies arising under his/her employment by the Company;

(iii) The Company will make a lump sum cash payment to Executive in an amount equal to 1.0 times the Target Amount for the year in which the termination occurs, less all applicable withholdings and deductions, which will be paid in a lump sum on the Company's second regularly scheduled payroll date following the later of (x) the Release Effective Date or (y) the effective date of a Change in Control;

(iv) Effective as of the later of (x) the effective date of a Change in Control or (y) Executive's termination date, the vesting and exercisability of all outstanding equity awards held by Executive immediately prior to the termination date that are subject to time-based vesting requirements (if any) shall be accelerated in full, and the vesting and exercisability of all outstanding equity awards subject to performance-based vesting will be treated as set forth in Executive's equity award agreement governing such award.

(b) The CIC Severance Benefits provided to Executive pursuant to this Section 6.2 are in lieu of, and not in addition to or in duplication of, any benefits to which Executive may otherwise be entitled under Section 6.1 of this Agreement or any Company severance plan, policy or program.

(c) Any damages caused by the termination of Executive's employment without Cause during the Change in Control Measurement Period would be difficult to ascertain; therefore, the CIC Severance Benefits for which Executive is eligible pursuant to Section 6.2(a) above in exchange for the Release are agreed to by the parties as liquidated damages, to serve

as full compensation, and not a penalty.

6.3 Termination by the Company for Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 8.1 of this Agreement.

(b) "***Cause***" for purposes of this Agreement shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the Company and Executive; provided that, except for a breach which by its nature cannot reasonably be expected to be cured, the Executive shall have a period to cure such breach of 30 days after receipt of written notice from the Company setting forth in reasonable detail the nature of such breach; (ii) any act constituting dishonesty, fraud, immoral or disreputable conduct; (iii) any conduct which constitutes a felony under applicable law; (iv) material violation of any Company policy or any act of misconduct; (v) refusal to follow or implement a clear, reasonable and lawful directive of Company; (vi) Executive's willful failure to perform Executive's duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; (vii) failure to pass to the satisfaction of the Company, a preliminary background check or failure to submit proof of legal eligibility to work in the United States; or (viii) breach of fiduciary duty.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits, CIC Severance Benefits, or any other compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall provide to Executive the Accrued Obligations.

6.4 Resignation by Executive (other than for Good Reason).

(a) Executive may resign from Executive's employment with the Company at any time by giving notice as described in Section 8.1.

(b) In the event Executive resigns from Executive's employment with the Company (other than for Good Reason), Executive will not receive Severance Benefits, CIC Severance Benefits or any other compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall provide to Executive the Accrued Obligations.

6.5 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, and Executive will not receive the Severance Benefits, CIC Severance Benefits or any other severance compensation or benefit, except that the Company shall, pursuant to the Company's standard payroll policies, provide to Executive's legal representatives Executive's accrued but unpaid salary through the date of death together with all compensation and benefits payable to Executive based on his participation in any compensation or benefit plan, program or arrangement through the date

of termination.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability (as defined below). Termination by the Company of Executive's employment based on "***Disability***" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of Executive's position with or without reasonable accommodation for one hundred twenty (120) consecutive calendar days or six (6) months in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive the Severance Benefits, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the accrued but unpaid salary of Executive through the date of termination, together with all compensation and benefits payable to Executive based on his participation in any compensation or benefit plan, program or arrangement through the date of termination.

6.6 [RESERVED]

6.7 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's termination, with or without Cause, unless pursuant to Section 6.3(b)(vi) in which case ten (10) days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon Executive's death;

(iii) ten (10) days after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full time performance of Executive's duties prior to such date;

(iv) ten (10) days after Executive gives written notice to the Company of Executive's resignation, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) for a termination for Good Reason, immediately upon Executive's full satisfaction of the requirements of Section 6.1(g).

(b) In the event notice of a termination under subsections (a)(i) and (iii) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within five (5) business days of the request in compliance with the requirement of Section 8.1 below. In the event of a termination for Cause, written confirmation shall specify the subsection(s) of the definition of Cause relied on to support the decision to terminate.

6.8 Cooperation With Company After Termination of Employment. Following termination of Executive's employment for any reason, Executive shall fully cooperate with the Company in all matters relating to the winding up of Executive's pending work including, but not limited to, any litigation in which the Company is involved, and the orderly transfer of any such pending work to such other employees as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.9 Application of Section 409A. It is intended that all of the benefits and payments under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code provided under Treasury Regulations 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A of the Code, and incorporates by reference all required definitions and payment terms. For purposes of Section 409A of the Code (including, without limitation, for purposes of Treasury Regulation Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) will be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder will at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if Executive is deemed by the Company at the time of his Separation from Service to be a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code, and if any of the payments upon Separation from Service set forth herein and/or under any other agreement with the Company are deemed to be "deferred compensation", then if delayed commencement of any portion of such payments is required to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code and the related adverse taxation under Section 409A of the Code, the timing of the payments upon a Separation from Service will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after the effective date of Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "***Delayed Initial Payment Date***"), the Company will (A) pay to Executive a lump sum amount equal to the sum of the payments upon Separation from Service that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payments had not been delayed pursuant to this paragraph, and (B) commence paying the balance of the payments in accordance with the applicable payment schedules set forth above. No interest will be due on any amounts so deferred.

7. SECTION 280G MATTERS.

7.1 If any payment or benefit Executive will or may receive from the Company or otherwise (a "***280G Payment***") would (i) constitute a "parachute payment" within the meaning

of Section 280G of the Code, and (ii) but for this Section, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then any such 280G Payment provided pursuant to this Agreement (a "***Payment***") shall be equal to the Reduced Amount. The "***Reduced Amount***" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state, and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Executive's receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the "***Reduction Method***") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "***Pro Rata Reduction Method***").

7.2 Notwithstanding any provision of this Section 7 to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (B) as a second priority, Payments that are contingent on future events (*e.g.*, being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

7.3 Unless Executive and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change in Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity, or group effecting the Change in Control transaction, the Company shall appoint a nationally-recognized accounting or law firm to make the determinations required by this Section 7. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to Executive and the Company within fifteen (15) calendar days after the date on which Executive's right to a 280G Payment becomes reasonably likely to occur (if requested at that time by Executive or the Company) or such other time as requested by Executive or the Company.

7.4 If Executive receives a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 7.1 and the Internal Revenue Service determines

thereafter that some portion of the Payment is subject to the Excise Tax, Executive agrees to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 7.1 so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 7.1, Executive shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

8. GENERAL PROVISIONS.

8.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll or to Executive's Company-issued email address or Executive's email address as listed in Company records, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

8.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

8.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

8.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

8.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including but not limited to the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Confidential Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of

Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

8.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

8.7 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

8.8 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Executive's estate upon Executive's death.

8.9 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of Indiana.

8.10 Resolution of Disputes. The parties recognize that litigation in federal or state courts or before federal or state administrative agencies of disputes arising out of Executive's employment with the Company or out of this Agreement, or Executive's termination of employment or termination of this Agreement, may not be in the best interests of either Executive or the Company, and may result in unnecessary costs, delays, complexities, and uncertainty. The parties agree that any dispute between the parties arising out of or relating to the negotiation, execution, performance or termination of this Agreement or Executive's employment, including, but not limited to, any claim arising out of this Agreement, claims under Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Americans with Disabilities Act of 1990, Section 1981 of the Civil Rights Act of 1966, as amended, the Family Medical Leave Act, the Executive Retirement Income Security Act, and any similar federal, state or local law, statute, regulation, or any common law doctrine, whether that dispute arises during or after employment, shall be settled by binding arbitration in accordance with the Employment Arbitration Rules and Mediation Procedures of the American Arbitration Association; *provided however,* that this dispute resolution provision shall not apply to any separate agreements between the parties that do not themselves specify arbitration as an exclusive remedy. The location for the arbitration shall be the Charlottesville, Virginia area. Any award made by such panel shall be final, binding and conclusive on the parties for all purposes, and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. The arbitrators' fees and expenses and all administrative fees and expenses associated with the filing of the arbitration shall be borne by the Company; *provided however*, that at Executive's option, Executive may voluntarily pay up to one-half the costs and fees. The parties acknowledge and agree that their obligations to arbitrate under this Section survive the termination of this Agreement and continue after the termination of the employment

relationship between Executive and the Company. The parties each further agree that the arbitration provisions of this Agreement shall provide each party with its **exclusive remedy**, and each party expressly waives any right it might have to seek redress in any other forum, except as otherwise expressly provided in this Agreement. By election arbitration as the means for final settlement of all claims, **the parties hereby waive their respective rights to, and agree not to, sue each other in any action in a Federal, State or local court with respect to such claims, but may seek to enforce in court an arbitration award rendered pursuant to this Agreement. The parties specifically agree to waive their respective rights to a trial by jury, and further agree that no demand, request or motion will be made for trial by jury**.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Employment Agreement on the day and year written below effective as of the Effective Date (as defined herein).

Acumen Pharmaceuticals, Inc.

By: /s/ Daniel J. O'Connell
Daniel J. O'Connell,
President and Chief Executive Officer

Executive:

/s/ Eric Siemers, MD
Eric Siemers, MD

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Daniel O'Connell, certify that:

1. I have reviewed this Form 10-Q of Acumen Pharmaceuticals, Inc.;

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

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

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

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

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

Date: August 8, 2023

By: /s/ Daniel O'Connell

Daniel O'Connell

President and Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Matthew Zuga, certify that:

1. I have reviewed this Form 10-Q of Acumen Pharmaceuticals, Inc.;

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

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

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

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

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

Date: August 8, 2023

By: /s/ Matthew Zuga

Matthew Zuga

Chief Financial Officer and Chief Business Officer

(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION OF PERIODIC FINANCIAL REPORTS 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 Acumen Pharmaceuticals, Inc. (the "Company") for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel O'Connell, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

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

Date: August 8, 2023

By: /s/ Daniel O'Connell

Daniel O'Connell

President and Chief Executive Officer

(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF PERIODIC FINANCIAL REPORTS 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 Acumen Pharmaceuticals, Inc. (the "Company") for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Matthew Zuga, Chief Financial Officer and Chief Business Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

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

Date: August 8, 2023

By: /s/ Matthew Zuga

Matthew Zuga

Chief Financial Officer and Chief Business Officer

(Principal Financial Officer and Principal Accounting Officer)