As filed with the Securities and Exchange Commission on June 24, 2021.

Registration No. 333-256945

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

AMENDMENT NO. 1 to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Acumen Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	2836	36-4108129
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

427 Park St.
Charlottesville, VA 22902
(434) 297-1000
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Daniel O'Connell
Chief Executive Officer
Acumen Pharmaceuticals, Inc.
427 Park St.
Charlottesville, VA 22902
(434) 297-1000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(3)
Common Stock, $0.0001 par value per share	9,583,332	$16.00	$153,333,312	$16,729

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended. Includes the offering price of 1,249,999 additional shares that the underwriters have the option to purchase.
(2) Calculated pursuant to Rule 457(a) based on an estimate of the proposed maximum aggregate offering price.
(3) Of this amount, the registrant previously paid $10,910.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated June 24, 2021

PRELIMINARY PROSPECTUS

8,333,333 Shares

Common Stock

This is Acumen Pharmaceuticals, Inc.'s initial public offering. We are selling 8,333,333 shares of our common stock.

We expect the public offering price to be between $14.00 and $16.00 per share. Currently, no public market exists for the shares of our common stock. We have applied to list our common stock on The Nasdaq Global Market under the trading symbol "ABOS."

We are an "emerging growth company" and a "smaller reporting company" as defined under the U.S. federal securities laws and, as such, will be subject to reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 11 of this prospectus.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount(1)	$	$
Proceeds, before expenses, to us	$	$

(1) See the section titled "Underwriting" for additional information regarding underwriting compensation.

At our request, an affiliate of BofA Securities, Inc., a participating underwriter, has reserved for sale, at the initial public offering price, up to 5% of the shares of our common stock offered by this prospectus through a reserved share program for sale to certain of our directors, officers, employees, distributors, dealers, business associates and related persons. For additional information, see the section titled "Underwriting."

The underwriters may also exercise their option to purchase up to an additional 1,249,999 shares of common stock from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The shares of common stock will be ready for delivery on or about , 2021.

BofA Securities **Credit Suisse** **Stifel**

UBS Investment Bank

The date of this prospectus is , 2021

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Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide you. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where such offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

For investors outside of the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

All trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert their rights thereto.

PROSPECTUS SUMMARY

This summary highlights, and is qualified in its entirety by, information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the sections titled "Risk Factors," "Business," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing elsewhere in this prospectus, before making an investment decision. As used in this prospectus, unless the context otherwise requires, references to "we," "us," "our," "the company," "Acumen" and "Acumen Pharmaceuticals" refer to Acumen Pharmaceuticals, Inc.

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 AbOs, globular assemblies of the amyloid-beta, or Ab, peptide that are distinct from Ab monomers and amyloid plaques. Based on decades of research and supporting evidence, AbOs have gained increasing scientific acceptance as a primary toxin involved in the initiation and propagation of AD pathology. We are currently focused on advancing a targeted immunotherapy drug candidate, ACU193, and establishing proof of mechanism in early AD patients. ACU193 is a humanized monoclonal antibody that selectively targets AbOs, 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 models for AD. We initiated our Phase 1 clinical trial of ACU193 in the second quarter of 2021 with the objective to evaluate its safety and tolerability and explore its pharmacokinetics and target engagement. This trial is enrolling patients with mild dementia or mild cognitive impairment, or MCI, due to AD, conditions referred to as "early AD." Our ACU193 Phase 1 data intended to evaluate safety and tolerability and demonstrate clinical proof of mechanism are expected by year end 2022.

Understanding the Foundation of Our Therapeutic Approach

Historically, the primary hypothesis of decades of AD research, known as the amyloid hypothesis, held that AD dementia is the clinical consequence of Ab peptide monomers accumulating into extracellular amyloid plaques, or amyloid plaques, which in turn contribute to the formation of intracellular neurofibrillary tangles composed of the tau protein and cause inflammation, ultimately leading to neuronal cell loss and progressive dementia. Based on this hypothesis, a number of monoclonal antibodies currently or previously in development for AD have primarily targeted either Ab monomers or amyloid plaques; we refer to this broadly defined "class" as anti-Ab/plaque antibodies. Several of these antibodies are currently in late-stage development, one having recently received regulatory approval, and collectively they have provided a biological foothold for treating AD. However, the clinical data available to date indicate some of the potential limitations of these approaches with respect to clinically meaningful patient benefit and safety.

Our therapeutic approach focuses on targeting AbOs, which we believe are the most toxic and pathogenic form of Ab relative to Ab monomers and amyloid plaques. Growing evidence, spurred by advances in AD research and analytic techniques, supports our view that AbOs are the main instigators of AD neurodegeneration. AbOs have been observed to be potent neurotoxins that cause both acute synaptic toxicity and induce neurodegeneration. Experimentally in animal models, the accumulation of AbOs is associated with core AD neuropathologies, including synapse deterioration and loss, tau phosphorylation, and inflammation. Research has also shown that the accumulation of AbOs is associated with AD-related behavioral deficits, such as learning and memory impairment. In light of this evidence, we believe that blocking the toxicity of AbOs

is the most promising approach for the treatment of AD, which led us to discover and develop ACU193.

ACU193 for the Treatment of AD

Our product candidate, ACU193, is the first clinical-stage humanized monoclonal antibody discovered and developed to target soluble AbOs and was developed in partnership with Merck & Co., Inc., or Merck. We believe that ACU193 represents a differentiated approach from current and prior AD immunotherapies because it is highly selective for AbOs. ACU193 has a nanomolar affinity for AbOs, over 500-fold greater selectivity for AbOs over Ab monomers, and limited or no binding to amyloid plaques.

We believe ACU193 has characteristics that make it a promising potential treatment for AD relative to other antibodies that do not selectively target AbOs. ACU193 has been engineered to reduce immune effector function signaling and designed to avoid binding to vascular amyloid. These attributes of ACU193 are expected to reduce the incidence of amyloid-related imaging abnormalities, or ARIA, a common adverse event observed with amyloid plaque-targeting immunotherapies currently in development for AD.

Our Differentiated Approach to the Treatment of AD

We believe ACU193 has several potential advantages in comparison to other AD drugs that are currently approved or in development:

Differentiated mechanism of action:

- Potentially addresses an underlying cause of AD: AbOs, a novel, more toxic and more pathogenic target;
- Selectively binds to AbOs; and
- Binds to a broad spectrum of toxic AbOs.

Potential for symptomatic improvement and disease modification:

- By selectively targeting and neutralizing AbO toxicity, we believe that ACU193 has the potential to provide a reduction in cognitive decline in addition to disease-modifying effects, including synaptic protection and decreased neurodegeneration.

Potential for higher dosing:

- Selectivity for AbOs is likely to result in greatly reduced rates of ARIA, allowing a broad therapeutic window.

Summary of Clinical Development Plan

In the second quarter of 2021, we initiated a U.S.-based, multi-center, randomized, double-blind, placebo-controlled, single and multiple ascending dose Phase 1 clinical trial of ACU193 in patients with early AD. The early AD patient group is comprised of individuals who have mild dementia or MCI due to AD, and our trial excludes patients with moderate to severe AD dementia. We plan to enroll 62 patients across seven cohorts, consisting of a single-ascending dose Part A (32 participants) and an overlapping multiple-ascending dose Part B (30 participants).

The main objectives of the trial are to evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics, and AbO target engagement of single and multiple ascending doses of ACU193 administered by intravenous infusion. Exploratory outcomes include cognitive scales and computerized cognitive testing. Our goal is to establish proof of mechanism of ACU193 in early AD patients in order to enable rapid progression into an adaptive Phase 2/3 clinical trial in 2023. We intend to provide periodic updates of the status of the Phase 1 trial and anticipate reporting proof of mechanism results by year end 2022.

Summary of Our Nonclinical Data

In nonclinical studies conducted by Merck and Acumen, ACU193 has demonstrated promising characteristics which indicate its potential as a therapy for the treatment of AD. ACU193 has high selectivity, with binding affinity studies showing that it has over 500-fold binding selectivity for AbOs compared to Ab monomers and an ex vivo study we conducted with brain tissue from AD patients showing limited or no binding to amyloid plaques. ACU193 binds to a broad spectrum of small to large soluble AbOs. Additionally, ACU193 has been shown in ex vivo animal studies to offer protection from synaptic toxicity by inhibiting binding of AbOs to primary hippocampal neurons. ACU193 has also demonstrated suitable in vivo pharmacology, target engagement, blood-brain barrier penetration and reduction of behavioral deficits. Based on nonclinical studies conducted using animal models, AbO target engagement has the potential to be achieved at doses of ACU193 that will be tested in the clinic. Lastly, ACU193 has been shown to have an adequate safety margin in Good Laboratory Practice, or GLP, toxicity studies conducted in two animal species. These data indicate that ACU193 has the potential to offer patients a reduction in cognitive decline.

Our Strategy

Our objective is to transform the treatment of AD, and potentially other diseases, by developing innovative therapeutics that target the primary drivers of disease pathology. Our initial therapeutic approach is focused on inhibiting and reducing the toxic activity of AbOs, which may allow for synaptic protection and decreased neurodegeneration, leading to more effective treatment for patients with early AD. To achieve this objective, we are pursuing the following strategies:

- Rapidly advance ACU193 through clinical development in patients with early AD;
- Evaluate combination approaches to complement our core ACU193 monotherapy strategy;
- Selectively explore potential of ACU193 for other diseases;
- Expand our product portfolio by developing additional molecules; and
- Optimize value of ACU193 and future drug candidates in major markets.

Our Team

We are led by an experienced management team with deep scientific and drug development knowledge and a strong commitment to developing safe and effective therapies for patients. Collectively, our management team has a rich set of experiences in industry as well as in academia, leading clinical development programs for both public and venture-backed clinical-stage companies, as well as with large biopharmaceutical companies, such as Eli Lilly & Co, or Eli Lilly. We are led by our President and Chief Executive Officer, Daniel O’Connell, our Chief Financial Officer and Chief Business Officer, Matthew Zuga, our Chief Medical Officer, Eric Siemers, M.D. and our Chief Operating Officer, Russell Barton. Our executive team is complemented by our drug development experts, approximately half of whom hold Ph.D. or M.D. degrees and are former members of Eli Lilly’s global AD clinical development organization. These team members, including Dr. Siemers and Mr. Barton, have worked for over a decade on early- through late-phase AD drug development, including

numerous early-phase AD trials and five large multi-national Phase 3 studies in AD. Together, our management team brings expertise across relevant disciplines, including neuroscience, neurology, translational science, protein manufacturing, biomarker development and quality and regulatory affairs. We believe our team's experience and longstanding working relationships position us to take ACU193 through late-stage clinical development and potentially through registration.

Our company has been financially supported by a group of institutional investors, and we have raised approximately $67.5 million in funding as of March 31, 2021. Our key investors include BlackRock, PBM Capital, RA Capital Management, Rock Springs Capital, Sands Capital and several other private investors, each of whom has participated in our Series A, Series A-1 or Series B financings or purchased convertible notes or warrants to purchase common stock of the company. On June 17, 2021 we closed the second tranche of our Series B preferred stock financing, pursuant to which certain of our investors funded an additional $30.0 million, after which they have no commitment to make any additional investment in the company. For additional information regarding our Series B preferred stock financing, see "Certain Relationships and Related Party Transactions—Private Placements of Our Securities—Convertible Preferred Stock Financings."

Risk Factors Summary

Our business is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section titled "Risk Factors" and include, among others:

- We are a clinical-stage biopharmaceutical company with a limited operating history.
- We have no product candidates approved for commercial sale, we have never generated any revenue from sales and we may never be profitable.
- Even if this offering is successful, we will require substantial additional funding to finance our operations, complete the development and commercialization of ACU193 for AD and evaluate future product candidates. If we are unable to raise this funding when needed, we may be forced to delay, reduce or eliminate our drug development programs or other operations.
- We are substantially dependent on the success of ACU193, our sole product candidate, which will require significant clinical testing before we can seek regulatory approval and potentially launch commercial sales, and which may not be successful in clinical trials, receive regulatory approval or be successfully commercialized, even if approved.
- We have concentrated our research and development efforts on the treatment of AD, a field that has to date seen very limited success in drug development.
- Our approach to the potential treatment of AD is based on a novel therapeutic approach, which exposes us to unforeseen risks.
- Nonclinical and clinical drug development involves a lengthy, expensive and uncertain process. The results of nonclinical studies and early clinical trials are not always predictive of future results. ACU193 or any other product candidate that we advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval.
- Clinical failure can occur at any stage of clinical development and we have never completed a clinical trial or submitted a biologics license application, or BLA, or marketing authorization application, or MAA.

- We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

- We currently rely on CMOs to supply components of and manufacture ACU193. The loss of any of these CMOs or the failure of any of them to meet their obligations to us could affect our ability to develop ACU193 in a timely manner.

- We intend to rely on CROs and other third parties to conduct, supervise and monitor a significant portion of our research and nonclinical testing and clinical trials for our product candidates, and if those third parties do not successfully carry out their contractual duties, comply with regulatory requirements or otherwise perform satisfactorily, we may not be able to obtain regulatory approval or commercialize product candidates, or such approval or commercialization may be delayed, and our business may be substantially harmed.

- We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer or more effective than ours.

- If we are unable to enter into a commercial collaboration or, alternatively, establish internal sales, marketing and distribution capabilities, for ACU193 or any other product candidate that may receive regulatory approval, we may not be successful in commercializing those product candidates if and when they are approved.

- If we are unable to obtain and maintain sufficient intellectual property protection for our product candidate, and other proprietary technologies we develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our product candidate, and other proprietary technologies if approved, may be adversely affected.

- We have identified a material weakness in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For so long as we remain an emerging growth company, we may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- reduced obligations with respect to financial data, including only being required to present two years of audited financial statements, in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;

- an exception from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;

- reduced obligations with respect to 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 the last day of the fiscal year ending after the fifth anniversary of this offering or such earlier time that 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) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering, (ii) the last day of the fiscal year in which we have more than $1.07 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 U.S. Securities and Exchange Commission, 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 prospectus. Accordingly, the information contained herein may be different than you might obtain from other public companies in which you hold equity interests.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies, which may make comparison of our financials to those of other public companies more difficult. As a result of these elections, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests. In addition, it is possible that some investors will find our common stock less attractive as a result of these elections, which may result in a less active trading market for our common stock and higher volatility in our share price.

We are also a "smaller reporting company," meaning that the market value of our shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering 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 after this offering 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.

Corporate Information

We were incorporated under the laws of the State of Delaware in 1996. Our principal executive offices are located at 427 Park St., Charlottesville, Virginia 22902 and our telephone number is (434) 297-1000. Our website address is http://www.acumenpharm.com/. The information contained on, or accessible through, our website is not incorporated by reference into this prospectus. We have included our website in this prospectus solely as an inactive textual reference.

The Offering

Common stock offered by us	8,333,333 shares.
Underwriters' option to purchase additional shares	1,249,999 shares.
Common stock to be outstanding immediately after this offering	36,985,129 shares (or 38,235,128 shares if the underwriters exercise in full their option to purchase additional shares).
Use of proceeds	We estimate that the net proceeds from this offering will be approximately $112.8 million (or approximately $130.2 million if the underwriters exercise in full their option to purchase up to 1,249,999 additional shares of common stock), assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to (i) fund the completion of our ongoing Phase 1 clinical trial of ACU193 and, subject to the successful completion of that trial, the Phase 2 portion of a future Phase 2/3 adaptable trial of ACU193; (ii) to fund chemistry, manufacturing and other research and development activities, and (iii) the remainder for working capital and other general corporate purposes. See the section titled "Use of Proceeds" for additional information.
Reserved Share Program	At our request, an affiliate of BofA Securities, Inc., a participating underwriter, has reserved for sale, at the initial public offering price, up to 5% of the shares of our common stock offered by this prospectus for sale to certain of our directors, officers, employees, distributors, dealers, business associates and related persons. If these persons purchase reserved shares, this will reduce the number of shares of our common stock available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.
Risk factors	You should read the section titled "Risk Factors" for a discussion of factors you should consider carefully, together with all the other information included in this prospectus, before deciding to invest in our common stock.
Proposed Nasdaq Global Market symbol	"ABOS"

The number of shares of our common stock to be outstanding after this offering is based on 28,651,796 shares of our common stock outstanding as of March 31, 2021, after giving effect to the conversion of all outstanding shares of our convertible preferred stock, including 477,297 shares of our Series A convertible preferred stock, 7,537,879 shares of our Series A-1 convertible preferred stock, and 19,770,070 shares of our Series B convertible preferred stock, into an aggregate of 27,785,246 shares of common stock, as well as the

automatic conversion of an outstanding preferred stock warrant into 447,426 shares of our common stock based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and excludes:

- 3,481,178 shares of our common stock issuable upon the exercise of options under our Amended and Restated Stock Performance Plan, or the Prior Plan, outstanding as of March 31, 2021, at a weighted-average exercise price of $1.17 per share;
- 385,693 shares of our common stock issuable upon the exercise of common stock warrants outstanding as of March 31, 2021 at an exercise price of $4.47 per share;
- 667,030 shares of our common stock reserved for future issuance under the Prior Plan, which shares will cease to be available for issuance at the time our 2021 Equity Incentive Plan, or the 2021 Plan, becomes effective and will be added to, and become available for issuance under, the 2021 Plan;
- 3,550,000 shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2021 Plan; and
- 375,000 shares of our common stock reserved for future issuance under our 2021 Employee Stock Purchase Plan, or the ESPP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

Unless otherwise indicated, all information contained in this prospectus, including the number of shares of common stock that will be outstanding after this offering, assumes or gives effect to:

- the automatic conversion of all outstanding shares of our convertible preferred stock into 27,785,246 shares of our common stock, which will occur upon the closing of this offering;
- the automatic exercise and conversion of an outstanding preferred stock warrant into 447,426 shares of our common stock, which will occur upon the closing of this offering (based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus);
- a 1-for-30 reverse stock split of our common stock and preferred stock effected on November 20, 2020;
- a 1-for-1.490 reverse stock split of our common stock effected on June 23, 2021;
- the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering;
- no exercise of the outstanding options and common stock warrants referred to above after March 31, 2021;
- no exercise by the underwriters of their option to purchase up to 1,249,999 additional shares of our common stock in this offering; and
- no purchase of our shares of our common stock by certain of our directors, officers, employees, distributors, dealers, business associates and related persons designated by us through the reserved share program described under “Underwriting.”

SUMMARY FINANCIAL DATA

The following tables set forth our summary financial data for our business. We have derived the statement of operations data for the years ended December 31, 2019 and 2020 and the balance sheet data as of December 31, 2020 from our audited financial statements appearing elsewhere in this prospectus. The statement of operations data for the three months ended March 31, 2020 and 2021 and the balance sheet data as of March 31, 2021 have been derived from our unaudited interim financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of the results that should be expected in the future and our operating results for the three months ended March 31, 2021 are not necessarily indicative of the results that may be expected for the full year ended December 31, 2021 or any other interim periods or any future year or period.

You should read the following summary financial data together with our financial statements and the related notes thereto included elsewhere in this prospectus and the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations." The summary financial data in this section are not intended to replace our financial statements and are qualified in their entirety by our financial statements and related notes included elsewhere in this prospectus.

	Year Ended		Three Months Ended	
	December 31, 2019	December 31, 2020	March 31, 2020	March 31, 2021
	(in thousands, except share and per share data)			
Statement of Operations Data:				
Grant and other revenue	$ 1,697	$ 1,436	$ 226	$ —
Operating expenses:				
Research and development	8,576	7,997	2,050	2,578
General and administrative	926	1,351	222	1,215
Total operating expenses	9,502	9,348	2,272	3,793
Loss from operations	(7,805)	(7,912)	(2,046)	(3,793)
Other income (expense)	(102)	587	1	(23,204)
Net loss	(7,907)	(7,325)	(2,045)	(26,997)
Contribution related to common stock exchanged for Series A convertible preferred stock	221	—	—	—
Net loss attributable to common stockholders	$ (7,686)	$ (7,325)	$ (2,045)	$ (26,997)
Net loss per share, basic and diluted	$ (17.84)	$ (17.48)	$ (4.88)	$ (64.41)
Weighted average shares outstanding, basic and diluted	430,814	419,124	419,124	419,124
Pro forma net loss per common share, basic and diluted (1)		$ (0.28)		$ (0.13)
Weighted average shares used to compute pro forma net loss per share, basic and diluted (1)		28,651,796		28,651,796

(1) The unaudited pro forma net loss per share for the year ended December 31, 2020 and the three months ended March 31, 2021 were computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of convertible preferred stock into 27,785,246 shares of common stock, as well as the automatic exercise and conversion of an outstanding preferred stock warrant into 447,426 shares of common stock and the settlement of the preferred stock tranche rights liability, as if such conversions had occurred at the beginning of the period, regardless of their issuance dates.

	As of March 31, 2021		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
		(in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$ 41,407	$ 71,407	$ 184,157
Working capital(3)	10,921	69,551	182,301
Total assets	42,373	72,373	185,123
Preferred stock tranche rights liability	26,557	—	—
Preferred stock warrant liability	2,073	—	—
Convertible preferred stock	56,653	—	—
Accumulated deficit	(53,962)	(53,962)	(53,962)
Total stockholders' (deficit) equity	(45,462)	69,821	182,571

(1) Gives effect to the conversion of all of the outstanding shares of our convertible preferred stock into an aggregate of 27,785,246 shares of our common stock upon the closing of this offering, as well as automatic conversion of an outstanding preferred stock warrant into 447,426 shares of our common stock based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus as if such conversions had occurred on March 31, 2021.

(2) Gives further effect to the sale of 8,333,333 shares of common stock in this offering at an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting fees and commissions and estimated offering expenses payable by us. This pro forma as adjusted information is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $7.8 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million in the number of shares we are offering would increase or decrease the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and stockholders' equity by $14.0 million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) We define working capital as current assets less current liabilities. For further details regarding our current assets and current liabilities, see our financial statements appearing elsewhere in this prospectus.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our financial statements and related notes, before deciding whether to purchase shares of our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to our Financial Position and Capital Needs

We are a clinical-stage biopharmaceutical company with a limited operating history.

We are a clinical-stage biopharmaceutical company with a limited operating history focused on pioneering a novel disease-modifying therapeutic approach to treat Alzheimer's disease, or AD. We were incorporated in 1996 and were party to an exclusive license and research collaboration with Merck & Co., Inc., or Merck, in 2003. Although we acquired the exclusive rights to ACU193 from Merck in 2011, following Merck's strategic decision to focus its AD development efforts on a different product candidate, we did not recommence meaningful operations until we completed our first institutional fundraising in 2018. As a result, we have a very limited operating history, which may make it difficult to evaluate the success of our business to date and assess our future viability. Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We received clearance of our Investigational New Drug application, or IND, for our sole product candidate, ACU193, and initiated our Phase 1 clinical trial in the second quarter of 2021. To date, we have not completed a clinical trial, initiated a pivotal trial, obtained marketing approval for any product candidate, manufactured a commercial scale product candidate, arranged for a third party to do so on our behalf or conducted sales or marketing activities necessary for successful product candidate commercialization. Our short operating history makes any assessment of our future success and viability subject to significant uncertainty. We will likely encounter risks and difficulties frequently experienced by early-stage biopharmaceutical companies in rapidly evolving fields, and we have not yet demonstrated an ability to overcome such risks and difficulties successfully. If we do not address these risks and difficulties successfully, our business will suffer.

We have no product candidates approved for commercial sale, we have never generated any revenue from sales and we may never be profitable.

We have no product candidates approved for sale, have never generated any revenue from sales, have never been profitable and do not expect to be profitable in the foreseeable future. We have incurred net losses in each year since our inception. For the years ended December 31, 2019 and 2020 and for the three months ended March 31, 2021, our net losses were $7.9 million, $7.3 million and $27.0 million, respectively. We had an accumulated deficit of $54.0 million as of March 31, 2021.

To date, we have devoted most of our financial resources to research and development of ACU193, including our nonclinical development activities of ACU193, and corporate overhead. We expect that it will be several years, if ever, before we have a product candidate approved and ready for commercialization. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, ACU193 and any other product candidate we may develop in the future, prepare for and begin the commercialization of any approved product candidates and add infrastructure and personnel to support our drug development efforts and operations as a public company. We anticipate that any such losses could be significant for the next several years. These net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. Further, these net losses may fluctuate significantly from quarter-to-quarter or year-to-year. To become and remain profitable, we must develop and eventually commercialize ACU193 or another drug with significant revenue.

We may never succeed in developing a commercial drug and, even if we succeed in commercializing one or more product candidates, we may never generate revenues that are large enough to achieve profitability. In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown challenges. Because of these numerous risks and uncertainties, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to generate revenues or achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis, and we will continue to incur substantial research and development costs and other expenditures to develop and market additional product candidates.

Even if this offering is successful, we will require substantial additional funding to finance our operations, complete the development and commercialization of ACU193 for AD and evaluate future product candidates. If we are unable to raise this funding when needed, we may be forced to delay, reduce or eliminate our drug development programs or other operations.

To date, we have used substantial amounts of cash to fund our operations, and we expect our expenses to increase substantially in the foreseeable future in connection with our ongoing activities, particularly as we continue the research and development, conduct clinical trials of, and seek marketing approval for, ACU193. Developing ACU193 and conducting clinical trials for the treatment of AD and any other product candidates or indications that we may pursue in the future will require substantial amounts of capital. In addition, if we obtain marketing approval for ACU193 or any future product candidates, we expect to incur significant commercialization expenses related to the commercialization of the product, whether we are commercializing alone or with a collaborator. Furthermore, upon the closing of this offering, we expect to incur additional significant expenses associated with operating as a public company.

Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. As of March 31, 2021, we had $41.4 million in cash and cash equivalents. Based on our current operating plan, we believe that the net proceeds of this offering, together with our existing cash and cash equivalents, including the $30.0 million received in June 2021 upon the second closing of our Series B preferred stock financing, will be sufficient to enable us to fund our operations at least through 2023. However, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may need to raise additional funds sooner than we anticipate if we choose to expand more rapidly than we presently anticipate.

The amount and timing of our future funding requirements will depend on many factors, some of which are outside of our control, including but not limited to:

- the progress, costs, timing and results of our Phase 1 trial and other clinical trials of ACU193, including for potential additional indications that we may pursue beyond AD;
- the requirements of the U.S. Food and Drug Administration, or the FDA, and European Medicines Agency, or the EMA, for clinical trials and nonclinical studies and other work, for review and approval of ACU193 for AD;
- the outcome, costs and timing of seeking and obtaining FDA, EMA and any other regulatory approvals;
- the number and characteristics of product candidates that we pursue;
- our ability to obtain sufficient quantities of our product candidates from our third-party manufacturers;
- our need to expand our research and development activities;

- the costs associated with securing and establishing commercialization capabilities if we were to elect to commercialize one or more products on our own;
- the economics and other terms, timing of and success of any collaboration, licensing or other arrangements into which we may enter for the commercialization of our products;
- the costs and other terms, timing and success, of acquiring, in-licensing or investing in businesses, product candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to retain management and hire scientific and clinical personnel;
- the effect of competing drugs and product candidates and other market developments; and
- our need to implement additional internal systems and infrastructure, including financial and reporting systems.

Additional funding may not be available to us on acceptable terms or at all. Any such funding may result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. We also could be required to seek funds through arrangements with collaborative partners or otherwise that may require us to relinquish rights to some of our technologies or product candidates or otherwise agree to terms unfavorable to us. Any funds we raise may not be sufficient to enable us to continue to implement our long-term business strategy. Further, our ability to raise additional capital may be adversely impacted by potential worsening global economic conditions and the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic. If we are unable to raise sufficient additional capital on a timely basis, we could be forced to curtail our planned operations and the pursuit of our business strategy, which would have a material adverse effect on the value of our common stock.

Risks Related to the Development of our Product Candidates

We are substantially dependent on the success of ACU193, our sole product candidate, which will require significant clinical testing before we can seek regulatory approval and potentially launch commercial sales, and which may not be successful in clinical trials, receive regulatory approval or be successfully commercialized, even if approved.

We are early in our development efforts. To date, we have invested substantially all of our efforts and financial resources in the research and development of ACU193, which is currently our only product candidate. Before seeking marketing approval from regulatory authorities for the sale of ACU193, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the drug in humans. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA, or comparable foreign regulatory authorities, and we may never receive such regulatory approval. We cannot be certain that ACU193 will be successful in clinical trials. Further, ACU193 may not receive regulatory approval even if it is successful in clinical trials. If we do not receive regulatory approvals for ACU193, we may not be able to continue our operations. Our prospects, including our ability to finance our operations and generate revenue, will depend entirely on the successful development, regulatory approval and commercialization of ACU193 by us or

by one or more of our partners. The clinical and commercial success of ACU193 will depend on a number of factors, including the following:

- successful patient enrollment in our Phase 1 and other clinical trials of ACU193;
- sufficiency of our financial and other resources to complete the necessary clinical trials;
- the results from our Phase 1 clinical trial and future clinical trials of ACU193;
- the frequency and severity of adverse effects of ACU193;
- the ability of third-party manufacturers to manufacture supplies of ACU193 and to develop, validate and maintain a commercial-scale manufacturing process that is compliant with current good manufacturing practices, or cGMP;
- our ability to demonstrate ACU193's safety and efficacy to the satisfaction of the FDA and foreign regulatory authorities in order to receive necessary marketing approvals for ACU193;
- whether we are required by the FDA to conduct additional clinical trials prior to the approval to market ACU193 and whether the FDA may disagree with the number, design, size, conduct, implementation or other aspects of our clinical trials;
- whether the FDA may require implementation of a Risk Evaluation and Mitigation Strategy, or REMS, as a condition of approval or post-approval;
- our ability to successfully commercialize ACU193, if approved for marketing and sale by the FDA or foreign regulatory authorities, whether alone or in collaboration with others;
- our success in educating physicians and patients about the benefits, administration and use of ACU193;
- acceptance of ACU193 as safe and effective by patients and the medical community;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;
- achieving and maintaining compliance with all regulatory requirements applicable to ACU193, including any required post-marketing approval commitments;
- effectively competing with other AD therapies;
- the effectiveness of our own or any future collaborators' marketing, pricing, coverage and reimbursement, sales and distribution strategies and operations;
- our ability to maintain our existing patents and obtain newly issued patents that cover ACU193 and to enforce such patents and other intellectual property rights in and to ACU193;
- our ability to avoid third-party intellectual property claims;
- the availability of third-party coverage and adequate reimbursement for ACU193 and any other product candidates, once approved; and
- a continued acceptable safety, tolerability and efficacy profile of ACU193 following approval.

Many of these factors are beyond our control. Accordingly, we cannot assure you that we will ever be able to generate revenue through the sale of ACU193. If we are not successful in commercializing ACU193, or are significantly delayed in doing so, our business will be materially harmed.

We have concentrated our research and development efforts on the treatment of AD, a field that has to date seen very limited success in drug development.

We have focused our research and development efforts solely on developing effective treatments for AD. Collectively, efforts by pharmaceutical companies in the field of AD have seen very limited successes in drug development. There are few approved products available for patients with AD.

Our future success is highly dependent on the successful development of ACU193 for treating AD. The development and, if approved, commercialization of ACU193 subjects us to a number of challenges, including ensuring that we select an effective dose of ACU193, executing appropriate clinical trials to test for safety and efficacy and obtaining regulatory approval from the FDA and other regulatory authorities. We cannot be sure that ACU193, or any other product candidate we develop, will ultimately prove to be safe and effective, scalable or profitable. Moreover, public perception of drug safety issues, including adoption of new therapeutics or novel approaches to treatment, may adversely influence the willingness of subjects to participate in clinical trials, or if approved, of physicians to prescribe novel treatments.

Our approach to the potential treatment of AD is based on a novel therapeutic approach, which exposes us to unforeseen risks.

There is no current scientific or general consensus on the causation of AD or method of action to treat AD. We have discovered and are developing ACU193, a humanized monoclonal antibody that selectively targets amyloid-beta oligomers, or AbOs, to treat AD. Our approach is based on research on AbOs, globular assemblies of the amyloid-beta, or Ab, peptide that are distinct from other forms of amyloid. AbOs have gained scientific acceptance as primary toxins involved in the initiation and propagation of AD pathology. Based on the results of our nonclinical studies to date, we believe ACU193 is different from current and prior clinical-stage anti-amyloid drugs and product candidates based on its selectivity for AbOs. We believe that this is a novel mechanism which has the potential to provide more clinically meaningful benefits, with a possible improved safety profile, as compared to approved therapies and product candidates in development and may potentially slow disease progression. However, we may ultimately discover that ACU193 does not possess properties required for therapeutic effectiveness. We have no evidence regarding the efficacy, safety or tolerability of ACU193 in humans. We may spend substantial funds attempting to develop ACU193 or other product candidates and never succeed in doing so.

The market for any products that we successfully develop, if any, will also depend on the cost of the product. We do not yet have sufficient information to reliably estimate what it would cost to commercially manufacture ACU193, and the actual cost to manufacture ACU193 or any drug we develop in the future could materially and adversely affect the commercial viability of the drug. We may also find that the manufacture of our product candidates is more difficult than anticipated, resulting in an inability to produce a sufficient amount of our product candidates for our clinical trials or, if approved, commercial supply. If we do not successfully develop ACU193 or any other drug we develop with drug product cannot be reliably and economically manufactured at scale, we will not become profitable, which would materially and adversely affect the value of our common stock.

Nonclinical and clinical drug development involves a lengthy, expensive and uncertain process. The results of nonclinical studies and early clinical trials are not always predictive of future results. ACU193 or any other product candidate that we advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval.

The research and development of product candidates is extremely risky. Only a small percentage of product candidates that enter the development process ever receive marketing approval. Before obtaining marketing

approval from regulatory authorities for the sale of any product candidate, we must complete nonclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain.

The results of nonclinical studies and early clinical trials are not necessarily predictive of future results and ACU193, or any other product candidate that we may develop, may not be further developed or have favorable results in later studies or trials. Clinical trial failure may result from a multitude of factors including, but not limited to, flaws in study design, dose selection, placebo effect, patient enrollment criteria and failure to demonstrate favorable safety or efficacy traits. As such, failure in clinical trials can occur at any stage of testing. A number of companies in the pharmaceutical industry have suffered setbacks in the advancement of their product candidates into later-stage clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding results in earlier nonclinical studies or clinical trials. We intend to enroll 62 patients with early AD in our Phase 1 clinical trial of ACU193. Even if the results of our Phase 1 clinical trial are positive, it may not be predictive of the results of outcomes in our later-stage clinical trials. The results of clinical trials in one set of patients or disease indications may not be predictive of those obtained in another. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. This is particularly true in AD, where failure rates historically are higher than in most other disease areas.

In the event of negative or inconclusive results, we may decide, or regulatory authorities may require us, to conduct additional clinical trials or nonclinical studies. In addition, data obtained from clinical trials and nonclinical studies is susceptible to varying interpretations, and regulatory authorities may not interpret our data as favorably as we do, which may further delay, limit or prevent development efforts, clinical trials or marketing approval. Furthermore, as more competing product candidates within a particular class of drugs proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change.

If we are unable to complete nonclinical studies or clinical trials of ACU193 or future product candidates, due to safety concerns or otherwise, or if the results of these trials are not sufficient to convince regulatory authorities of their safety or efficacy, we will not be able to obtain marketing approval for commercialization on a timely basis or at all. Even if we are able to obtain marketing approval for ACU193 or any future product candidates, those approvals may be for indications or dose levels that deviate from our desired approach or may contain other limitations that would adversely affect our ability to generate revenue from sales of those product candidates. Moreover, if we are not able to differentiate our product candidate against other approved product candidates within the same class of drugs, or if any of the other circumstances described above occur, our business would be harmed and our ability to generate revenue from that class of drugs would be severely impaired.

Clinical failure can occur at any stage of clinical development and we have never completed a clinical trial or submitted a biologics license application, or BLA, or marketing authorization application, or MAA.

We are early in our development efforts for ACU193, and will need to successfully complete our ongoing and planned clinical trials, including pivotal clinical trials, in order to obtain FDA approval to market ACU193 or any other product candidate we seek to develop. Carrying out clinical trials and the submission of a successful BLA is a complicated process. Although members of the Acumen team have significant experience in clinical development of drugs through regulatory approval, as an organization, Acumen has just begun conducting its first clinical trial, has no experience in conducting any clinical trials, has limited experience in preparing regulatory submissions and has not previously submitted a BLA for any product candidate.

In addition, we have had limited interactions with the FDA and cannot be certain how many clinical trials of ACU193 will be required or how such trials should be designed. Consequently, we may be unable to successfully and efficiently execute and complete necessary clinical trials in a way that leads to BLA submission and approval of ACU193 or any other product candidate. We may require more time and incur greater costs than our competitors and may not succeed in obtaining regulatory approvals of product candidates that we develop. Failure to commence or complete, or delays in, our planned clinical trials, could prevent us from or delay us in commercializing ACU193 or any future product candidates we may develop, and failure to successfully complete any of these activities in a timely manner could have a material adverse impact on our business and financial performance.

We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- regulatory authorities, Institutional Review Boards, or IRBs, or Ethics Committees, or ECs, may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site or we may fail to reach a consensus with regulatory authorities on trial design; for example, our initial submission of the IND for ACU193 was placed on clinical hold by the FDA until we were able to address the FDA's initial concerns regarding potential off-target binding of ACU193 with an additional nonclinical tissue cross reactivity study, after which the FDA permitted us to initiate the Phase 1 clinical trial of ACU193 in April 2021;

- regulatory authorities in jurisdictions in which we seek to conduct clinical trials may differ from each other on our trial design, and it may be difficult or impossible to satisfy all such authorities with one approach;

- we may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different contract research organizations, or CROs, and trial sites;

- we may be unable to add or be delayed in adding a sufficient number of clinical trial sites and obtaining IRB or independent EC approval at each clinical trial site;

- clinical trials of our product candidates may fail to show safety or efficacy or otherwise produce negative or inconclusive results, and we may decide, or regulatory authorities may require us, to conduct additional clinical trials or abandon drug development programs;

- the number of patients required for clinical trials of our product candidates may be larger than we anticipate;

- enrollment in our clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;

- difficulties in having subjects complete a clinical trial or returning for post-treatment follow-up;

- changes to clinical trial protocols;

- our third-party contractors, including clinical investigators, contract manufacturers and vendors may fail to comply with applicable regulatory requirements, lose their licenses or permits, or otherwise fail, or lose the ability to, meet their contractual obligations to us in a timely manner, or at all;

- we might have to suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;

- regulatory authorities or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements, a finding that our product candidates have undesirable side effects or other unexpected characteristics, or that the participants are being exposed to unacceptable health risks;

- the cost of clinical trials of our product candidates may be greater than we anticipate, and we may lack adequate funding to continue one or more clinical trials;

- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;

- clinical trial sites may deviate from clinical trial protocol or drop out of a clinical trial; and

- occurrence of serious adverse events in trials of the same class of agents conducted by other companies.

Adverse side effects, properties or other safety risks associated with ACU193 or any future product candidates could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon further development, limit the commercial profile of an approved label or result in significant negative consequences following marketing approval, if any.

As is the case with pharmaceuticals generally, it is possible that there may be side effects and adverse events associated with the use of ACU193 or any future product candidates we may develop. Results of our Phase 1 trial of ACU193, or future clinical trials, could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics as the clinical trials progress to greater exposures and a larger number of patients. Undesirable side effects caused by, or unexpected or unacceptable characteristics associated with, ACU193 or any future product candidates we may develop, could result in the delay, suspension or termination of clinical trials by us, the FDA or other regulatory authorities, or IRBs for a number of reasons. We may also elect to limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for such product candidate if approved. If we elect or are required to further delay, suspend or terminate any clinical trial of any product candidates we may develop, the commercial prospects of such product candidates will be harmed and our ability to generate drug revenues from any such product candidates will be delayed or eliminated.

It is possible that, as we test ACU193 in our Phase 1 trial or future trials, or as the use of ACU193 becomes more widespread if it receives regulatory approval, we may identify additional adverse events that were not identified or not considered significant in our earlier trials. If such side effects become later known in development or upon approval, if any, such findings may harm our business, financial condition, results of operations and prospects significantly. If we or others later identify undesirable side effects, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw, suspend or limit approval of ACU193 or any future product candidates;

- we may be required to recall a drug or change the way such drug is administered to patients;

- regulatory authorities may require additional warnings or statements in the labeling, such as a boxed warning or a contraindication or issue safety alerts, press releases or other communications containing warnings or other safety information about the product candidate, for example, field alerts to physicians and pharmacies;

- regulatory authorities may require us to implement a REMS to ensure that the benefits of the drug outweigh its risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools;
- we may be required to change the way a drug is distributed or administered, conduct additional clinical trials or be required to conduct additional post-marketing studies or surveillance;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide to remove such product candidates from the market;
- we could be sued and held liable for harm caused to patients;
- sales of the drug may decrease significantly or ACU193 or any future drug could become less competitive; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of ACU193 or any future product candidates, if approved, and could significantly harm our business, financial condition, results of operations and prospects.

We may experience delays or difficulties in the enrollment and retention of patients in clinical trials, which could delay or prevent our receipt of necessary regulatory approvals.

Successful and timely completion of clinical trials will require that we enroll a sufficient number of patients. Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors, including the size and nature of the patient population and competition for patients eligible for our clinical trials with competitors which may have ongoing clinical trials for product candidates that are under development to treat the same indications as one or more of our product candidates or approved products for the conditions for which we are developing our product candidates.

Trials may be subject to delays as a result of patient enrollment taking longer than anticipated or patient withdrawal. We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA, EMA or foreign regulatory authorities. We cannot predict how successful we will be at enrolling subjects in future clinical trials. Subject enrollment is affected by other factors including:

- the severity and difficulty of diagnosing the disease under investigation;
- the eligibility and exclusion criteria for the trial in question;
- the size of the patient population and process for identifying patients;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the design of the trial protocol;
- the perceived risks and benefits of the product candidate in the trial, including relating to cell therapy approaches;

- the availability of competing commercially available therapies and other competing therapeutic candidates' clinical trials for the disease or condition under investigation;
- the willingness of patients to be enrolled in our clinical trials;
- the efforts to facilitate timely enrollment in clinical trials;
- potential disruptions caused by the COVID-19 pandemic, including difficulties in initiating clinical sites, enrolling and retaining participants, diversion of healthcare resources away from clinical trials, travel or quarantine policies that may be implemented, and other factors;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Our inability to enroll a sufficient number of patients for clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in these clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Furthermore, we expect to rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and we will have limited influence over their performance.

Furthermore, even if we are able to enroll a sufficient number of patients for our clinical trials, we may have difficulty maintaining enrollment of such patients in our clinical trials.

Interim, "top-line" and preliminary results from our clinical trials that we announce or publish from time to time may change as more data become available and is subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim, top-line or preliminary results from our clinical trials. Interim results from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or top-line results also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are reported. Differences between preliminary, top-line or interim data and final data could significantly harm our business prospects and may cause the trading price of our common stock to fluctuate significantly. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated.

Further, others, including regulatory agencies may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular development program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed meaningful by you or others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product

candidate or our business. If the interim, top-line or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, product candidates may be harmed, which could significantly harm our business prospects.

We cannot be certain that ACU193 or any of our future product candidates will receive regulatory approval, and without regulatory approval we will not be able to market our product candidates.

We currently have no product candidates approved for sale and we cannot guarantee that we will ever have marketable product candidates. ACU193 is our sole product candidate designed for the treatment of AD. Our ability to generate revenue related to sales of ACU193, if ever, will depend on the successful development and regulatory approval of ACU193 for the treatment of AD and, potentially, other indications.

The development of a product candidate and its approval and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to extensive regulation by the FDA, the EMA and regulatory authorities in other countries, with regulations differing from country to country. We are not permitted to market our product candidates in the United States, Europe or other countries until we receive approval of a BLA from the FDA or MAA from the EMA, respectively. We have not submitted any marketing applications for ACU193.

BLAs and MAAs must include extensive nonclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each desired indication. BLAs and MAAs must also include significant information regarding the chemistry, manufacturing and controls for the drug. Obtaining approval of a BLA or a MAA is a lengthy, expensive and uncertain process, and we may not be successful in obtaining approval. The FDA and the EMA review processes can take years to complete and approval is never guaranteed. If we submit a BLA to the FDA, the FDA must decide whether to accept or reject the submission for filing. We cannot be certain that any submissions will be accepted for filing and review by the FDA. Regulators of other jurisdictions, such as the EMA, have their own procedures for approval of product candidates.

Even if a drug is approved, the FDA or the EMA, as the case may be, may limit the indications for which the drug may be marketed, require extensive warnings on the drug labeling or require expensive and time-consuming clinical trials or reporting as conditions of approval. Regulatory authorities in countries outside of the United States and Europe also have requirements for approval of product candidates with which we must comply prior with marketing in those countries. Obtaining regulatory approval for marketing of a product candidate in one country does not ensure that we will be able to obtain regulatory approval in any other country. In addition, delays in approvals or rejections of marketing applications in the United States, Europe or other countries may be based upon many factors, including regulatory requests for additional analyses, reports, data, nonclinical studies and clinical trials, regulatory questions regarding different interpretations of data and results, changes in regulatory policy during the period of drug development and the emergence of new information regarding ACU193 or other product candidates we may develop in the future. Also, regulatory approval for any of our product candidates may be withdrawn.

We initiated our Phase 1 trial in patients with AD in the second quarter of 2021. Before we submit a BLA to the FDA or a MAA to the EMA for ACU193 for the treatment of patients with AD, we will be required to successfully complete our Phase 1 clinical trial and at least one additional late-stage clinical trial. The FDA generally requires two pivotal clinical trials to support approval. In addition, we must scale up manufacturing and complete other standard nonclinical and clinical studies. We cannot predict whether our current or future trials will be successful or whether regulators will agree with our conclusions regarding the nonclinical studies and the clinical trials we conduct.

We may in the future conduct clinical trials for our product candidates outside the United States, and the FDA, EMA and other foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct one or more of our clinical trials outside the United States, including in Europe. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA, EMA or applicable foreign regulatory authorities may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to current good clinical practice, or cGCP, regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, EMA or any other foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA, EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

We may not be successful in our efforts to build a pipeline of additional product candidates.

Our sole product candidate is ACU193. We may not be able to identify and successfully develop new product candidates in addition to ACU193. Even if we are successful in building our product pipeline, the potential product candidates that we identify may not be suitable for clinical development or, if deemed suitable for clinical development, successful in any clinical trials. For example, product candidates may be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be successfully developed, much less receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize product candidates, we will not be able to obtain product revenue in future periods, which would result in significant harm to our financial position and adversely affect our stock price.

If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of our products may be delayed.

From time to time, we may estimate the timing of the accomplishment of various scientific, clinical, regulatory, manufacturing and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of nonclinical studies and clinical trials and the submission of regulatory filings, including BLA submissions. From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones are, and will be, based on a variety of assumptions. The actual timing of these milestones can vary significantly compared to our estimates, in some cases for reasons beyond our control. We may experience numerous unforeseen events during, or as a result of, any future clinical trials that we conduct that could delay or prevent our ability to receive marketing approval or commercialize our product candidates.

Our business and operations may be adversely affected by the evolving and ongoing COVID-19 global pandemic.

Our business and operations may be adversely affected by the effects of the recent and evolving COVID-19 virus, which was declared a global pandemic by the World Health Organization in March 2020. The COVID-19 pandemic has resulted in travel and other restrictions in order to reduce the spread of the disease, including public health directives and orders in the United States and the European Union that, among other things and for various periods of time, directed individuals to shelter at their places of residence, directed businesses and

governmental agencies to cease non-essential operations at physical locations, prohibited certain non-essential gatherings and events and ordered cessation of non-essential travel. Future remote work policies and similar government orders or other restrictions on the conduct of business operations related to the COVID-19 pandemic may negatively impact productivity and may disrupt our ongoing research and development activities and our clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. Further, such orders also may impact the availability or cost of materials, which would disrupt our supply chain and manufacturing efforts and could affect our ability to conduct ongoing and planned clinical trials and preparatory activities.

Although we do not believe our operations have been materially impacted by the COVID-19 pandemic to date, we may experience related disruptions in the future that could severely impact our clinical trials, including:

- interruptions in our ability to obtain drug supply for our clinical trials;
- interruptions in our ability to obtain clinical test kits for our clinical trials;
- delays in receiving authorizations from regulatory authorities to initiate our planned clinical trials;
- delays, difficulties or a suspension in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- changes in local regulations as part of a response to the COVID-19 outbreak that may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs or to discontinue the clinical trials altogether;
- interruption of key clinical trial activities, such as clinical trial site monitoring, and the ability or willingness of subjects to travel to trial sites due to limitations on travel imposed or recommended by federal or state governments, employers and others;
- risk that participants enrolled in our clinical trials will contract COVID-19 while the trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- interruptions of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations, or CMOs, due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;

- changes in local regulations as part of a response to the COVID-19 pandemic, which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue such clinical trials altogether; and

- refusal of the FDA to accept data from clinical trials in these affected geographies.

The spread of COVID-19, which has caused a broad impact globally, may materially affect us economically. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, the continued widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

The global COVID-19 pandemic continues to rapidly evolve. The extent to which the COVID-19 pandemic impacts our business and operations, including our clinical development and regulatory efforts, will depend on future developments that are highly uncertain and cannot be predicted with confidence at the time of this prospectus, such as the ultimate geographic spread of the disease, the duration of the outbreak, the duration and effect of business disruptions and the short-term effects and ultimate effectiveness of the travel restrictions, quarantines, social distancing requirements and business closures in the United States and other countries to contain and treat the disease. Accordingly, we do not yet know the full extent of potential delays or impacts on our business, our clinical and regulatory activities, healthcare systems or the global economy as a whole. However, these impacts could adversely affect our business, financial condition, results of operations and growth prospects.

In addition, to the extent the ongoing COVID-19 pandemic adversely affects our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described in this “Risk Factors” section.

We may develop ACU193 and future product candidates for use in combination with other therapies, which could expose us to additional regulatory risks.

We may develop ACU193 and future product candidates for use in combination with one or more other approved therapies for AD. Even if any product candidate we develop were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risk that the FDA, EMA or comparable foreign regulatory authorities could revoke approval of the therapy used in combination with our product candidate or that safety, efficacy, manufacturing or supply issues could arise with these existing therapies. This could result in our own products being removed from the market or being less successful commercially.

Further, we will not be able to market and sell any product candidate we develop in combination with an unapproved AD therapy for a combination indication if that unapproved therapy does not ultimately obtain marketing approval either alone or in combination with our product. In addition, unapproved AD therapies face the same risks described with respect to our product candidates currently in development and clinical trials, including the potential for serious adverse effects, delay in their clinical trials and lack of FDA approval.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates proceed through nonclinical studies to late-stage clinical trials towards potential approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize processes and product characteristics. For example, we recently changed the storage conditions for future lots of ACU193 drug product, which required a change in contract manufacturer and submission of stability data to FDA in an IND amendment.

The change in contract manufacturer IND amendment was filed with the FDA on April 8, 2021. The FDA has confirmed there is no plan for a 30 day review or wait at the agency.

Such changes carry the risk that they will not achieve our intended objectives. Any such changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the materials manufactured using altered processes. Such changes may also require additional testing, FDA notification approval. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and jeopardize our ability to commence sales and generate revenue. In addition, we may be required to make significant changes to our upstream and downstream processes across our pipeline, which could delay the development of our future product candidates.

Risks Related to the Commercialization of our Product Candidates

Even if ACU193 or any other product candidate we develop receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

If ACU193 or any other product candidate we develop receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant revenue and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the clinical indications for which our product candidates are licensed;
- the efficacy, safety and potential advantages compared to alternative treatments;
- our ability to demonstrate the advantages of our product candidates over other medicines;
- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- product labeling or product insert requirements of the FDA, EMA or other foreign regulatory authorities, including any limitations or warnings contained in a product’s approved labeling, including any black box warning or REMS;
- the willingness of the target patient population to try new treatments and of physicians to prescribe these treatments;
- our ability to commercialize the product either in collaboration with a third party or on our own;
- the timing of market introduction of our product candidates as well as competitive products;
- the strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement for ACU193 and any other product candidates, once approved;

- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

If we are unable to enter into a commercial collaboration or, alternatively, establish internal sales, marketing and distribution capabilities, for ACU193 or any other product candidate that may receive regulatory approval, we may not be successful in commercializing those product candidates if and when they are approved.

We do not have sales or marketing infrastructure. To achieve commercial success for ACU193 or any other product candidate for which we may obtain marketing approval, we will either need to establish a commercial collaboration with a pharmaceutical company that has a sales and marketing organization or we will be required to develop these capabilities internally. There are risks and limitations associated with entering into a commercial collaboration. For example, we may not be successful in entering into arrangements with third parties to sell, market and distribute our product candidates or may be unable to do so on terms that are favorable to us. Even if we are able to enter into a collaboration, our revenue and profitability, if any, are likely to be significantly lower than if we were able to successfully commercialize a product ourselves. In addition, we likely would have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively.

At the same time, there are significant risks associated with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This would be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to market our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians in order to educate physicians about our product candidates, once approved;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we do not establish sales, marketing and distribution capabilities successfully, either in collaboration with third parties or on our own, we will not be successful in commercializing our product candidates.

The affected populations for ACU193 or any other product candidate we may develop may be smaller than we or third parties currently project, which may affect the addressable markets for our product candidates.

Our projections of the number of people who have AD, as well as the subset of people with AD who have the potential to benefit from treatment with ACU193, are estimates based on our knowledge and understanding of the disease. These estimates may prove to be incorrect and new studies may further reduce the estimated incidence or prevalence of the disease or narrow the universe of patients who would be understood to potentially benefit for treatment with ACU193, if approved. The number of patients in the United States, the European Union and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our product

candidates or patients may become increasingly difficult to identify and access, all of which would adversely affect our business, financial condition, results of operations and prospects. Further, even if we obtain approval for ACU193, the FDA or other regulators may limit their approved indications to more narrow uses or subpopulations within the populations for which we are targeting development of ACU193.

The total addressable market opportunity for our product candidates will ultimately depend upon a number of factors including the diagnosis and treatment criteria included in the final label, if approved for sale in specified indications, acceptance by the medical community, patient access and product pricing and reimbursement. Incidence and prevalence estimates are frequently based on information and assumptions that are not exact and may not be appropriate, and the methodology is forward-looking and speculative.

The estimated incidence and prevalence ranges included herein have been derived from data from multiple sources, including scientific literature, surveys of clinics, patient foundations or market research, and may prove to be incorrect. Accordingly, the incidence and prevalence estimates included in this prospectus should be viewed with caution. Further, the data and statistical information used in this prospectus, including estimates derived from them, may differ from information and estimates made by our competitors or from current or future studies conducted by independent sources.

Off-label use or misuse of our products may harm our reputation in the marketplace, result in injuries that lead to costly product liability suits, and subject us to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with any product.

If ACU193 or any other product candidate we develop is approved by the FDA, we may only promote or market our product candidate for its specifically approved indications and consistent with its approved labeling. We or any third party collaborator responsible for commercialization of our products will train the marketing and sales forces responsible for our products against promoting them for uses outside of their approved indications for use, known as “off-label uses.” However, neither we, nor any future commercial partner of ours will be able to prevent a physician from using our products off-label, when in the physician’s independent professional medical judgment he or she deems it appropriate. Furthermore, the use of our products for indications other than those approved by the FDA may not effectively treat such conditions. Any such off-label use of our product candidates could harm our reputation in the marketplace among physicians and patients. There may also be an increased risk of injury to patients if physicians attempt to use our products for these uses for which they are not approved, which could lead to product liability suits that that might require significant financial and management resources and that could harm our reputation.

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the U.S. Federal Trade Commission, the Department of Justice, or DOJ, the Office of Inspector General of the U.S. Department of Health and Human Services, or HHS, state attorneys general, members of the U.S. Congress and the public. Additionally, advertising and promotion of any product candidate that obtains approval outside of the United States will be heavily scrutinized by comparable foreign entities and stakeholders. Violations, including actual or alleged promotion of our products for unapproved or off-label uses, are subject to enforcement or warning letters, mandates to issue corrective information to healthcare practitioners, inquiries, investigations, injunctions and civil and criminal sanctions by the FDA, DOJ or comparable foreign bodies. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and as enjoined several companies from engaging in an off-label promotion.

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer or more effective than ours.

The development and commercialization of new drugs is highly competitive. Moreover, the AD field is characterized by strong competition and a strong emphasis on intellectual property. We may face competition with respect to any product candidates that we seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide.

Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

If approved, ACU193 will compete with therapies currently approved for the treatment of AD, which have primarily been developed to treat the symptoms of AD rather than the underlying cause of the disease, such as memantine and cholinesterase inhibitors. ACU193 may also compete with one or more potentially disease-modifying therapeutics that target Ab or amyloid plaques, the most advanced of which is Biogen Inc.'s aducanumab, which the FDA approved in June 2021 under the accelerated approval pathway, which allows for earlier approval of drugs that treat serious conditions, and that fill an unmet medical need based on a surrogate endpoint. Regulatory approval of aducanumab is pending in Europe and Japan. Other companies known to be developing therapies with Ab/amyloid plaque-related targets include Alzheon, Inc., Alzinova AB, Chugai Pharmaceutical Co. Ltd., Cognition Therapeutics, Inc., Eisai Co., Ltd., Eli Lilly and Company, Grifols, S.A., KalGene Pharmaceuticals, Inc., Neurimmune AG, Novartis AG, ProMIS Neurosciences, Inc., Prothena Biosciences, Inc., Roche Holding AG (including Genentech, its wholly owned subsidiary) and Wren Therapeutics, Inc.. Additionally, ACU193, if approved, may also compete with other potential therapies intended to address underlying causes of AD that are being developed by several companies, including AbbVie Inc., AC Immune SA, Alector, Inc., Anavex Life Sciences Corp., Annovis Bio, Inc., Athira Pharma, Inc., Biohaven Pharmaceuticals, Inc., Cassava Sciences, Inc., Cortexyme, Inc., Denali Therapeutics, Inc., Johnson & Johnson (including Janssen, its wholly-owned subsidiary) and Takeda Pharmaceutical Co. Ltd.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, nonclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved product candidates than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize product candidates that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any product candidates that we may develop. Furthermore, currently approved product candidates could be discovered to have application for treatment of AD, which could give such product candidates significant regulatory and market timing advantages over any of our product candidates. Our competitors also may obtain FDA, EMA or other regulatory approval for their product candidates more rapidly than we may obtain approval for ours from the FDA, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, product candidates or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitors.

If our competitors market product candidates that are more effective, safer or less expensive than our product candidates, if approved, or that reach the market sooner than our product candidates, we may not achieve commercial success. In addition, the pharmaceutical industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or product candidates developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

Any product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

If we are successful in achieving regulatory approval to commercialize any biologic product candidate that we develop, it may face competition from biosimilar products. In the United States, ACU193 is, and we expect that

any other product candidate we may seek to develop likely will be, regulated by the FDA as a biologic product subject to approval under the BLA pathway. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or the BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four (4) years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed by the FDA. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own nonclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product.

There is a risk that any of our product candidates approved as a biological product under a BLA would not qualify for the 12-year period of exclusivity or that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products will depend on a number of marketplace and regulatory factors that are still developing. If competitors are able to obtain marketing approval for biosimilars referencing our candidates, if approved, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and potential adverse consequences.

The success of our product candidates will depend significantly on coverage and adequate reimbursement or the willingness of patients to pay for these therapies.

We believe our success depends on obtaining and maintaining coverage and adequate reimbursement from third- party payors for ACU193 and any other product candidate we successfully develop, and the extent to which patients will be willing to pay out-of-pocket for such products, in the absence of reimbursement for all or part of the cost. In the United States and in other countries, patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. The availability of coverage and adequacy of reimbursement for our products by third-party payors, including government health care programs (e.g., Medicare, Medicaid, TRICARE), managed care providers, private health insurers, health maintenance organizations, and other organizations is essential for most patients to be able to afford medical services and pharmaceutical products such as our product candidates. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. However, decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a payor-by-payor basis. One payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage, and adequate reimbursement. The principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the HHS. CMS decides whether and to what extent products will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree.

Third-party payors determine which products and procedures they will cover and establish reimbursement levels. Even if a third-party payor covers a particular product or procedure, the resulting reimbursement payment rates may not be adequate. Patients who are treated in-office for a medical condition generally rely on third-party payors to reimburse all or part of the costs associated with the procedure, including costs associated with products used during the procedure, and may be unwilling to undergo such procedures in the absence of such coverage and adequate reimbursement. Physicians may be unlikely to offer procedures for such treatment if they are not covered by insurance and may be unlikely to purchase and use our product candidates, if approved, for our stated indications unless coverage is provided and reimbursement is adequate. In addition, for products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs.

Reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that a procedure is safe, effective and medically necessary; appropriate for the specific patient; cost-effective; supported by peer-reviewed medical journals; included in clinical practice guidelines; and neither cosmetic, experimental nor investigational. Further, increasing efforts by third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. In order to secure coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA or comparable regulatory approvals. Additionally, we may also need to provide discounts to purchasers, private health plans or government healthcare programs. Our product candidates may nonetheless not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit. We expect to experience pricing pressures from third-party payors in connection with the potential sale of any of our product candidates. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales.

Foreign governments also have their own healthcare reimbursement systems, which vary significantly by country and region, and we cannot be sure that coverage and adequate reimbursement will be made available with respect to the treatments in which our products are used under any foreign reimbursement system.

There can be no assurance that ACU193 or any other product candidate, if approved for sale in the United States or in other countries, will be considered medically reasonable and necessary, that it will be considered cost-effective by third-party payors, that coverage or an adequate level of reimbursement will be available or that reimbursement policies and practices in the United States and in foreign countries where our products are sold will not adversely affect our ability to sell our product candidates profitably, if they are approved for sale.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or drugs caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or drugs that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards paid to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any products that we may develop.

Although we maintain product liability insurance coverage, such insurance may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

We are subject to a variety of privacy and data security laws, and our failure to comply with them could harm our business.

We maintain a large quantity of sensitive information, including confidential business and personal information in connection with the conduct of our clinical trials and related to our employees, and we are subject to laws and regulations governing the privacy and security of such information. In the United States, there are numerous federal and state privacy and data security laws and regulations governing the collection, use, disclosure and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws, and federal and state consumer protection laws. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing focus on privacy and data protection issues, which may affect our business and is expected to increase our compliance costs and exposure to liability. In the United States, numerous federal and state laws and regulations could apply to our operations or the operations of our partners, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws and regulations (e.g. Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and regulations promulgated thereunder. Depending on the facts and circumstances, we could be subject to significant penalties if we obtain, use or disclose individually identifiable health information in a manner that is not authorized or permitted by HIPAA.

In Europe, the General Data Protection Regulation, or GDPR, took effect in May 2018. The GDPR governs the collection, use, disclosure, transfer or other processing of personal data of individuals within the European Economic Area, or EEA, including clinical trial data. Among other things, the GDPR imposes requirements regarding the security of personal data and notification of data processing obligations to the competent national data processing authorities, requires having lawful bases on which personal data can be processed, requires changes to informed consent practices, and more detailed notices for clinical trial subjects and investigators. In addition, the GDPR increases the scrutiny of transfers of personal data from the EEA to the United States and other jurisdictions that the European Commission does not recognize as having “adequate” data protection laws. In July 2020, the Court of Justice of the European Union limited how organizations could lawfully transfer personal data from the EEA to the United States by invalidating the EU-U.S. Privacy Shield and imposing further restrictions on use of the standard contractual clauses, which could increase our costs and our ability to efficiently process personal data from the EEA. The GDPR imposes substantial fines for breaches and violations (up to the greater of €20 million or four percent (4%) of our consolidated annual worldwide gross revenue) and confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the GDPR. Relatedly, following the United Kingdom’s, or U.K., withdrawal from the EEA and the European Union, and the expiry of the transition period, which ended on January 1, 2021, companies have to comply with both the GDPR and the GDPR as incorporated into U.K. national law, the latter regime having the ability to separately fine up to the greater of £17.5 million or four percent (4%) of global turnover. On January 1, 2021, the U.K. became a third country for the purposes of the GDPR.

The relationship between the U.K. and the European Union in relation to certain aspects of data protection law remains unclear. For example, it is unclear how data can lawfully be transferred between each jurisdiction, which exposes us to further compliance risk. Pursuant to the EU-U.K. Trade and Cooperation Agreement of

December 24, 2020, transfers of personal data from the European Union to the U.K. may continue to take place without a need for additional safeguards during a further transition period, to expire on (1) the date on which an adequacy decision with respect to the U.K. is adopted by the EU Commission; or (2) the expiry of four (4) months, which shall be extended by a further two (2) months unless either the European Union or the U.K. objects. It remains unclear whether the EU Commission will adopt an adequacy decision with respect to the U.K. In the absence of such decision after the expiry of the additional transition period, we may need to put in place additional safeguards for transfers of personal data from the European Union to the U.K., such as standard contractual clauses approved by the EU Commission.

Compliance with these and any other applicable privacy and data security laws and regulations is a rigorous and time-intensive process, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. If we fail to comply with any such laws or regulations, we may face significant fines and penalties that could adversely affect our business, financial condition and results of operations. Furthermore, the laws are not consistent, and compliance in the event of a widespread data breach is costly. In addition, states are constantly adopting new laws or amending existing laws, requiring attention to frequently changing regulatory requirements. For example, California enacted the California Consumer Privacy Act, or CCPA, which took effect on January 1, 2020, became enforceable by the California Attorney General on July 1, 2020, and has been dubbed the first “GDPR-like” law in the United States. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, receive detailed information about how their personal information is used by requiring covered companies to provide new disclosures to California consumers (as that term is broadly defined) and provide such consumers new ways to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Further, the California Privacy Rights Act, or CPRA, recently passed in California. The CPRA will impose additional data protection obligations on companies doing business in California, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. Although the CCPA currently exempts certain health-related information, including clinical trial data, the CCPA and the CPRA may increase our compliance costs and potential liability. Similar laws have been proposed in other states and at the federal level, and if passed, such laws may have potentially conflicting requirements that would make compliance challenging.

If we or any contract manufacturers and suppliers we engage fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could seriously harm our business.

We and any contract manufacturers and suppliers we engage are subject to numerous federal, state and local environmental, health, and safety laws, regulations and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air and water; and employee health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities. We also could incur significant costs associated with civil or criminal fines and penalties.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research, product development and manufacturing efforts. In

addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty, and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended, which could seriously harm our business.

Risks Related to Our Dependence on Third Parties

We currently rely on CMOs to supply components of and manufacture ACU193. The loss of any of these CMOs or the failure of any of them to meet their obligations to us could affect our ability to develop ACU193 in a timely manner.

We do not own or operate manufacturing facilities and rely on a limited number of CMOs to manufacture our product candidates. We have entered into agreements with third-party CMOs to manufacture ACU193 and supply the Phase 1 clinical trial material, in compliance with applicable regulatory and quality standards. We intend to continue to rely on third-party CMOs to manufacture our clinical supply for the foreseeable future. Any replacement of a third-party CMO could require significant effort and expertise because there may be a limited number of qualified replacements. Any delays in obtaining adequate clinical supply that meets the necessary quality standards may delay our development or commercialization.

Our reliance on CMOs for manufacturing activities will reduce our control over these activities but will not relieve us of our responsibility to ensure compliance with all required regulations. Under certain circumstances, these CMOs may be entitled to terminate their engagements with us. If a CMO terminates its engagement with us, or does not successfully carry out its contractual duties, meet expected deadlines or manufacture ACU193 or any other product candidate that we develop in accordance with regulatory requirements, or if there are disagreements between us and a CMO, we may not be able to complete, or may be delayed in completing, the nonclinical studies required to support clinical trials required for approval of ACU193 or any other product candidate. In such instance, we may need to enter into an appropriate replacement third-party relationship, which may not be readily available or available on acceptable terms, which would cause additional delay or increased expense prior to the approval of ACU193 or any future product candidate and would thereby have a negative impact on our business, financial condition, results of operations and prospects.

We may rely on additional third parties to manufacture ingredients of our product candidates in the future and to perform quality testing. Reliance on CMOs and other third-party service providers entails risks to which we would not be subject if we manufactured the product candidates ourselves, including:

- reduced control for certain aspects of manufacturing activities;
- termination or nonrenewal of the applicable manufacturing and service agreements in a manner or at a time that is costly or damaging to us;
- the possible breach by our third-party manufacturers and service providers of our agreements with them;
- the failure of our third-party manufacturers and service providers to comply with applicable regulatory requirements;
- disruptions to the operations of our third-party manufacturers and service providers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or service provider; and

- the possible misappropriation of our proprietary information, including our trade secrets and know-how.

Any of these events could lead to clinical trial delays or failure to obtain regulatory approval, impact our ability to successfully commercialize any of our product candidates or otherwise harm our business, financial condition, results of operations, stock price and prospects. Some of these events could be the basis for FDA or other regulatory authority action, including injunction, recall, seizure or total or partial suspension of product manufacture.

We intend to rely on CROs and other third parties to conduct, supervise and monitor a significant portion of our research and nonclinical testing and clinical trials for our product candidates, and if those third parties do not successfully carry out their contractual duties, comply with regulatory requirements or otherwise perform satisfactorily, we may not be able to obtain regulatory approval or commercialize product candidates, or such approval or commercialization may be delayed, and our business may be substantially harmed.

We intend to engage CROs and other third parties to conduct our planned nonclinical studies or clinical trials, including our Phase 1 trial and future clinical trials of ACU193, and to monitor and manage data. We expect to continue to rely on third parties, including clinical data management organizations, medical institutions and clinical investigators, in the future. Any of these third parties may terminate their engagements with us, some in the event of an uncured material breach and some at any time for convenience. If any of our relationships with these third parties terminate, we may not be able to timely enter into arrangements with alternative third parties or to do so on commercially reasonable terms, if at all. Switching or adding CROs involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we intend to carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects. Further, the performance of our CROs and other third parties conducting our trials may also be interrupted by the ongoing COVID-19 pandemic, including due to travel or quarantine policies, heightened exposure of a CRO or clinical site or other vendor staff who are healthcare providers to COVID-19 or prioritization of resources toward the pandemic.

In addition, any third parties conducting our clinical trials will not be our employees, and except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our clinical programs. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. Consequently, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase substantially and our ability to generate revenue could be delayed significantly.

We rely on these parties for execution of our nonclinical studies and clinical trials and generally do not control their activities. Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with GCPs, which are standards for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. If we or any of our CROs or other third parties, including trial sites, fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any

of our clinical trials complies with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP conditions. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process, or may result in fines, adverse publicity and civil and criminal sanctions.

We also are required to register certain ongoing clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA. The FDA may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the trial. The FDA may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA and may ultimately lead to the denial of marketing approval for ACU193 or any other product candidate we develop.

We also expect to rely on other third parties to store and distribute product supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential revenue.

If any of our third-party manufacturers encounter difficulties in production of ACU193 or any future product candidate we develop, or fail to meet rigorously enforced regulatory standards, our ability to provide supply of our product candidates for clinical trials or, if approved, for commercial sale could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.

The processes involved in manufacturing ACU193 and any other product candidate we may develop are highly-regulated and subject to multiple risks. As product candidates are developed through nonclinical studies to late-stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of our third-party manufacturers, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business.

In order to conduct clinical trials of our product candidates, or supply commercial product candidates, if approved, we will need to manufacture them in both small and large quantities. We currently rely on third parties to manufacture ACU193 for clinical trial purposes, and our manufacturing partners will have to modify and scale-up the manufacturing process when we transition to commercialization of our product candidates. Our manufacturing partners may be unable to successfully modify or scale-up the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If our manufacturing partners are unable to successfully scale-up the manufacture of our product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business. The same risks would apply to our internal manufacturing facilities, should we in the future decide to build internal manufacturing capacity. In addition, building internal manufacturing capacity would carry significant risks in terms of being

able to plan, design and execute on a complex project to build manufacturing facilities in a timely and cost-efficient manner.

In addition, the manufacturing process for any product candidates that we may develop is subject to FDA, EMA and foreign regulatory requirements, and continuous oversight, and we will need to contract with manufacturers who can meet all applicable FDA, EMA and foreign regulatory authority requirements, including complying cGMPs on an ongoing basis. If we or our third-party manufacturers are unable to reliably produce product candidates in accordance with the requirements of the FDA, EMA or other regulatory authorities, we may not obtain or maintain the approvals we need to commercialize such product candidates. Even if we obtain regulatory approval for any of our product candidates, there is no assurance that either we or our third party contract manufacturers will be able to manufacture the approved product in accordance with the requirements of the FDA, EMA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidate, impair commercialization efforts, increase our cost of goods and have an adverse effect on our business, financial condition, results of operations and growth prospects. Significant non-compliance could also result in the imposition of sanctions, including warning or untitled letters, fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation and our business.

We will likely seek collaborations with third parties for the development or commercialization of our product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of those product candidates, including ACU193.

We will likely seek third-party collaborators for the commercialization of ACU193 and any of our future product candidates, in the United States and may enter into collaboration agreements for the development and commercialization of any of our product candidates outside the United States. In the United States, commercialization partners are likely to include large biotechnology or pharmaceutical companies. Our likely collaborators outside the United States would most likely include regional and national pharmaceutical companies and biotechnology companies. If we enter into such arrangements with any third parties, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenue from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates would pose the following risks to us:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or drugs, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our or their intellectual property rights or may use our or their proprietary information in such a way as to invite litigation that could jeopardize or invalidate such intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If any future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for any collaboration will depend, among other things, upon our assessment of the collaborator’s resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator’s evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA, EMA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate additional collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of such product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate revenue.

We may be exposed to a variety of international risks that could materially adversely affect our business.

We may enter into agreements with third parties for the development and commercialization of product candidates in international markets. International business relationships will subject us to additional risks that may materially adversely affect our ability to attain or sustain profitable operations, including:

- differing regulatory requirements for product approvals internationally;
- potentially reduced protection for intellectual property rights;
- potential third-party patent rights in countries outside of the United States;
- the potential for so-called “parallel importing,” which is what occurs when a local seller, faced with relatively high local prices, opts to import goods from another jurisdiction with relatively low prices, rather than buying them locally;
- pricing pressure and differing reimbursement regimes:
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability, particularly in non-U.S. economies and markets, including several countries in Europe;
- compliance with tax, employment, immigration and labor laws for employees traveling abroad;
- taxes in other countries;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism, or natural disasters, including earthquakes, volcanoes, typhoons, pandemics, epidemics, floods, hurricanes and fires.

If we engage in acquisitions, we will incur a variety of costs and we may never realize the anticipated benefits of such acquisitions.

Although we currently have no plans to do so, we may attempt to acquire businesses, technologies or drug candidates that we believe are a strategic fit with our business. If we do undertake any acquisitions, the process

of integrating an acquired business, technology or drug candidates into our business may result in unforeseen operating difficulties and expenditures, including diversion of resources and management's attention from our core business. In addition, we may fail to retain key executives and employees of the companies we acquire, which may reduce the value of the acquisition or give rise to additional integration costs. Future acquisitions could result in additional issuances of equity securities that would dilute the ownership of existing stockholders. Future acquisitions could also result in the incurrence of debt, contingent liabilities or the amortization of expenses related to other intangible assets, any of which could adversely affect our operating results. In addition, we may fail to realize the anticipated benefits or synergies of any acquisition.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our product candidate, and other proprietary technologies we develop, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our product candidate, and other proprietary technologies if approved, may be adversely affected.

Our commercial success will depend in part on our ability to obtain and maintain a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our product candidate, and other proprietary technologies we develop. If we are unable to obtain or maintain patent protection with respect to our product candidate, and other proprietary technologies we may develop, our business, financial condition, results of operations, and prospects could be materially harmed.

The patent position of biotechnology and pharmaceutical companies is highly uncertain and involves complex legal, scientific, and factual questions and has been the subject of frequent litigation in recent years. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our patent applications may not result in patents being issued that protect our product candidate and other proprietary technologies we may develop or that effectively prevent others from commercializing competitive technologies and products. Further, no consistent policy regarding the breadth of claims allowed in pharmaceutical patents has emerged to date in the United States or in many jurisdictions outside of the United States. Changes in either the patent laws or interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be enforced in the patents that may be issued from the applications we may own or license from third parties. Further, if any patents we obtain or license are deemed invalid and unenforceable, our ability to commercialize or license our technology could be adversely affected.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our actual or potential future collaborators will be successful in protecting our product candidate and other proprietary technologies and their uses by obtaining, defending and enforcing patents. These risks and uncertainties include the following:

- the United States Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;

- patent applications may not result in any patents being issued;

- issued patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable, or may otherwise not provide any competitive advantage;

- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with, or eliminate our ability to make, use and sell our product candidate;

- other parties may have designed around our claims or developed technologies that may be related or competitive to ours, may have filed or may file patent applications and may have received or may receive patents that overlap or conflict with our patent applications and/or patents, either by claiming the same composition of matter, methods or formulations or by claiming subject matter that could dominate our patent position;

- any successful opposition to any patents owned by or licensed to us could deprive us of rights necessary for the practice of our technologies or the successful commercialization of any product candidate that we may develop;

- because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we or our licensors were the first to file any patent application related to our product candidate and other proprietary technologies and their uses;

- an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of any application with an effective filing date before March 16, 2013;

- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop, and market competing product candidate in those countries.

The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, or maintain all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection for such output. In addition, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our inventions and the prior art allow our inventions to be patentable over the prior art. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. If we do not adequately protect our intellectual property and proprietary technology, competitors may be able to use our product candidate and other proprietary technologies and erode or negate any competitive advantage we may

have, which could have a material adverse effect on our financial condition and results of operations. For example:

- others may be able to make compounds that are similar to our product candidate but that are not covered by the claims of our patents;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- any patents that we obtain may not provide us with any competitive advantages;
- we may not develop additional proprietary technologies that are patentable;
- our competitors might conduct research and development activities in countries where we do not have patent rights or where patent protection is weak and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we cannot ensure that we will be able to successfully commercialize our product candidate on a substantial scale, if approved, before the relevant patents that we own or license expire; or
- the patents of others may have an adverse effect on our business.

Others have filed, and in the future are likely to file, patent applications covering products and technologies that are similar, identical or competitive to ours or important to our business. We cannot be certain that any patent application owned by a third party will not have priority over patent applications filed or in-licensed by us, or that we or our licensors will not be involved in interference, opposition or invalidity proceedings before U.S. or non-U.S. patent offices.

We cannot be certain that claims in an issued patent covering our product candidate will be considered patentable by the USPTO, courts in the United States, or by patent offices and courts in foreign countries. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property internationally.

The strength of patents in the biotechnology and pharmaceutical fields involves complex legal and scientific questions and can be uncertain. Patent applications that we file or in-license may fail to result in issued patents with claims that cover our product candidate in the United States or in foreign countries. Even if such patents do successfully issue, third parties may challenge the ownership, validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful opposition to our patents could deprive us of exclusive rights necessary for the successful commercialization of our product candidate. Furthermore, even if they are unchallenged, our patents may not adequately protect our intellectual property, provide exclusivity for our product candidate or prevent others from designing around our claims. If the breadth or strength of protection provided by our patents with respect to our product candidate is threatened, it could dissuade companies from collaborating with us to develop, or threaten our ability to commercialize our product candidate.

For U.S. patent applications in which claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights from the prevailing

party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our participation in an interference proceeding may fail and, even if successful, may result in substantial costs and distract our management and other employees.

For U.S. patent applications containing a claim not entitled to priority before March 16, 2013, there is greater level of uncertainty in the patent law. In September 2011, the Leahy-Smith America Invents Act, or America Invents Act, was signed into law. The America Invents Act includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The USPTO is developing regulations and procedures to govern the administration of the America Invents Act, and many of the substantive changes to patent law associated with the America Invents Act, and in particular, the "first to file" provisions, were enacted on March 16, 2013. This will require us to be cognizant going forward of the time from invention to filing of a patent application and be diligent in filing patent applications, but circumstances could prevent us from promptly filing patent applications on our inventions. It remains unclear what impact the America Invents Act will have on the operation of our business. As such, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

Patent terms may be inadequate to protect our competitive position on our product candidate for an adequate amount of time.

The term of any individual patent depends on applicable law in the country where the patent is granted. In the United States, provided all maintenance fees are timely paid, a patent generally has a term of 20 years from its application filing date or earliest claimed non-provisional filing date. Extensions may be available under certain circumstances, but the life of a patent and, correspondingly, the protection it affords is limited. When the terms of all patents covering our product candidate expire, our business may become subject to competition from competitive products, including biosimilar version of our products.

Our product candidate is protected by patents covering the composition of matter and methods of using ACU193. The patents in this portfolio are predicted to expire in 2031 without taking into account any possible extensions and assuming payment of all appropriate maintenance, renewal, annuity, or other governmental fees. We cannot be certain that we will file and, if filed, obtain patent protection for our product candidate beyond our rights in the current ACU193 patent portfolio. If we are unable to obtain additional patent protection on ACU193, our primary protection from biosimilar market entry will be limited to regulatory biologic exclusivity.

If we do not obtain patent term extension for our product candidate our business may be materially harmed.

Depending upon the timing, duration, and specifics of any FDA marketing approval of our product candidate, one or more of patents issuing from U.S. patent applications that we file or license may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term, or PTE, of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. Similar patent term restoration provisions to compensate for commercialization delay caused by regulatory review are also available in certain foreign jurisdictions, such as in Europe under Supplemental Protection Certificate, or SPC. If we encounter delays in our development efforts, including our future clinical trials, the period of time during which we could market our product candidate under patent protection would be reduced. Additionally, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents, or otherwise fail to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration, or the term of any such extension is

less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties, or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

Licensing of intellectual property rights is of critical importance to our business and involves complex legal, business and scientific issues. Disputes may arise between us and our licensors regarding intellectual property rights subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property rights of the licensor that are not subject to the license agreement;
- our right to sublicense intellectual property rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidate, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property rights that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms and/or to secure the our rights to the licensed intellectual property, our business, results of operations, financial condition, and prospects may be adversely affected. We may enter into additional licenses in the future and if we fail to comply with obligations under those agreements, we could suffer adverse consequences.

We were a party to a collaboration agreement with Merck to research, discover and develop certain technology related to amyloid beta-derived diffusible ligands, or ADDLs. This collaboration was initiated in 2003 and was later terminated by Merck in 2011. During the collaboration, ACU193, an ADDL-binding antibody, was developed and intellectual property was filed by Merck. Under the surviving provisions of the collaboration agreement, Merck exclusively licensed Merck's interest in patent rights claiming ADDL antibodies, ADDL antigens and/or products to Acumen. If a dispute were to arise in the future as to our rights to the intellectual property under the agreement, our ability to commercialize ACU193 may be jeopardized.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent process. Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on any issued patents and/or applications are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ outside counsel to pay these fees due to foreign patent agencies. While an inadvertent lapse may sometimes be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance

can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market with similar or identical products or technology earlier than should otherwise have been the case, which would have a material adverse effect on our business, financial condition, results of operations, and prospects.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidate.

As is the case with other biotechnology and pharmaceutical companies, our success is heavily dependent on intellectual property, particularly on obtaining and enforcing patents. Our patent rights may be affected by developments or uncertainty in U.S. or foreign patent statutes, patent case law, USPTO rules and regulations or the rules and regulations of foreign patent offices. Obtaining and enforcing patents in the biotechnology and pharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. In addition, the United States may, at any time, enact changes to U.S. patent law and regulations, including by legislation, by regulatory rule-making, or by judicial precedent, that adversely affect the scope of patent protection available and weaken the rights of patent owners to obtain patents, enforce patent infringement and obtain injunctions and/or damages. For example, the scope of patentable subject matter under 35 U.S.C. 101 has evolved significantly over the past several years as the Court of Appeals for the Federal Circuit and the Supreme Court issued various opinions, and the USPTO modified its guidance for practitioners on multiple occasions. Other countries may likewise enact changes to their patent laws in ways that adversely diminish the scope of patent protection and weaken the rights of patent owners to obtain patents, enforce patent infringement, and obtain injunctions and/or damages.

Further, the United States and other governments may, at any time, enact changes to law and regulation that create new avenues for challenging the validity of issued patents. For example, the America Invents Act created new administrative post-grant proceedings, including post-grant review, inter partes review, and derivation proceedings that allow third parties to challenge the validity of issued patents. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may not be able to protect our intellectual property rights throughout the world.

Patents are of national or regional effect. Filing, prosecuting, and defending patents on our product candidate, and other proprietary technologies we develop in all countries throughout the world would be prohibitively expensive. In addition, the laws of some foreign countries do not protect intellectual property rights in the same manner and to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement of such patent protection is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

The requirements for patentability may differ in certain countries. For example, unlike other countries, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a

claimed drug. In India, unlike the United States, there is no link between regulatory approval for a drug and its patent status. In addition to India, certain countries in Europe and developing countries, including China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, some countries limit the enforceability of patents against government agencies or government contractors.

In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology or pharmaceutical products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

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

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

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through in-licenses.

Presently we have intellectual property rights to our product candidate, through a license from Merck. We also have an intellectual property license through a license with Northwestern University and, if this agreement remains in place, we could be required to pay low single digit royalties to Northwestern in the future. Because our program may require the use of additional proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these proprietary rights. In addition, our product candidate may require specific formulations to work effectively and efficiently and these rights may be held by others. We may be unable to acquire or in-license, on reasonable terms, proprietary rights related to any compositions, formulations, methods of use, processes or other intellectual property rights from third parties that we identify as being necessary for our product candidate. Even if we are able to obtain a license to such

proprietary rights, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Where we obtain licenses from or collaborate with third parties, we may not have the right to control the preparation, filing, and prosecution of patent applications, or to maintain or enforce the patents, covering technology that we license from third parties, or such activities, if controlled by us, may require the input of such third parties. If any of our licensors or collaboration partners fail to prosecute, maintain and enforce such patents and patent applications in a manner consistent with the best interests of our business, including by payment of all applicable fees for patents covering our product candidate, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, our ability to develop and commercialize those product candidate may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution. We may also require the cooperation of our licensors and collaborators to enforce any licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business, or in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such application.

Moreover, we will likely have obligations under our current or future licenses, including making royalty and milestone payments, and any failure to satisfy those obligations could give our licensor the right to terminate the license. Termination of a necessary license, or expiration of licensed patents or patent applications, could have a material adverse impact on our business. Our business would suffer if any such licenses terminate, if the licensors fail to abide by the terms of the license, if the licensors fail to enforce licensed patents against infringing third parties, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms. Furthermore, if any licenses terminate, or if the underlying patents fail to provide the intended exclusivity, competitors or other third parties may gain the freedom to seek regulatory approval of, and to market, products identical or similar to ours. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

The licensing and acquisition of third-party proprietary rights is a competitive area, and companies, which may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party proprietary rights that we may consider necessary or attractive in order to commercialize our product candidate. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

For example, we have collaborated and may in the future collaborate with U.S. and foreign academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate an exclusive license to any of the institution's proprietary rights in technology resulting from the collaboration. Regardless of such option to negotiate a license, we may be unable to negotiate a license within the specified time frame or under terms that are acceptable to us. If we are unable to do so, the institution may offer, on an exclusive basis, their proprietary rights to other parties, potentially blocking our ability to pursue our program. In addition, disputes may arise under our existing or future license agreements with these institutions or with other counterparties which may, among other things, lead to the termination or renegotiation of these agreements, or otherwise require us to incur significant financial obligations.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us, either on reasonable terms, or at all. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment, or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights on commercially reasonable terms, our ability to commercialize our products, and our business, financial condition, and prospects for growth, could suffer.

Third-party claims alleging intellectual property infringement may prevent or delay our drug discovery and development efforts.

Our success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings for challenging patents, including inter partes review, interference and reexamination proceedings before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions. The America Invents Act introduced new procedures including inter partes review and post grant review. The implementation of these procedures brings uncertainty to the possibility of challenges to our patents in the future and the outcome of such challenges. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our product candidate. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our activities related to our product candidate may give rise to claims of infringement of the patent rights of others.

The pharmaceutical and biotechnology industries have produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. We cannot assure you that any of our current or future product candidate will not infringe existing or future patents. We may not be aware of patents that have already issued that a third party might assert are infringed by one of our current or future product candidate.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents of which we are currently unaware with claims to materials, compositions, formulations, methods of manufacture or methods for treatment related to our product candidate, or the use or manufacture of our product candidate. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, there may be currently pending third-party patent applications which may later result in issued patents that our product candidate, and other proprietary technologies may infringe, or which such third parties claim are infringed by the use of our technologies. Parties making claims against us for infringement or misappropriation of their intellectual property rights may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidate. Defense of these claims, regardless of their merit, could involve substantial expenses and could be a substantial diversion of management and other employee resources from our business.

If we collaborate with third parties in the development of technology in the future, our collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to litigation or potential liability. Further, collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability. In the future, we may agree to indemnify our commercial collaborators against certain intellectual property infringement claims brought by third parties.

Any claims of patent infringement asserted by third parties would be time-consuming and could:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;

- cause development delays;
- prevent us from commercializing our product candidate until the asserted patent expires or is finally held invalid, unenforceable, or not infringed in a court of law;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis;
- require us to pay damages to the party whose intellectual property rights we may be found to be infringing, which may include treble damages if we are found to have been willfully infringing such intellectual property;
- require us to pay the attorney's fees and costs of litigation to the party whose intellectual property rights we may be found to be willfully infringing; and/or
- require us to enter into royalty or license agreements, which may not be available on commercially reasonable terms, or at all.

If we are sued for patent infringement, we would need to demonstrate that our products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do either. Proving invalidity or unenforceability is difficult. For example, in the United States, proving invalidity before federal courts requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, which may not be available, defend an infringement action or challenge the validity or enforceability of the patents in court. Patent litigation is costly and time-consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid or unenforceable, we may incur substantial monetary damages, encounter significant delays in bringing our product candidate to market and be precluded from developing, manufacturing or selling our product candidate.

We do not always conduct independent reviews of pending patent applications of and patents issued to third parties. We cannot be certain that any of our or our licensors' patent searches or analyses, including but not limited to the identification of relevant patents, analysis of the scope of relevant patent claims or determination of the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States, Europe and elsewhere that is relevant to or necessary for the commercialization of our product candidate in any jurisdiction, because:

- some patent applications in the United States may be maintained in secrecy until the patents are issued;
- patent applications in the United States and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived;
- pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our product candidate or their uses;
- identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases, and the difficulty in assessing the meaning of patent claims;

- patent applications in the United States are typically not published until 18 months after the priority date; and
- publications in the scientific literature often lag behind actual discoveries.

Furthermore, the scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history and can involve other factors such as expert opinion. Our interpretation of the relevance or the scope of claims in a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. Further, we may incorrectly determine that our technologies or product candidate are not covered by a third party patent or may incorrectly predict whether a third party's pending patent application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or internationally that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our products or product candidate.

Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours, and others may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our product candidate or future products or impair our competitive position. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing product candidate. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidate. Any such patent application may have priority over one of our patent applications, which could further require us to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the USPTO to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful if, unbeknownst to us, the other party had independently arrived at the same or similar invention prior to our own invention, resulting in a loss of our U.S. patent position with respect to such inventions. Other countries have similar laws that permit secrecy of patent applications and may be entitled to priority over our applications in such jurisdictions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

If a third party prevails in a patent infringement lawsuit against us, we may have to stop making and selling the infringing product, pay substantial damages, including treble damages and attorneys' fees if we are found to be willfully infringing a third party's patents, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidate. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidate, which could harm our business significantly. Even if we were able to obtain a license, the rights may be nonexclusive, which may give our competitors access to the same intellectual property.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industries, in addition to our employees, we engage the services of consultants to assist us in the development of our product candidate, and other proprietary

technologies. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other pharmaceutical companies including our competitors or potential competitors. We may become subject to claims that we, our employees or a consultant inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team and other employees.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming, and unsuccessful. Further, our issued patents could be found invalid or unenforceable if challenged in court, and we may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

Third parties including competitors may infringe, misappropriate or otherwise violate our patents, patents that may issue to us in the future, or the patents of our licensors that are licensed to us. To counter infringement or unauthorized use, we may need to or choose to file infringement claims, which can be expensive and time-consuming. We may not be able to prevent, alone or with our licensors, infringement, misappropriation, or other violation of our intellectual property, particularly in countries where the laws may not protect those rights as fully as in the United States, or if we require, but do not receive, the consent or cooperation of our licensors to enforce such intellectual property.

If we choose to go to court to stop another party from using the inventions claimed in our patents, that individual or company has the right to ask the court to rule that such patents are invalid, unenforceable, or should not be enforced against that third party for any number of reasons. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements for patentability, including lack of novelty, obviousness, lack of written description, indefiniteness, or non-enablement. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution, i.e., committed inequitable conduct. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. Similar mechanisms for challenging the validity and enforceability of a patent exist in foreign patent offices and courts and may result in the revocation, cancellation, or amendment of any foreign patents we or our licensors hold now or in the future. The outcome following legal assertions of invalidity and unenforceability is unpredictable, and prior art could render our patents or those of our licensors invalid. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on such product candidate. Such a loss of patent protection would have a material adverse impact on our business.

Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct our future clinical trials, continue our research programs, license necessary technology from third parties, or enter into development or manufacturing partnerships that would help us bring our product candidate to market.

We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace. Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Our ability to enforce our patent rights depends on our ability to establish standing in a court of competent jurisdiction. Whether a patent holder or licensee of a patent has standing can be uncertain and the considerations complex. However, if a licensor is required to be joined, and they are unwilling to do so, we may be unable to proceed with an infringement action.

Our ability to enforce our patent rights depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful.

Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our issued patent or patents that may issue from patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our company or our stockholders. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

We rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers, and/or other advisors, and inventions agreements with employees, consultants, and advisors, to protect our trade secrets and other proprietary information. In addition to contractual measures, we try to protect the confidential nature of our proprietary information using commonly accepted physical and technological security measures. Despite these efforts, we cannot provide any assurances that all such agreements have been duly executed, and these agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our

proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

In addition, such security measures may not provide adequate protection for our proprietary information, for example, in the case of misappropriation of a trade secret by an employee, consultant, customer, or third party with authorized access. Our security measures may not prevent an employee, consultant or customer from misappropriating our trade secrets and providing them to a competitor, and recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. Even though we use commonly accepted security measures, the criteria for protection of trade secrets can vary among different jurisdictions.

Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Moreover, third parties may still obtain this information or may come upon this or similar information independently, and we would have no right to prevent them from using that technology or information to compete with us. Trade secrets will over time be disseminated within the industry through independent development, the publication of journal articles, and the movement of personnel skilled in the art from company to company or academic to industry scientific positions. Though our agreements with third parties typically restrict the ability of our advisors, employees, collaborators, licensors, suppliers, third-party contractors, and/or consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Because from time to time we expect to rely on third parties in the development, manufacture, and distribution of our products and provision of our services, we must, at times, share trade secrets with them. Despite employing the contractual and other security precautions described above, the need to share trade secrets increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position would be harmed. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized.

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

Our trademarks or trade names, once registered, may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights, or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

Moreover, any names we may propose to use with our product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed proprietary product names, it may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties, and be acceptable to the FDA. Similar requirements exist in Europe. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. If we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Any collaboration arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our future products.

Any future collaborations that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include that:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of our products or may elect not to continue or renew development or commercialization programs based on trial or test results, changes in their strategic focus due to the acquisition of competitive products, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidate;
- a collaborator with marketing, manufacturing, and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that causes the delay or termination of the research, development, or commercialization of our current or future products or that results in costly litigation or arbitration that diverts management attention and resources;

- collaborations may be terminated, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future products;

- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property; and

- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Intellectual property discovered through government funded programs may be subject to federal regulations such as "march-in" rights, certain reporting requirements and a preference for U.S.-based companies. Compliance with such regulations may limit our exclusive rights and limit our ability to contract with non-U.S. manufacturers.

Some of our patents may have been generated through the use of U.S. government funding, and we may acquire or license in the future intellectual property rights that have been generated through the use of U.S. government funding or grants. Pursuant to the Bayh-Dole Act of 1980, the U.S. government has certain rights in inventions developed with government funding. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (1) adequate steps have not been taken to commercialize the invention; (2) government action is necessary to meet public health or safety needs; or (3) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in rights"). If the U.S. government exercised its march-in rights in our existing or future intellectual property rights that are generated through the use of U.S. government funding or grants, we could be forced to license or sublicense intellectual property developed by us or that we license on terms unfavorable to us, and there can be no assurance that we would receive compensation from the U.S. government for the exercise of such rights. The U.S. government also has the right to take title to these inventions if the grant recipient fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U.S. government requires that any products embodying any of these inventions or produced through the use of any of these inventions be manufactured substantially in the United States. This preference for U.S. industry may be waived by the federal agency that provided the funding if the owner or assignee of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. industry may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property.

Risks Related to Legal and Regulatory Compliance Matters

Our relationships with customers, healthcare providers, including physicians, and third-party payors are subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Healthcare providers, including physicians, and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third- party payors subject us to various federal and state fraud and abuse laws and other

healthcare laws, including, without limitation, the federal Anti-Kickback Statute, the federal civil and criminal false claims laws and the law commonly referred to as the Physician Payments Sunshine Act and regulations promulgated under such laws. These laws will impact, among other things, our clinical research, proposed sales, marketing and educational programs, and other interactions with healthcare professionals. In addition, we may be subject to patient privacy laws by both the federal government and the states in which we conduct or may conduct our business. The laws that will affect our operations include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, individuals or entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind in return for, or to induce, either the referral of an individual, or the purchase, lease, order or arrangement for or recommendation of the purchase, lease, order or arrangement for any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. The term "remuneration" has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. A person does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation;

- the federal civil and criminal false claims laws, including, without limitation, the federal False Claims Act, which can be enforced by private citizens through civil whistleblower or qui tam actions, and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from the federal government, including Medicare, Medicaid and other government payors, that are false or fraudulent or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim or to avoid, decrease or conceal an obligation to pay money to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. federal government. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of products for unapproved, and thus non-reimbursable, uses. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act;

- HIPAA which created additional federal criminal statutes which prohibit, among other things, a person from knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the federal transparency laws, including the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, medical devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the State Children's Health Insurance Program, with specific exceptions, to report annually to the CMS, information related to: (i) payments or other "transfers of value'' made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and (ii) ownership and investment interests held by physicians and their immediate family members. Effective January 1,

2022, these reporting obligations will extend to include transfers of value made during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives; and

- analogous state and foreign laws and regulations; state laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, marketing expenditures or drug pricing; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or that otherwise restrict payments that may be made to healthcare providers; and state and local laws that require the registration of pharmaceutical sales representatives.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant penalties, including, without limitation, civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in federal and state funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, diminished profits and future earnings, reputational harm and the curtailment or restructuring of our operations, any of which could harm our business.

The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

Even if we obtain regulatory approval for ACU193 or any future product candidates, they will remain subject to ongoing regulatory oversight, which may result in significant additional expense.

Even if we obtain any regulatory approval for ACU193 or any future product candidates, such product candidates will be subject to ongoing regulatory requirements applicable to research, development, testing, manufacturing, labeling, packaging, storage, advertising, promoting, sampling, record-keeping and submission of safety and other post-market information, among other things. Any regulatory approvals that we receive for ACU193 or any future product candidates may also be subject to REMS, limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval or requirements that we conduct potentially costly post-marketing testing and surveillance studies, including Phase 4 trials and surveillance to monitor the quality, safety and efficacy of the drug. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval. We will further be required to immediately report any serious and unexpected adverse events and certain quality or production problems with our products to regulatory authorities along with other periodic reports. Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements

or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

In addition, drug manufacturers are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the BLA or foreign marketing application. If we, or a regulatory authority, discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured or if a regulatory authority disagrees with the promotion, marketing or labeling of that drug, a regulatory authority may impose restrictions relative to that drug, the manufacturing facility or us, including requesting a recall or requiring withdrawal of the drug from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of ACU193 or any future product candidates, a regulatory authority may:

- issue an untitled letter or warning letter asserting that we are in violation of the law;
- seek an injunction or impose administrative, civil or criminal penalties or monetary fines;
- issue a safety alert, Dear Healthcare Provider letter, press release or other communication containing warnings or safety information about the product;
- mandate corrections to promotional materials and labeling or issuance of corrective information;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending marketing application or supplement to an approved application or comparable foreign marketing application (or any supplements thereto) submitted by us or our strategic partners;
- restrict the marketing or manufacturing of the drug;
- seize or detain the drug or otherwise require the withdrawal of the drug from the market;
- refuse to permit the import or export of products or product candidates; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize ACU193 or any future product candidates and harm our business, financial condition, results of operations and prospects.

Even if we obtain FDA or EMA approval any of our product candidates in the United States or European Union, we may never obtain approval for or commercialize any of them in any other jurisdiction, which would limit our ability to realize their full market potential.

In order to market any products in any particular jurisdiction, we must establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety and efficacy.

Approval by the FDA in the United States or the EMA in the European Union does not ensure approval by regulatory authorities in other countries or jurisdictions. However, the failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval elsewhere. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country.

Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Seeking foreign regulatory approval could result in difficulties and increased costs for us and require additional nonclinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved for sale in any jurisdiction, including in international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of any product we develop will be unrealized.

Healthcare legislative or regulatory reform measures may have a negative impact on our business and results of operations.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. For example, in March 2010, the ACA was passed, which substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The ACA, among other things: (i) established an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs; (ii) expanded the entities eligible for discounts under the 340B drug pricing program; (iii) increased the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively, and capped the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price, or AMP; (iv) expanded the eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new eligibility categories for individuals with income at or below 133% (as calculated, it constitutes 138%) of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability; (v) addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics that are inhaled, infused, instilled, implanted or injected; (vi) introduced a new Medicare Part D coverage gap discount program in which manufacturers must now agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D (increased from 50%, effective January 1, 2019, pursuant to the Bipartisan Budget Act of 2018); (vii) created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and (viii) established the Center for Medicare and Medicaid Innovation at CMS to test

innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug.

There have been executive, judicial and Congressional challenges to certain aspects of the ACA. While Congress has not passed comprehensive repeal legislation, several bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 (the Tax Act) included a provision that repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On December 14, 2018, a Texas United States District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. Additionally, on December 18, 2019, the United States Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. The United States Supreme Court is currently reviewing this case, although it is unclear when a decision will be made. Although the United States Supreme Court has not yet ruled on the constitutionality of the ACA, on January 28, 2021, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021 through May 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructs certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is also unclear how the Supreme Court ruling, other such litigation and the healthcare reform measures of the Biden administration will impact the ACA or our business.

Other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013, and due to subsequent legislative amendments to the statute, including the Bipartisan Budget Act of 2018, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2021, unless additional Congressional action is taken. Legislation is currently pending in Congress that would further extend the suspension through December 31, 2021. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding, which could have an adverse effect on customers for our product candidates, if approved, and, accordingly, our financial operations.

Additionally, there has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives. For example, on July 24, 2020 and September 13, 2020, the Trump administration announced several executive orders related to prescription drug pricing that seek to implement several of the administration's proposals. As a result, the FDA also released a final rule on September 24, 2020 providing guidance for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, HHS finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The implementation of the rule has been delayed by the Biden administration from January 1, 2022 to January 1, 2023 in response to ongoing litigation. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers, the implementation of which have also been delayed until January 1, 2023. Further, in November 2020, CMS issued

an interim final rule implementing the Most Favored Nation, or MFN, Model under which Medicare Part B reimbursement rates will be calculated for certain drugs and biologicals based on the lowest price drug manufacturers receive in Organization for Economic Cooperation and Development countries with a similar gross domestic product per capita. The MFN Model regulations mandate participation by identified Part B providers and will apply in all U.S. states and territories for a seven-year period beginning January 1, 2021 and ending December 31, 2027. On December 28, 2020, the United States District Court in Northern California issued a nationwide preliminary injunction against implementation of the interim final rule. The likelihood of implementation of any of the other Trump administration reform initiatives is uncertain, particularly in light of the new Biden administration.

We expect that these and other healthcare reform measures that may be adopted in the future may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved drug. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our drugs. It is also possible that additional governmental action is taken to address the COVID-19 pandemic.

In addition, FDA regulations and guidance may be revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. For example, the results of the 2020 U.S. Presidential election may impact our business and industry. The Trump administration took several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict whether or how these requirements will be interpreted and implemented, or whether they will be rescinded and replaced under the Biden administration. The policies and priorities of the new administration are unknown and could materially impact the regulations governing our product candidates. Any new regulations or guidance, or revisions or reinterpretations of existing regulations or guidance, may impose additional costs or lengthen FDA review times for ACU193 or any other product candidate we may develop. We cannot determine how changes in regulations, statutes, policies, or interpretations when and if issued, enacted or adopted, may affect our business in the future. Such changes could, among other things, require:

- additional clinical trials to be conducted prior to obtaining approval;
- changes to manufacturing methods;
- recalls, replacements, or discontinuance of one or more of our products; and
- additional recordkeeping.

Such changes would likely require substantial time and impose significant costs, or could reduce the potential commercial value of ACU193 or other product candidates, and could materially harm our business and our financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any other products would harm our business, financial condition and results of operations.

Our business activities may be subject to the U.S. Foreign Corrupt Practices Act of 1977, or FCPA, and similar anti-bribery and anti-corruption laws.

Our business activities may be subject to the FCPA, U.S. domestic bribery statutes, and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we may operate, including the U.K. Bribery Act of 2010. The FCPA generally prohibits offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and

records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, hospitals are owned and operated by the government, and doctors and other hospital employees would be considered foreign officials under the FCPA. There is no certainty that all of our employees, agents, contractors or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, the closing down of our facilities, implementation of compliance programs and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our product candidates in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, and our business, prospects, operating results and financial condition.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading, which could significantly harm our business.

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional failures to comply with the regulations of the FDA and non-U.S. regulators, provide accurate information to the FDA and non-U.S. regulators, comply with health care fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our insurance policies are expensive and only protect us from some business risks, which will leave us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter. Some of the policies we currently maintain include general liability, products liability and directors' and officers' insurance. We do not know, however, if we will be able to maintain insurance with adequate levels of coverage. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of ACU193 or any other product candidate. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our financial position and results of operations.

Risks Related to Employee Matters and Managing our Growth

We will need to expand our operations and increase the size of our company, and we may experience difficulties in managing growth.

As we advance ACU193 through clinical development, and potentially expand the number of our drug development programs, we will need to increase our drug development, scientific and administrative headcount to manage these programs. In addition, to meet our obligations as a public company, we will need to increase our

general and administrative capabilities. Our management, personnel and systems currently in place may not be adequate to support this future growth. Our need to effectively manage our operations, growth and various projects requires that we:

- successfully attract and recruit new employees or consultants with the expertise and experience we will require;
- manage our clinical programs effectively, which we anticipate being conducted at numerous clinical sites;
- develop a marketing and sales infrastructure; and
- continue to improve our operational, financial and management controls, reporting systems and procedures.

If we are unable to successfully manage this growth and increased complexity of operations, our business may be adversely affected.

We may not be able to manage our business effectively if we are unable to attract and retain key personnel and consultants.

We may not be able to attract or retain qualified management, finance, scientific and clinical personnel and consultants due to the intense competition for qualified personnel and consultants among biotechnology,
pharmaceutical and other businesses. If we are not able to attract and retain necessary personnel and consultants to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on the research and development, clinical, regulatory and business development expertise of Daniel O'Connell, President and Chief Executive Officer, Matthew Zuga, our Chief Financial Officer and Chief Business Officer, Eric Siemers, M.D., our Chief Medical Officer and Russell Barton, our Chief Operating Officer. If we lose the services of any of these individuals, our ability to implement our business strategy successfully could be seriously harmed. Any of our executive officers or key employees or consultants may terminate their employment at any time. Replacing executive officers, key employees and consultants may be difficult and may take an extended period because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize product candidates successfully. Competition to hire and retain employees and consultants from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel and consultants. Our failure to retain key personnel or consultants could materially harm our business.

We have scientific and clinical advisors and consultants who assist us in formulating our research, development and clinical strategies. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. Non-compete agreements are not permissible or are limited by law in certain jurisdictions and, even where they are permitted, these individuals typically will not enter into non-compete agreements with us. If a conflict of interest arises between their work for us and their work for another entity, we may lose their services. In addition, our advisors may have arrangements with other companies to assist those companies in developing product candidates or technologies that may compete with ours.

We have identified a material weakness in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements.

In connection with the preparation and audit of our consolidated financial statements as of December 31, 2020 and 2019 and for the years then ended, a material weakness was identified in our internal control over financial

reporting. In addition, we have in the past identified other material weaknesses in our internal controls over financial accounting, which have since been remediated. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Our existing material weakness is related to segregation of duties related to roles and responsibilities in our accounting department which is lacking in various circumstances, including with respect to account reconciliation and receipt/disbursement duties, independent review of journal entries and access to the accounting systems. Our existing material weakness did not result in a misstatement to our financial statements, however, it could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected. We plan to remediate this material weakness by hiring additional accounting staff and upgrading our accounting systems, though there is no guarantee that these remediation efforts will be successful.

In order to maintain and improve the effectiveness of our internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight. Our independent registered public accounting firm is not required to formally attest to the effectiveness of its internal control over financial reporting until after it is no longer an "emerging growth company" as defined in the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which its internal control over financial reporting is documented, designed, or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could adversely affect our business and operating results and could cause a decline in the price of our common stock.

If we fail to build our finance infrastructure and improve our accounting systems and controls, we may be unable to comply with the financial reporting and internal controls requirements for publicly traded companies.

As a public company, we will operate in an increasingly demanding regulatory environment, which requires us to comply with the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, the regulations of Nasdaq Global Market, or Nasdaq, the rules and regulations of the SEC, expanded disclosure requirements, accelerated reporting requirements and more complex accounting rules. Company responsibilities required by the Sarbanes-Oxley Act include establishing corporate oversight and adequate internal control over financial reporting and disclosure controls and procedures. Effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent financial fraud. Commencing with our fiscal year ending the year after this offering is completed, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. Prior to this offering, we have never been required to test our internal controls within a specified period and, as a result, we may experience difficulty in meeting these reporting requirements in a timely manner.

We anticipate that the process of building our accounting and financial functions and infrastructure will require significant additional professional fees, internal costs and management efforts. We expect that we will need to implement a new internal system to combine and streamline the management of our financial, accounting, human resources and other functions. However, such a system would likely require us to complete many processes and procedures for the effective use of the system or to run our business using the system, which may result in substantial costs. Any disruptions or difficulties in implementing or using such a system could adversely affect our controls and harm our business. Moreover, such disruption or difficulties could result in unanticipated costs and diversion of management attention. In addition, we may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no

evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If we cannot provide reliable financial reports or prevent fraud, our business and results of operations could be harmed, investors could lose confidence in our reported financial information and we could be subject to sanctions or investigations by Nasdaq, the Commission or other regulatory authorities.

Risks Related to This Offering, Ownership of our Common Stock and our Status as a Public Company

An active trading market for our common stock may not develop and you may not be able to resell your shares of our common stock at or above the initial offering price, if at all.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock was determined through negotiations with the underwriters and may not be indicative of the price at which our common stock will trade after the closing of this offering. Although we expect our common stock to be approved for listing on Nasdaq, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop or is not sustained, it may be difficult for you to sell shares you purchased in this offering at an attractive price or at all.

The trading price of the shares of our common stock may be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price may be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- the commencement, enrollment or results of our clinical trials, including the Phase 1 clinical trial of ACU193 and any future clinical trials we may conduct, or changes in the development status of our product candidates;
- any delay in our regulatory filings for ACU193 or any other product candidate we may develop, and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- delays in, or termination of, clinical trials;
- adverse regulatory decisions, including failure to receive regulatory approval of our product candidates;
- unanticipated serious safety concerns related to the use of ACU193 or any other product candidate we develop;
- changes in financial estimates by us or by any equity research analysts who might cover our stock;
- conditions or trends in our industry;
- changes in the market valuations of similar companies;

- announcements by our competitors of new product candidates or technologies, or the results of clinical trials or regulatory decisions;
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the biopharmaceutical industry;
- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;
- our relationships with our collaborators;
- announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;
- investors' general perception of our company and our business;
- recruitment or departure of key personnel;
- overall performance of the equity markets;
- trading volume of our common stock;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- changes in the structure of healthcare payment systems;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

The stock market in general, Nasdaq and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies, including very recently in connection with the ongoing COVID-19 pandemic, which has resulted in decreased stock prices for many companies notwithstanding the lack of a fundamental change in their underlying business models or prospects. Broad market and industry factors, including potentially worsening economic conditions and other adverse effects or developments relating to the ongoing COVID-19 pandemic, may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in this section, could have a significant and material adverse impact on the market price of our common stock.

In addition, in the past, stockholders have initiated class action lawsuits against pharmaceutical and biotechnology companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources from our business.

Because the public offering price of our common stock will be substantially higher than the net tangible book value per share of our outstanding common stock following this offering, new investors will experience immediate and substantial dilution.

The public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock immediately following this offering based on the total value of our tangible assets less our total liabilities. Therefore, if you purchase shares of our common stock in this offering, you will experience immediate dilution of approximately $10.06 per share, the difference between the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and the net tangible book value per share of our common stock as of March 31, 2021, after giving effect to the issuance of shares of our common stock in this offering. Furthermore, if the underwriters exercise their option to purchase additional shares, or outstanding options and warrants are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after the offering, see the section of this prospectus captioned "Dilution."

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

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

Future sales of our common stock in the public market could cause our share price to fall.

Sales of a substantial number of shares of our common stock in the public market after this offering, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. Based on the number of shares of common stock outstanding as of March 31, 2021, upon the closing of this offering, we will have 36,985,129 shares of common stock outstanding (assuming no exercise of the underwriters' option to purchase additional shares from us) or 38,235,128 shares of common stock if the underwriters' option to purchase up to 1,249,999 additional shares is exercised in full.

All of the common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act of 1933, as amended, or the Securities Act, except for any shares held by our affiliates as defined in Rule 144 under the Securities Act. The remaining shares of common stock outstanding after this offering will be restricted as a result of securities laws, lock-up agreements or other contractual restrictions that restrict transfers for at least 180 days after the date of this prospectus. The underwriters may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements with the underwriters prior to expiration of the lock-up period. For additional information, see the section of this prospectus captioned "Shares Eligible for Future Sale."

The holders of 28,232,672 shares of common stock, representing 76.3% of our outstanding common stock on an as-converted basis as of March 31, 2021, will be entitled to rights with respect to registration of such shares under the Securities Act pursuant to an investor rights agreement between such holders and us. If such holders, by exercising their registration rights, sell a large number of shares, they could adversely affect the market price for our common stock. If we file a registration statement for the purpose of selling additional shares to raise

capital, we may be required to offer these holders the right to participate in the offering and, if we are required to include shares held by these holders pursuant to the exercise of their registration rights, our ability to raise capital may be impaired.

We intend to file a registration statement on Form S-8 under the Securities Act to register 8,073,208 shares subject to outstanding stock options issued under the Prior Plan and shares of common stock reserved for issuance under the 2021 Plan and the 2021 ESPP. Both the 2021 Plan and the 2021 ESPP provide provides for annual automatic increases in the shares reserved for issuance under the plans which could result in additional dilution to our stockholders. Once we register the issuance of shares under these plans, they can be freely sold in the public market upon issuance, subject to the vesting of the equity awards, other restrictions provided under the terms of the applicable plan or equity award, and the lock-up period with respect to this offering.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common stock may be lower as a result.

There are provisions in our certificate of incorporation and bylaws to be in effect upon the closing of this offering that may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change of control was considered favorable by you and other stockholders. For example, our board of directors will have the authority to issue up to 10,000,000 shares of preferred stock. The board of directors can fix the price, rights, preferences, privileges and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock may delay or prevent a change of control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders.

Our charter documents will also contain other provisions that could have an anti-takeover effect, including:

- only one of our three classes of directors will be elected each year;
- stockholders will not be entitled to remove directors other than by a 66 2/3% vote and only for cause;
- stockholders will not be permitted to take actions by written consent;
- stockholders cannot call a special meeting of stockholders; and
- stockholders must give advance notice to nominate directors or submit proposals for consideration at stockholder meetings.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which regulates corporate acquisitions by prohibiting Delaware corporations from engaging in specified business combinations with particular stockholders of those companies. These provisions could discourage potential acquisition proposals and could delay or prevent a change of control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Based on their shareholdings as of March 31, 2021, our directors, executive officers and beneficial owners of greater than 5% of our outstanding stock and their respective affiliates will beneficially own, in the aggregate,

approximately 64% of our outstanding common stock upon the closing of this offering, assuming no purchase by them of any shares in this offering. As a result, these persons, acting together, would be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation, sale of all or substantially all of our assets or other significant corporate transactions.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the estimated public offering price and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and principal stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

We are an "emerging growth company" and a "smaller reporting company" and, as a result of the reduced disclosure and governance requirements applicable to emerging growth companies and smaller reporting companies, our common stock may be less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- not being required to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of the last day of the fiscal year (i) following the fifth anniversary of the closing of our initial public offering, (ii) in which we have total annual gross revenue of at least $1.07 billion, or (iii) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th, and the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies, which may make comparison of our financials to those of other public companies more difficult. As a result of these elections, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests. In addition, it is possible that some investors will find our common stock less attractive as a result of these elections, which may result in a less active trading market for our common stock and higher volatility in our share price.

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended, or the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting common stock held by non-affiliates is more than $250 million measured on the last business day of our second fiscal quarter, or our annual revenues are more than $100 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is more than $700 million measured on the last business day of our second fiscal quarter.

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a return.

Our management will have broad discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Accordingly, investors will need to rely on our judgment with respect to the use of these proceeds. We intend to use the net proceeds from this offering to fund our Phase 1 clinical trial for ACU193, and to support future clinical and nonclinical activities, as well as for working capital and general corporate purposes, including the costs of operating as a public company. While we have no current agreements, commitments or understandings for any specific strategic acquisitions or in-licenses at this time, we may use a portion of the net proceeds for these purposes. For more information see, "Use of Proceeds." The failure by our management to apply these funds effectively could adversely affect our ability to continue maintaining and expanding our business. Until the net proceeds are used, they may be placed in investments that do not produce significant income or that may lose value.

We have never paid dividends on our capital stock and we do not intend to pay dividends for the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have never declared or paid any dividends on our common stock and do not intend to pay any dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the operation of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Our failure to meet Nasdaq's continued listing requirements could result in a delisting of our common stock.

If, after listing, we fail to satisfy Nasdaq's continued listing requirements, such as the corporate governance requirements or the minimum closing bid price requirement. Nasdaq may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq's listing requirements.

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware and the U.S. federal district courts will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation, as will be in effect upon the completion of this offering, will provide that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative claim or cause of action brought on our behalf;
- any claim or cause of action asserting a breach of fiduciary duty;
- any claim or cause of action against us arising under DGCL;
- any claim or cause of action arising under or seeking to interpret our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any claim or cause of action against us that is governed by the internal affairs doctrine.

The provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act.

Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation will further provide that the U.S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- we will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;

- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;

- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;

- we will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification;

- the rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons; and

- we may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

General Risk Factors

We will incur increased costs and demands upon management as a result of being a public company.

As a public company listed in the United States, we will incur significant additional legal, accounting and other costs. These additional costs could negatively affect our financial results. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the Commission and Nasdaq, may increase legal and financial compliance costs and make some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies.

We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

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

We have incurred net operating losses (NOLs) during our history, we expect to continue to incur significant NOLs for the foreseeable future, and we may not achieve profitability prior to the time that certain of our NOLs expire. As of December 31, 2020, we had federal and state NOL carryforwards of $22.3 million and $31.0 million, respectively, that will begin expiring in the year 2028 for both federal and state NOLs if not utilized. We also have $15.9 million of federal net operating loss carryforwards as of December 31, 2020, that do not expire as a result of recent tax law changes. Our NOL carryforwards are subject to review and possible adjustment by U.S. and state tax authorities. Our NOL carryforwards could expire unused or be unavailable to offset future income tax liabilities because of their limited duration or because of restrictions under U.S. tax law. Federal NOLs generated in tax years ending on or prior to December 31, 2017 are only permitted to be carried forward for 20 taxable years under applicable U.S. federal tax law. Under the Tax Act, as modified by the Coronavirus Aid, Relief, and Economic Security Act (CARES) Act signed into law on March 27, federal NOLs arising in tax years beginning after December 31, 2017, and before January 1, 2021 may be carried back to each of the five tax years preceding the tax year of such loss, and federal NOLs arising in tax years beginning after December 31, 2020 may not be carried back. Moreover, under the Tax Act as modified by the CARES Act, federal NOLs generated in tax years ending after December 31, 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs may be limited to 80% of current year taxable income for tax years beginning after December 31, 2020. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, California recently imposed limits on the usability of California state NOL carryforwards to offset taxable income in taxable years beginning after 2019 and before 2023. It is generally uncertain if and to what extent various states will conform to the Tax Act or the CARES Act.

Additionally, we continue to generate business tax credits, including research and development tax credits, which generally may be carried forward to offset a portion of future taxable income, if any, subject to expiration of such credit carryforwards.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change” (generally defined as a cumulative change in our ownership by “5-percent shareholders” that exceeds 50 percentage points over a rolling three-year period), the corporation’s ability to use its pre-change NOLs and certain other pre-change tax attributes (such as research and development tax credits) to offset its post-change income and taxes may be limited. Similar rules may apply under state tax laws. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which may be outside our control. We have not conducted any studies to determine annual limitations, if any, that could result from such changes in the ownership. Our ability to utilize those NOLs could be limited by an “ownership change” as described above and consequently, we may not be able to utilize a material portion of our NOLs and certain other tax attributes, which could have an adverse effect on our cash flows and results of operations.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our business operations and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the Tax Act enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to the Tax Act may affect us, and certain aspects of the Tax Act could be repealed or modified in future legislation. Furthermore, the CARES Act modified certain provisions of the Tax Act. In addition, it is uncertain if and to what extent various states will conform to the Tax Act or any newly enacted federal tax legislation. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under the Tax Act or future reform legislation could have a material impact on the value of our deferred tax assets, could

result in significant one-time charges, and could increase our future U.S. tax expense. Among the changes made by the Tax Act was a reduction of the business tax credit for certain clinical testing expenses incurred in the testing of certain drugs for rare diseases or conditions generally referred to as "orphan drugs." We continue to examine the impact this tax reform legislation may have on our business. We urge investors to consult with their legal and tax advisers regarding the implications of the Tax Act and potential changes in U.S. tax laws on an investment in our common stock.

Our business and operations would suffer in the event of computer system failures, cyberattacks or a deficiency in our cybersecurity or a natural disaster.

Despite the implementation of security measures, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyberattacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyberattacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur material legal claims and liability and damage to our reputation, and the further development of our product candidates could be delayed.

Disruptions at the FDA, the Commission and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the Commission and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs or biologics to be reviewed and approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including most recently from December 22, 2018 to January 25, 2019, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

FDA and regulatory authorities outside the United States may adopt policy measures in response to the COVID-19 pandemic and may experience delays in their regulatory activities. In response to the COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most inspections of foreign manufacturing facilities and products while local, national and international conditions warrant. On March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities and provided guidance regarding the conduct of clinical trials, which the FDA continues

to update. As of June 23, 2020, the FDA noted it was continuing to ensure timely reviews of applications for medical products during the COVID-19 pandemic in line with its user fee performance goals and conducting mission critical domestic and foreign inspections to ensure compliance of manufacturing facilities with FDA quality standards. As of July 2020, utilizing a rating system to assist in determining when and where it is safest to conduct such inspections based on data about the virus' trajectory in a given state and locality and the rules and guidelines that are put in place by state and local governments, FDA is either continuing to, on a case-by-case basis, conduct only mission critical inspections, or, where possible to do so safely, resuming prioritized domestic inspections, which generally include pre-approval inspections. Foreign pre-approval inspections that are not deemed mission-critical remain postponed, while those deemed mission-critical will be considered for inspection on a case-by-case basis. FDA will use similar data to inform resumption of prioritized operations abroad as it becomes feasible and advisable to do so. The FDA may not be able to maintain this pace and delays or setbacks are possible in the future. Should FDA determine that an inspection is necessary for approval, and an inspection cannot be completed during the review cycle due to restrictions on travel, FDA has stated that it generally intends to issue a complete response letter. Further, if there is inadequate information to make a determination on the acceptability of a facility, FDA may defer action on the application until an inspection can be completed. Additionally, regulatory authorities outside the U.S. may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic and may experience delays in their regulatory activities.

If a prolonged government shutdown occurs, or if global health concerns prevent the FDA or other regulatory authorities from conducting business as usual or conducting inspections, reviews or other regulatory activities, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. Portions of our future clinical trials may be conducted outside of the United States and unfavorable economic conditions resulting in the weakening of the U.S. dollar would make those clinical trials more costly to operate. Furthermore, a severe or prolonged economic downturn, including a recession or depression resulting from the current COVID-19 pandemic or political disruption could result in a variety of risks to our business, including weakened demand for our product candidates or any future product candidates, if approved, and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy or political disruption, including any international trade disputes, could also strain our manufacturers or suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our potential products. Any of the foregoing could seriously harm our business, and we cannot anticipate all of the ways in which the political or economic climate and financial market conditions could seriously harm our business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and elsewhere in this prospectus. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "estimate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions intended to identify statements about the future. These statements speak only as of the date of this prospectus and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements include, without limitation, statements about the following:

- the sufficiency of our existing cash and cash equivalents 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 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;
- 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 financial performance;
- the effects of the COVID-19 pandemic; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

In addition, you should refer to the "Risk Factors" section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Other sections of this prospectus may include additional factors that could harm our business and financial performance. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. You should, however, review the factors and risks and other information we describe in the reports we will file from time to time with the SEC after the date of this prospectus.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, the events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

MARKET AND INDUSTRY DATA

We obtained the industry, statistical and market data included in this prospectus from our own internal estimates and research as well as from industry and general publications and research, surveys and studies conducted by third parties. All of the market data used in this prospectus involve a number of assumptions and limitations, and the sources of such data cannot guarantee the accuracy or completeness of such information. While we are not aware of any misstatements regarding the third-party information and we believe that each of these studies and publications is reliable, the industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of important factors, including those described in the section titled “Risk Factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of 8,333,333 shares of our common stock in this offering will be approximately $112.8 million (or approximately $130.2 million if the underwriters exercise in full their option to purchase up to 1,249,999 additional shares), assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by $7.8 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million in the number of shares we are offering would increase or decrease the net proceeds to us from this offering by $14.0 million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, assuming the assumed initial public offering price stays the same. We do not expect that a change in the offering price or the number of shares by these amounts would have a material effect on our intended uses of the net proceeds from this offering, although it may impact the amount of time prior to which we may need to seek additional capital.

As of March 31, 2021, we had cash and cash equivalents of $41.4 million. We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- approximately $75.0 million to fund the completion of our ongoing Phase 1 clinical trial of ACU193 and, subject to the successful completion of that trial, the Phase 2 portion of a future Phase 2/3 adaptive trial of ACU193;
- approximately $30.0 million to fund chemistry, manufacturing and other research and development activities; and
- the remainder for working capital and other general corporate purposes.

We may also use a portion of the remaining net proceeds to in-license, acquire or invest in complementary businesses, technologies, products or assets, although we have no current agreements, commitments or understandings to do so.

Based on our current operating plan, we believe that the net proceeds of this offering, together with our existing cash and cash equivalents, including the $30.0 million received in June 2021 upon the second closing of our Series B preferred stock financing, will be sufficient to enable us to fund our operations at least through 2023. Based on our current operational plans and assumptions, we expect the net proceeds from this offering, together with our cash and cash equivalents, will be sufficient to fund the completion of the Phase 2 portion of our future Phase 2/3 adaptive clinical trial of ACU193. However, we expect that we will need to raise additional capital in order to complete the Phase 3 portion of that trial and any potential future trials that may be required by regulatory authorities. We have based these estimates on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect.

This expected use of net proceeds from this offering and our existing cash and cash equivalents represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for ACU193 and any other product candidates we develop, and any unforeseen cash needs.

Our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of those net proceeds. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. Pending their use, we plan to invest the net proceeds from this offering in short-term, interest bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States.

DIVIDEND POLICY

We have never declared or paid, and do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of March 31, 2021:

- on an actual basis;
- on a pro forma basis to give effect to the conversion of all of the outstanding preferred shares of our convertible preferred stock into an aggregate of 27,785,246 shares of our common stock upon the closing of this offering, as well as automatic conversion of an outstanding preferred stock warrant convertible into 447,426 shares of our common stock based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus), as if such conversions had occurred on March 31, 2021; and
- on a pro forma as adjusted basis to give further effect our issuance and sale of 8,333,333 shares of common stock in this offering at an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting fees and commissions and estimated offering expenses payable by us.

Our capitalization following the closing of this offering will depend on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information in conjunction with our financial statements and the related notes appearing at the end of this prospectus, the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other financial information contained in this prospectus.

	As of March 31, 2021		
	Actual	Pro Forma	Pro Forma As Adjusted(1)
	(in thousands, except share and per share data)		
Cash and cash equivalents	$ 41,407	$ 71,407	$ 184,157
Preferred stock tranche rights liability	$ 26,557	—	—
Preferred stock warrant liability	2,073	—	—
Series A convertible preferred stock, $0.0001 par value; 711,203 shares authorized, 477,297 issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	1,067	—	—
Series A-1 convertible preferred stock, $0.0001 par value; 11,898,177 shares authorized, 7,537,879 shares issued and outstanding, actual; no shares authorized, issued or outstanding pro forma and pro forma as adjusted	16,333	—	—
Series B convertible preferred stock, $0.0001 par value; 29,457,450 shares authorized, 11,862,043 shares issued and outstanding, no shares authorized, issued or outstanding pro forma and pro forma as adjusted	39,253	—	—
Stockholders’ (deficit) equity:			
Preferred stock, $0.0001 par value; no shares authorized, issued or outstanding, actual; 10,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—

	As of March 31, 2021		
	Actual	Pro Forma	Pro Forma As Adjusted(1)
	(in thousands, except share and per share data)		
Common stock, $0.0001 par value; 50,500,000 shares authorized, 419,124 shares issued and outstanding, actual; 300,000,000 shares authorized, 28,651,796 shares issued and outstanding, pro forma; 300,000,000 shares authorized, 36,985,129 shares issued and outstanding, pro forma as adjusted	—	3	4
Additional paid-in capital	8,500	123,780	236,529
Accumulated (deficit) equity	(53,962)	(53,962)	(53,962)
Total stockholders' (deficit) equity	(45,462)	69,821	182,571
Total capitalization	$ 39,821	$ 69,821	$ 182,571

(1) Each $1.00 increase or decrease) in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by approximately $7.8 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares offered by us at the assumed initial public offering price per share of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of additional paid-in capital, total stockholders' deficit and total capitalization by approximately $14.0 million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions, and estimated offering expenses payable by us.

The number of shares of our common stock outstanding in the table above excludes:

- 3,481,178 shares of our common stock issuable upon the exercise of options under the Prior Plan outstanding as of March 31, 2021 at a weighted-average exercise price of $1.17 per share;
- 385,693 shares of our common stock issuable upon the exercise of common stock warrants outstanding as of March 31, 2021 at an exercise price of $4.47;
- 667,030 shares of our common stock reserved for future issuance under the Prior Plan, which shares will cease to be available for issuance at the time the 2021 Plan becomes effective and will be added to, and become available for issuance under, the 2021 Plan;
- 3,550,000 shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2021 Plan; and
- 375,000 shares of our common stock reserved for future issuance under the ESPP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

As of March 31, 2021, we had a historical net tangible book value (deficit) of $(45.5) million, or $(108.47) per share of common stock. Our historical net tangible book value (deficit) per share represents total tangible assets less total liabilities and convertible preferred stock, which is not included within our stockholders' equity (deficit), divided by the number of shares of our common stock outstanding as of March 31, 2021.

Our pro forma net tangible book value as of March 31, 2021 was $69.8 million, or $2.44 per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the conversion of all of the outstanding preferred shares of our convertible preferred stock into an aggregate of 27,785,246 shares of our common stock upon the closing of this offering, as well as the automatic conversion of an outstanding preferred stock warrant convertible into 447,426 shares of our common stock based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus; as if such conversions had occurred on March 31, 2021. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of March 31, 2021, after giving effect to the pro forma adjustment described above.

After giving further effect to the sale of 8,333,333 shares of common stock in this offering at an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2021 would have been $182.6 million, or $4.94 per share. This amount represents an immediate increase in pro forma net tangible book value of $2.50 per share to our existing stockholders and immediate dilution of $10.06 per share to new investors in this offering. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share after this offering from the amount of cash that a new investor paid for a share of common stock in this offering.

The following table illustrates this dilution:

Assumed initial public offering price per share		$15.00
Historical net tangible book value (deficit) per share as of March 31, 2021	$(108.47)	
Pro forma increase in net tangible book value (deficit) per share attributable to the pro forma transactions described above	110.91	
Pro forma net tangible book value per share as of March 31, 2021	2.44	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors participating in this offering	2.50	
Pro forma as adjusted net tangible book value per share after this offering		4.94
Dilution per share to new investors participating in this offering		$10.06

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted net tangible book value per share after this offering by $0.21, and dilution in pro forma net tangible book value per share to new investors by $0.79, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and

estimated offering expenses payable by us. An increase of 1.0 million shares in the number of shares we are offering would increase the pro forma as adjusted net tangible book value per share after this offering by $0.23 and decrease the dilution per share to new investors participating in this offering by $0.23, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A decrease of 1.0 million shares in the number of shares we are offering would decrease the pro forma as adjusted net tangible book value per share after this offering by $0.25 and increase the dilution per share to new investors participating in this offering by $0.25, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full, the pro forma as adjusted net tangible book value after this offering would be $5.23 per share, the increase in pro forma net tangible book value would be $2.79 per share and the dilution to new investors would be $9.77 per share, in each case assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus.

The following table summarizes, as of March 31, 2021, on the pro forma as adjusted basis described above, the differences between the number of shares purchased from us, the total consideration paid to us in cash and the average price per share that existing stockholders and new investors paid for such shares. This calculation is based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	(dollar amounts in thousands, except per share amounts)				
	Total Shares		Total Consideration		Weighted-Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	28,651,796	77.5%	$ 97,500	43.8%	$ 2.64
New investors	8,333,333	22.5	125,000	56.2	15.00
Total	36,985,129	100%	$222,500	$ 100%	

The foregoing tables and calculations are based on the number of shares of our common stock outstanding as of March 31, 2021, after giving effect to the conversion of all of the outstanding preferred shares of our convertible preferred stock into an aggregate of 27,785,246 shares of our common stock upon the closing of this offering, as well as the automatic conversion of an outstanding preferred stock warrant convertible into 447,426 shares of our common stock based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus; as if such conversions had occurred on March 31, 2021, and excludes:

- 3,481,178 shares of our common stock issuable upon the exercise of options under the Prior Plan outstanding as of March 31, 2021 at a weighted-average exercise price of $1.17 per share;
- 385,693 shares of our common stock issuable upon the exercise of common stock warrants outstanding as of March 31, 2021 at an exercise price of $4.47;
- 667,030 shares of our common stock reserved for future issuance under the Prior Plan, which shares will cease to be available for issuance at the time the 2021 Plan becomes effective and will be added to, and become available for issuance under, the 2021 Plan;
- 3,550,000 shares of our common stock reserved for future issuance under our 2021 Plan, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2021 Plan; and

- 375,000 shares of our common stock reserved for future issuance under the ESPP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

To the extent that stock options or warrants are exercised, new stock options or other equity awards are issued under our equity incentive plan or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our financial statements and related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those described in or implied by these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" and elsewhere in this prospectus. You should carefully read the "Risk Factors" section of this prospectus to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Special Note Regarding 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 (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 (AbOs), globular assemblies of the amyloid-beta (Ab) peptide that are distinct from other forms of Ab and amyloid. We are currently focused on advancing a targeted immunotherapy drug candidate, ACU193, through clinical proof of mechanism in early AD patients. We initiated our Phase 1 clinical trial of ACU193 in the second quarter of 2021.

We were incorporated in 1996 and were party to an exclusive license and research collaboration with Merck in 2003. Although we acquired the exclusive rights to ACU193 from Merck in 2011 following Merck's strategic decision to focus its AD development efforts on a different product candidate, we did not recommence meaningful operations until we completed our first institutional fundraising in 2018. Since 2018, we have devoted substantially all of our efforts to organizing and staffing our company, business planning, raising capital, conducting discovery, research and development activities, and providing general and administrative support for these operations. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through the sale of our convertible preferred stock and common stock, the issuance of notes, grant revenue and during our collaboration with Merck, certain payments received under our collaboration agreement.

From inception through March 31, 2021, we have raised an aggregate of $67.5 million of gross proceeds through the issuance of convertible preferred stock, as well as sales of common stock and issuance of notes that were converted to preferred stock, with the vast majority of this capital being raised since our Series A-1 convertible preferred stock, or Series A-1, financing in 2018. In 2020, we conducted a Series B convertible preferred stock, or Series B, financing, with the funding to occur in two tranches. We closed the first tranche of the Series B financing in November 2020, selling 11,862,043 shares of Series B at $3.80 per share for gross proceeds of $45.1 million. On June 9, 2021, our board of directors and the holders of more than 67% of the outstanding shares of Series B preferred stock elected to waive the achievement of the milestone event. On June 17, 2021, we closed the second tranche of our Series B preferred stock financing, pursuant to which certain of our investors funded an additional $30.0 million.

We have incurred net losses and negative cash flows from operations since our inception. Our net loss was $7.3 million and $27.0 million for the year ended December 31, 2020 and for the three months ended March 31, 2021, respectively. As of March 31, 2021, we had an accumulated deficit of $54.0 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 into 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 commercialization of ACU193 or any other product candidate that is approved for marketing. However, we may seek to commercialize our products at our own expense, which would require us to incur significant additional expenses for marketing, sales, manufacturing and distribution.

In March 2020, the World Health Organization declared COVID-19 a global pandemic and the United States declared a national emergency with respect to COVID-19. In response to the COVID-19 pandemic, a number of governmental orders and other public health guidance measures have been implemented across much of the United States, including in the locations of our office, clinical trial sites and third parties on whom we rely. We implemented a work-from-home policy allowing employees and consultants who can work from home to do so. Business travel has been limited, and online video and teleconference technology is used to meet virtually rather than in person. We have taken measures to secure our research and development activities, while work in laboratories by our partners has been organized to reduce risk of COVID-19 transmission. Although to date, our business has not been materially impacted by COVID-19, it is possible that our clinical development timelines could be negatively affected by COVID-19, which could materially and adversely affect our business, financial condition and results of operations.

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. 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 March 31, 2021, we had cash and cash equivalents of $41.4 million. Without giving effect to closing of the second tranche of the Series B financing, or the anticipated net proceeds from this offering, based on our current operating plan, we believe our cash and cash equivalents as of March 31, 2021, were sufficient to support current operations through the third quarter of 2022. 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. See “—Liquidity and Capital Resources.”

Components of our Results of Operations

Grants and Other Revenue

To date, we have not generated any revenues from the commercial sale of any products, and we do not expect to generate revenues from the commercial sale of any products for the foreseeable future, if ever. For the years ended December 31, 2019 and 2020, we derived revenue from a grant awarded by the National Institutes of Health in September 2017 and renewed annually in 2018 through 2020. The grant provides us with funding to support the completion of preclinical chemistry, manufacturing and control studies, toxicology and pharmacokinetic studies, submit an IND dossier to the FDA, and then conduct first in human clinical safety trials for ACU193. We recognize revenue from this grant when the related costs are incurred and the right to payment is realized. As of December 31, 2020, we had been awarded a total of $3.9 million under this grant, all of which has been recognized as revenue prior to or during the years ended December 31, 2019 and 2020.

Operating Expenses

Our operating expenses consist of (i) research and development expenses and (ii) 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 costs and contract development and manufacturing 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 equity-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.

Costs for certain activities are recognized based on an evaluation of the progress to completion of specific tasks using data such as information provided to us by our vendors and analyzing the progress of our nonclinical and clinical studies or other services performed. Significant judgment and estimates are made in determining the accrued expense balances at the end of any reporting period. Advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered or the services rendered.

As we currently only have one product candidate, ACU193, in development, we do not separately track expenses by program. Further, as we have historically relied exclusively on consultants for research and development activities, we did not have any material internal research and development costs for the years ended December 31, 2019 and 2020 or for the three months ended March 31, 2021.

We expect that our research and development expenses will increase substantially in connection with our clinical development activities for our ACU193 program. At this time, we cannot accurately estimate or know the nature, timing and costs of the efforts that will be necessary to complete the clinical development of, or obtain regulatory approval for, any of our current or future product candidates. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the following:

- our ability to add and retain key research and development personnel;
- our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize our product candidates;
- our successful enrollment in and completion of clinical trials, including our ability to generate positive data from any such trials;

- the size and cost of any future clinical trials for existing or future product candidates in our pipeline;
- the costs associated with the development of any additional programs we identify in-house or acquire through collaborations and other arrangements and the success of such collaborations;
- the terms and timing of any additional collaborations, license or other arrangement, including the timing of any payments thereunder;
- our ability to establish and maintain agreements and operate with third-party manufacturers for clinical supply for our clinical trials and commercial manufacturing, if any of our product candidates are approved;
- costs related to manufacturing of our product candidates or to account for any future changes in our manufacturing plans;
- our ability to obtain and maintain patents, trade secret and other intellectual property protection and regulatory exclusivity for our product candidates, both in the United States and internationally;
- our ability to obtain and maintain third-party insurance coverage and adequate reimbursement for our product candidates, if and when approved;
- the acceptance of our product candidates, if approved, by patients, the medical community and third-party payors;
- effectively competing with other products if our product candidates are approved;
- the impact of any business interruptions to our operations, including the timing and enrollment of patients in our planned clinical trials, or to those of our manufacturers, suppliers, or other vendors resulting from the COVID-19 pandemic or similar public health crisis; and
- our ability to maintain a continued acceptable safety profile for our therapies following approval.

A change in the outcome of any of these variables with respect to the development of our product candidates could significantly change the costs and timing associated with the development of that product candidate. We may never succeed in obtaining regulatory approval for any of our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of management and business consultants and other related costs, including stock-based compensation. General and administrative expenses also include board of directors' expenses and professional fees for legal, patent, consulting, accounting, auditing, tax services and insurance costs.

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 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 changes in fair value of the Series A-1 warrant liability and the Series B tranche rights and interest income, net.

The Series A-1 warrant was issued in October 2018 in connection with the Series A-1 preferred financing. The warrant liability met the definition of a freestanding financial instrument, as it was legally detachable and separately exercisable from the initial closing of the Series A-1 convertible preferred stock. The warrant liability was initially recorded at fair value as a liability on our balance sheet and was subsequently re-measured at fair value at the end of each reporting period. The changes in the fair value were recognized as a component of other income (expense).

Included in the terms of the Series B stock purchase agreement in November 2020 were tranche rights granted to the holders of the Series B. The tranche rights provide the Series B holders with the right to purchase additional shares of Series B at $3.80 per share in an additional tranche after the achievement of a certain milestone event. On June 17, 2021 we closed the second tranche of our Series B preferred stock financing upon the election of a majority of the Series B investors, pursuant to which certain of our investors funded an additional $30 million. The tranche rights met the definition of a freestanding financial instrument as the tranche rights are legally detachable and separately exercisable from the Series B. The tranche rights were initially recorded at fair value as a liability on our balance sheet. The tranche rights are subsequently re-measured at fair value at the end of each reporting period and at settlement. Changes in the fair value are recognized as a component of other income (expense).

Results of Operations

Comparison of Three Months Ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021 (in thousands):

	For the Three Months Ended March 31,		
	2020	2021	Change
Grant and other revenue	$ 226	$ —	$ (226)
Costs and operating expenses			
Research and development	2,050	2,578	528
General and administrative	222	1,215	993
Total operating expenses	2,272	3,793	1,521
Loss from operations	(2,046)	(3,793)	(1,747)
Other income (expense)			
Interest income	1	4	3
Change in fair value of preferred stock tranche rights liability and preferred stock warrant liability	—	(23,217)	(23,217)
Other income	—	9	9
Total other income (expense)	1	(23,204)	(23,205)
Net loss	$ (2,045)	$ (26,997)	$ (24,952)

Grant and Other Revenue

Revenue related to our NIH grant was $0.2 million for the three months ended March 31, 2020. Revenue under the NIH grant is recognized when the related costs were incurred and the right to payment was realized. All NIH grant revenue that we expect to receive was fully recognized in periods prior to the three months ended March 31, 2021.

Research and Development Expenses

Research and development expenses were $2.1 million and $2.6 million for the three months ended March 31, 2020 and 2021, respectively. The $0.5 million increase was primarily due to increases in costs for contract research organizations and personnel of $0.9 million and $0.5 million, respectively, net of decreases in costs for drug safety testing and nonclinical materials of $0.7 million and $0.2 million, respectively.

General and Administrative Expenses

General and administrative expense was $0.2 million and $1.2 million for the three months ended March 31, 2020 and 2021, respectively. The $1.0 million increase was primarily due to increased accounting and consulting expenses incurred of $0.5 million related to the audit of our financial statements, as well as increased personnel expenses of $0.4 million due to employees hired during the three months ended March 31, 2021.

Other Income (Expense)

Increases in the fair value of both the Series A-1 warrant liability and the Series B tranche liability resulted in $23.2 million of other expense for the three months ended March 31, 2021.

Comparison of the Years Ended December 31, 2019 and 2020

The following table summarizes our results of operations for the years ended December 31, 2019 and 2020 (in thousands):

	For the Year Ended December 31,		
	2019	2020	Change
Grant and other revenue	$ 1,697	$ 1,436	$ (261)
Costs and operating expenses:			
Research and development	8,576	7,997	(579)
General and administrative	926	1,351	425
Total operating expenses	9,502	9,348	(154)
Loss from operations	(7,805)	(7,912)	(107)
Other income (expense)			
Interest income	45	1	(44)
Change in fair value of preferred stock tranche rights liability and preferred stock warrant liability	(147)	586	733
Total other income (expense)	(102)	587	689
Net loss	$ (7,907)	$ (7,325)	$ 582

Grant and Other Revenue

Revenue related to our NIH grant was $1.7 million and $1.4 million for the years ended December 31, 2019 and 2020, respectfully, and was recognized when the related costs were incurred and the right to payment was realized.

Research and Development Expenses

Research and development expenses were $8.6 million and $8.0 million for the years ended December 21, 2019 and 2020, respectively. The $0.6 million decrease was primarily due to decreases for nonclinical materials and consulting costs of $1.8 million and $0.4 million, respectively; net of increases for contract research organizations and drug safety testing of $1.0 million and $0.6 million, respectively, due to our progression towards and submission of our IND to the FDA in the fourth quarter of 2020.

General and Administrative Expenses

General and administrative expense was $0.9 million and $1.4 million for the years ended December 31, 2019 and 2020, respectively. The $0.4 million increase was primarily due to higher executive compensation and increased business development consulting costs, as well as increased franchise taxes and accounting expenses.

Other Income (Expense)

Other income (expense) increased by $0.7 million due to a total gain of $0.6 million related to decreases in the fair value of both the Series A-1 warrant liability and the Series B tranche liability for the year ended December 31, 2020, as compared to a $0.1 million increase in the fair value of the Series A-1 warrant liability for the year ended December 31, 2019.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have funded our operations primarily through the sale of our convertible preferred stock and common stock, the issuance of notes, grant revenue and, during our collaboration with Merck, certain payments received under our collaboration agreement. We do not have any products approved for sale and have not generated any revenue from product sales. From inception through March 31, 2021, we have raised an aggregate of $67.5 million of gross proceeds through the issuance of convertible preferred stock, as well as sales of common stock and issuance of notes that were converted to preferred stock, with the vast majority of this capital being raised since our Series A-1 financing in 2018. In 2020, we conducted a Series B financing, with the funding to occur in two tranches. We closed the first tranche of the Series B financing in November 2020 for gross proceeds of $45.1 million. Upon achievement of a certain milestone event for ACU193, or upon election of the Series B investors to waive the requirement for the milestone event to be achieved prior to its achievement, we are obligated to issue and sell a second tranche of Series B shares to the Series B purchasers for gross proceeds of $30.0 million. On June 9, 2021, our board of directors and the holders of more than 67% of the outstanding shares of Series B preferred stock elected to waive the achievement of the milestone event. On June 17, 2021 we closed the second tranche of our Series B preferred stock financing upon the election of a majority of the Series B investors, pursuant to which certain of our investors funded an additional $30 million. As of March 31, 2021, our cash and cash equivalents totaled $41.4 million.

Cash Flows

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

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
Net cash used in operating activities	$ (6,818)	$ (7,450)	$ (1,816)	$ (2,370)
Net cash provided by financing activities	6,239	44,675	—	—
Net change in cash and cash equivalents	$ (579)	$ 37,225	$ (1,816)	$ (2,370)

Operating Activities

Net cash used in operating activities was $1.8 million and $2.4 million for the three months ended March 31, 2020 and 2021, respectively. Net cash used in operating activities during the three months ended March 31, 2020 was primarily due to our net loss of $2.0 million, partially offset by $0.2 million of cash provided by changes in our operating assets and liabilities. Net cash used in operating activities during the three months ended March 31, 2021 was primarily due to our net loss of $27.0 million, including other expenses of $23.2 million related to the change in the fair values of the Series A-1 warrant liability and the Series B tranche liability, partially offset by increases in accounts payable of $0.4 million and accrued expenses and other current liabilities of $1.0 million.

Net cash used in operating activities was $6.8 million and $7.5 million for the years ended December 31, 2019 and 2020, respectively. Net cash used in operating activities in 2019 was primarily due to our net loss of $7.9 million, which was partially offset by an increase in accrued liabilities and accounts payable of $0.6 million. In 2020, net cash used in operating activities was primarily due to our net loss of $7.3 million and income from the change in the fair values of the Series A-1 warrant liability and the Series B tranche liability, which totaled $0.6 million; partially offset by changes in our working capital, partially offset by $0.3 million increase in accounts payable and a $0.1 million decrease in long-term prepaid service agreements.

Financing Activities

Net cash provided by financing activities was $6.2 million and $44.7 million for the years ended December 31, 2019 and 2020, respectively, and was due to the issuance of Series A-1 convertible preferred stock in 2019 and Series B convertible preferred stock in 2020.

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, upon the completion of this offering, we 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 commercialization of ACU193 or any other product candidate that is approved for marketing. However, we may seek to commercialize our products at our own expense, which 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 the net proceeds from this offering, together with our existing cash and cash equivalents as of March 31, 2021 and the $30.0 million received in June 2021 upon the second closing of our Series B preferred stock financing, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements at least through 2023. We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. 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 our product candidates;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the achievement of milestones or occurrences 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 any of our product candidates for which we receive marketing approval;
- the amount of revenue, if any, received from commercial sales of our 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 cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interests may be diluted, and the terms of these securities may include liquidation or other preferences that could adversely affect your rights as a common stockholder. 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.

Off-Balance Sheet Arrangements

During the periods presented we did not have, nor do we currently have, any off-balance sheet arrangements as defined under SEC rules.

Contractual Obligations

As of March 31, 2021, we have an operating lease obligation associated with a lease for our executive office space that totals approximately $2,000 for the remainder of the lease term. This amount is due in equal monthly installments over the remaining lease term, which expires on August 31, 2021.

We have been subleasing space in Indiana since March 1, 2020 under a lease that expired on December 31, 2020. We executed a new sublease for this space that was effective February 1, 2021. The term of the sublease is for 31 months, expiring on August 30, 2023. We pay monthly rent of $12,719 and we are also allowing others to sublease a portion of the space from us for less than a one-year period. As of March 31, 2021, the remaining aggregate minimum rent obligation over the remaining term was approximately $369,000.

At March 31, 2021, future minimum lease payments under lease agreements (including short-term leases) associated with our operations were as follows (in thousands):

Year ended December 31, 2021 (remaining 9 months)	$117
Year ended December 31, 2022	153
Year ended December 31, 2023	102
Total	$371

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 cancelable by us upon prior notice of 30 days. Payments due upon cancelation consist only of payments for services provided and expenses incurred up to the date of cancelation.

Critical Accounting Estimates and Policies

This management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in our financial statements. In accordance with U.S. GAAP, we evaluate our estimates and judgments on an ongoing basis, including those related to accrued expenses, the preferred stock tranche and warrant liabilities and stock-based compensation. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We define our critical accounting policies as those accounting principles that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations, as well as the specific manner in which we apply those principles. While our significant accounting policies are more fully described in Note 2 to our audited financial statements appearing elsewhere in this prospectus, we believe the following are the critical accounting policies used in the preparation of our financial statements that require significant estimates and judgments.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses as of each balance sheet date. This process involves reviewing open contracts and purchase orders, identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. We make estimates of our accrued expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include the costs incurred for services performed by our vendors in connection with research and development activities for which we have not yet been invoiced. Since our inception, we have not experienced any material differences between accrued or prepaid costs and actual costs.

We base our expenses related to research and development activities on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing

service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid expense accordingly. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Stock-based Compensation

Stock-based compensation expense represents the grant date fair value of equity awards recognized in the period using the Black-Scholes option pricing model. We recognize the expense for equity awards on a straight-line basis over the requisite service periods of the awards, which is usually the vesting period. Forfeitures are recognized as they occur.

Estimating the fair value of equity awards pursuant to the Black-Scholes option pricing model requires us to make assumptions regarding a number of variables, including the risk-free interest rate, the expected stock price volatility, the expected term of stock options, the expected dividend yield and the fair value of the underlying common stock on the date of grant. Changes in these assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized.

The Black-Scholes option pricing model utilizes inputs which are highly subjective assumptions and generally require significant judgment. We determine these assumptions in the following manner:

- ***Fair Value of Common Stock.*** See the subsections titled "—Fair Value of Common Stock" and "—Common Stock Valuation Methodology" below.

- ***Expected Term.*** The expected term of stock options represents the period of time that the awards are expected to be outstanding. Because we do not have sufficient historical exercise behavior, we determine the expected term assumption using the simplified method, which calculates the expected term as the average time-to-vesting and the contractual life of the award.

- ***Expected Volatility.*** As we are not yet a public company and do not have a trading history for our common stock, the expected volatility assumption was determined by examining the historical volatilities of a group of industry peers whose share prices are publicly available.

- ***Risk-Free Interest Rate.*** The risk-free rate assumption is based on the U.S. Treasury yield in effect at the time of the grant with maturities consistent with the expected term of the awards.

- ***Expected Dividend Yield.*** The expected dividend yield assumption is based on our history and expectation of dividend payouts. The Company has not paid and does not intend to pay dividends and, therefore, used an expected dividend yield of zero.

See Note 6 to our financial statements included elsewhere in this prospectus for more information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options. Certain of such assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

We recorded stock-based compensation expense of $0.2 million for each of the years ended December 31, 2019 and 2020 and $0.1 million for the three months ended March 31, 2021. As of December 31, 2020 and March 31, 2021, there was $0.1 million and $1.4 million, respectively, of total unrecognized stock-based compensation expense related to unvested stock options which we expected to recognize over a remaining weighted-average period of one year as of December 31, 2020 and 3.5 years as of March 31, 2021. We expect to continue to grant stock options and other equity-based awards in the future, and to the extent that we do, our stock-based compensation expense recognized in future periods will likely increase.

Fair Value of Common Stock

The fair values of the shares of common stock underlying our options were estimated on each grant date by our board of directors. In order to determine the fair value, our board of directors considered, among other things, contemporaneous valuations of our common stock prepared by unrelated third-party valuation firms in accordance with the guidance provided by the American Institute of Certified Public Accountants Audit and Accounting Practice Aid Series: Valuation of Privately-Held-Company Equity Securities Issued as Compensation, or the Practice Aid. Given the absence of a public trading market of our capital stock, our board of directors will exercise reasonable judgment and consider a number of objective and subjective factors to determine the best estimate of the fair value of our common and preferred stock, including:

- contemporaneous third-party valuations of our common stock;
- the prices, rights, preferences and privileges of our convertible preferred stock relative to our common stock;
- our business, financial condition and results of operations, including related industry trends affecting our operations;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company, given prevailing market conditions;
- the lack of marketability of our common stock;
- U.S. and global economic and capital market conditions and outlook.

The valuations prepared as of December 31, 2018, December 31, 2019, November 20, 2020 and December 31, 2020 resulted in a valuation of our common stock of $0.72, $0.84, $1.00 and $0.83 per share, respectively, as of those dates. A valuation was also prepared as of March 31, 2021 which resulted in a valuation of our common stock of $5.07. The March 31, 2021 valuation was not used in determining the grant date fair value of any stock based compensation awarded as of the date hereof.

Common Stock Valuation Methodology

In determining the estimated fair value of common stock, our board of directors considered the subjective factors discussed above in conjunction with the most recent valuations of our common stock that were prepared by an independent third-party.

In estimating the fair market value of our common stock, our board of directors first determined the equity value of our business using accepted valuation methods. For valuations as of December 31, 2018, December 31, 2019, November 20, 2020 and December 31, 2020 we used the option-pricing model, or OPM, under which shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options. Specifically, we use the OPM backsolve method to estimate the fair value of our common stock, which derives the implied equity value for one type of equity security from a contemporaneous transaction involving another type of security, such as the shares of our Series A, Series A-1 and Series B convertible preferred stock. We used the OPM backsolve method because we were at an early stage of development and future liquidity events were difficult to forecast. We applied a discount for lack of marketability to account for a lack of access to an active public market.

Beginning in March 2021, we began applying the hybrid method, which combines elements of the OPM backsolve method and the expected IPO value as estimated through analysis of IPOs for comparable guideline companies, to arrive at a value per share in the IPO scenario. The underlying equity values from each approach were probability weighted based upon the expected likelihood of each scenario.

Options granted

We did not issue any stock options during 2020. The following table sets forth by grant date the number of shares subject to options granted during 2021, the per share exercise price of the options, the fair value of common stock on each grant date, and the per share estimated fair value of the options:

Grant Date	Number of shares subject to options granted	Per share exercise price of options	Fair value of common stock per share on date of option grant
January 4, 2021	2,479,661	$ 1.19	$ 0.83

Preferred Stock Tranche Rights Liability

We determined that our obligation to issue, and the investors' right to purchase, additional shares of Series B pursuant to the milestone closings represent a freestanding financial instrument, or the tranche liability. The tranche liability was initially recorded at fair value. The proceeds from the sale of the convertible preferred stock are first allocated to the fair value of the tranche liability, with the remaining proceeds from the sale of the convertible preferred stock allocated to the Series B convertible preferred stock. The tranche liability is remeasured at each reporting period and upon the exercise of the obligation, with gains and losses arising from subsequent changes in its fair value recognized as a component of other income (expense) in the statement of operations. At the time of the exercise of the tranche liability and the milestone closing on June 17, 2021, any remaining value of the tranche liability was reclassified to convertible preferred stock on the balance sheet.

The fair value for the tranche liability was estimated as a forward contract using a tranche model as of November 20, 2020, December 31, 2020 and in the Stay Private scenario utilized in the hybrid methodology as of March 31, 2021. Under this approach, the fair value of the liability is discounted back to the valuation date, and adjusted for probability of the achievement of the milestone event. For the other portion of the hybrid method used as of March 31, 2021, the fair value for the tranche liability was estimated based upon an allocation of the underlying equity value, which was determined using an expected IPO value as estimated through analysis of IPOs for comparable guideline companies, to arrive at a value per share in the IPO scenario.

Preferred Stock Warrant Liability

We determined that the warrant liability met the definition of a freestanding financial instrument, as it was legally detachable and separately exercisable from the initial closing of the Series A-1 convertible preferred stock. The warrant liability is remeasured at each reporting period until the earlier of the exercise or expiration of the applicable warrant, with gains and losses arising from subsequent changes in its fair value recognized in other income (expense) in the statement of operations. At the time of the exercise or expiration of the warrant liability, any remaining value of the warrant liability is reclassified to convertible preferred stock on the balance sheet.

The fair value of the warrant liability was estimated using the OPM backsolve method as of December 31, 2019 and 2020 and using a hybrid method, which included an OPM backsolve in the Stay Private scenario as of March 31, 2021. The hybrid method used to value the warrant liability as of March 31, 2021 considered both the underlying equity value determined using the OPM backsolve method in a Stay Private scenario, as well as the underlying equity value that was determined using an expected IPO value as estimated through analysis of IPOs for comparable guideline companies, to arrive at a value per share in the IPO scenario. The underlying equity values from each approach were probability weighted based upon the expected likelihood of each scenario.

Recent Accounting Pronouncements

See Note 2 to our financial statements included elsewhere in this prospectus for information about recent accounting pronouncements, the timing of their adoption, and our assessment, if any, of their potential impact on our financial condition and results of operations.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk related to changes in interest rates. As of December 31, 2019 and 2020 and March 31, 2021, our cash equivalents consisted of interest-bearing checking accounts and money market funds. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term nature and the low risk profile of our interest-bearing accounts, an immediate 10% change in interest rates would not have a material effect on the fair market value of our cash and cash equivalents or on our financial position or results of operations.

Inflation generally affects us by increasing our costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the years ended December 31, 2019 and 2020 and the three months ended March 31, 2021.

Emerging Growth Company and Smaller Reporting Company Status

We are an emerging growth company, as defined in the JOBS Act, and we may remain an emerging growth company for up to five years following the completion of this offering. For so long as we remain an emerging growth company, we are permitted and intend to rely on certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved and an exemption from compliance with the requirements regarding the communication of critical audit matters in the auditor's report on financial statements. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation-related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as public companies that are not emerging growth companies. As a result of this election, our financial statements may not be comparable to those of companies that are not emerging growth companies.

We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have at least $1.07 billion in annual revenue; (ii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer," as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded $700 million as of the last business day of the second fiscal quarter of such year; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt securities during the prior three-year period; and (iv) the last day of the fiscal year ending after the fifth anniversary of this offering.

We are also a "smaller reporting company," meaning that the market value of our shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering 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 after this offering 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.

BUSINESS

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 AbOs, which are globular assemblies of the amyloid-beta, or Ab, peptide that are distinct from Ab monomers and amyloid plaques. Based on decades of research and supporting evidence, AbOs have gained increasing scientific acceptance as a primary toxin involved in the initiation and propagation of AD pathology. We are currently focused on advancing a targeted immunotherapy drug candidate, ACU193, through clinical proof of mechanism trials in early AD patients. ACU193 is a humanized monoclonal antibody, or mAb, that selectively targets AbOs, 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 models for AD. We initiated our Phase 1 clinical trial of ACU193 in the second quarter of 2021 with the objective to evaluate its safety and tolerability and explore its pharmacokinetics and target engagement. This trial is enrolling patients with mild dementia or mild cognitive impairment, or MCI, due to AD, conditions referred to as "early AD." Data from this trial are expected by year end 2022.

ACU193 is the result of over a decade of research and development undertaken by the company, which included a drug discovery partnership with Merck & Co., Inc., or Merck, from 2003 to 2011. ACU193's mechanism of action is intended to slow disease progression and potentially preserve or improve memory function in early AD patients by binding to AbOs. AbOs are known to bind to neurons, leading to synaptic malfunction, memory deficits, cognitive impairment and, ultimately, neurodegeneration and cell death. As such, we believe AbOs are the most toxic and pathogenic form of Ab in the brains of AD patients relative to other forms of amyloid, including Ab monomers and amyloid plaques. We believe the development and commercialization of a drug that reduces toxicity of AbOs is one of the most promising approaches for the potential treatment and prevention of the progression of AD.

In our nonclinical studies, we observed that ACU193 has over 500-fold greater selectivity for AbOs over Ab monomers and has limited or no binding to amyloid plaques. Also, ACU193 potently prevents binding of AbOs to hippocampal neurons. Recent laboratory studies conducted by us and others suggest that inhibiting AbOs may enable damaged brain circuits to regain some function and prevent further degeneration from occurring. ACU193 has demonstrated in vivo biochemical and behavioral activity in several AD mouse models, including crossing the blood-brain barrier and forming complexes with AbOs in a dose-dependent manner. ACU193 has shown consistent pharmacokinetics and brain penetration properties in four animal species. Safety toxicology studies in rats and monkeys provide acceptable margins for dosing in the clinic. Additionally, studies in transgenic mice indicate low potential for microhemorrhage. Based in part on its binding affinity for AbOs rather than amyloid plaques, ACU193 has the potential to have a lower rate of amyloid-related imaging abnormalities, or ARIA, than the plaque-clearing anti-amyloid antibody therapies currently in development. ARIA is a common adverse event for antibodies targeting amyloid plaque and can be a dose-limiting safety liability for those antibodies.

Our Phase 1 trial 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 involving 62 patients with early AD. The overall objective of the trial is to evaluate the safety and tolerability, and establish clinical proof of mechanism of ACU193 administered intravenously in single and multiple escalating doses. The primary trial endpoints are focused on safety and immunogenicity. An important safety measure will be the use of magnetic resonance imaging, or MRI, to assess the presence or absence of ARIA. Secondary endpoints include pharmacokinetics in plasma and cerebrospinal fluid, or CSF, and target engagement as evidenced by detection of ACU193 bound to AbOs in CSF. Clinical scales typically used in AD trials as well as computerized cognitive testing are included as exploratory measures. We expect to report proof of mechanism results by year end 2022, with periodic updates including trial progress and cohort advancement.

Alzheimer's disease currently affects over 6 million people in the United States and approximately 32 million people worldwide and is the sixth-leading cause of death in the United States. However, due to the aging population, patient populations in the United States impacted by AD are expected to triple by 2050 without effective preventative measures or disease-modifying treatments. By 2050, healthcare costs for AD in the United States alone are estimated to exceed $1 trillion. While medications that provide a modest improvement in AD symptoms are available, with the exception of Biogen's aducanumab, which was approved by the FDA in June 2021 and is pending regulatory approval in Europe and Japan (currently marketed in the U.S. at a wholesale price of $56,000 per patient per year), there are no therapies currently approved to address the underlying pathology of and slow the inexorable progression of the disease. The need for a medical breakthrough in AD treatment and prevention becomes more urgent with each passing year, and we believe that our novel approach can potentially help address this pressing need.

Understanding the Foundation of Our Therapeutic Approach

While the pathology of AD was first described by Dr. Alois Alzheimer in 1906, the amyloid hypothesis was not developed until the Ab peptide was first identified as a major constituent of amyloid plaques in the 1980s. Historically, the primary hypothesis of decades of AD research, known as the amyloid hypothesis, held that AD dementia is the clinical consequence of Ab peptide monomers accumulating into extracellular amyloid plaques, or amyloid plaques, which in turn contribute to the formation of intracellular neurofibrillary tangles composed of the tau protein and cause inflammation, ultimately leading to neuronal cell loss and progressive dementia. The primary constituent of amyloid plaques is the Ab peptide, although other proteins are present to lesser degrees.

The amyloid hypothesis was more firmly established when a series of genetic mutations causing AD were discovered in the early to mid-1990s. These mutations were found in genes coding for the Amyloid Precursor Protein, or APP, and the genes coding for one of the enzymes which cleaves APP, creating the Ab peptide. Based on this hypothesis, a number of monoclonal antibodies currently or previously in clinical development for AD have primarily targeted either Ab monomers or amyloid plaques; for our purposes, this broadly defined class is referred to as anti-Ab/plaque antibodies. Several of these antibodies are currently in late-stage development, one having recently received regulatory approval, and collectively they have provided a biological foothold for treating AD. However, the clinical data available to date indicate some of the potential limitations of these approaches with respect to clinically meaningful patient benefit and safety.

Though alternative hypotheses to the amyloid hypothesis propose that amyloid accumulation is a consequence of another process such as infection, the field has now developed an understanding that the three predominant pools of Ab species exist in vivo: Ab monomers (single Ab peptide), amyloid plaques (insoluble fibrillar Ab), and soluble AbOs (dimers and up to 200-mers). The more recent appreciation of the crucial role of AbOs in the pathologic process is the central tenet of our therapeutic approach.

Our therapeutic approach focuses on targeting AbOs, which we believe are the most toxic and pathogenic form of Ab relative to Ab monomers and amyloid plaques. Growing evidence, spurred by advances in AD research and analytic techniques, supports our view that AbOs are the main instigators of AD neurodegeneration. AbOs have been observed to be potent neurotoxins that cause both acute synaptic toxicity and induce neurodegeneration. Experimentally in animal models, the accumulation of AbOs is associated with core AD neuropathologies, including synapse deterioration and loss, tau phosphorylation, and inflammation. Research has also shown that the accumulation of AbOs is associated with AD-related behavioral deficits, such as learning and memory impairment. In light of this evidence, we believe that blocking the toxicity of AbOs is the most promising approach for the treatment of AD, which led us to discover and develop ACU193.

Our Product Candidate

Our product candidate, ACU193, is a humanized monoclonal antibody that targets soluble AbOs. We are developing ACU193 for intravenous, or IV, administration every four weeks for the treatment of early AD. We believe that ACU193 represents a differentiated approach from current and prior anti-Ab/plaque immunotherapies

because it is highly selective for soluble AbOs. ACU193 has a nanomolar affinity for AbOs, over 500-fold greater selectivity for AbOs over Ab monomers, and limited or no binding to dense core amyloid plaques. We believe ACU193 is the most advanced immunotherapy candidate in development that selectively targets AbOs.

We believe ACU193 has characteristics that make it a promising potential treatment for AD relative to other antibodies that do not selectively target oligomers. ACU193 is engineered to reduce immune effector function signaling and to avoid binding to vascular amyloid, which we expect will reduce the incidence of ARIA observed with amyloid plaque-targeting immunotherapies currently in development for AD. We are currently assessing ACU193 in a proof of mechanism Phase 1 clinical trial involving early AD patients, which we expect to follow with an adaptive Phase 2/3 clinical trial in 2023.

Summary of Clinical Development Plan

In the second quarter of 2021, we initiated a U.S.-based, multi-center, randomized, placebo-controlled, single and multiple ascending dose Phase 1 clinical trial of ACU193 in patients with early AD. The early AD patient group is comprised of individuals who have mild dementia or MCI due to AD, and our trial excludes patients with moderate to severe AD dementia. We plan to enroll 62 patients across seven cohorts, consisting of a single ascending dose Part A (32 participants) and an overlapping multiple ascending dose Part B (30 participants). Part A will contain Cohorts 1 through 4; each cohort will receive a single IV dose between 2mg/kg and 60 mg/kg, or placebo. Part B will contain Cohorts 5 through 7; each cohort will receive a total of three doses of ACU193 or placebo as follows: 10 mg/kg every four weeks (Q4W), 60 mg/kg Q4W, or 60 mg/kg every two weeks (Q2W).

The main objectives of the trial are to evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics, and target engagement of single and multiple ascending doses of ACU193 administered by intravenous infusion. Exploratory outcomes will include cognitive scales and computerized cognitive testing. Our goal is to establish proof of mechanism of ACU193 in early AD patients in order to enable rapid progression into an adaptive Phase 2/3 clinical trial. We intend to provide periodic updates of the status of the Phase 1 trial and anticipate reporting proof of mechanism results by year end 2022.

Summary of Our Nonclinical Data

In nonclinical studies, ACU193 has demonstrated promising characteristics that indicate its potential to inhibit AbOs as a possible therapeutic treatment of AD. ACU193 has high selectivity, with over 500-fold binding selectivity for AbOs compared to Ab monomers and has limited or no binding to amyloid plaques. ACU193 binds to a broad spectrum of small to large soluble AbOs. Additionally, ACU193 has been shown to offer protection from synaptic toxicity by inhibiting binding of AbOs to primary hippocampal neurons. ACU193 has also demonstrated suitable in vivo pharmacology, target engagement, blood-brain barrier penetration and reduction of behavioral deficits. Based on nonclinical studies, AbO target engagement has the potential to be achieved at doses of ACU193 that will be tested in our Phase 1 clinical trial. Lastly, ACU193 has been shown to have an adequate safety margin in Good Laboratory Practice, or GLP, toxicity studies conducted in two animal species. These data indicate that ACU193 has the potential to offer patients a reduction in cognitive decline.

Our Strategy

Our objective is to transform the treatment of AD, and potentially other diseases, by developing innovative therapeutics that target primary drivers of disease pathology. Our initial therapeutic approach is focused on inhibiting and reducing the toxic activity of AbOs, which may allow for synaptic protection and decreased neurodegeneration, leading to more effective treatment for patients with early AD. To achieve this objective, we are pursuing the following strategies:

- **Rapidly advance ACU193 through clinical development in patients with early AD.** Based on the strength of the data we observed in our nonclinical studies, we initiated a Phase 1 clinical trial in

the second quarter of 2021 designed to evaluate safety and tolerability and establish proof of mechanism of ACU193 in early AD patients, which we expect to follow with an adaptive Phase 2/3 clinical trial.

- **Evaluate combination approaches to complement our core ACU193 monotherapy strategy.** Using ACU193 as the foundation of our AD therapy, we will evaluate its potential to be used in combination with drugs currently in development that have complementary mechanisms, which, if successful, could provide additive or even synergistic effects when used with ACU193. These other drugs include various antibodies and small molecules targeting tau, investigational drugs targeting inflammation (TREM2), regenerative drugs (hepatocyte growth factor/MET receptor stimulator) and drugs which putatively improve astrocyte function.

- **Selectively explore potential of ACU193 for other diseases.** Toxic AbOs have been implicated in several disease pathologies in nonclinical and epidemiological studies (e.g., dementia associated with Down Syndrome, glaucoma and retinopathies associated with age-related macular degeneration). Where both human observational data and nonclinical experiments support its therapeutic potential, we may conduct clinical trials of ACU193 in other indications.

- **Expand our portfolio by developing additional molecules.** In the long term, a key element of our portfolio strategy is to advance additional molecule development through in-licensing or development of alternative formulations for or derivatives of ACU193. Additional molecules may utilize complementary mechanisms to ACU193, making them candidates for combination therapies or as next-generation products.

- **Optimize value of ACU193 and future drug candidates in major markets.** We have an exclusive license from Merck to patents claiming the composition and method of use of ACU193. We plan to develop and pursue approval of ACU193 and other future drug candidates in major markets. We anticipate entering into strategic collaborations and partnerships to maximize the commercial potential of ACU193 and any future programs.

Our Team

We are led by an experienced management team with deep scientific and drug development knowledge and a strong commitment to developing safe and effective therapies for patients. Collectively, our management team has a rich set of experiences in industry as well as in academia, and has led clinical development programs at both public and venture-backed clinical-stage companies, as well as with large biopharmaceutical companies such as Eli Lilly & Co., or Eli Lilly. We are led by our President and Chief Executive Officer, Daniel O'Connell, our Chief Financial Officer and Chief Business Officer, Matthew Zuga, our Chief Medical Officer, Eric Siemers, M.D. and our Chief Operating Officer, Russell Barton. Our executive team is complemented our drug development experts, approximately half of whom hold Ph.D. or M.D. degrees and are former members of Eli Lilly's global AD clinical development organization. These team members, including Dr. Siemers and Mr. Barton, have worked for over a decade on early- through late-phase AD drug development, including numerous early-phase AD trials and five large multi-national Phase 3 studies in AD. Together, our management team brings expertise across relevant disciplines, including neuroscience, neurology, translational science, protein manufacturing, biomarker development and quality and regulatory affairs. We believe our team's experience and longstanding working relationships position us to take ACU193 through late-stage clinical development and potentially regulatory approval.

Our board of directors is comprised of our CEO and industry leaders that bring relevant biopharma and finance experience, including Jeffrey Ives, Ph.D., Venture Partner at New Leaf Venture Partners; Jeffrey Sevigny, M.D., Chief Medical Officer at Prevail Therapeutics; Sean Stalfort, President at PBM Capital; Laura Stoppel, Ph.D., Principal at RA Capital Management; and Nathan B. Fountain, M.D., Professor of Neurology at the University of Virginia School of Medicine.

We were founded by Caleb Finch, Ph.D., Grant Krafft, Ph.D. and William Klein, Ph.D., and Drs. Krafft and Klein currently serve as Scientific Advisors. Our clinical and scientific advisory board is comprised of leading researchers in the fields of AD, neurodegeneration and medicine, including Jeffrey Cummings, M.D., Sc.D., director for Transformative Neuroscience at the University of Nevada, Las Vegas; Steven DeKosky, M.D., deputy director at McKnight Brain Institute at the University of Florida; Cynthia Lemere, Ph.D., associate professor of neurology in the Ann Romney Center for Neurologic Diseases at Brigham and Women's Hospital and Harvard Medical School; Colin Masters, M.D., professor and laboratory head of neuropathology and neurodegeneration at The Florey Institute; Stephen Salloway, M.D., M.S., director of neurology at Butler Hospital and professor at Brown University; Jeffrey Sevigny, M.D., who also sits on the Company's board of directors; Reisa Sperling, M.D., professor of neurology at Harvard Medical School; and Michael Weiner, M.D., professor in residence in radiology and biomedical imaging, medicine, psychiatry, and neurology at the University of California, San Francisco.

Our company has been financially supported by a group of institutional investors, and we have raised approximately $67.5 million in funding as of March 31, 2021. Our key investors include BlackRock, PBM Capital, RA Capital Management, Rock Springs Capital, Sands Capital and several other private investors, each of whom has participated in our Series A, Series A-1 or Series B financings or purchased convertible notes or warrants to purchase common stock of the company. On June 17, 2021 we closed the second tranche of our Series B preferred stock financing, pursuant to which certain of our investors funded an additional $30 million. For additional information regarding our Series B preferred stock financing, see "Certain Relationships and Related Party Transactions—Private Placements of Our Securities—Convertible Preferred Stock Financings."

Impact of AD

Alzheimer's disease represents a significant unmet medical need and there are no marketed treatments that address the underlying pathology of the disease with the exception of Biogen's aducanumab, which received FDA accelerated approval in June 2021 and is pending regulatory approval in Europe and Japan. Alzheimer's disease is a progressive neurodegenerative disease that destroys memory and other important cognitive functions and ultimately leads to patient death. Alzheimer's disease is the sixth-leading cause of death in the United States. The disease afflicts more than 6 million people in the United States and more than 32 million people worldwide, and the patient population in the United States is expected to grow to approximately 13 million people in the United States by 2050. Alzheimer's disease can have a significant burden on family and caretakers. In 2020, these caregivers provided an estimated 15.3 billion hours of care valued at nearly $257 billion. The direct costs of caring for individuals with AD and other dementias in the United States were estimated to total $355 billion in 2021, and are projected to increase to $1.1 trillion by 2050, according to the Alzheimer's Association.

Therapeutic Approaches to AD

The development of effective therapeutics addressing the underlying cause of AD is one of the greatest medical challenges facing society. Existing treatments for AD consist of drugs that provide modest improvements in symptoms but have no impact on the underlying disease and are unable to halt or slow disease progression. While the pathology of AD was first described by Dr. Alois Alzheimer in 1906, the amyloid hypothesis was not developed until the Ab peptide was first identified as a major constituent of amyloid plaques in the 1980s. The hypothesis was more firmly established when a series of genetic mutations causing the disease were discovered in the early to mid-1990s. These mutations were found in genes coding for APP or in genes coding for one of the enzymes which cleaves APP, creating the Ab peptide.

Available Treatments: Symptomatic Treatments

Currently available symptomatic treatments include memantine, an N-methyl-D-aspartate receptor antagonist, and cholinesterase inhibitors, a class of drugs that block the normal breakdown of acetylcholine. The first approved cholinesterase inhibitor, tacrine, was approved in 1993, but was later withdrawn from the market

due to liver toxicity. Three other cholinesterase inhibitors were subsequently approved and continue to be used clinically. Memantine is the most recently approved symptomatic treatment drug for AD in 2003 and is indicated for use in moderate to severe AD patients.

*Potential Disease-Modifying Approaches focusing on A*b

Because of the lack of significant improvement provided by these symptomatic drugs, there remains a significant need for therapies that target underlying disease pathology and potentially slow or halt disease progression. Based on the strong linkage between Ab and AD pathology established by decades of research, a range of treatment modalities focusing on Ab have been explored as potential disease-modifying treatments, including g-secretase inhibitors, b-site APP-cleaving enzyme, or BACE, inhibitors and monoclonal antibodies.

Initial attempts at disease modification were made using g-secretase inhibitors and BACE inhibitors, each of which inhibited a different enzyme necessary to produce the Ab peptide. The first Phase 3 clinical trial results from a g-secretase inhibitor, semagacestat, were reported in 2010 and unexpectedly showed modest cognitive worsening. Development of the other g-secretase inhibitor, avagacestat, was also stopped due to cognitive worsening observed in the clinic. At least four BACE inhibitors have reached clinical trials; however, during 2018 and 2019, Phase 3 clinical trial results for many BACE inhibitors, including verubecestat and elenbecestat, also unexpectedly showed modest clinical worsening.

A third class of potential disease-modifying agents, monoclonal antibodies, or mAbs, have targeted Ab monomers or amyloid plaques directly. Some of these monoclonal antibodies, such as solanezumab (an Eli Lilly product), target Ab monomers, while others, such as aducanumab (a Biogen product), target deposited amyloid plaque, and these monoclonal antibodies have been evaluated in Phase 2 and Phase 3 trials over the period from 2012 to 2021. The most advanced monoclonal antibody for the treatment of AD is aducanumab, which received Food and Drug Administration, or FDA, approval in June 2021 and for which Biogen has applied for regulatory approval from the European Medicines Agency, or EMA, and Pharmaceuticals and Medical Devises Agency, or PMDA, in the United States, Europe, and Japan, respectively. As shown in Table 1 below, several of these antibodies have demonstrated some degree of slowing of disease progression in clinical trials, as measured by customary assessments of cognition and function.

Table 1: Percent Slowing of Cognitive/Functional Decline*

Measured Outcome**	solanezumab EXPEDITION 3 (Phase 3)	aducanumab EMERGE (Phase 3)	aducanumab ENGAGE† (Phase 3)	BAN2401 (Phase 2)	donanemab (Phase 2)
ADAS-cog	-11%	-27%	-12%	-47%	-39%
ADCS-ADL	-15%	-40%	-18%	N.A.	-23%
CDR-SB	-15%	-23%	2%	-26%	-23%
MMSE	-13%	-15%	3%	N.A.	-21%
iADRS	-11%	N.A.	N.A.	N.A.	-32%

* Percent Slowing= [1- [(endpoint score-baseline score)active/(endpoint score-baseline score)placebo]]*100%*(-1)

** ADAS-cog: Alzheimer's Disease Assessment Scale – Cognitive Subscale
ADCS-ADL: Alzheimer's Disease Cooperative Study – Activities of Daily Living
CDR-SB: Clinical Dementia Rating – Sum of Boxes
MMSE: Mini-Mental State Examination
iADRS: Integrated Alzheimer's Disease Rating Scale

†: ENGAGE Post-Protocol Version 4 – patients who received at least 14 doses of 10 mg/kg, High Dose cohort achieved 27% improvement on CDR-SB compared to placebo.

A potential limitation of the amyloid plaque-targeting antibodies under development is an adverse effect known as ARIA. ARIA has two different forms, ARIA-E, or cerebral edema, formerly called vasogenic edema, and ARIA-H, or cerebral microhemorrhages. While the mechanism of ARIA is not known with certainty, the prevailing theory is that ARIAs are related to the presence of amyloid plaques around blood vessels in the vast

majority of people with AD, a condition known as cerebral amyloid angiopathy. It is generally believed that the removal of these amyloid plaques by the antibody can result in small hemorrhages, or ARIA-H. ARIA-H occurs in untreated individuals with AD and is increased in individuals treated with antibodies that target amyloid plaques. Increased ARIA-H is correlated with worsening cognition. In contrast to ARIA-H, ARIA-E is hypothesized to result from the leakage of fluid from the blood vessels into the interstitial spaces in the brain, causing edema, or ARIA-E. ARIA-E, in particular, is sometimes associated with symptoms that include worsening of cognition, headache, and gait disturbance, which can be severe enough to lead to hospitalization. ARIA-E usually resolves weeks to months following the cessation of treatment. In clinical trials for anti-Ab/plaque mAbs, surveillance MRI scans are required to detect asymptomatic ARIA. Table 2 below illustrates the rates of ARIA observed in Phase 2 or 3 studies for the most advanced mAbs. Given observed rates of ARIA, from approximately 10% to over 40%, we believe that MRI scans to assess for ARIA are likely to be required in clinical practice for any amyloid plaque-targeting monoclonal antibody that receives regulatory approval.

Table 2: Percent of ARIA Events for Anti-Ab/plaque mAbs*

	Targeting Ab Monomers		Targeting Amyloid Plaques									
	solanezumab EXPEDITION 3 (Phase 3)		aducanumab EMERGE (Phase 3)			aducanumab ENGAGE (Phase 3)			BAN2401 (Phase2)		donanemab (Phase 2)	
	PC	Treated	PC	Low	High	PC	Low	High	PC	High	PC	Treated
ARIA-E	0.2%	0.1%	2.2%	26.1%	34.4%	3.0%	25.6%	35.7%	0.8%	9.9%	0.8%	27.5%
ApoE e4 carriers			1.9%	29.8%	42.5%	2.4%	28.7%	41.8%	1.2%	14.6%	3.6%	44.0%
ApoE e4 non-carriers			2.9%	18.1%	17.9%	4.3%	17.5%	27.7%	0.0%	8.0%		
Any ARIA E or H			10.3%	32.8%	41.2%	9.8%	30.7%	40.3%	N.A.		8.0%	38.9%

PC = Placebo, Low = Low Dose; High = High Dose

*Shows the absence of ARIA after treatment with antibodies targeting Ab monomers (solanezumab) in comparison to the increasing presence of ARIA after treatment at increasing dose levels with antibodies targeting amyloid plaques (aducanumab, BAN2401, and donanemab), indicate that ARIA results from the removal of amyloid plaques around blood vessels and likely does not result, from treatment with antibodies that target other species of Ab, i.e. Ab monomers and AbOs.

Table 3: AD Product Candidates and Target Selectivity and ARIA Profile

	Target Selectivity+				ARIA Profile
Product Candidate	Amyloid plaque	Ab fibrils	Ab monomers	Ab oligomers	Lack of ARIA
ACU193	x	untested	x	✓	✓
aducanumab	✓	✓	x	✓	x
lecanemab BAN2401	✓	✓	x	✓	x
gantenerumab	✓	✓	x	✓	x
donanemab	✓	untested	x	x	x
solanezumab*	x	x	✓	x	✓
crenezumab*	✓	✓	✓	✓	✓
bapineuzumab*	✓	✓	✓	✓	x

*Phase 3 discontinued for primary AD indication

+ There have been no head-to-head clinical trials between any of the product candidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.

Additional Treatment Modalities

While Ab and amyloid are generally considered to be the proximal cause of AD pathology, and alternative hypotheses to the amyloid hypothesis propose that amyloid accumulation is a consequence of other processes such as infection and that other pathogens lead to amyloid accumulation, downstream targets such as tau, inflammation-related targets, and growth factors may eventually be useful approaches in the treatment of AD and are being explored. Some of these treatment modalities have made nonclinical and early stage clinical

progress, although these efforts are still significantly less advanced than those approaches targeting Ab or amyloid plaques.

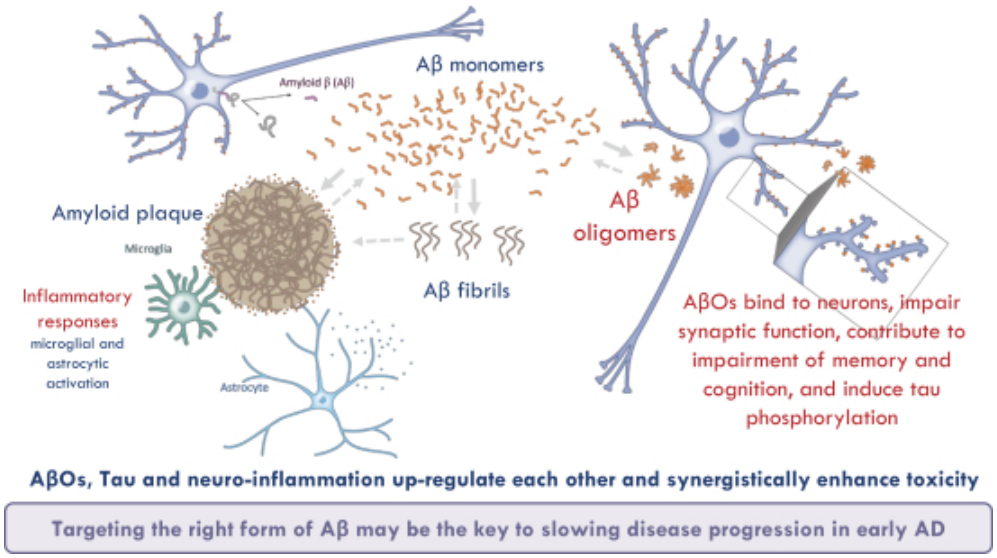
Potential Combination Approaches

The pathology of AD is complex, and many experts in the field expect that combination therapy using drugs with different mechanisms of action, such as tau-based therapies and immune inflammatory modulation, will ultimately prove most successful, similar to cutting edge approaches used in oncology. We believe that a drug targeting AbOs will likely be an important component of a combination treatment. In addition, because symptomatic treatments, such as memantine and cholinesterase inhibitors, affect neurotransmitter systems rather than the underlying AD pathology, we believe that it is likely that they will be used together with disease-modifying treatments.

Growing Interest in the Anti-AbO Hypothesis and AbOs as a Drug Target for AD

An important refinement of the amyloid hypothesis is the recognition that at least three pools of Ab species exist in vivo—Ab monomers, AbOs, and amyloid plaques. Because these pools exist in equilibria, manipulation of one pool may have indirect effects on other pools. For example, reduction of Ab monomers may reduce AbOs to some degree. Limited successes in the clinic have been demonstrated with antibodies targeting Ab monomers, even though Ab monomers themselves are not widely accepted to have toxic properties. Similarly, limited successes in the clinic have been demonstrated using antibodies that target amyloid plaques, although insoluble fibrillar Ab and b-amyloid plaques exhibit relatively low in vitro toxicity and may even serve as an in vivo mechanism for removal of the more toxic soluble Ab species. Both Ab monomers and amyloid plaques can act as sources of AbOs. The positive results of monoclonal antibodies targeting Ab monomers and amyloid plaques, even in the absence of targeting AbOs directly, support the significance of Ab and amyloid in AD and have led to a growing confidence in the field in the amyloid hypothesis broadly. In contrast to the non-toxic Ab monomers and relatively non-toxic amyloid plaques, AbOs are known to bind to neurons, causing synaptic dysfunction and possibly contributing to cognitive impairment, neurodegeneration and cell death. As a result, AbOs are now generally believed to be the most toxic form of Ab. The acute synaptic and chronic neurodegenerative toxicity of AbOs, coupled with their very low in vivo levels, suggests that they may be an optimal therapeutic target compared to Ab monomers and fibrillar Ab species. Therefore, we believe that drugs that directly target AbOs could represent a promising new approach to the potential treatment of AD.

Figure 1: Ab related species and pathophysiology of AD



The precise mechanism of toxicity of AbOs is not fully understood, however numerous studies suggest a mechanism that may include initial reversible memory loss caused by acute AbO-induced disruptions of synaptic plasticity, with progressive dementia attributable, at least in part, to neuronal degeneration induced by chronic exposure to AbOs. AbOs bind to synapses on hippocampal and cortical neurons. In rodent hippocampal slice preparations, AbOs cause rapid inhibition of long-term potentiation, or LTP, and direct injection of AbO solutions into rodent brains leads to reversible impairment of cognitive function. These findings support the view that AbOs may interfere acutely with normal synaptic functions and contribute significantly to the memory loss and cognitive dysfunction characteristic of AD. With regard to neurodegeneration, binding of AbOs to neurons also causes damage within neurons, such as calcium influx and the hyperphosphorylation of tau, which leads to neurofibrillary tangles, another downstream hallmark of AD pathology.

Our Differentiated Approach to the Treatment of AD

We believe that, based on its differentiated mechanism of action, potential for symptomatic improvement and disease modification, and potential for higher dosing, ACU193 has several potential advantages in comparison to other AD drugs that are currently approved or in development:

Differentiated mechanism of action:

- **Potentially addresses an underlying cause of AD**. A growing body of evidence indicates that AbOs, rather than Ab monomers or amyloid plaques, are the primary toxic species that impair neuronal synaptic function and contribute to impairment in memory and cognition and neurodegeneration. We believe that AbOs are an optimal therapeutic target relative to other Ab species and that ACU193 has the potential to be the first anti-AbO directed treatment to prevent or slow the progression of AD.

- **Selectively binds to AbO.** ACU193 is the first monoclonal antibody discovered and designed to selectively target AbOs. In our nonclinical studies, ACU193 demonstrated a greater than 500-fold affinity to bind to AbOs over monomers and did not bind vascular amyloid or dense core amyloid plaques. In comparison, other non-selective anti-Ab/amyloid antibodies in development bind primarily to Ab monomers or amyloid plaques.

- **Binds to a broad spectrum of toxic AbOs.** AbOs are present in the brain in a wide range of sizes. ACU193 has the ability to bind to a broad spectrum of toxic AbOs across various molecular weights. Nonclinical data shows that ACU193 binds to low- to mid-sized molecular weight oligomeric species.

Potential for symptomatic improvement and disease modification:

- **May provide symptomatic improvement in addition to disease modification.** While recent anti-Ab monoclonal antibody results have established a biological foothold for disease-modifying treatments for AD, they fail to demonstrate clinically meaningful symptomatic improvement as measured by AD clinical assessments. Recent nonclinical studies show that AbOs are acutely toxic to neuronal function. By selectively targeting and neutralizing AbO toxicity, we believe that ACU193 has the potential to build upon this biological foothold and provide improvements in cognitive function in addition to disease-modifying effects.

Potential for higher dosing:

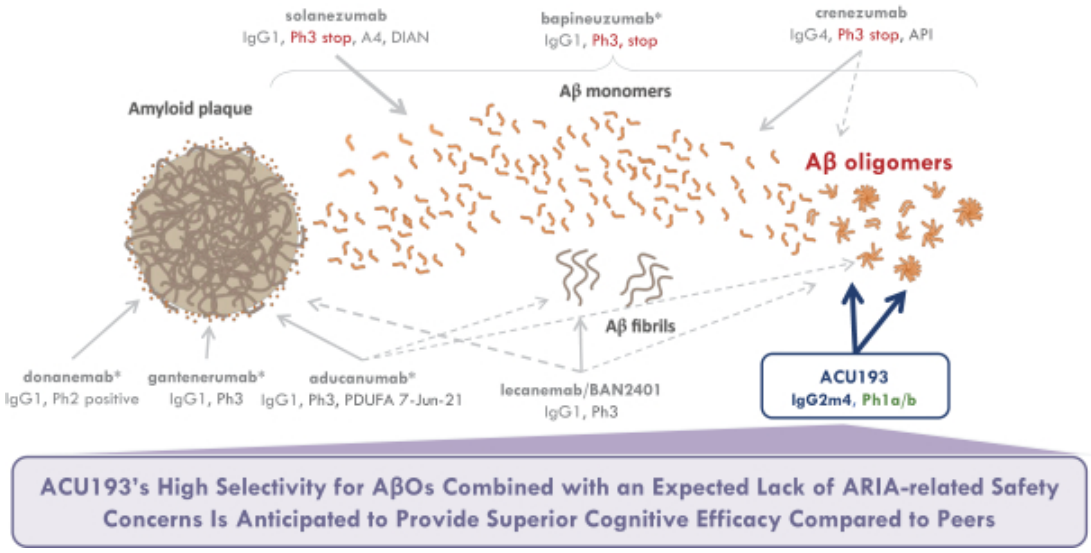
- **Selectivity for AbOs is likely to result in greatly reduced rates of ARIA, allowing a broad therapeutic window.** Amyloid plaque binding antibodies have been associated with ARIA, with IgG1 monoclonal antibodies in particular showing elevated rates of ARIA, which presents a safety

concern. In contrast, ACU193 was engineered as an IgG2m4 subclass monoclonal antibody, which lacks the inflammatory effector functions of other IgG subclasses. Because ACU193 exhibits limited or no binding to amyloid plaques and lacks inflammatory effector functions, we believe that treatment with ACU193 is likely to result in greatly reduced rates of ARIA adverse events relative to IgG1 monoclonal antibodies that bind to plaque. ACU193 has demonstrated a favorable pharmacokinetic profile in nonclinical studies. Based on the results of GLP safety studies in rats and monkeys, we believe that ACU193 has the potential to be clinically well-tolerated at doses up to 60 mg/kg. While certain anti-Ab/plaque antibodies have dose limitations due to ARIA, we believe that ACU193 may be well-tolerated at higher doses.

ACU193: First AD Immunotherapy Candidate to Selectively Target AbOs

Our product candidate, ACU193, is a humanized, affinity-matured, immunoglobulin G2m4, or IgG2m4, subclass monoclonal antibody, derived from the murine immunoglobulin G1, or IgG1, parent, ACU3B3. ACU193 lacks the inflammatory effector functions of other IgG subclasses. ACU193 binds with high selectivity to soluble AbOs (over 500-fold versus Ab monomer in a competitive assay), differentiating ACU193 from other therapeutic monoclonal antibodies, which primarily bind Ab monomers or fibrillar forms of Ab. Binding of ACU193 to AbOs may improve synaptic function and decrease neurodegeneration.

Figure 2: Summary comparison of ACU193 to anti-Ab/plaque antibodies in clinical development



* All IgG1 monoclonal antibodies that bind amyloid plaque have shown high rates of ARIA-E.

Despite recognition that AbOs are key structures contributing to AD memory dysfunction, cognitive deficits, and neurodegeneration, drug discovery efforts targeting these species have been hampered by technical difficulties of generating physiologically relevant preparations of synthetic AbOs, or syn-AbOs. Our founders and early-stage researchers were instrumental in the development of well-characterized preparations of syn-AbOs, initially termed Ab Derived Diffusible Ligands, or ADDLs. ADDL preparations were used as the immunogen to generate and discover ACU3B3, the murine IgG1 parent of ACU193.

In December 2003, we entered into an exclusive license and research and development collaboration agreement with Merck for the research, discovery, development, and commercialization of immunotherapies for

AD. From 2003 to 2011, Merck carried out extensive research leading to the humanization of ACU3B3 and creation of ACU193. ACU193 emerged as the lead product candidate based on its preferential AbO binding, favorable immunogenicity profile, and an absence of off-target binding. In 2011, Merck chose to terminate the program largely based on internal strategic priorities. Consequently, we regained an exclusive, perpetual, irrevocable, royalty-free, worldwide license for the research, development, manufacturing or commercialization of ADDL antibodies, ADDL antigens, or products, including ACU193.

Product Profile

We are developing ACU193, a humanized monoclonal antibody targeting soluble AbOs, as an IV administered treatment for early AD patients. The early AD population is defined as individuals with clinical symptoms consistent with MCI, or consistent with mild dementia who have demonstrated amyloid pathology as assessed with either a positron emission tomography, or PET, or cerebrospinal fluid analysis. A blood test to determine amyloid status may become available in the future. We believe ACU193 has the potential to reduce the rate of cognitive decline by at least 35%, which would be broadly considered as clinically meaningful.

ACU193 is a humanized, affinity-matured, mAb with high selectivity for toxic AbOs versus Ab monomers (greater than 500-fold) and amyloid plaques. With its selective targeting of AbOs, we believe that ACU193 could demonstrate a number of potential valuable clinical outcomes, including the slowing of disease progression and downstream changes in tau and neurofibrillary tangles. Additionally, given the acute toxicity of AbOs in laboratory studies, we believe that some patients could experience an improvement in cognitive function. ACU193's epitope is composed of a configuration of the N-terminal regions of Ab monomers within AbOs. AbOs form when Ab monomers associate co-linearly along the central alpha helical domains through C-terminal regions via stacking phenylalanine polar bonding associations. This presents an advantage for ACU193 binding because the co-linear association sterically restricts spatial configuration of the N-terminal regions presented by AbOs. The N-termini within AbOs are anionic and repel one another, resulting in presentation of N-terminal amino acids, which lead to high affinity for ACU193 binding.

In its current formulation, ACU193 deamidates at physiological pH and body temperature. The rate of deamidation is specific to the matrix and temperature, and results in reduced target binding. To prevent deamidation prior to administration of ACU193 in the clinic, the current drug product is stored frozen at -20°C.

ACU193 is an IgG2m4 subclass mAb which lacks the inflammatory effector function signaling stimulated by other IgG subclasses. The product is expected to be given as an IV infusion once every four weeks. Given the indication, ACU193 treatment would be initiated for patients diagnosed with mild dementia or MCI and would likely be continued for several years. Based on the target and lack of inflammatory effector function, we believe the rate of ARIA may be reduced compared to approaches targeting amyloid plaques. Finally, ACU193 could be used in combination with other therapies that might become available for AD, especially those targeting the tau protein or modulating the immune system.

Nonclinical Data Package

Summary of Nonclinical Studies

In our nonclinical studies, ACU193 has demonstrated: (i) preferential selectivity for binding to AbOs versus other forms of Ab monomers and amyloid plaques in in vitro assays, human AD tissue samples and in vivo transgenic mouse models; (ii) consistent data in support of ACU193 protective effects against AbO synaptic toxicity in in vitro and ex vivo assays; (iii) in vivo pharmacology in multiple species confirming blood-brain barrier penetration, target engagement, and behavioral effects; and (iv) safety data in multiple species including GLP toxicology studies in Sprague-Dawley rats and cynomolgus monkeys confirming an adequate safety margin for the first in human clinical trial. Based on the strength of the data we observed in our nonclinical studies, we initiated a Phase 1 clinical trial in the second quarter of 2021.

Key Characteristics and Data

Selectivity	• Binding characterization studies of ACU193 and its murine parent ACU3B3 show significant preferential selectivity for AbOs versus monomeric and amyloid plaques. – Competitive enzyme-linked immunosorbent assay, or ELISA, data show ACU193 binding to AbOs is 556-fold greater than to Ab monomer based on monomer equivalent weight. This selectivity value is even higher when adjusted for AbOs' molecular weight. – ACU193 binding in brain tissues of transgenic mice following IV dosing shows significant, preferential binding to non-fibrillar, thioflavin-S-negative Ab structures. The occasional co-localization observed with thioflavin-S-positive fibrillar plaques suggests binding to AbOs reported to surround amyloid plaques. • ACU193 binds a broad range of synthetic and human-derived low, mid, and higher molecular weight AbOs (dimers to 200-mers).
Protection from AbO-induced synaptic toxicity	• ACU193 and ACU3B3 prevent binding of AbOs to primary hippocampal neurons in vitro (the average IC50 of ACU193 is 17 nM). • ACU193 and ACU3B3 block AbOs' inhibition of long-term potentiation ex vivo. • ACU3B3 blocks AbO mediated intracellular calcium influx in vitro.
In vivo pharmacology	• ACU193 crosses the blood-brain barrier and demonstrates dose-dependent target engagement in the brain following peripheral administration of antibody. • Blinded studies in transgenic mouse models for AD over a broad range of ages show that treatment with ACU3B3 reduces multiple behavioral deficits. • QPS study of nine- to ten-month-old transgenic mice treated weekly with 20 mg/kg ACU3B3 for four weeks demonstrated significant behavioral improvements during water maze learning test. • Stanford University study of five- to seven-month-old transgenic mice treated weekly with 20 and 30 mg/kg ACU3B3 showed significant improvements during open field and Y-maze tests after four to five weeks of treatment. • Gladstone Institute studies of younger three- to five-month-old transgenic mice with sub-chronic weekly administration of ACU3B3 demonstrated significant behavioral improvements to hyperactivity, emotional response alterations and procedural learning deficits.
Safety	• GLP studies via IV route established no observed adverse effect level, or NOAEL, of 300 mg/kg/dose in a 14-week cynomolgus monkey study and 250 mg/kg/dose in a 28-day rat study. • Studies in transgenic mice indicated low potential for cerebral microhemorrhage.

Selectivity for AbOs

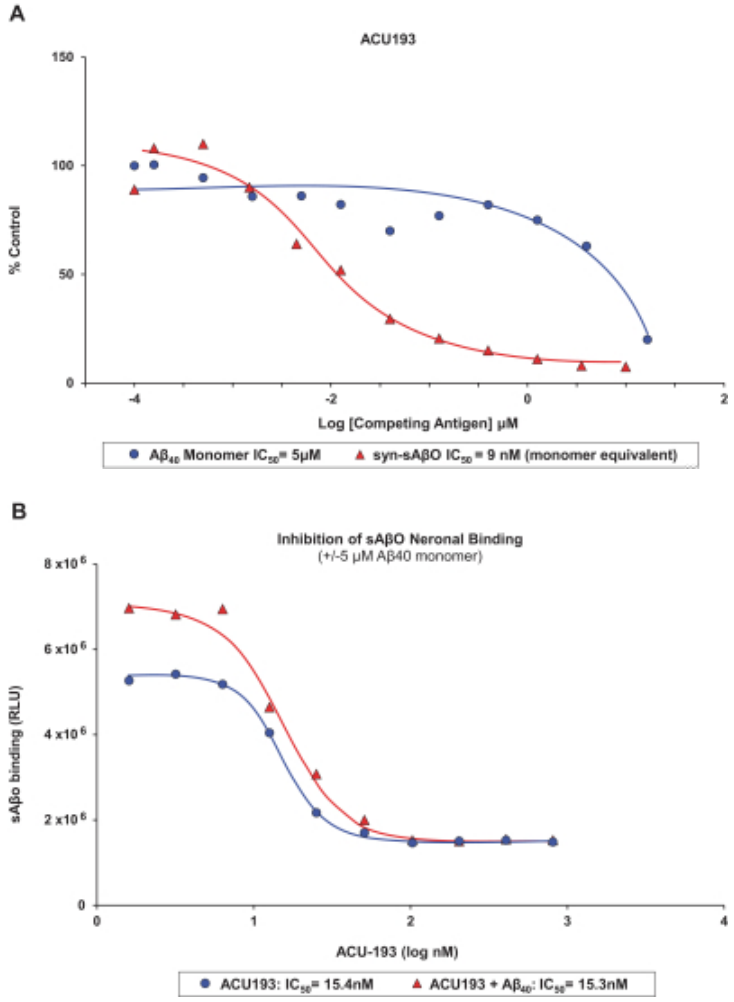
In order to understand ACU193 selectivity for AbOs, we performed biochemical assays and immunohistochemistry experiments.

Selectivity for AbOs versus Ab monomers

We demonstrated that ACU193 shows significant preferential selectivity for AbOs compared to Ab monomers. In a competition ELISA assay, ACU193's binding to AbOs was 556-fold greater than binding to Ab

monomers. Figure 3A shows comparative syn-AbO versus Ab monomer affinity data for ACU193, and illustrates the high selectivity of ACU193 for AbOs. Further evidence of ACU193 selectivity for syn-AbOs was obtained using a very high concentration of monomeric Ab, 5 µm, which did not decrease binding to syn-AbOs (Figure 3B). We believe ACU193's selectivity for AbOs in the presence of abundant Ab monomers is representative of the in vivo levels of these Ab species in AD patients. Thus, ACU193 does not experience "target distraction" from non-toxic Ab monomers in an environment simulating brain interstitial fluid.

Figure 3: [A] Competitive ELISA for ACU193 binding to syn-AbO or monomeric Ab_{40} [B] 5µM monomeric Ab did not substantially change binding to syn-AbO



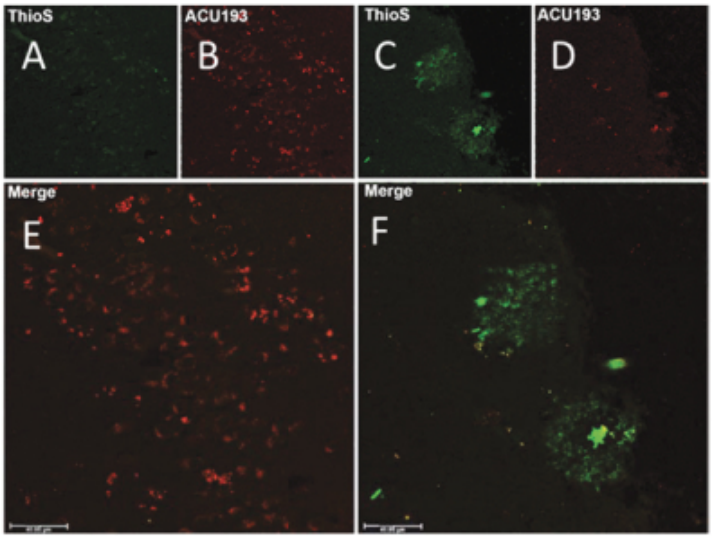
These results support the conclusion that selectivity of ACU193 for AbOs is maintained in a biochemical environment simulating the brain.

Selectivity for AbOs versus amyloid plaques

We have shown in our nonclinical data that ACU193 binds AbOs from AD patients with limited or no binding to amyloid plaques. In Figure 4 below, thioflavin S-positive b-amyloid plaques are shown in green

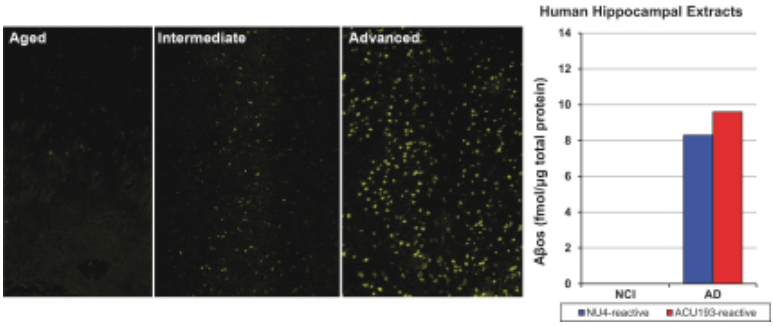
fluorescence while ACU193 binding is shown in red fluorescence. ACU193 binds significantly in regions that are thioflavin-S-negative, i.e., without amyloid plaques (Figure 4, Panels B and E), but only infrequently and minimally binds to thioflavin-S-positive fibrillar Ab structures (Figure 4, Panel D); close examination shows possible co-localization of ACU193 with thioflavin-S-positive Ab deposits in their periphery (Figure 4, Panel F). We believe the most likely explanation of ACU193 infrequent binding near the periphery of some amyloid plaques is due to binding to AbOs that surround the periphery of amyloid plaques. Taken together, these results are consistent with the concept that ACU193 binds endogenous AbOs, does not block binding by thioflavin-S, and, importantly, preferentially binds AbOs versus fibrillar Ab.

Figure 4: ACU193 binding to AbOs versus amyloid plaques



The upper left portion of the immunohistochemistry figure shows that in areas with no amyloid plaque binding (no green fluorescence staining, A) there is substantial binding by ACU193 (red fluorescence staining, B) that is not related to amyloid plaque. The merge of these panels (Panel E) shows ACU193 binding with no amyloid plaque present. On the upper right portion of the Figure, the area that is positive for amyloid plaque (green fluorescence staining, C) shows minimal ACU193 binding (red fluorescence staining, D). The merge of these panels (F) shows the minimal binding of ACU193 (red fluorescence staining) on the periphery of the amyloid plaque (green fluorescence staining), most likely related to AbO binding in the halo of the amyloid plaque.

Figure 5: AD stages based on AD neuropathic change, or ADNC, scoring

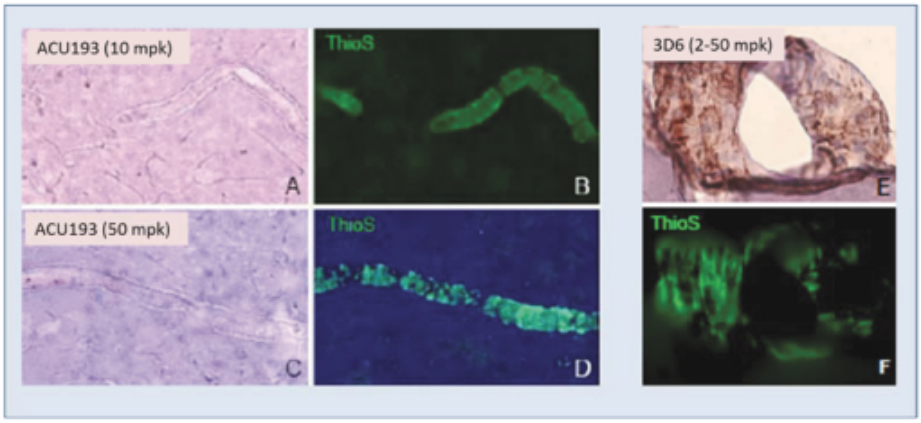


ADNC scoring is a combination of amyloid plaque levels, neuritic plaque levels, and neurogibrillary tangle pathology, or NFT, levels (Braak stage). In human tissue samples, ACU193 shows a disease state-relevant signal based on immunohistochemistry

shown on the left from aged controls, intermediate AD pathology, and advanced AD pathology. On the far-right panel, ACU193 detects AbOs in soluble hippocampal extracts from an autosomal dominant AD patient, but not from a cognitively normal patient.

Furthermore, we have demonstrated that ACU193 does not bind to amyloid plaque surrounding blood vessels (cerebral amyloid angiopathy). In a study of transgenic mice, we did not observe binding to vascular amyloid, in contrast to hu3D6 (bapineuzumab), which displayed significant binding at all dose levels.

Figure 6: ACU193 versus hu3D6 binding to vascular amyloids



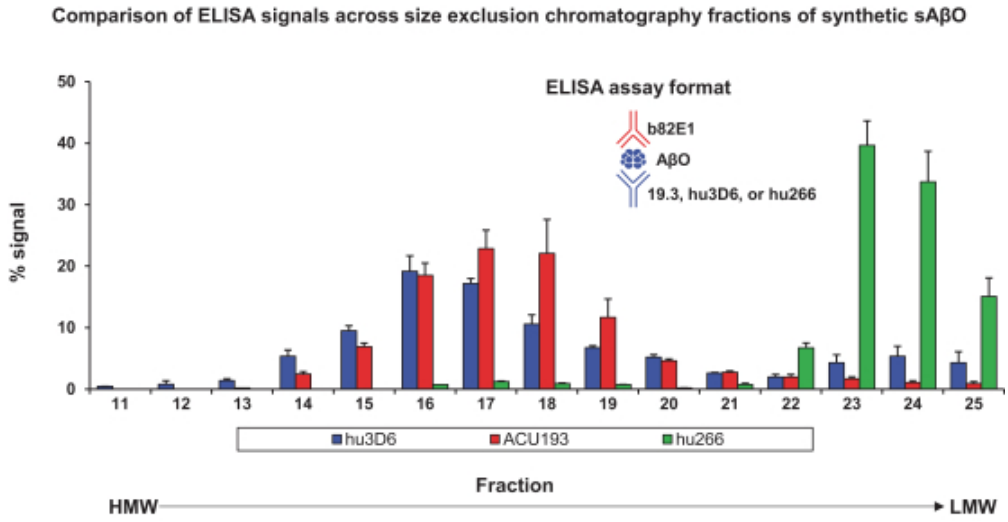
ACU193 (A and C) shows no binding to the vascular amyloid that is visible in the vessels stained by thioflavin-S (green fluorescence, B and D) in the brain 24 hours following IV dosing of 10 or 50 mg/kg in seven- to eight-month-old Tg2576 mice. In contrast, hu3D6 (bapineuzumab) binds vascular amyloid (E) at all dose levels assessed.

The data above related to vascular plaque binding support our belief that ACU193 is unlikely to have an ARIA liability. Given that the amyloid plaque-binding properties of multiple antibodies have been associated with ARIA (e.g., aducanumab, BAN2401, gantenerumab, and donanemab), we believe that ACU193's negligible binding of amyloid plaques, including amyloid plaques associated with cerebral amyloid angiopathy, provides evidence that ARIA is unlikely to be associated with this antibody.

Binding to a broad spectrum of molecular weight AbOs

In addition, we demonstrated that ACU193 binds a broad spectrum of AbOs across various molecular weights. In another series of experiments, syn-AbOs were fractionated by size exclusion chromatography and characterized by ELISA using ACU193, hu3D6 (bapineuzumab) or hu266 (solanezumab) as the capture antibody and biotinylated anti-human Ab antibody 82E1 for detection. These data show ACU193 binds mid to higher molecular weight AbOs, with preferential binding to mid-molecular weight oligomers compared to hu266. This range of molecular weights is very similar to the range of molecular weights of oligomers thought to be most toxic.

Figure 7. Binding of humanized antibodies to size exclusion chromatography fractions of synthetic Ab species



Size exclusion chromatography fractionation of syn-AbO prep with sandwich ELISA detection. hu3D6 is also known as bapineuzumab; hu266 is also known as solanezumab. These data demonstrate the specificity of ACU193 for oligomers versus monomers, and also demonstrate a range of oligomers that are bound by ACU193.

Collectively the data show that ACU193 binds AbOs with 556-fold selectivity versus Ab monomers and demonstrates limited to no binding to amyloid plaques, but does bind to a broad range of synthetic and endogenous low, mid, and higher molecular weight AbOs. Based on these and other data, we believe that ACU193 can target therapeutically relevant AbOs in the brain of early AD patients.

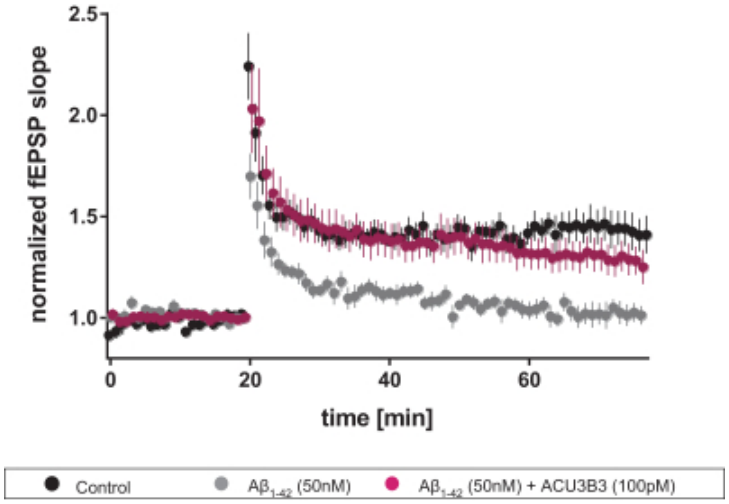
Protection from AbO-induced synaptic toxicity

In order to understand ACU193's ability to either neutralize or limit AbO-induced physiological changes, we performed ex vivo studies using brain slices or cell cultures.

Prevention of AbO toxic effects on neuronal electrophysiology

In ex vivo studies using the murine hippocampal slice LTP model, pre-incubation with ACU193 or ACU3B3 has been shown to prevent the LTP deficit caused by AbOs (formed by administration of 50nM Ab_{1-42}). Long term potentiation is an electrophysiological phenomenon demonstrated in neurons that may be associated with memory formation and other important neurological functions. Disruption of LTP has been associated with animal models in a variety of central nervous system disease states.

Figure 8. Effects of ACU3B3 and ACU193 on AbO-induced change in LTP

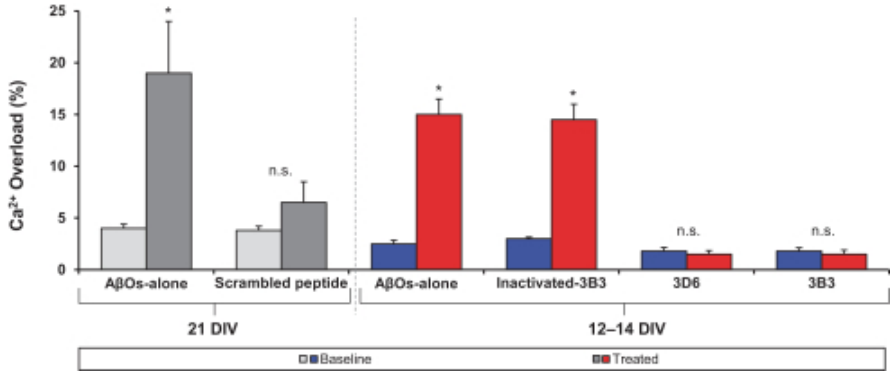


Note that AbOs disrupted normal LTP findings, but that pre-incubation with ACU3B3 prevented that disruption.

Prevention of toxic effects of AbOs on calcium homeostasis

Exposure to ACU3B3 has been shown to prevent calcium overload in cortical neuronal cultures induced by direct application of syn-AbOs (Figure 9). Disruptions in calcium homeostasis that cause cellular dysfunction have been implicated in a number of disease states, including myocardial infarction and stroke. Further, AbOs have been shown to cause disruption of calcium homeostasis, and thus, restoration of intracellular calcium to normal levels could serve as a functional indicator of potential treatment effect in AD. Multiphoton microscopy was used to examine the relationship of syn-AbO and neuronal calcium homeostasis in vitro (Figure 9). Direct application of syn-AbOs elicited calcium elevations in cortical neuronal cultures. Prior exposure to antibodies ACU3B3 and 3D6 prevented this calcium elevation (Figure 9). These results demonstrate that syn-AbOs induce elevated concentrations of intracellular neuronal calcium and that ACU3B3 prevented the syn-AbO-induced calcium overload.

Figure 9: Effect of ACU3B3 on calcium homeostasis



The relationship of syn-AbO and neuronal calcium homeostasis in the presence and absence of ACU3B3 was studied in primary cultures of transgenic APP-PS1 mouse cortical neurons. Multiphoton microscopy was used to obtain images of neuronal cultures at 12–14 days in vitro, or DIV, or 21 DIV. Cortical regions were identified and reimaged before and after topical applications of syn-AbOs to allow comparison of resting calcium within the same neuronal compartments. After baseline calcium was obtained, the cultures were treated with antibody-immunodepleted syn-AbOs (1 mL of 3 nM syn-AbOs with 9 µg of antibody) or syn-AbOs alone for 45 minutes. The cultures were then re-imaged in the same areas in the dish. Taken together, these studies show that ACU3B3 prevents the toxic effect of AbOs on calcium homeostasis.

In Vivo Pharmacology

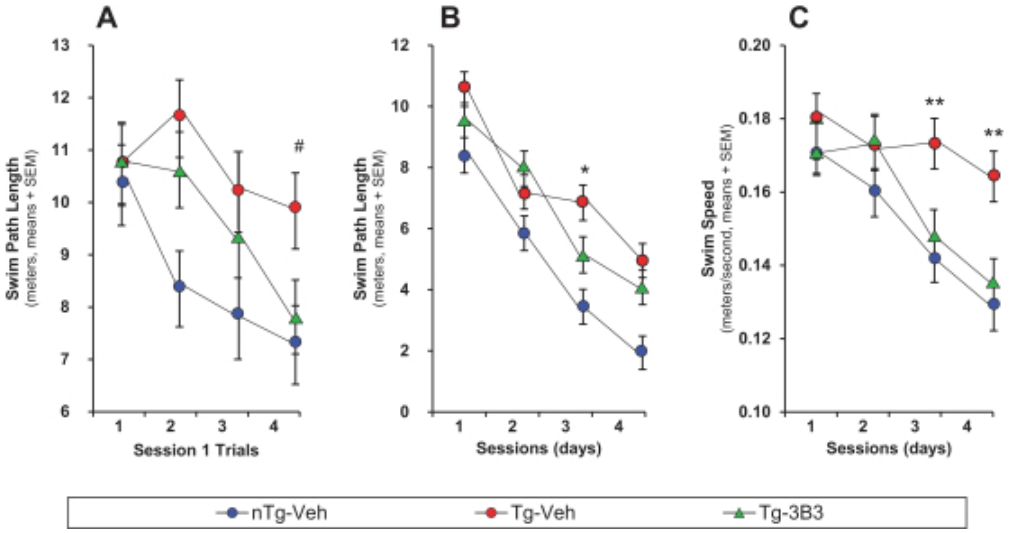
In order to understand the effects of ACU193 in intact animals, we performed behavioral studies in transgenic mice with genetic alterations that overproduce a mutant amyloid precursor protein that forms amyloid plaques. The transgenic mouse models are generally based on autosomal dominant mutations in the APP gene causing rare forms of human AD. Transgenic mouse models using these mutations may not cause the full spectrum of AD pathology, but they do provide relevant animal models for drug development in AD.

In vivo behavioral studies in multiple transgenic mouse models for AD

The behavioral studies described below, performed at three different laboratories, indicate in vivo central pharmacologic activity of peripherally administered ACU3B3. The behavioral effects seen in these studies indicate that sufficient amounts of ACU3B3 cross the blood-brain barrier to engage the target, resulting in behavioral improvements in these transgenic mice. The Phase 1 clinical trial includes doses in the range used in these nonclinical studies.

A study conducted at QPS and using nine- to ten-month-old APP/SL transgenic mice treated weekly with 20 mg/kg ACU3B3 for four weeks demonstrated statistically significant behavioral improvements in swim path length and swim speed during the water maze learning test (Figure 10).

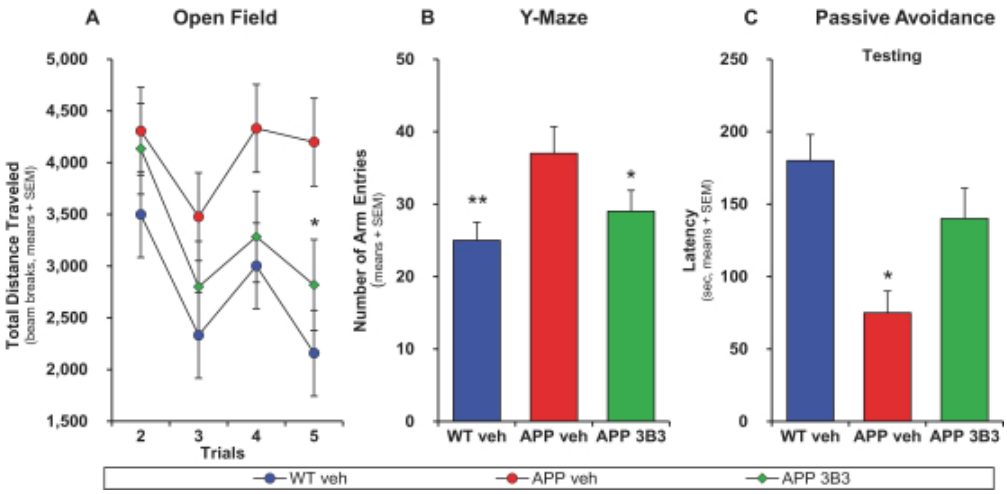
Figure 10: Results of ACU3B3 treatment in mice study



ACU3B3 treatment in nine- to ten-month-old APPSL mice (n=10/group) improves performance on the first day of water maze training (A; p=0.057), decreases swim path length (B; p=0.034), and reverses a swim speed abnormality (C; p<0.02).

In a separate study conducted at Stanford University, the hyperactivity phenotype of five- to seven-month-old Thy1-hAPP/SL transgenic mice in the open field and Y-maze tests was also significantly reduced after four to five weeks of treatment with ACU3B3 (20 and 30 mg/kg, weekly). Prior to dosing, Thy1-hAPP/SL mice showed increased activity in the activity chamber compared to wild-type mice. After treatment with ACU3B3, Thy1-hAPP/SL mice activity fell to a level comparable to wild-type mice, particularly activity in the center of the test arena (Figure 11A). Similar effects of ACU3B3 were found with changes in Y-maze behavior (Figure 11B) and passive avoidance (Figure 11C).

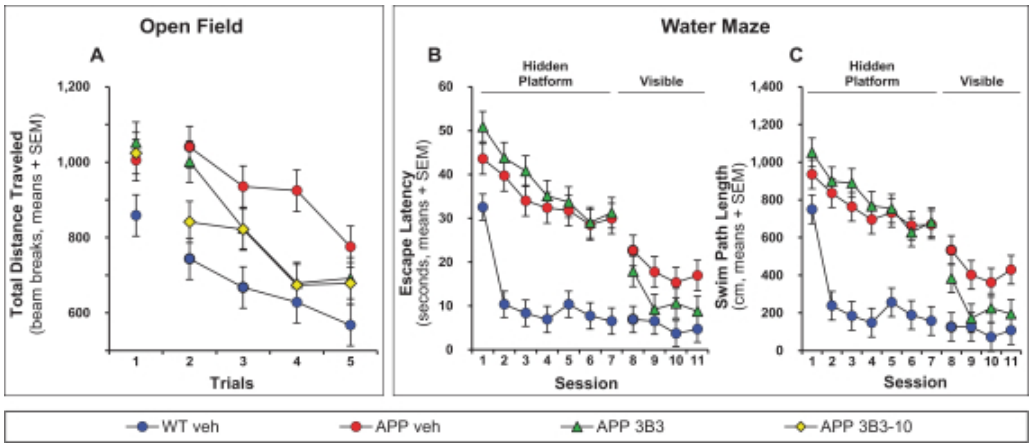
Figure 11: ACU3B3 treatment at 20 mg/kg in five- to seven-month-old Thy1-hAPP/SL mice (n=13-14/group, means + SEM)



[A] Open field total distance measurement, APP-Veh vs. APP-3B3, *p=0.029. [B] Y-maze arm entries, APP-Veh vs APP-3B3, *p=0.045; APP-Veh vs WT-Veh, **p=0.007. [C] Passive avoidance latency, APPSL-APP3B3 vs. APPSL-Veh trended for drug effect, but was not statistically significant.

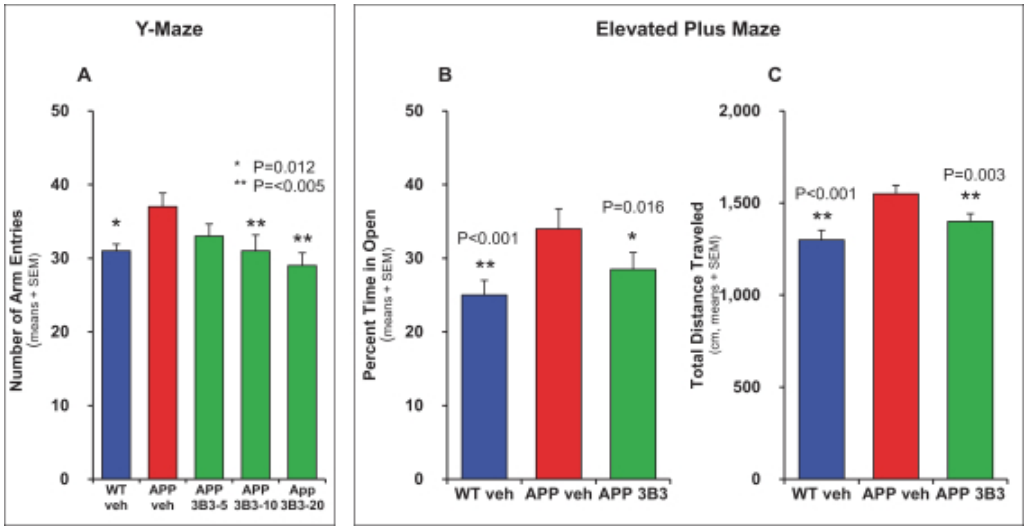
In separate studies conducted at the Gladstone Institute in young three- to five-month-old hAPP/J20 mice, behavioral abnormalities in these mice were reduced after chronic treatment with ACU3B3. Treatment ameliorated the hyperactivity phenotype, emotional response alterations and procedural learning deficits in this mouse model and hyperactivity in the Y-maze test was reduced dose-dependently (5 < 10 = 20 mg/kg) (Figure 12).

Figure 12: Open field and water-maze behavior in three- to five-month-old hAPP/J20 mice following repeat weekly IP dosing with ACU3B3 (n=13-14/group)



[A] Open field activity after four weekly doses. [B], [C] Water-maze behavior following eight weekly doses.

Figure 13: Y-maze and elevated plus-maze behavior in three- to five-month-old hAPP/J20 mice following repeat, weekly IP dosing with ACU3B3 (n=13-14/group)



[A] Y-maze activity after six weekly doses. [B], [C] Elevated plus-maze behavior following nine weekly doses.

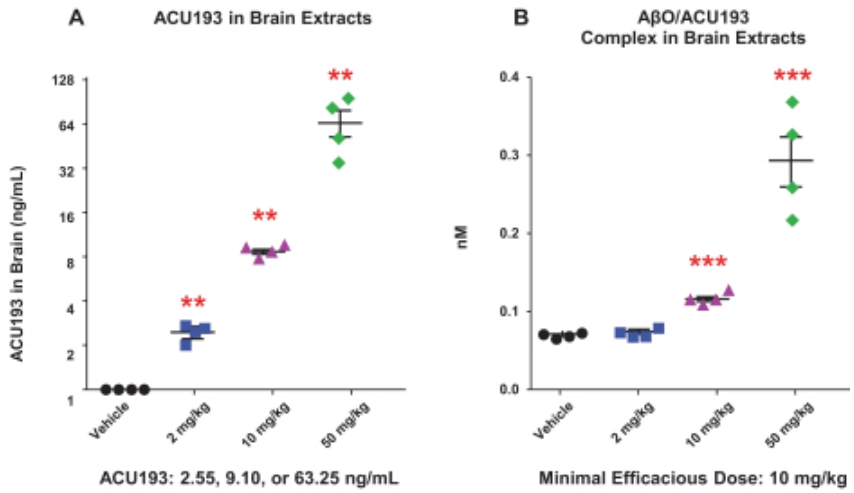
Taken together, these behavioral studies, performed at three different laboratories, indicate in vivo central pharmacologic activity of peripherally administered ACU3B3. The behavioral effects seen in these studies indicate that sufficient amounts of ACU3B3 cross the blood-brain barrier to engage the target, resulting in behavioral improvements in these transgenic mice. The range of doses used in these nonclinical studies is covered in the Phase 1 clinical trial.

Pharmacokinetics and Pharmacodynamics

ACU193 has demonstrated favorable pharmacokinetics and pharmacodynamics based on a number of nonclinical studies. ACU193 could be detected in plasma, CSF, and brain tissue of Tg2576 mice, rats, dogs, and rhesus monkeys following IV injection. Penetration of ACU193 into the brain was demonstrated by direct measurements of brain levels in Tg2576 mice, rats, and dogs, and by measurements of CSF levels in rats and rhesus monkeys. Brain levels were approximately 0.02% of plasma levels and CSF levels ranged from 0.05 to 0.15% of plasma levels, showing penetration of ACU193 into the brain. Toxicokinetic data collected as part of GLP toxicity studies in Sprague Dawley rats and cynomolgus monkeys showed clearance of 1 to 3 mL/h/kg and terminal half-life of approximately seven days.

Brain penetration and in vivo binding of ACU193 was explored in seven-month-old Tg2576 mice dosed intravenously with 2, 10 and 50 mg/kg of ACU193 or hu3D6 (bapineuzumab), and perfused brain tissue was collected 24 hours after dosing for analysis. A dose dependent increase in brain levels of ACU193 (Figure 14A) and ACU193/AbO complex (Figure 14B) was demonstrated, with a minimum effective dose for target engagement of 10 mg/kg.

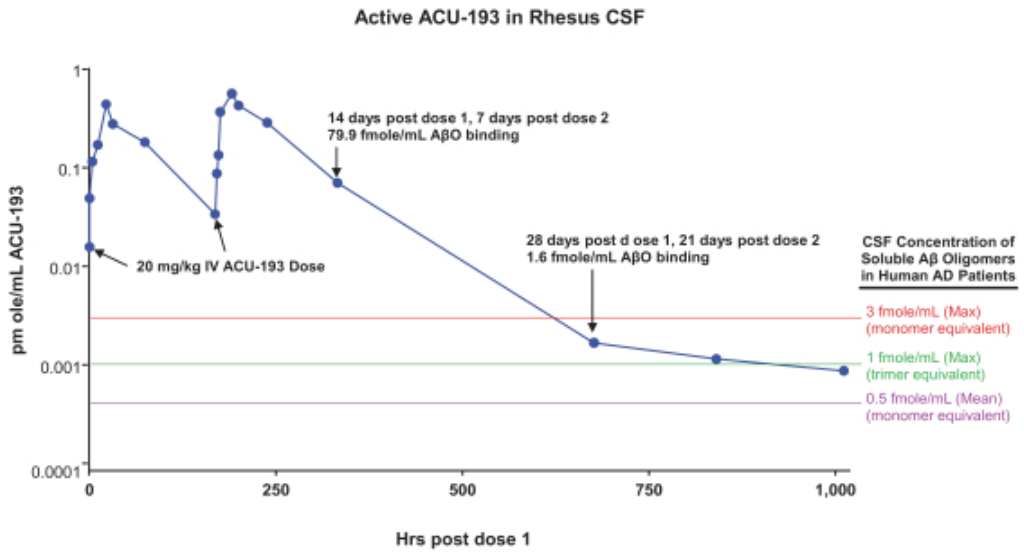
Figure 14: Levels of ACU193 and AbO/ACU193 complexes in the brain 24 hours following IV dosing in seven-month-old Tg2576 mice (n = 4/cohort)



These results show ACU193 can penetrate the blood-brain barrier and bind endogenous AbOs.

Additionally, a study of pharmacokinetics in CSF was conducted in rhesus monkeys. An intrathecal catheter was implanted in the monkeys, and two doses at 20 mg/kg IV were administered. As shown in Figure 15, the concentrations of ACU193 in CSF should provide adequate target engagement with every four week dosing.

Figure 15: Comparison of ACU193 levels in rhesus CSF to CSF Levels of AbO in human AD patients



Following two doses of 20 mg/kg ACU193 CSF concentrations were sufficient to provide target engagement at 28 days. An estimate of 1 fmole/mL for oligomer concentration is conservative given that it is based on oligomers consisting of trimers.

Safety Profile

Good Laboratory Practice studies using IV administration of ACU193 established a no-observed-adverse-effect level, or NOAEL, of 250 mg/kg/dose, which was the maximum feasible dose, given every two weeks in a 28-day study in Sprague-Dawley rats. The NOAEL in cynomolgus monkeys was 300 mg/kg/dose in a 14-week study in cynomolgus monkeys using IV dosing every two weeks. In Sprague Dawley rats, no adverse findings were noted. In the 14-week study in cynomolgus monkeys, doses of 60, 300, or 600 mg/kg/dose ACU193 once every two weeks were administered. Three animals administered the highest 600 mg/kg/dose were sacrificed early for humane reasons on Days 43 or 60 due to ACU193-related, anaphylactoid-type reactions. Thus, the 300 mg/kg/dose is considered the NOAEL for cynomolgus monkeys. The NOAELs of 300 mg/kg and 250 mg/kg compare favorably to the highest dose of ACU193 being used in our Phase 1 clinical trial (60 mg/kg).

Based in part on binding to AbOs rather than amyloid plaque, ACU193 has the potential to have a lower rate of ARIA than plaque-clearing anti-amyloid antibodies. Additionally, ACU3B3 showed no apparent increased risk of microhemorrhage when administered in vivo for three months in aged Tg2576 mice, as compared with 3D6, a plaque binding antibody used as a positive control.

With regard to effector function and possible inflammatory effects generally, ACU193 is an IgG2m4 subclass antibody which lacks inflammatory effector function signaling stimulated by other IgG subclasses. Thus, the risk for inflammatory effector function using ACU193 is considered to be low.

Investigational New Drug Application

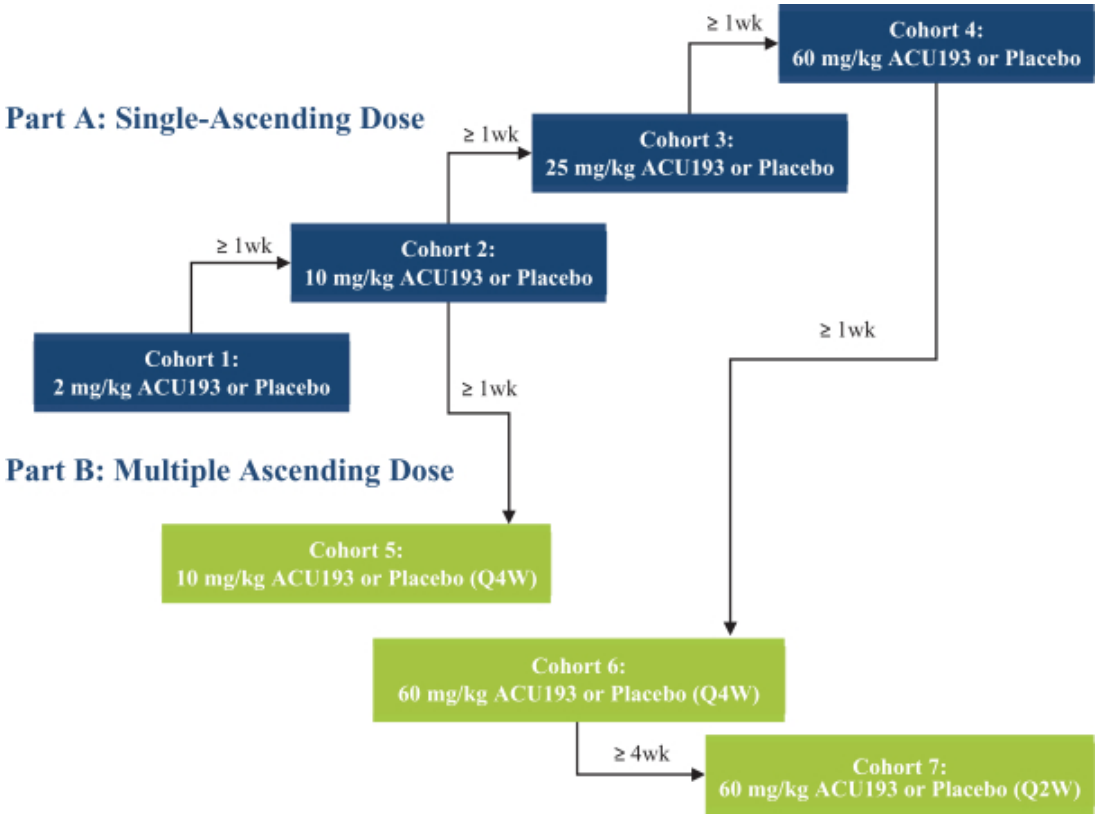
In October 2020, we submitted an investigational new drug, or IND, application for ACU193 to the FDA. The FDA initially placed the IND on clinical hold until we were able to address the FDA's concerns regarding potential off-target binding of ACU193 with an additional nonclinical tissue cross reactivity (TCR) study in human, monkey, and rat samples. The supplemental TCR study supported the in-vivo GLP safety results. On April 9, 2021, we received an FDA letter advising us that the clinical hold had been removed and authorizing us to proceed with a first-in-human, Phase 1 clinical trial.

Clinical Development Plan

Phase 1 Clinical Trial in AD

In the second quarter of 2021, we initiated a multi-center, randomized, placebo-controlled, single and multiple ascending dose Phase 1 clinical trial of ACU193 in 62 patients with early AD. The early AD patient set is comprised of individuals who have mild dementia or MCI due to AD. Patients with moderate to severe dementia will not be included. The main objectives of the trial are to evaluate the safety, tolerability, pharmacokinetics, and target engagement of single and multiple ascending doses of ACU193 administered by IV infusion. Pharmacodynamics effects including cognitive testing will be performed on an exploratory basis. The trial will be conducted in two overlapping parts: Part A (the single ascending dose portion) and Part B (the multiple ascending dose portion).

Figure 16: Design of Study ACU-001



Trial Design Part A – Single Ascending Dose

We expect to enroll 32 participants in Part A of our clinical trial, with the participants randomized in a 6:2 ratio into one of four cohorts to receive a single dose of ACU193 or placebo as follows:

- Cohort 1: One IV dose of ACU193 (2 mg/kg) or placebo.
- Cohort 2: One IV dose of ACU193 (10 mg/kg) or placebo.
- Cohort 3: One IV dose of ACU193 (25 mg/kg) or placebo.
- Cohort 4: One IV dose of ACU193 (60 mg/kg) or placebo.

The double-blind treatment period for Cohorts 1-4 of Part A will be approximately 20 weeks and will include ten visits (four inpatient and six outpatient). A sequential dosing scheme will be followed for each cohort in Part A. Dosing of Cohorts 1-3 will begin at least one week after all participants in the immediately preceding lower-dose cohort have received one administration of study drug and safety data have been reviewed by our internal blinded safety team. Dosing of Cohort 4 will begin at least one week after all participants in Cohort 3 have received one administration of study drug and these safety data, along with Cohort 2 aggregate pharmacokinetic data, have been reviewed by our internal blinded safety team. An unblinded, independent Data Monitoring Committee, or DMC, will also monitor the trial and can review safety data on an ad hoc basis if requested by the blinded study team.

Trial Design Part B – Multiple Ascending Dose

We expect to enroll 30 participants in Part B of our clinical trial, with the participants randomized in an 8:2 ratio into one of three cohorts to receive a total of three doses of ACU193 or placebo as follows:

- Cohort 5: One IV dose of ACU193 (10 mg/kg) or placebo once every four weeks.
- Cohort 6: One IV dose of ACU193 (60 mg/kg) or placebo once every four weeks.
- Cohort 7: One IV dose of ACU193 (60 mg/kg) or placebo once every two weeks.

Participants in Cohorts 5 and 6 will be evaluated over approximately 35 weeks, consisting of a seven-week screening period followed by a 28-week, double-blind treatment period. A follow-up safety check will be performed approximately eight weeks after the final visit of the double-blind treatment period.

Participants in Cohort 7 will be evaluated over approximately 31 weeks, consisting of a seven-week screening period, followed by a 24-week, double-blind treatment period. A follow-up safety check will be performed approximately eight weeks after the final visit of the double-blind treatment period.

In order to maintain participant safety for Part B of the clinical trial, dosing of Cohort 5 will begin at least one week after all participants in Cohort 2 of Part A have received one administration of ACU193 or placebo and the Cohort 2 safety data have been reviewed by our internal blinded safety team. For Cohort 6, dosing will begin at least one week after all participants in Cohort 4 of Part A have received one administration of ACU193 or placebo and the Cohort 4 safety data have been reviewed by our internal blinded safety team. Dosing of Cohort 7 will begin after four or more participants in Cohort 6 have been administered two doses of ACU193 or placebo and the Cohort 6 safety data, along with aggregated pharmacokinetic data from Cohort 4, have been reviewed by our internal blinded safety team. If a potential safety signal, an unexpected adverse reaction, or higher than expected exposure occurs, our internal blinded safety team will notify the independent, unblinded DMC to review the safety and pharmacokinetic data and advise on dose escalation. Cohort 7 will allow for additional pharmacokinetic modeling to more accurately determine the half-life of ACU193 if every two-week dosing is necessary.

Endpoints

Our goal for the Phase 1 trial is to establish clinical proof of mechanism of ACU193 in patients with early AD. The endpoints we will measure as part of this trial include:

Primary Endpoint

- safety and immunogenicity, including assessment for ARIA;

Secondary Endpoints and Exploratory Objectives

- pharmacokinetics in plasma;
- determination of CSF concentrations of ACU193;
- evaluation of central target engagement as measured by levels of ACU193 AbO complex in CSF;
- evaluation of possible changes in concentration of biomarkers for AD in CSF or blood;
- evaluation of possible changes in amyloid plaque load as determined by PET imaging;
- evaluation of possible changes in cerebral blood flow as determined by MRI imaging, using Arterial Spin Labeling (ASL) pulse sequence; and
- evaluation of possible changes in cognitive, functional, and behavioral measures using computerized testing and standard clinical measures for AD.

We expect to report proof of mechanism results by year end 2022, with periodic updates including trial progress and cohort advancement. Safety will be evaluated periodically during the trial both by a blinded study team and an unblinded monitoring committee.

Future Clinical Trials

Subject to establishment of proof of mechanism of ACU193 and the safety and immunogenicity results of the Phase 1 clinical trial, we intend to advance ACU193 into later stage clinical trials. We plan to explore a proposed therapeutic dose of ACU193 in a future Phase 2/3 clinical trial based on safety, pharmacokinetics and pharmacodynamics assessments of the various dosing cohorts in the Phase 1 trial. The Phase 2/3 trial is being designed as an adaptive trial, such that after a planned interim analysis of clinical and biomarker changes, a decision could be made to increase the enrollment of the trial to be adequately powered as a Phase 3 pivotal trial, or to continue the trial as a Phase 2 clinical trial. The Phase 2/3 trial will utilize standard cognitive measures that are widely employed in AD trials and most highly sensitive to changes in mild AD patients, including ADAS-COG 13, CDR-sb, ADCS-iADL, iADRS, MMSE, and potentially others including computerized neuropsychological testing. Additionally, a number of biomarkers may be studied including blood flow as determined by ASL pulse sequence on MRI, plasma or CSF p-tau, amyloid PET scanning, and tau PET scanning. Selected endpoints will be used to inform the interim decision whether to expand the trial and whether to initiate a second Phase 3 clinical trial.

Combination Potential

While ACU193, if successful, will likely be a foundational treatment for people with early AD, it also could be used as part of a combination treatment regimen. The pathology of AD is complex, and many experts in the field expect that combination therapy using drugs with different mechanisms of action, such as tau, immune modulation, glial cells such as microglia and astrocytes, and growth factors, will ultimately prove most successful, similar to cutting edge approaches used in oncology. In addition, because symptomatic treatments, such as memantine and cholinesterase inhibitors, affect neurotransmitter systems rather than the underlying AD pathology, we believe that it is likely that they will be used together with disease-modifying treatments.

Manufacturing

We do not currently own or operate facilities for product manufacturing, storage and distribution, or testing. We contract with third parties for the manufacture of ACU193. Because we rely on contract manufacturers, we employ personnel with extensive technical, manufacturing, analytical and quality experience. Our staff has strong project management discipline to oversee contract manufacturing and testing activities, and to compile manufacturing and quality information for our regulatory submissions.

Manufacturing is subject to extensive regulation that imposes various procedural and documentation requirements and that governs record keeping, manufacturing processes and controls, personnel, quality control and quality assurance, and more. Our systems and our contractors are required to be in compliance with these regulations, and compliance is assessed regularly through monitoring of performance and a formal audit program.

Our current supply chains for ACU193 involve several manufacturers that specialize in specific operations of the manufacturing process, including raw materials manufacturing, drug substance manufacturing and drug product manufacturing. We currently operate under work order programs for ACU193 with master services agreements in place that include specific supply timelines, volume and quality specifications. We believe our current manufacturers have the scale, the systems, and the experience to supply our currently planned clinical trials.

Competition

We face competition from several different institutions, including pharmaceutical and biotechnology companies, research institutions, governmental organizations and universities developing novel therapies for AD. We believe that the key factors affecting the clinical and commercial success of ACU193 will include safety profile, efficacy, cost, method of administration, level of marketing activity, insurance reimbursement and intellectual property protection.

If approved, ACU193 will compete with therapies currently approved for the treatment of AD, which have primarily been developed to treat the symptoms of AD rather than the underlying cause of the disease, such as memantine and cholinesterase inhibitors. ACU193 may also compete with one or more potentially disease-modifying therapeutics that target Ab or amyloid plaques, the most advanced of which is Biogen Inc.'s aducanumab, which the FDA approved in June 2021 under the accelerated approval pathway, which allows for earlier approval of drugs that treat serious conditions, and that fill an unmet medical need based on a surrogate endpoint. Regulatory approval of aducanumab is pending in Europe and Japan. Other companies known to be developing therapies with Ab/amyloid plaque-related targets include Alzheon, Inc., Alzinova AB, Chugai Pharmaceutical Co. Ltd., Cognition Therapeutics, Inc., Eisai Co., Ltd., Eli Lilly and Company, Grifols, S.A., KalGene Pharmaceuticals, Inc., Neurimmune AG, Novartis AG, ProMIS Neurosciences, Inc., Prothena Biosciences, Inc., Roche Holding AG (including Genentech, its wholly owned subsidiary) and Wren Therapeutics, Inc. Additionally, ACU193, if approved, may also compete with other potential therapies intended to address underlying causes of AD that are being developed by several companies, including AbbVie Inc., AC Immune SA, Alector, Inc., Anavex Life Sciences Corp., Annovis Bio, Inc., Athira Pharma, Inc., Biohaven Pharmaceuticals, Inc., Cassava Sciences, Inc., Cortexyme, Inc., Denali Therapeutics, Inc., Johnson & Johnson (including Janssen, its wholly-owned subsidiary) and Takeda Pharmaceutical Co. Ltd.

Collaboration Agreement with Merck

In December 2003, we entered into an exclusive license and research and development collaboration agreement with Merck to research, discover and develop certain technology related to amyloid beta-derived diffusible ligands, or ADDL, which agreement was amended and restated in October 2006. The agreement generally provided that, during the course of the collaboration, Merck would be responsible for the preclinical and clinical development and commercialization of any products covered by the agreement and, in return, we were eligible to receive potential nonclinical, clinical and regulatory milestone payments and royalties on future

product sales. During the collaboration, Merck developed ACU193, an ADDL antibody, and intellectual property related to ACU193 was filed by Merck. In 2011, Merck elected to voluntarily terminate the collaboration agreement. Pursuant to the surviving provisions of the agreement, effective upon termination of the collaboration, Merck granted us an exclusive, perpetual, irrevocable, royalty-free, worldwide license, with right to sublicense, under Merck's interest in the patent rights and know-how necessary for the research, development, manufacturing or commercialization of ADDL antibodies, ADDL antigens or products, including ACU193.

Intellectual Property

Our intellectual property is critical to our business and we strive to protect it, including by obtaining and maintaining patent protection in the United States and internationally for our product candidate. We also rely on the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors. To help protect our proprietary know-how that is not patentable, we rely on confidentiality agreements to protect our interests. We require our employees, consultants, scientific advisors and contractors to enter into confidentiality agreements prohibiting the disclosure of confidential information and requiring disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

The main form of commercial exclusivity for our product candidate, ACU193, is expected to come from biologic regulatory exclusivity. We expect that once approved by regulatory agencies, ACU193 will receive the benefit of 12 years of market exclusivity in the U.S. and 10 to 11 years of data and market exclusivity in Europe, in each case, against competitors seeking approval for a biosimilar product.

We have an exclusive license grant from Merck to patents claiming the composition and method of use of our product candidate, ACU193. The license grant arose from our collaboration agreement with Merck to research, discover, and develop technology related to ADDLs. During our collaboration, ACU193, an ADDL antibody, was developed and intellectual property was filed by Merck. In 2011, the collaboration agreement terminated and Merck exclusively licensed to Acumen, Merck's interest in patent rights claiming ADDL antibodies, including ACU193, ADDL Antigens and/or Products to Acumen. In the nine years subsequent to the termination of the collaboration with Merck, Acumen has controlled and directed and continues to control and direct prosecution of the licensed ACU193 patent portfolio. Acumen has also paid for and continues to pay all costs and fees associated with the prosecution and maintenance of the licensed ACU193 patent portfolio.

As of November 6, 2020, Acumen licenses from Merck 1 issued U.S. patent, 16 issued foreign patents including issued patents in China, Canada, Australia, Japan, France, Germany and the UK, and two pending foreign applications drawn to our product candidate, ACU193. These patents and patent applications, once issued, are projected to expire in July of 2031, without taking into account any possible extensions and assuming payment of all appropriate maintenance, renewal, annuity, or other governmental fees.

Throughout the development of our product candidate, we seek to identify additional means of obtaining patent protection that would potentially enhance commercial success, including by protecting inventions related to additional methods of use, processes of making, formulation, and dosing regimens.

Patent Term and Term Extensions

The terms of individual patents are determined based primarily on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, utility patents issued for applications filed in the United States are granted a term of 20 years from the earliest effective filing date of a non-provisional patent application. In addition, in certain instances, the term of a U.S. patent can be extended to recapture a portion of the United States Patent and Trademark Office, or USPTO, delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory

review period. However, as to the FDA component, the restoration period cannot be longer than five years and the restoration period cannot extend the patent term beyond 14 years from FDA approval for the product covered by that patent. In addition, only one patent applicable to an approved drug may receive the extension, and the extension applies only to coverage for the approved drug, methods for using it and methods of manufacturing it, even if the claims cover other products or product candidate. Where one patent covers multiple products or product candidate, it may only receive an extension for one of the covered products; any extension related to a second product or product candidate must be applied to a different patent. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date of a non-provisional patent application, such as a Patent Cooperation Treaty, or PCT, application. All taxes, annuities or maintenance fees for a patent, as required by the USPTO and various foreign jurisdictions, must be timely paid in order for the patent to remain in force during this period of time.

The actual protection afforded by a patent may vary on a product-by-product basis, from country to country, and can depend upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions and the availability of legal remedies in a particular country and the validity and enforceability of the patent.

Our patents and patent applications may be subject to procedural or legal challenges by others. We may be unable to obtain, maintain and protect the intellectual property rights necessary to conduct our business, and we may be subject to claims that we infringe or otherwise violate the intellectual property rights of others, which could materially harm our business. For more information, see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

Trademarks and Know-How

In connection with the ongoing development and advancement of our products and services in the United States and various international jurisdictions, we seek to create protection for our marks and enhance their value by pursuing trademarks and service marks where available and when appropriate. We rely upon know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, by using confidentiality agreements with our commercial partners, collaborators, employees and consultants, and invention assignment agreements with our employees and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed by our employees and through relationships with third parties. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our contractors, commercial partners, collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. For more information, see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

Government Regulation

The FDA and other regulatory authorities at federal, state, and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring, and post-approval reporting of biologics such as those we are developing. We, along with our third-party contractors, will be required to navigate the various preclinical, clinical, manufacturing and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval or licensure of our product candidates. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable regulatory requirements at any time during the product development process or post-

approval may subject an applicant to delays in development or approval, as well as administrative and judicial sanctions.

U.S. Biologics Regulation

In the United States, biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, or FDCA, the Public Health Service Act, or PHSA, and other federal, state, local and foreign statutes and regulations. The process required by the FDA before biologics may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies performed in accordance with the FDA's Good Laboratory Practice requirements, or GLPs;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before clinical trials may begin and must be updated annually and when certain changes are made;
- approval by an institutional review board, or IRB, or independent ethics committee at each clinical site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials in accordance with Good Clinical Practice, or GCP, requirements and other clinical trial-related regulations to establish the safety, purity and potency of the proposed biologic product candidate for its intended purpose;
- preparation of and submission to the FDA of a biologics license application, or BLA, after completion of all pivotal clinical trials;
- payment of user fees for FDA review of the BLA;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the proposed product is produced to assess compliance with current Good Manufacturing Practices, or cGMPs, and to assure that the facilities, methods and controls are adequate to preserve the biological product's continued safety, purity and potency, and of selected clinical investigation sites to assess compliance with GCPs; and
- FDA review and approval of the BLA to permit commercial marketing of the product for particular indications for use in the United States.

Preclinical and Clinical Trials

Prior to beginning the first clinical trial with a product candidate in the United States, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluations of chemistry, formulation and stability, as well as *in vitro* and animal studies to assess safety and in some cases to establish the rationale for therapeutic use. The conduct of preclinical studies is subject to federal and state regulations and requirements, including GLP requirements for safety and toxicology studies. In the United States, the results of the preclinical studies, together with manufacturing information and analytical data must be submitted to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational new drug to humans. The central focus of an IND submission is on the general investigational

plan and the protocol(s) for clinical studies. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the dosing procedures, subject selection and exclusion criteria, and the parameters and criteria to be used in monitoring safety and effectiveness. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed.

While clinical trials are ongoing, the FDA may impose a partial or complete clinical hold based on concerns for patient safety and/or noncompliance with regulatory requirements. This order issued by the FDA would cause the suspension of an ongoing study, or part of an ongoing study, until all outstanding concerns have been adequately addressed, and the FDA has notified the company that investigations may proceed. Imposition of a clinical hold could cause significant delays or difficulties in completing planned clinical studies in a timely manner. In addition, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries. In the United States, information about applicable clinical trials, including clinical trials results, must be submitted within specific timeframes for publication on the www.clinicaltrials.gov website.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA. Written IND safety reports must be submitted to the FDA and the investigators fifteen days after the trial sponsor determines the information qualifies for reporting for serious and unexpected suspected adverse events, findings from other studies or animal or in vitro testing suggest a significant risk for human participants exposed to the drug or biologic, or for any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must also notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction as soon as possible but in no case later than seven calendar days after the sponsor’s initial receipt of the information.

For purposes of BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1—The investigational product is initially introduced into a limited population of healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dose response, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.

- Phase 2—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

- Phase 3—The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of a BLA.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may also be made a condition to approval of the BLA.

Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate, and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life and to identify appropriate storage conditions for the product candidate.

BLA Submission and Review by the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. The BLA must include data available from preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by independent investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety, purity and potency of the investigational biologic, to the satisfaction of the FDA. FDA approval of a BLA must be obtained before a biologic may be marketed in the United States. The submission of a BLA requires payment of a substantial application user fee to the FDA, unless a waiver or exemption applies.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the FDA accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. Once a BLA has been accepted for filing, the FDA's goal is to review standard applications within ten months after the filing date, or, if the application qualifies for priority review, six months after the FDA accepts the application for filing. In both standard and priority reviews, the review process may also be extended by FDA requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product's continued safety, purity and potency. The FDA may also convene an advisory committee to provide clinical insight on application review questions. An advisory committee is a panel of

independent experts, including clinicians and other scientific experts, which reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving a BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. After the FDA evaluates a BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter, or CRL. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A CRL will describe all of the deficiencies that the FDA has identified in the BLA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the CRL without first conducting required inspections, testing submitted product lots, and/or reviewing proposed labeling. In issuing the CRL, the FDA may recommend actions that the applicant might take to place the BLA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the BLA with a Risk Evaluation and Mitigation Strategy, or REMS, to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy implemented to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying product candidates. These programs include fast track designation, breakthrough therapy designation, priority review, and accelerated approval.

The fast track program is intended to expedite or facilitate the process for reviewing new products that are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a fast track product has opportunities for more frequent interactions with the applicable FDA review team during product development and, once a BLA is submitted, the product candidate may be eligible for priority review. A fast track product may

also be eligible for rolling review, where the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product candidate can receive breakthrough therapy designation if preliminary clinical evidence indicates that the product candidate, alone or in combination with one or more other drugs or biologics, may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers and experienced review staff in a cross-disciplinary review, where appropriate.

Any marketing application for a drug or biologic submitted to the FDA for approval, including a product candidate with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. A product candidate is eligible for priority review if it is designed to treat a serious or life-threatening disease or condition, and if approved, would provide a significant improvement in safety or effectiveness compared to available alternatives for such disease or condition. For original BLAs, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date (as compared to ten months under standard review).

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Fast track designation, breakthrough therapy designation, and priority review, accelerated approval do not change the standards for approval but may expedite the development or approval process. Even if a product candidate qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if a second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-approval Requirements

Biologics are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and complying with advertising and promotion requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as “off-label use”) and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe approved products for off-label uses, manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, including not only by Company employees but also by agents of the Company or those speaking on the Company’s behalf, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. Promotional materials for approved biologics must be submitted to the FDA in conjunction with their first use or first publication.

After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual program fees for any marketed products. Biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements up. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;

- safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- fines, warning letters, or untitled letters;
- clinical holds on clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information; and
- and the imposition of civil or criminal penalties.

United States Biosimilars and Exclusivity

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the ACA, signed into law in 2010, includes a subtitle called the Biologics Price Competition and Innovation Act, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars in the United States. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

Under the BPCIA, a reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, and an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed “interchangeable” by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the Patient Protection and Affordable Care Act, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation, and regulatory interpretation of the BPCIA remain subject to significant uncertainty.

Other Healthcare Laws

Pharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business and may constrain the financial arrangements and relationships through which we research, as well as, sell, market and distribute any products for which we obtain marketing approval. Such laws include, without limitation, federal and state anti-kickback, fraud and abuse, false claims, data privacy and security and physician and other health care provider transparency laws and regulations. If our significant operations are found to be in violation of any of such laws or any other governmental regulations that apply, they may be subject to penalties, including, without limitation, significant administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and imprisonment.

Coverage and Reimbursement

Sales of any product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. These third-party payors are increasingly reducing reimbursements for medical products, drugs and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales.

Healthcare Reform

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, each as amended, collectively known as the ACA, was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly affected the pharmaceutical industry. The ACA contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement adjustments and changes to fraud and abuse laws. For example, the ACA:

- increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the average manufacturer price;
- required collection of rebates for drugs paid by Medicaid managed care organizations;
- required manufacturers to participate in a coverage gap discount program, under which they must agree to offer 70 percent point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D; and
- imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell “branded prescription drugs” to specified federal government programs.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. For example,

on March 2, 2020 the United States Supreme Court granted the petitions for writs of certiorari to review the U.S. Court of Appeals for the 5th Circuit ruling that the individual mandate was unconstitutional and to determine the constitutionality of the ACA in its entirety. It is uncertain when the Supreme Court will rule on this case. Other legislative changes have been proposed and adopted since the ACA was enacted, including aggregate reductions of Medicare payments to providers of 2% per year, which was temporarily suspended from May 1, 2020 through March 31, 2021 due to the COVID-19 pandemic, and reduced payments to several types of Medicare providers. Legislation is currently pending in Congress that would further extend the suspension through December 31, 2021. Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries, proposed and enacted legislation and executive orders issued by the prior presidential administration designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. It is also possible that additional governmental action is taken in response to the COVID-19 pandemic. Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Employees and Human Capital Resources

Our human capital objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of stock-based compensation awards.

As of March 31, 2021, we had seven employees, including five in research and development and two in general and administrative functions. We also utilize eight consultants, six in various roles related to research and development and two in general and administrative functions. We believe our employee relations are good.

Legal Proceedings

We are not currently subject to any material legal proceedings.

Facilities

Our corporate headquarters are currently located in Charlottesville, Virginia, where we lease 950 square feet of office space pursuant to a lease agreement that expires in August 2021. We also lease 8,573 square feet of office space in Carmel, IN pursuant to a lease agreement that expires in August 2023. We believe that these facilities will be adequate for our near-term needs. If required, we believe that suitable additional or alternative space would be available in the future on commercially reasonable terms.

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our current executive officers and directors, including their ages as of June 23, 2021:

Name	Age	Position(s)
Executive Officers		
Daniel O'Connell.	51	President and Chief Executive Officer and Director
Matthew Zuga	56	Chief Financial Officer and Chief Business Officer
Eric Siemers, M.D.	66	Chief Medical Officer
Russell Barton, M.S.	63	Chief Operating Officer
Non-Employee Directors		
Jeffrey L. Ives, Ph.D. (1)(2)	70	Director
Nathan B. Fountain, M.D. (3)	58	Director
Jeffrey Sevigny, M.D. (2)(3)	52	Director
Sean Stalfort (1)(2)	51	Director
Laura Stoppel, Ph.D. (1)(3)	35	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.

Executive Officers

Daniel O'Connell Mr. O'Connell has served as our President and Chief Executive Officer since December 2014. Mr. O'Connell previously co-founded and served as Chief Executive Officer of Functional NeuroModulation Ltd., or FNM, a clinical-stage company developing deep brain stimulation therapies for Alzheimer's disease. Mr. O'Connell is a founding member and former managing partner of NeuroVentures Capital, LLC, a firm he helped to invest in emerging neurosciences companies. He earned a B.A. from Brown University and M.B.A. from the University of Virginia. Our board of directors believes Mr. O'Connell is qualified to serve as a director based on his experience in venture capital and in the neurosciences.

Matthew Zuga Mr. Zuga has served as our Chief Financial Officer and Chief Business Officer since May 2021. Mr. Zuga also served as HighCape Capital Acquisition Corp.'s Chief Financial Officer and Chief Operating Officer and a member of HighCape's board of directors from June 2020 through June 2021. Since October 2013, Mr. Zuga has been a partner of HighCape Capital, LLC. From July 2019 through April 2021, Mr. Zuga was an advisor to Acumen. Mr. Zuga is currently on the board of directors of Aziyo Biologics, Inc. Mr. Zuga received an M.B.A. from the Kenan-Flagler Business School at the University of North Carolina at Chapel Hill and a B.S. in Business Administration/Finance from Ohio State University.

Eric Siemers, M.D. Dr. Siemers has served as our Chief Medical Officer since June 2018, prior to which, in April 2018, he began consulting for us. Prior to joining us, from November 1998 to December 2017, he served in various roles for Eli Lilly and Company, including most recently as Distinguished Medical Fellow, from October 2014 to December 2017, and was responsible for several clinical trials for Alzheimer's disease compounds, including five Phase 3 studies as well as Phase 1 and 2 studies. Prior to Eli Lilly, Dr. Siemers founded the Indiana University Movement Disorder Clinic, where his research included Parkinson's and Huntington's disease. Dr. Siemers served on the NIA/Alzheimer's Association working group that proposed new research nomenclature for Alzheimer's disease utilizing biomarkers and clinical symptoms. He was a founding member of the Alzheimer's Association Research Roundtable and is on the steering committee for the Alzheimer's Disease Neuroimaging Initiative. Dr. Siemers earned his M.D. from the Indiana University School of Medicine with Highest Distinction.

Russell Barton, M.S. Mr. Barton has served as our Chief Operating Officer since April 2019. Mr. Barton also serves as Director of Clinical Operations at AgeneBio, a role he has held since October 2018. From 1979 to 2017, he served in various roles for Eli Lilly and Company, including as Chief Operating Officer of the company's Global Alzheimer's Disease Platform Team for 10 years from 2007 to 2017. Mr. Barton was an active participant in the design and startup of the Global Alzheimer's Platform, which was developed through a collaboration between the Global Chief Executive Officer initiative on Alzheimer's disease and the New York Academy of Sciences. Mr. Barton received a B.S. in chemistry from Illinois State University and a M.S. in chemistry from Purdue University.

Non-Employee Directors

Nathan B. Fountain M.D. Dr. Fountain has served as a member of our board of directors since June 2021. Dr. Fountain is Professor of Neurology at the University of Virginia School of Medicine and has served as Director of the F.E. Dreifuss Comprehensive Program since 1998. Dr. Fountain serves as a consultant to a number of companies, including Sands Capital. Dr. Fountain is the founding co-chair of the Epilepsy Foundation's Research Roundtable for Epilepsy. Dr. Fountain is immediate past-president of the National Association of Epilepsy Centers where he remains on the board of directors ex officio. Dr. Fountain served on the FDA Peripheral and CNS Drugs Advisory Committee from November 2010 to June 2021, most recently serving as chair of the committee from February 2018 through June 2021. Dr. Fountain has been the chair of the Professional Advisory Board for the Epilepsy Foundation of Virginia since 2009. Dr. Fountain received an M.D. from the University of Iowa College of Medicine and a B.S. in Zoology from the University of Iowa. Our board of directors believes Dr. Fountain is qualified to serve as a director based on his experience in neurology.

Jeffrey L. Ives, Ph.D. Dr. Ives has served as a member of our board of directors since May 2014. Dr. Ives has served as a director on the board of Cara Therapeutics since 2014. He currently also serves on the boards of several neurodegenerative disease companies including Pinteon Therapeutics, Orthogonal Neuroscience, and Astrocyte Pharmaceuticals. From 2008 until 2013, Dr. Ives served as the Chief Executive Officer of Satori Pharmaceuticals, Inc., a company focused on Alzheimer's disease. Prior to Satori, he served as senior vice president at Pfizer, leading the neurodegenerative diseases, psychiatry and pain research areas. Dr. Ives received his doctorate and master's degrees from Yale University and received his B.A. from Colgate University. Our board of directors believes Dr. Ives is qualified to serve as a director based on experience in neurodegenerative diseases, particularly AD.

Jeffrey Sevigny, M.D. Dr. Sevigny has served as a member of our board of directors since July 2019. Dr. Sevigny is the Chief Medical Officer of Prevail Therapeutics, where he has served in such capacity since March 2018. Prior to his tenure at Prevail, he served as Vice President and Global Head of Translational Medicine Neuroscience at Roche from January 2016 to March 2018. Prior to Roche, he was Senior Director of Clinical Development at Biogen Inc., a multinational biotechnology company, from September 2010 to January 2016. Previously, he served as Principal Medical Scientific Expert of Neuroscience at Novartis AG, a multinational pharmaceutical company, and as Associate Director of Neuroscience at Merck. Dr. Sevigny has also held academic appointments as Assistant Professor of Neurology at Albert Einstein School of Medicine and Assistant Professor of Clinical Neurology at Columbia University College of Physicians and Surgeons. Dr. Sevigny received an M.D. from Tufts University School of Medicine and an A.B. in biochemistry from Bowdoin College. He completed a neurology residency at the Neurological Institute of New York at Columbia University Medical Center and a fellowship in Aging & Dementia and Neuro Epidemiology at Sergievsky Center at Columbia University and Columbia University Mailman School of Public Health. Our board of directors believes Dr. Sevigny is qualified to serve as a director based on his over 15 years of experience in neurology, and specifically neurodegenerative disorders.

Sean Stalfort Mr. Stalfort has served as a member of our board of directors since October 2018. Mr. Stalfort is President of PBM Capital Group, LLC, a private equity and venture capital investment firm in the business of investing in healthcare and life-science related companies, and has worked at PBM Capital since 2010.

Mr. Stalfort is a director of Verrica Pharmaceuticals, Inc., a biopharmaceutical company, and he previously served as a director of Dova Pharmaceuticals, Inc., a biopharmaceutical company. Prior to joining PBM Capital, he was the executive vice president for new business development/M&A for PBM Products. Mr. Stalfort is also a founding partner of Octagon Partners and Octagon Finance, historic tax credit real estate companies. Mr. Stalfort received a B.A. in business economics and political science from Brown University. Our board of directors believes Mr. Stalfort is qualified to serve as a director based on his experience in venture capital, particularly related to healthcare.

Laura Stoppel, Ph.D. Dr. Stoppel has served as a member of our board of directors since November 2020. Dr. Stoppel currently serves as a Principal on the Investment Team at RA Capital Management and has previously served in various roles at RA Capital since 2016. Dr. Stoppel serves on the board of directors for Artiva Biotherapeutics and Nimbus Therapeutics. Dr. Stoppel holds a B.A. in Biology and Psychology from Harvard University, and a Ph.D. in Neuroscience from MIT. Our board of directors believes Dr. Stoppel is qualified to serve as a director based on her experience in venture capital and the neurosciences.

Board Composition

Our business and affairs are managed under the direction of our board of directors, which currently consists of six members. Our directors were elected to, and currently serve on, the board pursuant to a voting agreement among us and certain of our stockholders and voting rights granted by our current amended and restated certificate of incorporation. The voting agreement will terminate upon the closing of this offering, after which there will be no further contractual obligations regarding the election of our directors.

In accordance with our amended and restated certificate of incorporation that will be in effect upon the closing of this offering, our board of directors will be divided into three classes, each of which will consist, as nearly as possible, of one-third of the total number of directors constituting our entire board and which will serve staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- Class I, which will consist of Jeffrey Ives, Ph.D. and Sean Stalfort, and their terms will expire at our first annual meeting of stockholders to be held after the closing of this offering;
- Class II, which will consist of Laura Stoppel, Ph.D. and Jeffrey Sevigny, M.D., and their terms will expire at our second annual meeting of stockholders to be held after the closing of this offering; and
- Class III, which will consist of Nathan Fountain, M.D. and Daniel O'Connell, and their terms will expire at our third annual meeting of stockholders to be held after the closing of this offering.

Our amended and restated bylaws, which will become effective upon the closing of this offering, will provide that the authorized number of directors may be changed only by resolution approved by a majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change of control.

Director Independence

Applicable Nasdaq rules, or the Nasdaq Listing Rules, require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent and that audit committee members also satisfy

independence criteria set forth in Rule 10A-3 under the Exchange Act of 1934, as amended, or the Exchange Act. The Nasdaq independence definition includes a series of objective tests, such as that the director is not, and has not been for at least three years, one of our employees, and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Our board of directors has determined that all of our directors other than Daniel O'Connell, representing five of our six directors, are "independent directors" as defined under applicable Nasdaq rules. In making such determination, our board of directors considered the current and prior relationships that each such director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each director and the transactions described in the section titled "Certain Relationships and Related Party Transactions."

There are no family relationships among any of our directors or executive officers.

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through the board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure. Following the completion of this offering, we intend for our audit committee to have the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The audit committee will also monitor compliance with legal and regulatory requirements.

Board Committees

Our board of directors has established an audit committee, compensation committee and a nominating and corporate governance committee, each of which operate pursuant to a committee charter. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below.

Audit Committee

Upon the completion of this offering, our audit committee will consist of Jeffrey Ives, Ph.D., Sean Stalfort and Laura Stoppel, Ph.D., with Sean Stalfort serving as chair of the audit committee. Our board of directors has determined that each of these individuals meets the independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934, or the Exchange Act, and the applicable listing standards of Nasdaq. Each member of our audit committee can read and understand fundamental financial statements in accordance with Nasdaq audit committee requirements. Our board of directors has also determined that Jeffrey Ives, Ph.D. qualifies as an audit committee financial expert within the meaning of SEC regulations and meets the financial sophistication requirements of the Nasdaq Listing Rules. In arriving at these determinations, the board has examined each audit committee member's scope of experience and the nature of their prior and/or current employment.

The functions of this committee include, among other things:

- helping our board of directors oversee our corporate accounting and financial reporting processes;

- managing the selection, engagement, qualifications, independence and performance of a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing related person transactions;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually that describes our internal quality control procedures, any material issues with such procedures and any steps taken to deal with such issues when required by applicable law; and
- approving or, as permitted, pre-approving, audit and permissible non-audit services to be performed by the independent registered public accounting firm.

We believe that the composition and functioning of our audit committee will comply with all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee

Upon the completion of this offering, our compensation committee will consist of Jeffrey Ives, Ph.D., Sean Stalfort, and Jeffrey Sevigny, M.D., with Jeffrey Ives, Ph.D. serving as chair of the compensation committee. Each of these individuals is a non-employee director, as defined in Rule 16b-3 promulgated under the Exchange Act. Our board of directors has determined that each of these individuals is ‘‘independent’’ as defined under the applicable listing standards of Nasdaq, including the standards specific to members of a compensation committee. The functions of this committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) our overall compensation strategy and policies;
- making recommendations to the full board of directors regarding the compensation and other terms of employment of our executive officers;
- reviewing and making recommendations to the full board of directors regarding performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full board of directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- reviewing and making recommendations to the full board of directors regarding the type and amount of compensation to be paid or awarded to our non-employee board members;

- establishing policies with respect to votes by our stockholders to approve executive compensation to the extent required by Section 14A of the Exchange Act and, if applicable, determining our recommendations regarding the frequency of advisory votes on executive compensation;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- reviewing and making recommendations to the full board of directors regarding the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing with management and approving our disclosures under the caption "Compensation Discussion and Analysis" in our periodic reports or proxy statements to be filed with the SEC, to the extent such caption is included in any such report or proxy statement;
- preparing the report that the SEC requires in our annual proxy statement; and
- reviewing and evaluating on an annual basis the performance of the compensation committee and the compensation committee charter.

We believe that the composition and functioning of our compensation committee will comply with all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Nominating and Corporate Governance Committee

Upon the completion of this offering, our nominating and corporate governance committee will consist of Laura Stoppel, Ph.D., Jeffrey Sevigny, M.D. and Nathan B. Fountain, M.D., with Jeffrey Sevigny, M.D. serving as chair of the nominating and corporate governance committee. Our board of directors has determined that each of these individuals is ''independent'' as defined under the applicable listing standards of Nasdaq and SEC rules and regulations. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board of directors;
- determining the minimum qualifications for service on our board of directors;
- evaluating director performance on the board and applicable committees of the board and determining whether continued service on our board is appropriate;
- evaluating, nominating and recommending individuals for membership on our board of directors;
- evaluating nominations by stockholders of candidates for election to our board of directors;
- considering and assessing the independence of members of our board of directors;

- developing a set of corporate governance policies and principles and recommending to our board of directors any changes to such policies and principles;
- reviewing and making recommendations to the board of directors with respect to management succession planning;
- considering questions of possible conflicts of interest of directors as such questions arise; and
- reviewing and evaluating on an annual basis the performance of the nominating and corporate governance committee and the nominating and corporate governance committee charter.

We believe that the composition and functioning of our nominating and corporate governance committee will comply with all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Code of Business Conduct and Ethics

Effective upon the closing of this offering, we will adopt a Code of Business Conduct and Ethics, or the Code of Conduct, applicable to all of our employees, executive officers and directors. This includes our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions. Following the closing of this offering, the full text of the Code of Conduct will be available on our website at http://www.acumenpharm.com/. We intend to post on our website all disclosures that are required by law or the Nasdaq Listing Rules concerning any amendments to, or waivers from, any provision of the Code of Conduct. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus. We have included our website in this prospectus solely as an inactive textual reference.

Non-Employee Director Compensation

Prior to this offering, from time to time, we have provided equity-based compensation to certain of our non-employee directors upon their joining our board of directors, but we have not maintained a formal non-employee director compensation policy. In connection with this offering, our board of directors has established a non-employee director compensation policy, which will take effect upon the pricing of this offering.

Cash Compensation

Following the completion of this offering, each non-employee director will receive an annual cash retainer of $35,000 for serving on our board of directors, and the chairperson of our board of directors will receive an additional annual cash retainer of $30,000. The chairperson of the audit committee of our board of directors will be entitled to an annual service retainer of $15,000, and each other member of the audit committee will be entitled to an annual service retainer of $7,500. The chairperson of the compensation committee of our board of directors will be entitled to an annual service retainer of $10,000, and each other member of the compensation committee will be entitled to an annual service retainer of $5,000. The chairperson of the nominating and corporate governance committee of our board of directors will be entitled to an annual service retainer of $8,000, and each other member of the nominating and corporate governance committee will be entitled to an annual service retainer of $4,000. All annual cash compensation amounts will be payable in equal quarterly installments in arrears, on the last day of each fiscal quarter for which the service occurred, pro-rated for any partial months of service.

Equity Compensation

Initial Grant. Upon the pricing of this offering, each non-employee director will receive a stock option to purchase 34,000 shares of common stock under the 2021 Plan at an exercise price equal to the public offering

price of our common stock in this offering. Each new non-employee director who joins our board of directors following the closing of this offering will receive an option to purchase 34,000 shares of common stock under the 2021 Plan upon joining the board, which option will have an exercise price per share equal to the per share fair market value of our common stock on the date of grant. These initial grant options will vest in 36 equal monthly installments, subject to the non-employee director's continuous service with us on each applicable vesting date.

Annual Grants. On the date of each annual meeting of our stockholders following the completion of this offering, each continuing non-employee director will receive an option to purchase 17,000 shares of common stock under the 2021 Plan having an exercise price per share equal to the per share fair market value of our common stock on the date of grant. These options will vest upon the earlier of the one year anniversary of the grant date or the next annual meeting, subject to the non-employee director's continuous service with us on each applicable vesting date.

All then outstanding options held by non-employee directors will vest upon our change in control, subject to the non-employee director's continuous service with us through the date of our change in control.

2020 Director Compensation Table

The following table sets forth information regarding the compensation earned for service on our board of directors in 2020 by our non-employee directors. Daniel O'Connell, our Chief Executive Officer, is also a member of our board of directors but did not receive any additional compensation for service as a director.

Name (4)	Fees Earned or Paid in Cash ($)	Total ($)
Jeffrey L. Ives, Ph.D.	42,000	42,000
Jeffrey Sevigny, M.D.	42,000	42,000
Sean Stalfort	—	—
Laura Stoppel, Ph.D.	—	—
Stephen Zachary, Ph.D(1).	—	—
Grant Krafft, Ph.D.(2)	42,000	42,000
Joseph Andrasko(3)	—	—

(1) Dr. Zachary resigned from our board of directors in June 2021.
(2) Dr. Krafft resigned from our board of directors in November 2020.
(3) Mr. Andrasko resigned from our board of directors in November 2020.
(4) No stock options were granted to our non-employee directors during 2020. The table below shows the aggregate number of option awards outstanding for each of our non-employee directors as of December 31, 2020:

Name	Number of Outstanding Options
Jeffrey L. Ives, Ph.D.	69,999
Jeffrey Sevigny, M.D.	72,499
Sean Stalfort	—
Laura Stoppel, Ph.D.	—
Stephen Zachary, Ph.D.	—

EXECUTIVE COMPENSATION

This section describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers in 2020. We are an "emerging growth company," within the meaning of the Jumpstart Our Business Startups Act of 2012, as amended, or JOBS Act, and have elected to comply with the reduced compensation disclosure requirements available to emerging growth companies under the JOBS Act. Our named executive officers for 2020 were Daniel O'Connell, Eric Siemers, M.D. and Russell Barton, M.S. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our named executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by and paid to our named executive officers with respect to the year ended December 31, 2020.

Name and Principal Position	Salary ($)(1)	Bonus ($)(2)	Total ($)
Daniel O'Connell (3)			
President and Chief Executive Officer	240,000	96,000	336,000
Eric Siemers, M.D.			
Chief Medical Officer	180,000	57,600	237,600
Russell Barton, M.S.			
Chief Operating Officer	168,000	55,680	223,680

(1) Each of our named executive officers served as a consultant to the company prior to January 1, 2021. Amounts included in the "Salary" column represent consulting fees paid to each named executive officer for services rendered to us during 2020.
(2) This column reflects annual discretionary bonuses received in respect of 2020 services.
(3) Mr. O'Connell is also a member of our Board, but he did not receive any additional compensation in his capacity as a director in 2020.

Outstanding Equity Awards at December 31, 2020

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2020. All awards were granted pursuant to the Prior Plan. See "—Equity Incentive Plans—Prior Plan" below for additional information.

		Option Awards(1)				
Name	Grant Date	Number of Securities Underlying Unexercised Options(#) Exercisable	Number of Securities Underlying Unexercised Options(#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options(#)	Option Exercise Price($)	Option Expiration Date
Daniel O'Connell	12/1/2011	1,118	—	—	$ 4.47	12/1/2021
	5/14/2013	197	—	—	$ 22.39	5/14/2023
	12/17/2014	33,567	—	—	$ 4.47	12/17/2024
	4/27/2017	12,527	—	—	$ 4.47	4/27/2027
	3/1/2019	302,540	116,363(2)	—	$ 0.72	3/1/2029
Eric Siemers, M.D.	3/1/2019	134,911	51,889(2)	—	$ 0.72	3/1/2029
Russell Barton, M.S.	3/1/2019	25,788	20,632(2)	—	$ 0.72	3/1/2029

(1) All option awards listed in this table were granted pursuant to our Prior Plan, the terms of which are described below under "—Equity Incentive Plans—Prior Plan".
(2) The shares underlying this option vest in equal monthly installments over a period of 36 months from the date of grant, subject to the named executive officer's continuous service through each vesting date.

Employment Arrangements

Agreements with our Named Executive Officers and Potential Payments upon Termination of Employment

We have entered into employment agreements with each of our named executive officers. The agreements generally provide for employment without any specific term and set forth the named executive officer's base salary, bonus potential, eligibility for employee benefits and severance benefits upon a qualifying termination of employment, subject to certain confidentiality, non-solicitation and non-competition provisions. Any potential payments and benefits due upon a qualifying termination of employment or a change in control are further described below.

Daniel O'Connell

Executive Employment Agreement

On January 1, 2021, we entered into an executive employment agreement with Mr. O'Connell, pursuant to which Mr. O'Connell serves as our President and Chief Executive Officer and as an employee at-will. Under his executive employment agreement, Mr. O'Connell is entitled to an annual base salary of $512,000, which base salary will be reviewed and may be adjusted by the board of directors on an annual basis. Additionally, Mr. O'Connell is eligible to receive an annual performance bonus with a target equal to 50% of his then-current base salary, contingent upon satisfaction of individual and company performance goals. In 2020, we paid Mr. O'Connell an annual performance bonus of $96,000 based upon the achievement of 2020 individual and company performance milestones as determined by our board of directors. As contemplated by his executive employment agreement, on January 4, 2021, we granted to Mr. O'Connell an option to purchase 1,186,346 shares of our common stock pursuant to our Prior Plan at an exercise price of $1.19 per share, which grant will vest as to 25% of the shares on the one-year anniversary of the grant, with the remainder vesting monthly over the following 36 months, subject to Mr. O'Connell's continuous service through such vesting dates.

Under Mr. O'Connell's executive employment agreement, if he resigns for "good reason" or we terminate Mr. O'Connell's employment without "cause" not in connection with a change in control (as defined in the executive employment agreement, and excluding a termination on account of Mr. O'Connell's death or disability), Mr. O'Connell shall be eligible to receive the following severance benefits:

- an amount equal to 12 months of his annual base salary; and
- payment for health premiums until the earlier of (i) 12 months; (ii) the date he becomes eligible for substantially equivalent health benefits; or (iii) the date he ceases to be eligible for COBRA continuation coverage at the level existing on the termination date.

As a condition to receiving the foregoing severance benefits, Mr. O'Connell must sign and not revoke a general release contained in a separation agreement in the form presented by us, return all company property and confidential information in his possession, comply with his post-termination obligations, and resign from any positions held with us.

Amended and Restated Consulting Agreement

On October 1, 2018, we entered into an amended and restated consulting agreement with Fastnet BioVentures, LLC, pursuant to which Mr. O'Connell, as sole member of Fastnet BioVentures, LLC, agreed to

serve as our President and Chief Executive Officer. Pursuant to the amended and restated consulting agreement, Mr. O'Connell was responsible for leading the planning, development and execution of our growth and development efforts, as described in the agreement. The amended and restated consulting agreement had a term continuing through December 31, 2021 and was terminated early in accordance with its terms upon execution of Mr. O'Connell's executive employment agreement in January 2021. Under the amended and restated consulting agreement, Mr. O'Connell was entitled to receive compensation including a fee of $20,000 per month.

Eric Siemers, M.D.

Executive Employment Agreement

On January 1, 2021, we entered into an executive employment agreement with Dr. Siemers, pursuant to which Dr. Siemers serves as our Chief Medical Officer and as an employee at-will. Under his executive employment agreement, Dr. Siemers is entitled to an annual base salary of $332,000, which base salary will be reviewed and may be adjusted by the board of directors on an annual basis. Additionally, Dr. Siemers is eligible to receive an annual performance bonus with a target equal to 40% of his then-current base salary, contingent upon satisfaction of individual and company performance goals. In 2020, we paid Dr. Siemers an annual performance bonus of $57,600 based upon the achievement of 2020 individual and company performance milestones as determined by our board of directors. As contemplated by his executive employment agreement, on January 4, 2021, we granted to Dr. Siemers an option to purchase 310,989 shares of our common stock pursuant to our Prior Plan at an exercise price of $1.19 per share, which grant will vest as to 25% of the shares on the one-year anniversary of the grant, with the remainder vesting monthly over the following 36 months, subject to Dr. Siemers' continuous service through such vesting dates.

Under Dr. Siemers' executive employment agreement, if he resigns for "good reason" or we terminate Dr. Siemers' employment without "cause" not in connection with a change in control (as defined in the executive employment agreement, and excluding a termination on account of Dr. Siemers' death or disability), Dr. Siemers' shall be eligible to receive the following severance benefits:

- an amount equal to six months of his annual base salary; and
- payment for health premiums until the earlier of (i) 12 months; (ii) the date he becomes eligible for substantially equivalent health benefits; or (iii) the date he ceases to be eligible for COBRA continuation coverage at the level existing on the termination date.

As a condition to receiving the foregoing severance benefits, Dr. Siemers must sign and not revoke a general release contained in a separation agreement in the form presented by us, return all company property and confidential information in his possession, comply with his post-termination obligations, and resign from any positions held with us.

Amended and Restated Consulting Agreement

On June 1, 2019, we entered into an amended and restated consulting agreement with Siemers Integration LLC, pursuant to which Dr. Siemers, as President of Siemers Integration LLC, agreed to serve as our lead clinical development consultant with the title of Chief Medical Officer and to provide additional consulting services as described in the amended and restated consulting agreement. The amended and restated consulting agreement had a term of 36 months and was terminated early in accordance with its terms upon execution of Dr. Siemers' executive employment agreement in January 2021. Under the amended and restated consulting agreement, Dr. Siemers was entitled to receive compensation including a fee of $15,000 per month and an option to purchase 186,800 shares of our common stock.

Russell Barton, M.S.

Executive Employment Agreement

On January 1, 2021, we entered into an executive employment agreement with Mr. Barton, pursuant to which Mr. Barton serves as our Chief Operating Officer and as an employee at-will. Under his executive employment agreement, Mr. Barton is entitled to an annual base salary of $260,000, which base salary will be reviewed and may be adjusted by the board of directors on an annual basis. Additionally, Mr. Barton is eligible to receive an annual performance bonus with a target equal to 40% of his then-current base salary, contingent upon satisfaction of individual and company performance goals. In 2020, we paid Mr. Barton an annual performance bonus of $55,680 based upon the achievement of 2020 individual and company performance milestones as determined by our board of directors. As contemplated by his executive employment agreement, on January 4, 2021, we granted at an exercise price of $1.19 per share to Mr. Barton an option to purchase 285,439 shares of our common stock in pursuant to our Prior Plan, which grant will vest as to 25% of the shares on the one-year anniversary of the grant, with the remainder vesting monthly over the following 36 months, subject to Mr. Barton's continuous service through such vesting dates.

Under Mr. Barton's executive employment agreement, if he resigns for "good reason" or we terminate Mr. Barton's employment without "cause" not in connection with a change in control (as defined in the executive employment agreement, and excluding a termination on account of Mr. Barton's death or disability), Mr. Barton shall be eligible to receive the following severance benefits:

- an amount equal to six months of his annual base salary; and
- payment for health premiums until the earlier of (i) 12 months; (ii) the date he becomes eligible for substantially equivalent health benefits; or (iii) the date he ceases to be eligible for COBRA continuation coverage at the level existing on the termination date.

As a condition to receiving the foregoing severance benefits, Mr. Barton must sign and not revoke a general release contained in a separation agreement in the form presented by us, return all company property and confidential information in his possession, comply with his post-termination obligations, and resign from any positions held with us.

Amended and Restated Consulting Agreement

On April 1, 2019, we entered into an amended and restated consulting agreement with Pharmasagacity Consulting, LLC, pursuant to which Mr. Barton, as President of Pharmasagacity Consulting, LLC, agreed to serve as our IND Team Leader and Head of Clinical Operations to provide project management services as described in the amended and restated consulting agreement. The amended and restated consulting agreement had a term of 24 months and was terminated early in accordance with its terms upon execution of Mr. Barton's executive employment agreement in January 2021. Under the amended and restated consulting agreement, Mr. Barton was entitled to receive compensation including a fee of $14,000 per month and an option to purchase 46,420 shares of our common stock.

Equity Incentive Plans

2021 Equity Incentive Plan

Our board of directors adopted our 2021 Plan in June 2021 and our stockholders approved our 2021 Plan in June 2021. Our 2021 Plan provides for the grant of incentive stock options (ISOs) to employees, including employees of any parent or subsidiary, and for the grant of nonstatutory stock options (NSOs) stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of

stock awards to employees, directors, and consultants, including employees and consultants of our affiliates. Our 2021 Plan is a successor to and continuation of our Prior Plan, which is described below. The 2021 Plan will become effective immediately prior to and contingent upon the execution of the underwriting agreement related to this offering.

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2021 Plan after it becomes effective will not exceed 7,698,208 shares, which is the sum of (1) 3,550,000 new shares, plus (2) the number of shares that remain available for issuance under our Prior Plan at the time our 2021 Plan becomes effective, plus (3) any shares subject to outstanding stock options or other stock awards that were granted under our Prior Plan that, on or after the 2021 Plan becomes 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 Prior Plan. In addition, the number of shares of our common stock reserved for issuance under our 2021 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2022 (assuming the 2021 Plan becomes effective in 2021) through January 1, 2031, in an amount equal to 5% of the total number of shares of our 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 our board of directors prior to the applicable January 1. The maximum number of shares of our common stock that may be issued upon the exercise of incentive stock options under our 2021 Plan is 12,000,000.

Shares subject to stock awards granted under our 2021 Plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, do not reduce the number of shares available for issuance under our 2021 Plan. Additionally, shares become available for future grant under our 2021 Plan if they were issued under stock awards under our 2021 Plan if we repurchase them or they are forfeited. This includes shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2021 Plan. Our board of directors has delegated concurrent authority to administer our 2021 Plan to the compensation committee. We refer to the board of directors, or the applicable committee with the power to administer our 2021 Plan, as the plan administrator. Our plan administrator may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified stock awards and (2) determine the number of shares subject to such stock awards. Under our 2021 Plan, our board of directors has the authority to determine award recipients, grant dates, the numbers and types of stock awards to be granted, the applicable fair market value, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award. The plan administrator has the power to modify outstanding awards under our 2021 Plan. Subject to the terms of our 2021 Plan, the plan administrator has the authority to reprice any outstanding stock award, cancel and re-grant any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2021 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2021 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our

affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock units are granted under restricted stock unit award agreements adopted by the plan administrator. Restricted stock units may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit. Except as otherwise provided in the applicable award agreement or other written agreement between us and the participant, restricted stock units that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Stock Appreciation Rights. Stock appreciation rights are granted under stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the purchase price or strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2021 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

Performance Awards. The 2021 Plan permits the grant of performance-based stock and cash awards. The plan administrator may structure awards so that the shares of our stock, cash, or other property will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period. The performance criteria that will be used to establish such performance goals may be based on any measure of performance selected by the plan administrator.

The performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any portion of our business which is divested achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required

to be recorded under generally accepted accounting principles. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award (or cash equivalent) and all other terms and conditions of such awards.

Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid to any non-employee director with respect to any calendar year, including stock awards granted and cash fees paid by us to such non-employee director, will not exceed $750,000 in total value, or in the event such non-employee director is first appointed or elected to the board during such annual period, $1,000,000 in total value (in each case, calculating the value of any such stock awards based on the grant date fair value of such stock awards for financial reporting purposes).

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split, or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2021 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of incentive stock options, and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. The following applies to stock awards under the 2021 Plan in the event of a corporate transaction, unless otherwise provided in a participant's stock award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the plan administrator at the time of grant.

In the event of a corporate transaction, any stock awards outstanding under the 2021 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the stock award may be assigned to the successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then with respect to any such stock awards that are held by participants whose continuous service has not terminated prior to the effective time of the transaction, or current participants, the vesting (and exercisability, if applicable) of such stock awards will be accelerated in full to a date prior to the effective time of the transaction (contingent upon the effectiveness of the transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the effectiveness of the transaction). With respect to performance awards with multiple vesting levels depending on performance level, unless otherwise provided by an award agreement or by the administrator, the award will accelerate at 100% of target. If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then with respect to any such stock awards that are held by persons other than current participants, such awards will terminate if not exercised (if applicable) prior to the effective time of the transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the transaction. The plan administrator is not obligated to treat all stock awards or portions of stock awards in the same manner and is not obligated to take the same actions with respect to all participants.

In the event a stock award will terminate if not exercised prior to the effective time of a corporate transaction, the plan administrator may provide, in its sole discretion, that the holder of such stock award may not exercise such stock award but instead will receive a payment equal in value to the excess (if any) of (1) the value of the property the participant would have received upon the exercise of the stock award over (2) any exercise price payable by such holder in connection with such exercise.

Under our 2021 Plan, a corporate transaction is defined to include the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of at least 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding before such transaction are converted or exchanged into other property by virtue of the transaction, unless otherwise provided in an award agreement or other written agreement between us and the award holder.

Change in Control. Awards granted under the 2021 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control (as defined in the 2021 Plan) as may be provided in the applicable stock award agreement or in any other written agreement between us or any affiliate and the participant, but in the absence of such provision, no such acceleration will automatically occur.

Under the 2021 Plan, a change in control is defined to include (1) the acquisition by any person or company of more than 50% of the combined voting power of our then outstanding stock; (2) a consummated merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity); (3) a consummated sale, lease, exclusive license or other disposition of all or substantially all of our assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders; and (4) an unapproved change in the majority of the board of directors.

Transferability. A participant may not transfer stock awards under our 2021 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2021 Plan.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2021 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No incentive stock options may be granted after the tenth anniversary of the date our board of directors adopted our 2021 Plan. No stock awards may be granted under our 2021 Plan while it is suspended or after it is terminated.

Amended and Restated Stock Performance Plan

The Amended and Restated Stock Performance Plan (the Prior Plan) was originally adopted by our board of directors and approved by our stockholders in April 8, 2013, and most recently amended and approved by our board of directors and our stockholders on November 20, 2020. The Prior Plan provides for the grant of ISOs, NSOs, restricted stock awards, restricted stock units, stock appreciation rights, performance share awards and other stock-based awards. Our employees, officers, directors, consultants and advisors are eligible to receive awards under the Prior Plan; however, ISOs may only be granted to our employees.

Stock Awards. As of March 31, 2021, there were 3,481,178 shares of common stock issuable upon the exercise of stock options outstanding under the Prior Plan at a weighted-average exercise price of $1.17 per share, options to purchase 18,939 shares of our common stock had been exercised and 667,030 shares of common stock were available for future issuance under the Prior Plan. On and after the effective date of the 2021 Plan described above, we will grant no further stock options or other awards under the Prior Plan. However, any shares of common stock subject to awards under our Prior Plan that expire, terminate, or otherwise are surrendered or canceled without being fully exercised, are forfeited or results in any common stock not being issued will become available for issuance under our 2021 Plan.

Administration. Our board of directors, or a committee appointed by our board, administers the Prior Plan and, subject to any limitations set forth in the Prior Plan, will select the recipients of awards, determine the

number of shares of common stock to be subject to such stock awards and specify the other terms and conditions, including the exercise price or purchase price and vesting schedule, applicable to such stock awards.

Share Reserve. The Prior Plan provides that a maximum of 4,179,202 shares of our common stock are authorized for issuance under the plan. Our board of directors may amend, suspend, or terminate the Prior Plan at any time.

If an award under the Prior expires or becomes unexercisable without having been exercised in full, or is surrendered pursuant to an option exchange program, the unpurchased shares which were subject thereto shall become available for future grant or sale under the Prior Plan. Shares of our common stock that have actually been issued under the Prior Plan, shall not be returned to the Prior Plan, except that if shares of restricted stock are repurchased at their original purchase price, such shares of our common stock shall become available for future grant under the Plan. Upon closing of this offering, any shares that would otherwise be returned to the Prior Plan will instead be added to the shares of common stock available for issuance under the 2021 Plan.

Options. The exercise price per share of ISOs and NSOs granted under our Prior Plan cannot be less than 100% of the fair market value per share of our common stock on the grant date. Subject to the provisions of our Prior Plan, our board of directors determines the other terms of options, including any vesting and exercisability requirements, the method of payment of the option exercise price, the option expiration date, and the period following termination of service during which options may remain exercisable.

Changes to Capital Structure. Upon the occurrence of any stock split, reverse stock split, stock dividend, combination or reclassification of shares, or any other increase or decrease in the number of issued shares of our common stock effected without receipt of consideration by us, the number of shares covered by an award, the number of shares authorized for issuance under the Prior Plan as well as the price per share of our common stock subject to an award shall be proportionately adjusted.

Change in Control. In the event of a change in control, all unvested awards shall become immediately vested unless otherwise provided in an award agreement.

Transferability. A participant generally may not transfer stock awards under the Prior Plan other than by will, the laws of descent and distribution, except as our board of directors may otherwise determine or provide in the award agreement or as otherwise provided under the Prior Plan.

Amendment and Termination. Our board of directors has the authority to amend, suspend or terminate the Prior Plan. No amendment, alteration, suspension or termination of the Prior Plan shall impair the rights of any participant, unless mutually agreed otherwise between the participant and the board in writing. Unless terminated sooner by our board of directors, the Prior Plan will automatically terminate on April 8, 2023. Our board of directors has determined not to make any further awards under the Prior Plan following the closing of this offering.

2021 Employee Stock Purchase Plan

Our board of directors adopted our 2021 Employee Stock Purchase Plan (ESPP) in June 2021 and our stockholders approved our ESPP in June 2021. The ESPP will become effective immediately prior to and contingent upon the execution of the underwriting agreement related to this offering. The purpose of the ESPP is to secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP includes two components. One component is designed to allow eligible U.S. employees to purchase our common stock in a manner that may qualify for favorable tax treatment under Section 423 of the Code. In addition, purchase rights may be granted under a component that does not qualify for such favorable tax treatment because of deviations necessary to permit participation by eligible employees who are foreign nationals or employed outside of the U.S. while complying with applicable foreign laws.

Share Reserve. Following this offering, the ESPP authorizes the issuance of 375,000 shares of our common stock under purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2022 (assuming the ESPP becomes effective in 2021) through January 1, 2031, by the lesser of (1) 1% of the total number of shares of our 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, our board of directors may determine that such increase will be less than the amount set forth in clauses (1) and (2). As of the date hereof, no shares of our common stock have been purchased under the ESPP.

Administration. Our board of directors administers the ESPP and may delegate its authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering under the ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Common stock will be purchased for the accounts of employees participating in the ESPP at a price per share that is at least the lesser of (1) 85% of the fair market value of a share of our common stock on the first date of an offering, or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week, (2) being customarily employed for more than five months per calendar year, or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of $25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each calendar year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value under Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or similar transaction, the board of directors will make appropriate adjustments to: (1) the class(es) and maximum number of shares reserved under the ESPP, (2) the class(es) and maximum number of shares by which the share reserve may increase automatically each year, (3) the class(es) and number of shares subject to and purchase price applicable to outstanding offerings and purchase rights, and (4) the number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of certain significant corporate transactions, including the consummation of (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, or (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for

by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue, or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within ten business days before such corporate transaction, and such purchase rights will terminate immediately.

ESPP Amendment or Termination. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

Limitations on Liability and Indemnification Matters

Upon the closing of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation and our amended and restated bylaws that will be in effect upon the closing of this offering will provide that we are required to indemnify our directors to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also provide that, upon satisfaction of certain conditions, we are required to advance expenses incurred by a director in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board.

We have entered into indemnification agreements with each of our directors and expect to enter into indemnification agreements with each of our executive officers prior to the closing of this offering. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and executive officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further,

a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for our directors, executive officers or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering, subject to early termination, the sale of any shares under such plans would be prohibited by the lock-up agreement that the director or officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2018 to which we have been a participant in which the amount involved exceeded or will exceed $120,000, and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or any members of their immediately family, had or will have a direct or indirect material interest, other than compensation arrangements that are described under "Management—Non-Employee Director Compensation" and "Executive Compensation."

Private Placements of Our Securities

Convertible Promissory Notes

In May 2018 we issued a convertible promissory note to James B. Murray, Jr. Revocable Trust U/A/D 8/8/1991 in the aggregate principal amount of $237,500. James B. Murray, Jr. is the trustee of the James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 and is the Manager of Praxis Technologies. Entities affiliated with James B. Murray, Jr. collectively beneficially own more than 5% of our capital stock. In conjunction with the Series A/A-1 financing round, this note along with accrued interest converted into shares of Series A-1 preferred stock and is reflected in the aggregate purchase price and the aggregate shares issued to entities affiliated with James B. Murray, Jr. in the tables below.

Convertible Preferred Stock Financings

From October 2018 to November 2019, (1) we issued an aggregate of 1,371,639 shares of our Series A convertible preferred stock upon the conversion of the aggregate principal amount and interest on certain then-outstanding promissory notes, (2) we issued an aggregate of 77,552 shares of our Series A convertible preferred stock upon the optional conversion of certain shares of then-outstanding common stock, (3) we issued and sold an aggregate of 6,442,971 shares of our Series A-1 convertible preferred stock at a purchase price of $2.24 per share for aggregate gross proceeds of $14.4 million, (4) we issued an aggregate of 123,042 shares of our Series A-1 convertible preferred stock upon the conversion of the aggregate principal amount and interest on certain then-outstanding promissory notes, and (5) we issued an aggregate of 971,867 shares of our Series A-1 convertible preferred stock upon the optional conversion of certain shares of then-outstanding Series A convertible preferred stock. Each share of our Series A convertible preferred stock and Series A-1 convertible preferred stock will convert into common stock upon the closing of this offering.

Name	Series A Convertible Preferred Stock Received Upon Conversion of Notes (#)	Note Principal and Interest Converted into shares of Series A Convertible Preferred Stock ($)	Series A Convertible Preferred Stock Received Upon Exchange of Shares of Common Stock (#)	Shares of Common Stock Exchanged for Shares of Series A Convertible Preferred Stock (#)
Entities Affiliated with BVF Investments, LLC (1)	160,673	359,110	—	—
NV Acumen Holdings LLC (2)	185,412	414,398	—	—
PBM Capital Investments, LLC (3)	351,861(5)	786,412	—	—
Entities Affiliated with James B. Murray, Jr. (4)	364,898(5)	815,551	25,146	25,146

(1) Represents 86,823 shares of Series A convertible preferred stock issued to Biotechnology Value Fund, L.P. upon conversion of $194,051 note principal and interest, 49,149 shares of Series A preferred stock issued to Biotechnology Value Fund II, L.P. upon conversion of $109,850 note principal and interest, and 24,701 shares of Series A preferred stock issued to Investment 10, LLC upon conversion of $55,208 note principal and interest. Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., and Investment 10, LLC are affiliates of BVF Investments, LLC. At the time of the Series A/A-1 convertible preferred stock financing, entities affiliated with BVF Investments, LLC collectively beneficially owned more than 5% of our capital stock.

(2) NV Acumen Holdings LLC was a special purpose vehicle organized by NeuroVentures Capital to invest in the Company. At the time of the Series A/A-1 convertible preferred stock financing, entities affiliated with NeuroVentures Fund collectively beneficially owned more than 5% of our capital stock. Daniel O'Connell, our Chief Executive Officer and a member of our board of directors, served as managing partner of NeuroVentures Capital, LLC, the general partner to NeuroVentures Fund, L.P. which has sole voting and investment power with respect to the shares held by NeuroVentures Fund, L.P.

(3) PBM Capital Investments, LLC is affiliated with PBM Capital Group, LLC. Entities affiliated with PBM Capital Group, LLC collectively beneficially owned more than 5% of our capital stock. Sean Stalfort, President of PBM Capital Group, LLC, is a director of the Company. In June 2021, all entities affiliated with PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning.

(4) Represents (a) 362,159 shares of Series A convertible preferred stock issued to James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 consisting of (i) 352,602 shares of Series A convertible preferred stock issued upon conversion of $788,067 note principal and interest, and (ii) 9,557 shares of Series A convertible preferred stock issued in exchange for 9,557 shares of common stock; and (b) 27,885 shares of Series A convertible preferred stock issued to Praxis Technologies L.P. consisting of (i) 12,296 shares of Series A convertible preferred stock issued upon conversion of $27,484 note principal and interest, and (ii) 15,589 shares of Series A convertible preferred stock issued in exchange for 15,589 shares of common stock. James B. Murray, Jr. is the trustee of James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 and is the Manager of Praxis Technologies. Entities affiliated with James B. Murray, Jr. collectively beneficially own more than 5% of our capital stock.

(5) Pursuant to the preferred stock purchase and exchange agreement, the stockholder elected to convert certain Series A convertible preferred stock shares into Series A-1 convertible preferred stock shares, as shown in the table below.

Name	Shares of Series A-1 Preferred Stock Received Upon Exchange of Shares of Series A Preferred (#)	Shares of Series A Preferred Stock Exchanged for Shares of Series A-1 Preferred (#)	Series A-1 Convertible Preferred Stock (#)	Aggregate Purchase Price ($)
PBM Capital Investments, LLC (1)	351,861	351,861	1,124,729	2,513,772
Knollwood Investment Fund LLC (2)	—	—	1,124,830	2,514,000
Entities Affiliated with Robert D. Hardie (3)	—	—	1,124,828	2,514,000
Sands Capital Ventures Discovery Fund III, L.P. (4)	—	—	1,124,729	2,513,772
Entities Affiliated with James B. Murray, Jr. (5)	403,060	403,060	575,718	1,025,487

(1) PBM Capital Investments, LLC is affiliated with PBM Capital Group, LLC. Entities affiliated with PBM Capital Group, LLC collectively beneficially owned more than 5% of our capital stock. Sean Stalfort, President of PBM Capital Group, LLC, is a director of the Company. In June 2021, all entities affiliated with PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning.

(2) Knollwood Investment Fund LLC is a beneficial owner of greater than 5% of our capital stock.

(3) Represents 562,414 shares of Series A-1 convertible preferred stock purchased by H7 Holdings, LLC and 562,414 shares of Series A-1 convertible preferred stock purchased by Level One Partners, LLC. Robert D. Hardie is the Manager of both H7 Holdings, LLC and Level One Partners, LLC. Entities affiliated with Robert D. Hardie collectively beneficially own more than 5% of our capital stock.

(4) Sands Capital Ventures eFund II, L.P. is affiliated with Sands Capital Management, LLC. Entities affiliated with Sands Capital Management, LLC collectively beneficially own more than 5% of our capital stock. Dr. Stephen Zachary, a Partner at Sands Capital Management, was a director of the Company from October 2018 through June 2021.

(5) Represents (a) 838,421 shares of Series A-1 convertible preferred stock issued to James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 consisting of (i) 375,175 shares of Series A-1 convertible preferred stock issued in exchange for 375,175 shares of Series A convertible preferred stock, and (ii) 463,246 shares of Series A-1 convertible preferred stock issued upon purchase and conversion of

$261,250 note principal and interest, and (b) 140,357 shares of Series A-1 convertible preferred stock issued to Praxis Technologies L.P consisting of (i) 27,885 shares of Series A-1 convertible preferred stock issued in exchange for 27,885 shares of Series A convertible preferred stock, and (ii) 112,472 shares of Series A-1 convertible preferred stock issued upon purchase. Entities affiliated with James B. Murray, Jr. collectively beneficially own more than 5% of our capital stock.

In connection with the Series A/A-1 financing, we issued a warrant to purchase up to 447,426 shares of Series A-1 convertible preferred stock at an initial exercise price of $2.794 to PBM Capital Investments, LLC. PBM Capital Investments, LLC is affiliated with PBM Capital Group, LLC. Entities affiliated with PBM Capital Group, LLC collectively beneficially owned more than 5% of our capital stock. Sean Stalfort, President of PBM Capital Group, LLC, is a director of the Company. In June 2021, this warrant was exercised as described below under "*—Exercise of Warrants to Purchase Common Stock and Preferred Stock*"

Series B Convertible Preferred Stock Financing

In November 2020, we issued and sold an aggregate of 11,862,043 shares of our Series B convertible preferred stock at a purchase price of $3.80 per share for aggregate gross proceeds of $45.1 million. Each of our Series B convertible preferred stock shares will convert into common stock upon the closing of this offering. The table below sets forth the aggregate number of shares of Series B convertible preferred stock issued to our related parties in this financing:

Name	Series B Convertible Preferred Stock (#)	Aggregate Purchase Price ($)
Entities Affiliated with RA Capital (1)	4,737,464	18,000,001
PBM ACU Holdings II, LLC (2)	1,312,672	4,987,499
Knollwood Investment Fund LLC (3)	394,788	1,499,999
Entities Affiliated with Sands Capital (4)	1,105,408	4,199,998
James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 (5)	789,577	3,000,001
Entities Affiliated with Robert D. Hardie (6)	1,245,794	4,733,402

(1) Represents 3,673,534 shares of Series B convertible preferred stock purchased by RA Capital Healthcare Fund, L.P., 710,620 shares of Series B convertible preferred stock purchased by RA Capital Nexus Fund II, L.P., and 353,310 shares of Series B convertible preferred stock purchased by Blackwell Partners LLC – Series A. RA Capital Healthcare Fund, L.P., RA Capital Nexus Fund II, L.P., and Blackwell Partners LLC – Series A are affiliated with RA Capital Management, L.P. Entities affiliated with RA Capital Management, L.P. collectively beneficially own more than 5% of our capital stock. Dr. Laura Stoppel, a Principal at RA Capital Management, is a director of the Company.

(2) PBM ACU Holdings II, LLC is affiliated with PBM Capital Group, LLC. Entities affiliated with PBM Capital Group, LLC collectively beneficially owned more than 5% of our capital stock. Sean Stalfort, President of PBM Capital Group, LLC, is a director of the Company. In June 2021, all entities affiliated with PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning.

(3) Knollwood Investment Fund LLC is a beneficial owner of greater than 5% of our capital stock.

(4) Represents 552,704 shares of Series B convertible preferred stock purchased by Sands Capital Global Venture Fund II, L.P. and 552,704 shares of Series B convertible preferred stock purchased by Sands Capital Life Sciences Pulse Fund, LLC. Sands Capital Global Venture Fund II, L.P. and Sands Capital Life Sciences Pulse Fund, LLC are affiliated with Sands Capital Management, LLC. Entities affiliated with Sands Capital Management, LLC collectively beneficially own more than 5% of our capital stock. Dr. Stephen Zachary, a Partner at Sands Capital Management, was a director of the Company from October 2018 through June 2021.

(5) James B. Murray, Jr. is the trustee of James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991, the purchaser. Entities affiliated with James B. Murray, Jr. collectively beneficially own more than 5% of our capital stock.

(6) Represents 662,897 shares of Series B convertible preferred stock purchased by H7 Holdings, LLC and 662,897 shares of Series B convertible preferred stock purchased by Level One Partners, LLC. Robert D. Hardie is the Manager of both H7 Holdings, LLC and Level One Partners, LLC. Entities affiliated with Robert D. Hardie collectively beneficially own greater than 5% of our capital stock.

Further, pursuant to the Series B purchase agreement, participating investors agreed to purchase 7,908,027 additional shares of Series B convertible preferred stock at a purchase price of $3.80 per share (as adjusted for stock splits, dividends and other similar events), for an aggregate purchase price of $30.0 million upon the occurrence of a milestone event, defined in the Series B purchase agreement as the successful completion of cohort 3 of the single ascending dose portion of the ACU193 Phase 1 clinical trial. On June 9, 2021, our board of directors and the holders of more than 67% of the outstanding shares of Series B preferred stock elected to waive the achievement of the milestone event. The second tranche of the Series B preferred stock financing closed on June 17, 2021.

The table below sets forth the aggregate number of shares of Series B convertible preferred stock issued to our related parties upon the closing of the second tranche of the financing.

Name	Series B Convertible Preferred Stock (#)	Aggregate Purchase Price ($)
Entities Affiliated with RA Capital (1)	3,158,309	11,999,999
PBM ACU Holdings II, LLC (2)	875,115	3,325,001
Knollwood Investment Fund LLC (3)	263,192	1,000,000
Entities Affiliated with Sands Capital (4)	736,938	2,800,002
James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 (5)	526,385	2,000,001
Entities Affiliated with Robert D. Hardie (6)	830,530	3,155,600

(1) Represents 2,449,023 shares of Series B convertible preferred stock purchased by RA Capital Healthcare Fund, L.P., 473,746 shares of Series B convertible preferred stock purchased by RA Capital Nexus Fund II, L.P, and 235,540 shares of Series B convertible preferred stock purchased by Blackwell Partners LLC – Series A. RA Capital Healthcare Fund, L.P., RA Capital Nexus Fund II, L.P., and Blackwell Partners LLC – Series A are affiliated with RA Capital Management, L.P. Entities affiliated with RA Capital Management, L.P. collectively beneficially own more than 5% of our capital stock. Dr. Laura Stoppel, a Principal at RA Capital, is a director of the Company.

(2) PBM ACU Holdings II, LLC is affiliated with PBM Capital Group, LLC. Entities affiliated with PBM Capital Group, LLC collectively beneficially owned more than 5% of our capital stock. Sean Stalfort, President of PBM Capital, LLC, is a director of the Company. In June 2021, all entities affiliated with PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning.

(3) Knollwood Investment Fund LLC is a beneficial owner of greater than 5% of our capital stock.

(4) Represents 368,469 shares of Series B convertible preferred stock purchased by Sands Capital Global Venture Fund II, L.P. and 368,469 shares of Series B convertible preferred stock purchased by Sands Capital Life Sciences Pulse Fund, LLC. Sands Capital Global Venture Fund II, L.P. and Sands Capital Life Sciences Pulse Fund, LLC are affiliated with Sands Capital Management, LLC. Entities affiliated with Sands Capital Management, LLC collectively beneficially own more than 5% of our capital stock. Dr. Stephen Zachary, a Partner at Sands Capital Management, was a director of the Company from October 2018 through June 2021.

(5) James B. Murray, Jr. is the trustee of James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991, the purchaser. Entities affiliated with James B. Murray, Jr. collectively beneficially own more than 5% of our capital stock.

(6) Represents 415,265 shares of Series B convertible preferred stock purchased by H7 Holdings, LLC and 415,265 shares of Series B convertible preferred stock purchased by Level One Partners, LLC. Robert D. Hardie is the Manager of both H7 Holdings, LLC and Level One Partners, LLC. Entities affiliated with Robert D. Hardie collectively beneficially own greater than 5% of our capital stock.

Exercise of Warrants to Purchase Common Stock and Preferred Stock

On June 22, 2021, PBM ACU Holdings, LLC exercised its warrant to purchase 447,426 shares of Series A-1 preferred stock at an exercise price of $2.794 per share and two warrants to purchase a total of 105,591 shares of common stock at an exercise price of $4.47 per share. Entities affiliated with PBM Capital Group, LLC collectively beneficially own more than 5% of our capital stock. Sean Stalfort, President of PBM Capital, LLC, is a director of the Company. Subsequent to the exercise of these warrants, in June 2021, all entities affiliated with

PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning.

Investors' Rights, Voting and Right of First Refusal Agreements

In connection with the sales of convertible preferred stock described above, we entered into an amended and restated investors' rights agreement, an amended and restated voting agreement and an amended and restated right of first refusal and co-sale agreement containing registration rights, information rights, voting rights and rights of first refusal, among other things, with the holders of our convertible preferred stock. These agreements will terminate upon the closing of this offering, except for the registration rights granted under our amended and restated investors' rights agreement, as more fully described in the section of this prospectus titled "Description of Capital Stock—Registration Rights."

Employment Arrangements

We have entered into employment agreements, consulting agreements or offer letter agreements with certain of our executive officers. For more information regarding our employment agreements and consulting agreements with Daniel O'Connell, Eric Siemers, and Russel Barton, see "Executive Compensation—Agreements with our Named Executive Officers and Potential Payments upon Termination of Employment." We have also entered into an advisory board consulting agreement with Dr. Jeffrey Sevigny, one of our current board members. For more information regarding our consulting agreement with Dr. Sevigny, see "Management—Non-Employee Director Compensation."

Indemnification Agreements

Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board.

In addition, we have entered into indemnification agreements with each of our directors, and we expect to enter into indemnification agreements with each of our executive officers prior to the closing of this offering. For more information regarding these agreements, see "Executive Compensation—Limitations on Liability and Indemnification Matters."

Related Person Transaction Policy

Prior to this offering, we have not had a formal policy regarding approval of transactions with related parties. In connection with this offering, we have adopted a related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions, which policy will become effective immediately upon the execution of the underwriting agreement for this offering. For purposes of our policy only, a related person transaction will be a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants in which the amount involved exceeds $120,000. Transactions involving compensation for services provided to us as an employee or director will not be covered by this policy. A related person will be any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related-person transactions and to effectuate the terms of the policy. In addition, under our Code of Conduct that we expect to adopt prior to the closing of this offering, our employees and directors will have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related person transactions, our audit committee, or other independent body of our board of directors, will take into account the relevant available facts and circumstances including:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy will require that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our board of directors, determines in the good faith exercise of its discretion.

All of the transactions described in this section were entered into prior to the adoption of this policy. Although we have not had a written policy for the review and approval of transactions with related persons, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to a director's or officer's relationship or interest in the agreement or transaction were disclosed to our board of directors. Our board of directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- our named executive officers; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Under these rules, beneficial ownership includes any shares of common stock as to which the individual or entity has sole or shared voting power or investment power. Applicable percentage ownership is based on 28,204,370 shares of common stock outstanding as of June 18, 2021, after giving effect to the conversion of all of our convertible preferred stock that was outstanding as of June 18, 2021, and without giving effect to the exercise of any warrants outstanding as of June 18, 2021. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options held by such person that are currently exercisable or will become exercisable within 60 days of June 18, 2021 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

The following table does not reflect any shares of our common stock that may be purchased pursuant to our reserved share program described under “Underwriting.” If any shares of our common stock are purchased by our existing principal stockholders, directors, officers or their affiliated entities, the number and percentage of shares of our common stock beneficially owned by them after this offering will differ from those set forth in the following table.

Unless noted otherwise, the address of all listed stockholders is c/o Acumen Pharmaceuticals, Inc., 427 Park St., Charlottesville, Virginia 22902.

Except as indicated by the footnotes below, we believe, based on information furnished to us, that each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

		Percentage of Shares Beneficially Owned	
Name and Address of Beneficial Owner (1)	**Shares**	**Percent Before Offering**	**Percent After Offering**
Greater than 5% Stockholders			
Entities affiliated with RA Capital (2)	7,895,773	28.0%	21.6%
Entities affiliated with PBM Capital Group, LLC (3)	4,217,394	14.7%	11.4%
Entities affiliated with Robert D. Hardie (4)	3,201,152	11.3%	8.8%
Entities affiliated with Sands Capital Management LLC (5)	2,967,075	10.5%	8.1%
Entities affiliated with James B. Murray, Jr. (6)	2,441,135	8.6%	6.7%
Knollwood Investment Fund LLC (7)	1,782,810	6.3%	4.9%
Named Executive Officers and Directors			
Daniel O’Connell (8)	432,977	1.5%	1.2%
Eric Siemers, M.D. (9)	171,233	*	*
Russell Barton, M.S. (10)	36,104	*	*

Name and Address of Beneficial Owner (1)	Shares	Percentage of Shares Beneficially Owned	
		Percent Before Offering	Percent After Offering
Nathan B. Fountain, M.D.	—	—	—
Jeffrey L. Ives, Ph.D. (11)	45,346	*	*
Jeffrey Sevigny, M.D. (12)	33,836	*	*
Sean Stalfort	—	—	—
Laura Stoppel, Ph.D.	—	—	—
All current executive officers and directors as a group (9 persons)	776,628	2.7%	2.1%

(1) Unless otherwise indicated, the business address of each of the directors and executive officers of the company is c/o Acumen Pharmaceuticals Inc., 427 Park St., Charlottesville, VA 22902.

(2) Consists of (a) 6,122,557 shares of common stock issuable upon conversion of Series B convertible preferred stock held by RA Capital Healthcare Fund, L.P. ("RACHF"), (b) 1,184,366 shares of common stock issuable upon conversion of Series B convertible preferred stock held by RA Capital Nexus Fund II, L.P. ("Nexus II"), and (c) 588,850 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Blackwell Partners LLC – Series A ("Blackwell"). RA Capital Management, LP ("RACM") is the investment adviser to RACHF, Nexus II and Blackwell. RA Capital Healthcare Fund GP, LLC is the general partner of RACHF. The general partner of Nexus II is RA Capital Nexus Fund II GP, LLC. Peter Kolchinsky and Rajeev Shah are the managing members of RACM, RA Capital Healthcare Fund GP, LLC and RA Capital Nexus Fund II GP, LLC and have the power to vote or dispose of the shares held by each entity. The address for Dr. Kolchinsky, Mr. Shah, RACHF and Nexus II is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.

(3) Consists of (a) 2,187,787 shares of common stock issuable upon conversion of Series B convertible preferred stock held by PBM ACU Holdings II, LLC, and (b) 1,476,590 shares of common stock issuable upon conversion of Series A-1 convertible preferred stock, 105,591 shares of common stock issuable upon the exercise of common stock warrants exercisable within 60 days of June 18, 2021 and 447,426 shares of common stock issuable upon the exercise and conversion of preferred stock warrants exercisable within 60 days of June 18, 2021 held by PBM ACU Holdings, LLC. The manager of PBM ACU Holdings II, LLC and PBM ACU Holdings, LLC is PBM Capital Group, LLC. In June 2021, all entities affiliated with PBM Capital Investments, LLC holding securities in the Company distributed all of their Acumen securities previously held to their beneficial owners, including Paul B. Manning, the Chief Executive Officer of PBM Capital Group, LLC, for no additional consideration in accordance with the terms of each entity's operating agreement. Under the terms of the distribution, Mr. Manning retains sole voting and shared dispositive power over all distributed shares through the completion of this offering, at which time Mr. Manning's voting and dispositive power over the distributed shares will terminate except with respect to any shares held by Mr. Manning. The percentage of shares beneficially owned after the offering in the table above does not take into account the termination, upon the completion of the offering, of Mr. Manning's sole voting and shared dispositive power over the distributed shares. The address for PBM ACU Holdings II, LLC, PBM ACU Holdings, LLC, PBM Capital Group, LLC and Paul B. Manning is 200 Garrett Street, Suite S, Charlottesville, VA 22902.

(4) Consists of (a) 1,038,162 shares of common stock issuable upon conversion of Series B convertible preferred Stock and 562,414 shares of common stock issuable upon conversion of Series A-1 preferred stock held by H7 Holdings LLC, and (b) 1,038,162 shares of common stock issuable upon conversion of Series B convertible preferred stock and 562,414 shares of common stock issuable upon conversion of Series A-1 preferred stock held by Level One Partners, LLC. Robert D. Hardie is the Manager of both H7 Holdings, LLC and Level One Partners, LLC and has the power to vote or dispose of the shares held by each entity. The address for Robert D. Hardie, H7 Holdings, LLC and Level One Partners, LLC is 210 Ridge McIntire Road, Suite 350, Charlottesville, VA 22903.

(5) Consists of (a) 921,173 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Sands Capital Global Venture Fund II, L.P., (b) 921,173 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Sands Capital Life Sciences Pulse Fund,

LLC, (c) 1,124,729 shares of common stock issuable upon conversion of Series A-1 convertible preferred stock held by Sands Capital Ventures Discovery Fund III, L.P. The sole general partner of Sands Capital Ventures Discovery Fund III, L.P. is Sands Capital Ventures Discovery Fund III-GP, LLC. The sole general partner of Sands Capital Global Venture Fund II, L.P. is Sands Capital Global Venture Fund II-GP, L.P., and the sole general partner of Sands Capital Global Venture Fund II-GP, L.P. is Sands Capital Global Venture Fund II-GP, LLC. Each of the funds is advised by Sands Capital Ventures, LLC, a registered investment adviser (the "Adviser"). The proxy voting power of the Adviser is exercised by the investment lead covering the company. Frank Sands Jr. holds dispositive power over the shares held by Sands Capital Ventures Discovery Fund III, L.P. Frank Sands Jr., Ian Ratcliffe, and Michael Graninger, acting unanimously, hold dispositive power over the shares held by Sands Capital Global Venture Fund II, L.P. Ian Ratcliffe and Stephen Zachary, acting unanimously, hold dispositive power over the shares held by Sands Capital Life Sciences Pulse Fund, LLC. The address for Sands Capital Global Venture Fund II, L.P., Sands Capital Life Sciences Pulse Fund, LLC, and Sands Capital Ventures Discovery Fund III, L.P., Sands Capital Ventures, LLC and each above-named person holding dispositive power over the shares held by these entities is 1000 Wilson Blvd, Suite 3000, Arlington, VA 22209.

(6) Consists of (a) 35 shares of common stock, 29,322 shares of common stock issuable upon conversion of Series A convertible preferred stock, 838,421 shares of common stock issuable upon conversion of Series A-1 convertible preferred stock, 1,315,962 shares of common stock issuable upon conversion of Series B convertible preferred stock, and 113,515 shares of common stock issuable upon the exercise of common stock warrants exercisable within 60 days of June 18, 2021 held by James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991, and (b) 140,357 shares of common stock issuable upon conversion of Series A-1 convertible preferred stock and 3,523 shares of common stock issuable upon the exercise of common stock warrants exercisable within 60 days of June 18, 2021 held by Praxis Technologies L.P. James B. Murray, Jr. is the trustee of James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991 and the Manager of Praxis Technologies, L.P. and has the power to vote or dispose of shares held by each entity. The address for James B. Murray, Jr., James B. Murray, Jr. Revocable Trust U/A/D 8/5/1991, and Praxis Technologies, L.P. is 427 Park St., Charlottesville, VA 22902.

(7) Consists of 657,980 shares of common stock issuable upon conversion of Series B convertible preferred stock and 1,124,830 shares of common stock issuable upon conversion of Series A-1 convertible preferred stock held by Knollwood Investment Fund LLC. Knollwood Investment Advisory, LLC is the Managing Member of Knollwood Investment Fund LLC. Kevin D. Irwin is the President of Knollwood Investment Advisory, LLC and has the power to vote or dispose of the shares held by Knollwood Investment Fund LLC. The address for Knollwood Investment Fund LLC., Knollwood Investment Advisory, LLC, and Kevin D. Irwin is 217 International Cir., Hunt Valley, MD 21030.

(8) Consists of 1,416 shares of common stock, 123 shares of common stock issuable upon conversion of Series A convertible preferred stock, 35 shares of common stock issuable upon the exercise of common stock warrants exercisable within 60 days of June 18, 2021, and 431,403 shares of common stock issuable upon the exercise of options exercisable within 60 days of June 18, 2021.

(9) Consists of 171,233 shares of common stock issuable upon the exercise of options exercisable within 60 days of June 18, 2021.

(10) Consists of 36,104 shares of common stock issuable upon the exercise of options exercisable within 60 days of June 18, 2021.

(11) Consists of 45,346 shares of common stock issuable upon the exercise of options exercisable within 60 days of June 18, 2021.

(12) Consists of 33,836 shares of common stock issuable upon the exercise of options exercisable within 60 days of June 18, 2021.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock, certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, as each will be in effect following the completion of this offering, and certain provisions of Delaware law are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is part.

General

Upon the completion of this offering, our amended and restated certificate of incorporation will authorize us to issue up to 300,000,000 shares of common stock, $0.0001 par value per share, and 10,000,000 shares of preferred stock, $0.0001 par value per share, all of which shares of preferred stock will be undesignated. Our board of directors may establish the rights and preferences of the preferred stock from time to time.

As of March 31, 2021, we had outstanding 419,124 shares of common stock, held by 84 stockholders of record. As of March 31, 2021, after giving effect to the conversion of all of the outstanding shares of our convertible preferred stock, including 477,297 shares of our Series A convertible preferred stock, 7,537,879 shares of our Series A-1 convertible preferred stock and 11,862,043 shares of our Series B convertible preferred stock issued, into 19,877,219 shares of common stock, there would have been 20,296,343 shares of common stock issued and outstanding, held by 128 stockholders of record.

Common Stock

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. The affirmative vote of holders of at least $66^{2}/_{3}\%$ of the voting power of all of the then-outstanding shares of capital stock, voting as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified board, the size of our board, removal of directors, director liability, vacancies on our board, special meetings, stockholder notices, actions by written consent and exclusive forum.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the right of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

As of March 31, 2021, there were 19,877,219 shares of our preferred stock outstanding consisting of 477,297 shares of our Series A convertible preferred stock, 7,537,879 shares of our Series A-1 convertible preferred stock, and 11,862,043 shares of our Series B convertible preferred stock. In June 2021, we issued an additional 7,908,027 shares of our Series B convertible preferred stock in connection with the closing of the second tranche of the Series B convertible stock financing and 447,426 shares of Series A-1 convertible preferred stock upon exercise of a warrant, as described under "Warrants" below. All currently outstanding shares of convertible preferred stock will be converted into an aggregate of 28,232,672 shares of common stock upon the closing of this offering.

Following the closing of this offering, our board of directors will have the authority under our amended and restated certificate of incorporation, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until the board of directors determines the specific rights attached to that preferred stock.

We have no present plans to issue any shares of preferred stock following the completion of this offering.

Options

As of March 31, 2021, there were options to purchase shares of common stock outstanding. For additional information regarding the terms of our Amended and Restated Stock Performance Plan and our 2021 Equity Incentive Plan, see "Executive Compensation—Equity Incentive Plans."

Warrants

As of March 31, 2021, there were outstanding immediately exercisable warrants to purchase up to 385,693 shares of our common stock at an exercise price of $4.47 per share and 447,426 shares of our Series A-1 preferred stock at an exercise price of $2.79 per share. On June 22, 2021 warrants to purchase 128,114 shares of common stock were exercised at an exercise price of $4.47 per share and the warrant to purchase 447,426 shares of Series A-1 preferred stock was exercised at an exercise price of $2.794 per share. Upon completion of this offering, the remaining warrants to purchase shares of common stock will be automatically net exercised for the purchase of an aggregate of 180,803 shares of our common stock (based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus).

Registration Rights

We, the holders of our existing convertible preferred stock and certain holders of our existing common stock have entered into an amended and restated investors' rights agreement. The registration rights provisions of this agreement provide those holders with demand, piggyback and Form S-3 registration rights with respect to the shares of common stock currently held by them and issuable to them upon conversion of our convertible preferred stock in connection with our initial public offering. These shares are collectively referred to herein as registrable securities.

Demand Registration Rights

At any time beginning 180 days following the effective date of the registration statement of which this prospectus is a part, the holders of a majority of registrable securities then outstanding have the right to demand that we file a registration statement covering registrable securities then outstanding having an aggregate offering price of at least $5.0 million, net of certain selling expenses. These registration rights are subject to specified conditions and limitations, including the right of the underwriters, if any, to limit the number of shares included in any such registration under specified circumstances. Upon such a request, we are required to effect the registration as soon as practicable, but in any event no later than 60 days after the receipt of such request. An aggregate of 28,232,672 shares of common stock will be entitled to these demand registration rights.

Piggyback Registration Rights

If we propose to register any of our securities under the Securities Act either for our own account or for the account of other stockholders, the holders of registrable securities will each be entitled to notice of the registration and will be entitled to include their shares of common stock in the registration statement. These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under specified circumstances. An aggregate of 28,232,672 shares of common stock will be entitled to these piggyback registration rights.

Registration on Form S-3

At any time after we become eligible to file a registration statement on Form S-3, the holders of at least 30% of registrable securities then outstanding will be entitled to request to have such shares registered by us on a Form S-3 registration statement. These Form S-3 registration rights are subject to other specified conditions and limitations, including the condition that the anticipated aggregate offering price, net of certain selling expenses, is at least $5.0 million. Upon receipt of this request, the holders of registrable securities will each be entitled to participate in this registration. An aggregate of 28,232,672 shares of common stock will be entitled to these Form S-3 registration rights.

Expenses of Registration

We are required to pay all expenses, including fees and expenses of one counsel to represent the selling stockholders (up to $50,000 total), relating to any demand, piggyback or Form S-3 registration, other than underwriting discounts and commissions, stock transfer taxes and any additional fees of counsel for the selling stockholders, subject to specified conditions and limitations. We are not required to pay registration expenses if a demand registration request is withdrawn at the request of a majority of holders of registrable securities to be registered, unless holders of a majority of the registrable securities agree to forfeit their right to one demand registration.

The amended and restated investors' rights agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the applicable registration statement attributable to us, and the selling stockholders are obligated to indemnify us for material misstatements or omissions in the registration statement attributable to them, subject to certain limitations.

Termination of Registration Rights

The registration rights granted under the investors' rights agreement will terminate with respect to any particular stockholder upon the earlier of (a) the closing of a deemed liquidation event, as defined in our certificate of incorporation, (b) the third anniversary of the closing of this offering and (c) with respect to each stockholder, at such time such stockholder is able to sell all of its shares pursuant to Rule 144 or another similar exemption under the Securities Act during a three-month period without registration.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include the following:

- any merger or consolidation involving the corporation or any direct or indirect majority-owned subsidiary of the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder (in one transaction or a series of transactions);
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation or by any direct or indirect majority-owned subsidiary of the corporation of any stock of the corporation or of such subsidiary to the interested stockholder;
- any transaction involving the corporation or any direct or indirect majority-owned subsidiary of the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering, or our restated certificate, will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the

other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our restated certificate and our amended and restated bylaws to be effective upon the completion of this offering, or our restated bylaws, will also provide that directors may be removed by the stockholders only for cause upon the vote of 66$^2/_3$% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Under our restated certificate of incorporation and amended and restated bylaws our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Our restated certificate and restated bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our restated bylaws will also provide that only our Chairman of the board, Chief Executive Officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our restated bylaws will also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder's notice.

Our restated certificate and restated bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of 66$^2/_3$% or more of our outstanding common stock.

As described in "—Preferred Stock" above, our restated certificate will give our board of directors the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change in control.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our amended and restated certificate of incorporation to be effective on the completion of this offering will provide that the Court of Chancery of the State of Delaware (or, if and only if, the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if, all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom shall be the sole and exclusive forum for the following claims or causes of action brought under Delaware statutory or common law: (1) any derivative claim or action brought on our behalf; (2) any claim or cause of action asserting a breach of fiduciary duty by any of our current or former director, officer or other employee; (3) any claim or cause of action asserting a claim against us arising out of, or pursuant to, the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; (4) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws (including any right, obligation, or remedy thereunder); (5) any claim or cause of action as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware; or (6) any claim or cause of action asserting a claim against us or any of our directors, officers or other employees, that is governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court having personal jurisdiction over the indispensable parties named as defendants. The aforementioned provision will not apply to claims or causes of action brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

In addition, our amended and restated certificate of incorporation will further provide that, unless we consent writing to the selection of an alternative forum, the federal district courts of the United States of America will be the exclusive forum, to the fullest extent permitted by law, for resolving any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could find the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, NY 11219.

Listing

We have applied to list our common stock on the Nasdaq Global Market under the trading symbol "ABOS."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, no public market existed for our common stock. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Immediately following the closing of this offering, based on the number of shares of common stock outstanding as of March 31, 2021, assuming (1) the automatic conversion of all outstanding shares of our preferred stock into 27,785,246 shares of our common stock upon the closing of this offering, (2) the automatic exercise and conversion of an outstanding preferred stock warrant into 447,426 shares of our common stock, which will occur upon the closing of this offering (based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus), (3) and no exercise of the underwriters' option to purchase up to 1,249,999 additional shares of our common stock, we will have an aggregate of 36,985,129 shares of common stock outstanding. Of theses shares, all shares of common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares of common stuck purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act, except for any shares of common stock purchased by our "affiliates," as the term is defined in Rule 144 under the Securities Act, or subject to lock-up agreements. Shares purchased by our affiliates would be subject to the Rule 144 resale restrictions described below, other than the holding period requirement.

The remaining shares of common stock outstanding after this offering will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, each of which is summarized below. We expect that substantially all of these shares will be subject to a 180-day lock-up period under the lock-up agreements described below.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may also be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition, investment or other transaction.

In addition, shares of common stock that are either subject to outstanding options or warrants or reserved for future issuance under our equity incentive plans will become eligible for sale in the public market to the extent permitted by the provisions of various listing schedules, the lock-up agreements described below, and Rules 144 and 701 under the Securities Act.

Rule 144

In general, non-affiliate persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of the company who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

Non-Affiliates

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates (subject to certain exceptions);
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting. Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Affiliates

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale, would be subject to the restrictions described above. They are also subject to additional restrictions, by which such person would be required to comply with the manner of sale and notice provisions of Rule 144 and would be entitled to sell within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 369,000 shares immediately after the completion of this offering based on the number of shares outstanding as of March 31, 2021; or
- the average weekly trading volume of our common stock on the stock exchange on which our shares are listed during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Additionally, persons who are our affiliates at the time of, or any time during the three months preceding, a sale may sell unrestricted securities under the requirements of Rule 144 described above, without regard to the six-month holding period of Rule 144, which does not apply to sales of unrestricted securities.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and in the section titled “Underwriting” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statements

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our equity plans. We expect to file the registration statement covering shares offered pursuant to our stock plans as soon as practicable after the closing of this offering, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to compliance with the resale provisions of Rule 144 and expiration or release from the terms of the lock-up agreements described below.

Lock-Up Agreements

We, our executive officers and directors and substantially all of the holders of our common stock outstanding on the date of this prospectus have entered into lock-up agreements with the underwriters or otherwise agreed, subject to certain exceptions, that we and they will not, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, or otherwise dispose of or hedge any of our shares of common stock, any options or warrants to purchase shares of our common stock, or any securities convertible into, or exchangeable for or that represent the right to receive shares of our common stock, without the prior written consent of BofA Securities, Inc. for a period of 180 days from the date of this prospectus.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into an agreement with the holders of our convertible preferred stock that contains market stand-off provisions imposing restrictions on the ability of such security holders to sell or otherwise transfer or dispose of any registrable securities for a period of 180 days following the date of this prospectus.

Registration Rights

Upon the closing of this offering, the holders of 28,232,672 shares of our common stock, including common stock issuable upon the conversion of our convertible preferred stock, or their transferees, will be entitled to specified rights with respect to the registration of their registrable shares under the Securities Act, subject to certain limitations and the expiration, waiver or termination of the lock-up agreements. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon effectiveness of the registration. See “Description of Capital Stock—Registration Rights” for additional information.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a summary of certain material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering. This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, does not address the potential application of the Medicare contribution tax on net investment income, and does not address any estate or gift tax consequences or any tax consequences arising under any state, local or foreign tax laws, or any other U.S. federal tax laws. This discussion is based on the Internal Revenue Code of 1986, as amended (the Code), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the Internal Revenue Service (IRS), all as in effect on the date of this prospectus. These authorities are subject to differing interpretations and may change, possibly retroactively, resulting in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This discussion is limited to non-U.S. holders who purchase our common stock pursuant to this offering and who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all of the U.S. federal income tax consequences that may be relevant to an individual non-U.S. holder in light of such non-U.S. holder's particular circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to non-U.S. holders subject to special rules under the U.S. federal income tax laws, including:

- U.S. expatriates and certain former citizens or long-term residents of the United States;
- partnerships or other pass-through entities (entities or arrangements treated as partnerships for U.S. federal income tax purposes and investors therein);
- "controlled foreign corporations";
- "passive foreign investment companies";
- corporations that accumulate earnings to avoid U.S. federal income tax;
- banks, financial institutions, investment funds, insurance companies, brokers, dealers or traders in securities;
- tax-exempt organizations and governmental organizations;
- tax-qualified retirement plans;
- persons who hold or acquire our common stock through the exercise of an option or otherwise as compensation;
- qualified foreign pension funds as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons subject to the alternative minimum tax;
- persons subject to special tax accounting rules under Section 451(b) of the Code;
- persons that own or have owned, actually or constructively, more than 5% of our common stock;
- persons who have elected to mark securities to market; and

- persons holding our common stock as part of a hedging or conversion transaction or straddle, or a constructive sale, or other risk reduction strategy or integrated investment.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships holding our common stock and the partners in such partnerships are urged to consult their tax advisors about the particular U.S. federal income tax consequences to them of holding and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Definition of Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is not a "U.S. holder" or a partnership (including any entity or arrangement treated as a partnership) for U.S. federal income tax purposes. A U.S. holder is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust (1) whose administration is subject to the primary supervision of a U.S. court and which has one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) who have the authority to control all substantial decisions of the trust or (2) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on Our Common Stock

As described under the section titled "Dividend Policy," we do not anticipate declaring or paying, in the foreseeable future, any cash distributions on our capital stock. However, if we distribute cash or other property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder's tax basis in our common stock, but not below zero. Any excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under the section titled " —Gain on Disposition of Our Common Stock" below.

Subject to the discussions below regarding effectively connected income, backup withholding and FATCA (as defined below), dividends paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends or such lower rate specified by an applicable income tax treaty. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish us or our withholding agent with a valid IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E

(in the case of entities), or other appropriate form, certifying such holder's qualification for the reduced rate. This certification must be provided to us or our withholding agent before the payment of dividends and must be updated periodically. In the case of a non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of the tax treaty, dividends will be treated as paid to the entity or to those holding an interest in the entity. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our withholding agent, either directly or through other intermediaries.

If a non-U.S. holder holds our common stock in connection with the conduct of a trade or business in the United States, and dividends paid on our common stock are effectively connected with such holder's U.S. trade or business (and are attributable to such holder's permanent establishment or fixed base in the United States if required by an applicable tax treaty), the non-U.S. holder will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a valid IRS Form W-8ECI (or applicable successor form) to the applicable withholding agent.

However, any such effectively connected dividends paid on our common stock generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

Non-U.S. holders that do not provide the required certification on a timely basis, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and FATCA (as defined below), a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized on the sale or other taxable disposition of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States;

- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition, and certain other requirements are met; or

- our common stock constitutes a "United States real property interest" (USRPI) by reason of our status as a United States real property holding corporation (USRPHC) for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock, and our common stock is not regularly traded on an established securities market during the calendar year in which the sale or other disposition occurs.

Determining whether we are a USRPHC depends on the fair market value of our USRPIs interests relative to the fair market value of our other trade or business assets and our foreign real property interests. We believe that we are not currently and we do not anticipate becoming a USRPHC for U.S. federal income tax purposes, although there can be no assurance we will not in the future become a USRPHC.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident

of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Gain described in the second bullet point above will be subject to U.S. federal income tax at a flat 30% rate (or such lower rate specified by an applicable income tax treaty), but may be offset by certain U.S.-source capital losses (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses. Gain described in the third bullet point above will generally be subject to U.S. federal income tax in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating the distributions on our common stock paid to such holder and any tax withheld with respect to those distributions. These information reporting requirements apply even if no withholding was required because the distributions were effectively connected with the holder's conduct of a U.S. trade or business, or withholding was reduced or eliminated by an applicable income tax treaty. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Backup withholding, currently at a 24% rate, generally will not apply to payments to a non-U.S. holder of dividends on or the gross proceeds of a disposition of our common stock provided the non-U.S. holder furnishes the required certification for its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, otherwise establishes an exemption, and if the payor does not have actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

Backup withholding is not an additional tax. If any amount is withheld under the backup withholding rules, the non-U.S. holder should consult with a U.S. tax advisor regarding the possibility of and procedure for obtaining a refund or a credit against the non-U.S. holder's U.S. federal income tax liability, if any.

Withholding on Foreign Entities

Sections 1471 through 1474 of the Code, which are commonly referred to as FATCA, impose a U.S. federal withholding tax of 30% on certain payments made to a "foreign financial institution" (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding certain U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. FATCA also generally will impose a U.S. federal withholding tax of 30% on certain payments made to a non-financial foreign entity unless such entity provides the withholding agent a certification identifying certain direct and indirect U.S. owners of the entity or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. FATCA currently applies to dividends paid on our common stock and would have applied also to payments of gross proceeds from the sale or other disposition of our common stock. The U.S. Treasury Department has released proposed regulations under FATCA providing for the elimination of the federal withholding tax of 30% applicable to gross proceeds of a sale or other disposition of our common stock. Under these proposed Treasury Regulations (which may be relied upon by taxpayers prior to finalization), FATCA will not apply to gross proceeds from sales or other dispositions of our common stock.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

UNDERWRITING

BofA Securities, Inc., Credit Suisse Securities (USA) LLC and Stifel, Nicolaus & Company, Incorporated are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
BofA Securities, Inc.	
Credit Suisse Securities (USA) LLC	
Stifel, Nicolaus & Company, Incorporated	
UBS Securities LLC	
Total	8,333,333

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $3,500,000 and are payable by us. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority and other regulatory fees up to $40,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to 1,249,999 additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

Reserved Shares

At our request, an affiliate of BofA Securities, Inc., a participating underwriter, has reserved for sale, at the initial public offering price, up to 5% of the shares of common stock offered by this prospectus for sale to certain of our directors, officers, employees, distributors, dealers, business associates and related persons. If these persons purchase reserved shares, this will reduce the number of shares of our common stock available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders that collectively own substantially all of our stock before this offering have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file or make a confidential submission of a registration statement related to the common stock, or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock, or the Lock-Up Securities. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

The agreements of our officers, directors and holders of substantially all of our common stock do not apply to (a) (i) transfers made as a *bona fide* gift or gifts, including, without limitation, to a charitable organization or educational institution, or for *bona fide* estate planning purposes, (ii) transfers to any immediate family member of such holder or to any trust for the direct or indirect benefit of such holder or the immediate family of such holder, (iii) if such holder is a trust, transfers to a trustor, trustee or beneficiary of such trust or to

the estate of a trustor, trustee or beneficiary of such trust, (iv) transfers made as a distribution to partners, members, managers, equity holders or stockholders of such holder, or (v) transfers to such holder's affiliates or to any investment fund or other entity controlled or managed by, controlling or managing, or under common control with, such holder or affiliates of such holder, *provided that* the transferee or distributee agrees to such restrictions for the remainder of the 180-day period, any such transfer does not involve a disposition for value, and such transfers or distributions are not required to be reported with the SEC on Form 4 and no public filing or report regarding such transfers is voluntarily effected during the remainder of the 180-day period; (b) transfers made (i) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or any immediate family of such holder, (ii) pursuant to a court or regulatory agency order, a qualified domestic order or in connection with a divorce settlement; or (iii) to us pursuant to any contractual arrangement that provides us with an option to repurchase such Lock-Up Securities in connection with the termination of such holder's employment or other service relationship with us, or pursuant to a right of first refusal with respect to transfers of such Lock-Up Securities or to cover taxes due upon or the consideration required in connection with the vesting, conversion or exercise of securities issued under an equity incentive plan or stock purchase plan of the Company, including through the withholding of shares by, or surrender of shares to, us pursuant to a "cashless" or "net exercise" settlement feature, *provided that* the transferee or distributee agrees to such restrictions for the remainder of the 180-day period, in the case of any transfer pursuant to (b)(i) above, such transfer does not involve a disposition for value, and any filing under the Exchange Act required to be made during the remainder of the 180-day period shall clearly indicate in the footnotes thereto that the filing relates to circumstances described above; (c) prevent or restrict (i) the exercise, vesting or settlement of any outstanding warrant, or any option to purchase common stock or other equity awards pursuant to any stock incentive plan or stock purchase plan of the Company (including in each case by "net" or "cashless" exercise), *provided that* the underlying shares shall continue to be subject to the transfer restrictions, (ii) the establishment of a plan of disposition that complies with Rule 10b5-1 under the Exchange Act (a "10b5-1 Plan"), or the amendment of an existing 10b5-1 Plan, so long as such plan does not provide for sales of Lock-Up Securities during the remainder of the 180-day period; and *provided that* the establishment of a 10b5-1 Plan or the amendment of a 10b5-1 Plan, in either case, providing for sales of Lock-Up Securities shall only be permitted if (1) the establishment or amendment of such plan is not required to be reported during the Lock-Up Period in any public report or filing with the SEC or otherwise, and (2) such holder does not otherwise voluntarily effect any public filing or report regarding the establishment or amendment of such plan during the remainder of the 180-day period, (iii) the conversion of the outstanding shares of preferred stock of the Company into shares of common stock, provided that any such shares of common stock received upon such conversion shall be subject to the transfer restrictions, or (iv) the transfer of Lock-Up Securities pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of common stock and involving a change of control of the Company, provided that in the event that the tender offer, merger, consolidation or other such transaction is not complete, the Lock-Up Securities owned by such shall remain subject to the restrictions contained in the lock-up agreement; (d) sales of common stock purchased by such holder in this offering if and only if (i) such sales are not required to be reported in any public report or filing with the SEC, or otherwise and (2) such holder does not otherwise voluntarily effect any public filing or report regarding such sales; or (e) sales of common stock purchased by such holder in the open market after the date of this prospectus, provided that any filing under the Exchange Act required to be made during the reminder of the 180-day period with respect to such sale shall clearly indicate in the footnotes thereto that such common stock was purchased in the open market after the date of this offering and is not subject to the terms of the transfer restrictions.

Nasdaq Global Market Listing

We expect the shares to be approved for listing on the Nasdaq Global Market, subject to notice of issuance, under the symbol "ABOS."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

European Economic Area

In relation to each Member State of the European Economic Area (each a "Relevant State"), no offer of shares which are the subject of this offering has been, or will be, made to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation), except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

a. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require the Issuer or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the underwriters that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

The Company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

The above selling restriction is in addition to any other selling restrictions set out below.

In connection with the offering, the underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

Notice to Prospective Investors in the United Kingdom

In relation to the United Kingdom, or the UK, no offer of shares which are the subject of this offering has been, or will be, made to the public in the UK prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority in the UK in accordance with the UK Prospectus Regulation and the FSMA, except that offers of shares may be made to the public in the UK at any time under the following exemptions under the UK Prospectus Regulation and the FSMA:

a. to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. at any time in other circumstances falling within section 86 of the FSMA,

provided that no such offer of shares shall require the Issuer or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Each person in the UK who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the underwriters that it is a qualified investor within the meaning of the UK Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the UK Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in the UK to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

The Company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in the UK means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018, and the expression "FSMA" means the Financial Services and Markets Act 2000.

In connection with the offering, the underwriters are not acting for anyone other than the issuer and will not be responsible to anyone other than the issuer for providing the protections afforded to their clients nor for providing advice in relation to the offering.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended, or FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended

from time to time (the "SFA")) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law; or

(d) as specified in Section 276(7) of the SFA.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the representatives are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Cooley LLP, Reston, Virginia. Certain legal matters will be passed upon for the underwriters by Ropes & Gray LLP, Boston, Massachusetts.

EXPERTS

The financial statements of Acumen Pharmaceuticals, Inc. as of December 31, 2019 and 2020 and for the years then ended, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to our company and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at www.sec.gov. Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available at www.sec.gov.

We also maintain a website at www.acumenpharm.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus. We have included our website in this prospectus solely as an inactive textual reference.

ACUMEN PHARMACEUTICALS, INC.
INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Acumen Pharmaceuticals, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Acumen Pharmaceuticals, Inc. (the Company) as of December 31, 2020 and 2019, the related statements of operations, changes in convertible preferred stock and stockholders' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditors since 2021.

Tysons, Virginia
April 9, 2021, except for Note 10 as to which the date is June 23, 2021.

ACUMEN PHARMACEUTICALS, INC.
BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2019	December 31, 2020	March 31, 2021 (unaudited)
ASSETS			
Current assets			
Cash and cash equivalents	$ 6,552	$ 43,777	$ 41,407
Grant receivable	30	109	109
Prepaid expenses and other current assets	596	543	587
Total current assets	7,178	44,429	42,103
Deferred offering costs	—	—	257
Other assets	144	—	13
Total assets	$ 7,322	$ 44,429	$ 42,373
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT			
Current liabilities			
Accounts payable	$ 223	$ 531	$ 918
Accrued expenses and other current liabilities	542	423	1,634
Preferred stock tranche rights liability	—	5,033	26,557
Preferred stock warrant liability	577	380	2,073
Total liabilities	1,342	6,367	31,182
Series A convertible preferred stock, $0.0001 par value; 802,972, 711,203 and 711,203 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 477,297 shares issued and outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited); liquidation preference of $1,067 as of March 31, 2021 (unaudited)	1,067	1,067	1,067
Series A-1 convertible preferred stock, $0.0001 par value; 12,710,059, 11,898,177 and 11,898,177 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 7,537,879 shares issued and outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited); liquidation preference of $16,847 as of March 31, 2021 (unaudited)	16,333	16,333	16,333
Series B convertible preferred stock, $0.0001 par value; 0, 29,457,450 and 29,457,450 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 0, 11,862,043 and 11,862,043 shares issued and outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; liquidation preference of $45,070 as of March 31, 2021 (unaudited)	—	39,253	39,253
Stockholders' deficit			
Common stock, $0.0001 par value; 17,400,000, 50,500,000 and 50,500,000 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 419,124 shares issued and outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited)	—	—	—
Additional paid-in capital	8,220	8,374	8,500
Accumulated deficit	(19,640)	(26,965)	(53,962)
Total stockholders' deficit	(11,420)	(18,591)	(45,462)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 7,322	$ 44,429	$ 42,373

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

ACUMEN PHARMACEUTICALS, INC.
STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Grant and other revenue	$ 1,697	$ 1,436	$ 226	$ —
Operating expenses				
Research and development	8,576	7,997	2,050	2,578
General and administrative	926	1,351	222	1,215
Total operating expenses	9,502	9,348	2,272	3,793
Loss from operations	(7,805)	(7,912)	(2,046)	(3,793)
Other income (expense)				
Interest income	45	1	1	4
Change in fair value of preferred stock tranche rights liability and preferred stock warrant liability	(147)	586	—	(23,217)
Other income	—	—	—	9
Total other income (expense)	(102)	587	1	(23,204)
Net loss	(7,907)	(7,325)	(2,045)	(26,997)
Contribution related to common stock exchanged for Series A convertible preferred stock	221	—	—	—
Net loss attributable to common stockholders	$ (7,686)	$ (7,325)	$ (2,045)	$ (26,997)
Net loss per common share, basic and diluted	$ (17.84)	$ (17.48)	$ (4.88)	$ (64.41)
Weighted-average shares outstanding, basic and diluted	430,814	419,124	419,124	419,124

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

ACUMEN PHARMACEUTICALS, INC.
STATEMENT OF CHANGES IN CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(in thousands, except share data)

	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	519,667	$ 1,162	4,670,887	$ 9,929	—	$ —	447,346	$ —	$ 8,116	$ (11,733)	$ (3,617)
Share-based compensation	—	—	—	—	—	—	—	—	174	—	174
Stock option exercises	—	—	—	—	—	—	6,350	—	7	—	7
Exchange of common stock for Series A convertible preferred stock	34,572	77	—	—	—	—	(34,572)	—	(77)	—	(77)
Exchange of Series A convertible preferred stock for Series A-1 convertible preferred stock	(76,942)	(172)	76,942	172	—	—	—	—	—	—	—
Issuance of Series A-1 convertible preferred stock, net of $4 issuance costs	—	—	2,790,050	6,232	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	—	—	—	(7,907)	(7,907)
Balance as of December 31, 2019	477,297	1,067	7,537,879	16,333	—	—	419,124	—	8,220	(19,640)	(11,420)
Issuance of Series B convertible preferred stock for cash, net of issuance costs of $395	—	—	—	—	11,862,043	39,253	—	—	—	—	—
Share-based compensation	—	—	—	—	—	—	—	—	154	—	154
Net loss	—	—	—	—	—	—	—	—	—	(7,325)	(7,325)
Balance as of December 31, 2020	477,297	1,067	7,537,879	16,333	11,862,043	39,253	419,124	—	8,374	(26,965)	(18,591)
Share-based compensation (unaudited)	—	—	—	—	—	—	—	—	126	—	126
Net loss (unaudited)	—	—	—	—	—	—	—	—	—	(26,997)	(26,997)
Balance as of March 31, 2021 (unaudited)	477,297	$ 1,067	7,537,879	$16,333	11,862,043	$39,253	419,124	$ —	$ 8,500	$ (53,962)	$ (45,462)

	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2019	477,297	$ 1,067	7,537,879	$16,333	—	$ —	419,124	$ —	$ 8,220	$ (19,640)	$ (11,420)
Share-based compensation (unaudited)	—	—	—	—	—	—	—	—	39	—	39
Net loss (unaudited)	—	—	—	—	—	—	—	—	—	(2,045)	(2,045)
Balance as of March 31, 2020 (unaudited)	477,297	$ 1,067	7,537,879	$16,333	—	$ —	419,124	$ —	$ 8,259	$ (21,685)	$ (13,426)

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

ACUMEN PHARMACEUTICALS, INC.
STATEMENTS OF CASH FLOWS
(in thousands)

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Cash flows from operating activities				
Net loss	$(7,907)	$ (7,325)	$ (2,045)	$ (26,997)
Adjustments to reconcile net loss to net cash used in operating activities:				
Change in fair value of preferred stock tranche rights liability and preferred stock warrant liability	147	(586)	—	23,217
Stock-based compensation expense	174	154	39	126
Changes in operating assets and liabilities:				
Grant receivable	200	(79)	(226)	—
Prepaid expenses and other current assets	6	53	251	(44)
Other assets	(80)	144	(291)	(13)
Accounts payable	110	308	153	387
Accrued expenses and other current liabilities	532	(119)	303	954
Net cash used in operating activities	(6,818)	(7,450)	(1,816)	(2,370)
Cash flows from financing activities				
Proceeds from issuance of convertible preferred stock, net of issuance costs	6,232	44,675	—	—
Proceeds from stock option exercises	7	—	—	—
Net cash provided by financing activities	6,239	44,675	—	—
Net change in cash and cash equivalents	(579)	37,225	(1,816)	(2,370)
Cash and cash equivalents, at the beginning of the period	7,131	6,552	6,552	43,777
Cash and cash equivalents, at the end of the period	$ 6,552	$43,777	$ 4,736	$ 41,407
Supplemental disclosure of cash flow information				
Cash paid for income taxes	$ —	$ —	$ —	$ —
Cash paid for interest	$ —	$ —	$ —	$ —
Supplemental disclosure of noncash financing activities				
Exchange of common stock for Series A convertible preferred stock	$ 77	$ —	$ —	$ —
Exchange of Series A convertible preferred stock for Series A-1 convertible preferred stock	$ 172	$ —	$ —	$ —
Deferred offering costs in accrued expenses and other current liabilities	$ —	$ —	$ —	$ 257

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

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is 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 discovers and develops targeted therapies for the treatment of Alzheimer's disease. Acumen's lead drug candidate, ACU193, is a subclass monoclonal antibody which selectively targets amyloid-beta oligomers (Aßo). Acumen and Merck & Co. discovered and developed ACU193 through an eight-year research collaboration. Acumen currently holds exclusive rights to the program. The Company submitted an Investigation Drug Application ("IND") for ACU193 to the Food and Drug Administration ("FDA") in the fourth quarter of 2020. We initiated a Phase 1 clinical trial of ACU193 in patients with early Alzheimer's disease in April 2021.

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

November 2020 Reverse Stock Split

On November 20, 2020, the Company effected a 1-for-30 reverse stock split of its authorized, issued and outstanding shares of common stock and convertible preferred stock. Accordingly, all share and per share amounts for the periods presented in the accompanying financial statements and these notes have been adjusted retroactively, where applicable, to reflect this reverse stock split. On November 20, 2020, the Company also increased the number of shares of preferred stock and common stock authorized for issuance (see Note 5).

June 2021 Reverse Stock Split

The Company's board of directors approved a reverse split of shares of the Company's common stock and convertible preferred stock on a 1-for-1.49 basis (the "June 2021 Reverse Stock Split"), which was effected on June 23, 2021. The par value and the number of authorized shares of the convertible preferred stock and common stock were not adjusted in connection with the June 2021 Reverse Stock Split. All references to common stock, convertible preferred stock, warrants to purchase common stock, warrants to purchase convertible preferred stock, options to purchase common stock, share data, per share data and related information contained in the financial statements have been retrospectively adjusted to reflect the effect of the June 2021 Reverse Stock Split for all periods presented. No fractional shares of the Company's common stock were issued in connection with the June 2021 Reverse Stock Split. Any fractional share resulting from the June 2021 Reverse Stock Split was rounded down to the nearest whole share, and any stockholder entitled to a fractional share as a result of the June 2021 Reverse Stock Split received a cash payment in lieu of receiving fractional shares.

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 December 31, 2020 and March 31, 2021, the Company had an accumulated deficit of $27.0 million and $54.0 million, respectively. The Company has relied on raising capital from venture capital firms and private investors and funding from a government grant to finance its operations.

On November 20, 2020, the Company closed on the sale of an aggregate of 11,862,043 shares of Series B convertible preferred stock for gross proceeds of $45.1 million (the "Initial Closing"). Net proceeds from the Initial Closing, after deducting offering expenses, were $44.7 million. Subject to the terms and conditions of the Series B Preferred Stock Purchase Agreement (the "Series B Agreement"), if, after the Initial Closing, the

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is unaudited)

Company achieves the milestone set forth in the Series B Agreement, then, as soon as practicable following the mutual determination by the Board of Directors ("Board") and the holders of at least 67% of the outstanding Series B convertible preferred stock shares then held by the Series B purchasers (the "Requisite Investors") that the milestone event has occurred or has been waived, the Company shall deliver a written notice to each Series B purchaser stating that the milestone event has been achieved. Notwithstanding the foregoing, at any time after the Initial Closing, the Requisite Investors may elect to waive the achievement of the milestone event and consummate the subsequent closing (the "Milestone Closing") by delivering a written election to the Company. On June 9, 2021, the Board and the holders of more than 67% of the outstanding shares of Series B preferred stock elected to waive the achievement of the milestone event (see Note 4). On June 17, 2021, the Milestone Closing for the Series B convertible preferred stock occurred, resulting in the sale of 7,908,027 shares of Series B convertible preferred stock at $3.80 per share for gross proceeds of $30.0 million.

As a result of the Initial Closing, management believes that its existing financial resources are sufficient to continue operating activities for at least one year past the issuance date of these financial statements. Future capital requirements will depend upon many factors, including the timing and extent of spending on research and development, the achievement of the milestone event and related Milestone Closing, future receipt of grant revenue and market acceptance of the Company's products. The Company will need to obtain additional financing in order to complete clinical trials and launch and commercialize any product candidates for which it receives regulatory approval. There can be no assurance that such financing will be available on terms acceptable to the Company, or at all.

The impact of the coronavirus ("COVID-19") outbreak on the Company's results of operations, financial position and cash flows will depend on future developments, including the duration and spread of the outbreak and related advisories and restrictions. These developments and the impact of COVID-19 on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's results of operations, financial position and cash flows may be materially adversely affected.

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

Basis of Presentation

The accompanying financial statements have been prepared in accordance with Generally Accepted Accounting Principles in the United States of America ("U.S. GAAP") as determined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC").

Emerging Growth Company

From time to time, new accounting pronouncements are issued by the FASB, or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the impact of recently issued standards that are not yet effective will not have a material impact on the Company's financial statements upon adoption. Under the Jumpstart Our Business Startups Act of 2012, as amended, the Company meets the definition of an emerging growth company and has 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.

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is unaudited)

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 financial statements and the reported amounts of expenses during the reporting period. These estimates and assumptions are based on current facts and historical experience, as well as other pertinent industry and regulatory authority information, including the potential future effects of COVID-19, 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 materially and adversely from these estimates. To the extent there are material differences between the estimates and actual results, the Company's future results of operations will be affected.

Unaudited Interim Financial Information

The accompanying interim balance sheet as of March 31, 2021, the statements of operations, statements of changes in convertible preferred stock and stockholders' deficit and statements of cash flows for the three months ended March 31, 2020 and 2021 and the related footnote disclosures are unaudited. In management's opinion, the unaudited interim financial statements have been prepared on the same basis as the audited financial statements and include all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's financial position as of March 31, 2021 and its results of operations and cash flows for the three months ended March 31, 2020 and 2021 in accordance with U.S. GAAP. The results for the three months ended March 31, 2021 are not necessarily indicative of the results expected for the full fiscal year or any other interim period.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. The Company's cash equivalents consist of funds held in a money market account. The Company had $4.2 million, $36.8 million and $36.8 million in cash equivalents as of December 31, 2019 and 2020 and March 31, 2021, respectively.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentration of credit risk consist primarily of cash and cash equivalents. Periodically, the Company may maintain deposits in financial institutions in excess of government insured limits. Management believes that the Company is not exposed to significant credit risk as the Company's deposits are held at financial institutions that management believes to be of high credit quality. The Company has not experienced any losses on these deposits.

Fair Value of Financial Instruments

The Company's financial assets and liabilities are accounted for in accordance with ASC 820, *Fair Value Measurements and Disclosures* which defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The fair value hierarchy requires an entity to maximize the use of observable inputs when measuring fair value and classifies those inputs into three levels:

Level 1— Observable inputs, such as quoted prices in active markets for identical assets or liabilities.

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is unaudited)

Level 2—Inputs other than Level 1 inputs that are either directly or indirectly observable, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the instrument's anticipated life.

Level 3—Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

To the extent the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair values requires more judgement. Accordingly, the degree of judgement exercised by management in determining fair value is greatest for instruments categorized as Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The following tables present the Company's fair value hierarchy for its money market securities, preferred stock tranche rights liability and preferred stock warrant liability measured at fair value on a recurring basis at December 31, 2019 and 2020 and March 31, 2021 (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 December 31, 2019
Assets included in:				
Cash and cash equivalents				
Money market securities	$ 4,207	$ —	$ —	$ 4,207
Total fair value	$ 4,207	$ —	$ —	$ 4,207
Liabilities included in:				
Preferred stock warrant liability	$ —	$ —	$ 577	$ 577
Total fair value	$ —	$ —	$ 577	$ 577

	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, 2020
Assets included in:				
Cash and cash equivalents				
Money market securities	$ 36,758	$ —	$ —	$ 36,758
Total fair value	$ 36,758	$ —	$ —	$ 36,758
Liabilities included in:				
Preferred stock tranche rights liability	$ —	$ —	$ 5,033	$ 5,033
Preferred stock warrant liability	—	—	380	380
Total fair value	$ —	$ —	$ 5,413	$ 5,413

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is 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 March 31, 2021
Assets included in:				
Cash and cash equivalents				
Money market securities	$ 36,762	$ —	$ —	$ 36,762
Total fair value	$ 36,762	$ —	$ —	$ 36,762
Liabilities included in:				
Preferred stock tranche rights liability	$ —	$ —	$ 26,557	$ 26,557
Preferred stock warrant liability	—	—	2,073	2,073
Total fair value	$ —	$ —	$ 28,630	$ 28,630

The carrying values reported in the Company's balance sheet for cash and cash equivalents, accounts payable, and accrued expenses are reasonable estimates of their fair values due to the short-term nature of these items.

Refer to Note 4 for further information about the Level 3 rollforward of activity and Level 3 inputs.

Grant Receivable

Grant receivable consists of research expenses reimbursable under a grant from the National Institute of Health ("NIH"). The Company carries its grant receivable at the unreimbursed amount. On a periodic basis, the Company evaluates its grant receivable to determine whether an allowance is required. The allowance is management's best estimate of probable losses. Management determined that no allowance was necessary as of December 31, 2019 and 2020 and March 31, 2021.

Convertible Preferred Stock

The Company records shares of convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The Company has applied the guidance in ASC 480-10-S99-3A, *SEC Staff Announcement: Classification and Measurement of Redeemable Securities* and has therefore classified the Series A, Series A-1 and Series B convertible preferred stock as mezzanine equity. The convertible preferred stock is recorded outside of stockholders' deficit because, in the event of certain deemed liquidation events considered not solely within the Company's control, such as a merger, acquisition and sale of all or substantially all of the Company's assets (a "Deemed Liquidation Event"), the convertible preferred stock will become redeemable at the option of the holders. In the event of a change of control of the Company, proceeds received from the sale of such shares will be distributed in accordance with the corresponding liquidation preferences. The Company did not adjust the carrying values of the convertible preferred stock to the deemed liquidation values of such shares since a liquidation event was not probable at any of the reporting dates. Subsequent adjustments to increase or decrease the carrying values to the ultimate liquidation values will be made only if and when it becomes probable that such a liquidation event will occur.

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Preferred Stock Tranche Rights Liability

The Company has determined that its obligation to issue, and the Company's investors' right to purchase, additional shares of Series B convertible preferred stock pursuant to the Milestone Closing (see Note 4) represents a freestanding financial instrument (the "tranche liability"). The tranche liability was initially recorded at fair value. The proceeds from the sale of the convertible preferred stock are first allocated to the fair value of the tranche liability with the remaining proceeds from the sale of the convertible preferred stock allocated to the Series B convertible preferred stock. The tranche liability is remeasured at each reporting period and upon the exercise or expiration of the obligation, with gains and losses arising from subsequent changes in its fair value recognized in other income and expense in the statement of operations. At the time of the exercise or expiration of the tranche liability, any remaining value of the tranche liability will be reclassified to convertible preferred stock on the balance sheet.

Preferred Stock Warrant Liability

The Company accounts for the warrant to purchase Series A-1 convertible preferred stock as a liability as this warrant is a freestanding financial instrument that may require the Company to transfer assets upon exercise. The warrant liability was initially recorded at fair value. The warrant liability is remeasured at each reporting period until the earlier of the exercise or expiration of the applicable warrant, with gains and losses arising from subsequent changes in its fair value recognized in other income and expense in the statement of operations. At the time of the exercise or expiration of the warrant liability, any remaining value of the warrant liability will be reclassified to convertible preferred stock on the balance sheet.

Common Stock Warrants

The Company assesses whether warrants issued require accounting as derivatives. The Company determined that the warrants were (1) indexed to the Company's own stock and (2) classified in stockholders' equity in accordance with FASB ASC Topic 815, *Derivatives and Hedging*. As such the Company has concluded the warrants meet the scope exception for determining whether the instruments require accounting as derivatives and should be classified in stockholders' equity.

Grant and Other Revenue Recognition

The Company's NIH grant is not within the scope of ASC 606, *Revenue from Contracts with Customers*, as the grant does not meet the definition of a contract with a customer. The Company has concluded that the grant meets the definition of a contribution and is a non-reciprocal transaction, and management has also concluded that Subtopic 958-605, *Not-for-Profit-Entities-Revenue Recognition* does not apply, as Acumen is a business entity and the grant is with a governmental agency.

In the absence of applicable guidance under U.S. GAAP, the Company's policy is to recognize grant revenue when the related costs are incurred and the right to payment is realized. Costs incurred are recorded in research and development and general and administrative expenses on the accompanying statements of operations.

The Company believes the recognition of revenue as costs are incurred and amounts become realizable is analogous to the concept of transfer of control of a service over time under ASC 606.

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Research and Development Expenses

Research and development expenses primarily consist of consultants and materials, biologic storage, salaries and other personnel-related expenses related to research and development activities and are expensed as incurred. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected on the balance sheet as prepaid or accrued expenses. The Company records accruals for estimated ongoing research costs. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the studies, including the phase or completion of events, invoices received and contracted costs.

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 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 each 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 based upon the respective employee's or non-employee's roles within the Company. Forfeitures are recorded as they occur. See also Note 6 below.

Income Taxes

Income taxes are recorded in accordance with ASC 740, *Income Taxes* ("ASC 740"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse, and net operating loss ("NOL") carryforwards and research and development tax credit ("R&D Credit") carryforwards. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The Company has recorded a full valuation allowance to reduce its net deferred income tax assets to zero. In the event the Company were to determine that it would be able to realize some or all its deferred income tax assets in the future, an adjustment to the deferred income tax asset valuation allowance would increase income in the period such determination was made.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. The Company has not recorded any accruals related to uncertain tax positions as of December 31, 2019 and 2020 and March 31, 2021. The Company's policy is to record interest and penalties, if any, as part of income tax benefit. No interest or penalties were recorded during the years ended December 31, 2019 and 2020, or during the three months ended March 31, 2021.

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Net Loss Per Share of Common Stock

Basic net loss per share of common stock is calculated using the two-class method under which earnings are allocated to both common shares and participating securities based on their participation rights. Net loss attributable to common stockholders is not allocated to the convertible preferred stock as the holders of the convertible preferred stock do not have a contractual obligation to share in any losses. Basic net loss per share is calculated by dividing the net loss attributable to common shares by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share of common stock is computed by dividing the net loss using the weighted-average number of common shares and, if dilutive, potential common shares outstanding during the period. Potential common shares consist of stock options and warrants to purchase common stock (using the treasury stock method), and the conversion of convertible preferred stock and the preferred warrant (using the if-converted method). See Note 9 below.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one segment.

Recently Adopted Accounting Pronouncements

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement.* This new guidance removes certain disclosure requirements related to the fair value hierarchy, modifies existing disclosure requirements related to measurement uncertainty and adds new disclosure requirements. The new disclosure requirements include disclosing the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and the range and weighted-average of significant unobservable inputs used to develop Level 3 fair value measurements. This new guidance was effective for the Company beginning on January 1, 2020 and did not have a material impact on the Company's financial statements.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, as amended, with guidance regarding the accounting for and disclosure of leases. This update requires lessees to recognize the liabilities related to all leases, including operating leases, with a term greater than 12 months on the balance sheet. This update also requires lessees and lessors to disclose key information about their leasing transactions. This guidance will become effective for the Company for annual reporting periods beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022. The adoption of Topic 842 is not expected to have a material impact on the financial statements.

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in ASC 740 and also clarifies and amends existing guidance to improve consistent application. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company is currently evaluating the impact of this standard on its financial statements.

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NOTE 3. SUPPLEMENTAL FINANCIAL INFORMATION

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

	December 31,		
	2019	2020	March 31, 2021
Service agreements	$540	$432	$ 417
Prepaid raw materials	49	91	123
Other	7	20	47
Total prepaid expenses and other current assets	$596	$543	$ 587

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

	December 31,		
	2019	2020	March 31, 2021
Research and development	$505	$133	$ 670
Bonuses and other employee liabilities	—	—	314
Professional fees	—	200	300
Legal	—	—	260
Other	37	90	90
Total accrued expenses and other current liabilities	$542	$423	$ 1,634

NOTE 4. CONVERTIBLE PREFERRED STOCK, TRANCHE LIABILITY AND WARRANT LIABIITY

Convertible Preferred Stock

Convertible preferred stock consisted of the following (in thousands, except share and per share data):

	December 31, 2019				
	Shares Authorized	Shares Issued and Outstanding	Issuance Price per Share	Carrying Value	Liquidation Preference
Series A	802,972	477,297	$ 2.24	$ 1,067	$ 1,067
Series A-1	12,710,059	7,537,879	2.24	16,333	16,847
Total	13,513,031	8,015,176		$ 17,400	$ 17,914

	December 31, 2020 and March 31, 2021				
	Shares Authorized	Shares Issued and Outstanding	Issuance Price per Share	Carrying Value	Liquidation Preference
Series A	711,203	477,297	$ 2.24	$ 1,067	$ 1,067
Series A-1	11,898,177	7,537,879	2.24	16,333	16,847
Series B	29,457,450	11,862,043	3.80	39,253	45,070
Total	42,066,830	19,877,219		$ 56,653	$ 62,984

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On November 20, 2020, the Company entered into the Series B Agreement for a private placement of up to 19,770,070 shares of Series B convertible preferred stock, $0.0001 par value per share, at an original issuance price of $3.80 per share, subject to separate closings, including: (1) 11,862,043 shares at the Initial Closing on November 20, 2020, and (2) 7,908,027 shares at a subsequent closing that would be triggered by the achievement of a specific clinical milestone. The Series B Agreement obligates the Company to issue and sell and the Series B purchasers to purchase up to a total of 7,908,027 additional shares of Series B convertible preferred stock (the "Milestone Shares") at the same price per share upon the achievement of a certain defined clinical milestone. The determination as to whether the milestone event has been met is subject to certification by the Board and the Requisite Investors. Each Series B convertible preferred stock investor has the right, but not the obligation, to purchase all or any portion of the Milestone Shares at any time in its sole option and in its sole and absolute discretion, whether or not the Company achieves the applicable clinical milestone. However, in the event that the Milestone Closing occurs, if any Series B purchaser fails to purchase its respective portion of the Milestone Shares, each existing share of Series B convertible preferred stock held by such stockholder will automatically convert into one share of common stock. See "*Series B Convertible Preferred Stock Tranche Rights Liability*" below).

On October 19, 2018, the Company entered into the Series A-1 and Series A Preferred Stock Purchase and Exchange Agreements (the "Series A-1 and Series A Agreements"). Under the Series A-1 and Series A Agreements, the Company sold 3,652,919 shares of Series A-1 convertible preferred stock, $0.0001 par value per share, at a purchase price of $2.24 per share for gross proceeds of $8.2 million. Convertible notes issued in 2018 including accrued interest thereon totaling $275,000, were converted into 123,043 shares of Series A-1 convertible preferred stock and convertible notes issued in 2014 through 2017 including accrued interest thereon totaling $3.1 million were converted into 1,371,639 shares of Series A convertible preferred stock, $0.0001 par value per share, in each case at a conversion rate of $2.24 per share. Additionally, the holders of Series A convertible preferred stock and the holders of common stock were given the option to exchange their respective shares into shares of Series A-1 convertible preferred stock and Series A convertible preferred stock, respectively, on a one-to-one basis. A total of 894,925 shares of Series A convertible preferred stock were exchanged for Series A-1 convertible preferred stock and a total of 42,980 shares of common stock were exchanged for Series A convertible preferred stock. The difference between the book value of the common shares and the issuance price of the Series A convertible preferred shares for which they were exchanged was recorded as a contribution in the statement of stockholders' deficit. On October 19, 2018, the Company also issued a warrant to purchase 447,426 shares of Series A-1 convertible preferred stock at an exercise price of $2.794. This warrant has a term of 10 years and an aggregate grant date fair value of $430,000 (see "*Series A-1 Convertible Preferred Stock Warrant Liability" below*).

During 2019, the Company sold an additional 2,790,050 shares of Series A-1 convertible preferred stock at a purchase price of $2.24 per share for gross proceeds of $6.2 million. Additionally, a total of 76,942 shares of Series A convertible preferred stock were exchanged for Series A-1 convertible preferred stock and a total of 34,572 shares of common stock were exchanged for Series A convertible preferred stock. The exchange of Series A convertible preferred stock for Series A-1 convertible preferred stock was accounted for on a prospective basis as the exchange was not considered to be a significant modification, and the Company reclassified $2.24 per share from Series A convertible preferred stock to Series A-1 convertible preferred stock. The exchange of common stock for Series A convertible stock was accounted for as an extinguishment as the exchange was considered to be a significant modification, and the common shares were retired by the Company at the common shares' book value, with the difference between that and the Series A convertible preferred stock issuance price of $2.24 per share recorded as a contribution in the statement of stockholders' deficit.

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Dividends

The holders of Series B, Series A-1 and Series A convertible preferred stock are entitled to receive dividends ahead of, or simultaneously with, common stockholders in an amount equal to the product of (A) the dividend payable on each share of the class or series of convertible preferred stock determined, if applicable, as if all shares of such class or series of convertible preferred stock had been converted into common stock and (B) the number of shares of common stock issuable upon conversion of a share of preferred stock. No dividends have been declared since inception.

Liquidation preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, holders of Series B convertible preferred stock are entitled to receive, prior and in preference to, holders of Series A-1 convertible preferred stock, Series A convertible preferred stock, and holders of common stock, in the amount of the original issue price plus any declared but unpaid dividends thereon. If upon occurrence of such an event, the assets and funds to be distributed among the holders of Series B convertible preferred stock are insufficient to permit full payment to such holders, the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of the Series B convertible preferred stock.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, holders of Series A-1 convertible preferred stock are entitled to receive, prior and in preference to, holders of Series A convertible preferred stock and holders of common stock, in the amount of the original issue price plus any declared but unpaid dividends thereon. If upon occurrence of such an event, the assets and funds to be distributed among the holders of Series A-1 convertible preferred stock are insufficient to permit full payment to such holders, the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of the Series A-1 convertible preferred stock.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, holders of Series A convertible preferred stock are entitled to receive, prior and in preference to, holders of common stock, in the amount of the original issue price plus any declared but unpaid dividends thereon. If upon occurrence of such an event, the assets and funds to be distributed among the holders of Series A convertible preferred stock are insufficient to permit full payment to such holders, the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of the Series A convertible preferred stock.

Conversion rights

Shares of all series of convertible preferred stock are convertible into such number of fully paid and non-assessable shares of common stock as determined by dividing the original issuance price for such series by the applicable conversion price for such series then in effect. The initial conversion price per share for each series of convertible preferred stock is the original issue price applicable to such series as shown in the table above, subject to adjustment in the event of certain dilutive issuances. The convertible preferred stock original issuance price and conversion price are each subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the convertible preferred stock.

Each share of convertible preferred stock is convertible at any time at the option of the holder at the conversion ratio then in effect. In addition, each share of convertible preferred stock will be automatically converted into

common stock at the conversion ratio then in effect upon either (a) the closing of an underwritten public offering resulting in gross proceeds to the Company of at least $75 million and at a price per share equal to at least two times the Series B original issuance price, or $7.60 (subject to adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B convertible preferred stock), or (b) the date and time, or the occurrence of an event, specified in such vote or written consent of at least 67% of the holders of the then outstanding shares of Series B convertible preferred stock.

Two days after the closing for the Milestone Shares occurs, if ever, each share of Series B convertible preferred stock held by a purchaser that fails to purchase its applicable Milestone Shares shall be automatically converted into one fully-paid, non-assessable share of common stock.

Voting rights

Holders of convertible preferred stock are entitled to vote as a single class together with the holders of common stock and have one vote for each share of common stock into which the convertible preferred stock is convertible.

The holders of Series B convertible preferred stock are entitled to elect two directors to the Board, and the holders of Series A and Series A-1 convertible preferred stock, voting together as a single class, are also entitled to elect two directors to the Board. The holders of common stock, exclusively and as a separate class, are entitled to elect two directors to the Board. The final director to the Board is designated by the holders of a majority of the shares of the preferred stock and common stock, voting together as a single class.

A majority of the outstanding shares of convertible preferred stock is necessary for approving certain matters, including the ability to either increase or decrease the authorized number of directors constituting the Board, pursuant to protective provisions in the Company's amended and restated certificate of incorporation.

Series B Convertible Preferred Stock Tranche Rights Liability

The Company concluded that the tranche liability met the definition of a freestanding financial instrument, as it was legally detachable and separately exercisable from the initial closing of the Series B convertible preferred stock. The fair value for the tranche liability was estimated as a forward contract using a tranche model as of November 20, 2020, December 31, 2020 and in the Stay Private scenario utilized in the hybrid methodology as of March 31, 2021. Under this approach, the fair value of the liability is discounted back to the valuation date and adjusted for probability of the achievement of the milestone event. Significant estimates and assumptions impacting fair value include the discount rate, expected time to the Milestone Closing, and probability of the Milestone Closing. The discount rate was equal to the risk-free rate for the estimated timing of the Milestone Closing.

The following assumptions were used in the estimation of the fair value of the tranche liability as a forward contract as of each of the dates indicated:

	November 20, 2020	December 31, 2020	March 31, 2021
Risk-free interest rate	0.11%	0.12%	0.07%
Expected time to Milestone Closing (in years)	1.0	1.3	1.0
Probability of achievement of Milestone Closing	70%	65%	70%

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For the other portion of the hybrid method used as of March 31, 2021, the fair value for the tranche liability was estimated based upon an allocation of the underlying equity value, which was determined using an expected initial public offering ("IPO") value as estimated through analysis of IPOs for comparable guideline companies, to arrive at a value per share in the IPO scenario. The estimated fair value of the tranche liability was $5,422,000, $5,033,000 and $26,557,000 as of November 20, 2020, December 31, 2020 and March 31, 2021, respectively. The significant increase in the March 31, 2021 valuation stems from a shift in methodology from an option pricing method ("OPM") to a hybrid method where the concluded value of the forward tranche is derived by the sum of the probability weighted present value of the forward tranche in the Stay Private and IPO scenarios (with the former including all other potential exit scenarios other than an imminent IPO). The resulting differences in estimated fair value have been recognized as a change in fair value within other income in the accompanying statements of operations during the year ended December 31, 2020 and the three months ended March 31, 2021. The tranche liability will be revalued each reporting period with the change in fair value recorded in the accompanying statements of operations until the Milestone Shares are issued, or it becomes apparent that the milestone event will not be achieved, and the Milestone Shares will never be issued.

On June 9, 2021, the Board and the holders of more than 67% of the outstanding shares of Series B preferred stock elected to waive the achievement of the milestone event. The Company will record the tranche liability at fair value up to the time of the Milestone Closing and upon the Milestone Closing, which occurred on June 17, 2021, the liability will be reclassified to convertible preferred stock on the balance sheet.

Series A-1 Convertible Preferred Stock Warrant Liability

On October 19, 2018, the Company issued a 10-year warrant (the "Series A-1 Warrant") to purchase up to an aggregate of 447,426 shares of Series A-1 convertible preferred stock at an exercise price of $2.794 on or before October 18, 2028. The Series A-1 Warrant was issued in connection with the Series A-1 and Series A Agreements. As of December 31, 2019 and 2020 and March 31, 2021, this Series A-1 Warrant remained outstanding.

The warrant liability met the definition of a freestanding financial instrument, as it was legally detachable and separately exercisable from the initial closing of the Series A-1 convertible preferred stock. As such, it is revalued each reporting period with the change in fair value recorded in the accompanying statements of operations until the warrant is exercised or expires.

The fair value of the warrant liability was estimated using the OPM backsolve method as of December 31, 2019 and 2020 and using a hybrid method, which included an OPM backsolve in the Stay Private scenario as of March 31, 2021. The following assumptions were used in the estimation of the fair value of the warrant liability using the OPM backsolve method as of each of the dates indicated:

	December 31,		
	2019	2020	March 31, 2021
Risk-free interest rate	1.66%	0.13%	0.16%
Expected term (in years)	4.0	2.0	2.2
Expected volatility	90%	90%	90%
Expected dividend yield	0%	0%	0%

The hybrid method used to value the warrant liability at March 31, 2021 considered both the underlying equity value determined using the OPM backsolve method in a Stay Private scenario, as well as the underlying equity

value that was determined using an expected IPO value as estimated through analysis of IPOs for comparable guideline companies, to arrive at a value per share in the IPO scenario. The underlying equity values from each approach were probability weighted based upon the expected likelihood of each scenario. The fair value of the warrant liability was estimated to be $1.29, $0.85 and $4.63 as of December 31, 2019 and 2020 and March 31, 2021, respectively.

The following table provides a reconciliation of the tranche liability and warrant liability measured at fair value using Level 3 significant unobservable inputs (in thousands):

	Series A-1 Preferred Stock Warrant	Series B Tranche Rights	Total
Balance, January 1, 2019	$ 430	$ —	$ 430
Change in fair value	147	—	147
Balance, December 31, 2019	577	—	577
Fair value at issuance of Series B convertible preferred stock (November 2020)	—	5,422	5,422
Change in fair value	(197)	(389)	(586)
Balance, December 31, 2020	380	5,033	5,413
Change in fair value	1,693	21,524	23,217
Balance, March 31, 2021	$ 2,073	$ 26,557	$28,630

NOTE 5. STOCKHOLDERS' DEFICIT

Authorized Shares

The Company amended its certificate of incorporation on November 20, 2020, such that the total number of shares of common stock authorized to be issued was increased to 50,500,000, and the total number of shares of preferred stock authorized to be issued was increased to 42,066,830, of which 711,203 are designated Series A convertible preferred stock, 11,898,177 are designated as Series A-1 convertible preferred stock and 29,457,450 are designated as Series B convertible preferred stock. The certificate of incorporation was also amended for the reverse stock splits that became effective on November 20, 2020 and June 23, 2021, but there were no changes to the authorized shares as a result of the reverse stock split that became effective on June 23, 2021 (see Note 1).

Common Stock

As of December 31, 2020, the Company's Amended and Restated Certificate of Incorporation authorized the issuance of 50,500,000 shares of common stock, $0.0001 par value per share. Each share of common stock is entitled to one voting right. The holders of common stock are entitled to elect two directors to the Board. Holders of common stock, voting together as a single class with the holders of preferred stock, may also designate an additional director to the Board. Common stock owners are entitled to dividends when funds are legally available and declared by the Board.

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Common Stock Warrants

As of December 31, 2019 and 2020 and March 31, 2021, the outstanding warrants to purchase the Company's common stock were comprised of the following:

	Equity Upon Exercise	Exercise Price	Expiration Dates	December 31, 2019	December 31, 2020	March 31, 2021
Warrants issued in 2014	Common Stock	$ 4.47	3/21/2024 - 6/30/2025	83,726	83,726	83,726
Warrants issued in 2015	Common Stock	$ 4.47	6/30/2025	209,690	209,690	209,690
Warrants issued in 2016	Common Stock	$ 4.47	6/30/2025	34,396	34,396	34,396
Warrants issued in 2017	Common Stock	$ 4.47	6/30/2025	57,881	57,881	57,881
Total Warrants				385,693	385,693	385,693

NOTE 6. STOCK-BASED COMPENSATION

On April 8, 2013, the Board and stockholders adopted the Company's Amended and Restated Stock Performance Plan (as amended from time to time, most recently on November 20, 2020, the "Plan"). The Plan provides for the grant of incentive stock options, non-statutory stock options, issuance of shares of restricted stock and other equity awards to the Company's employees, officers, directors, consultants and advisors. As of March 31, 2021, the aggregate number of shares authorized for issuance under the Plan totaled 4,179,202 and there were 667,030 shares available for future grants.

The Black-Scholes option-pricing model was used to estimate the fair value of stock options granted with the following weighted average assumptions:

	Year Ended December 31, 2019	Three Months Ended March 31, 2021
Risk-free interest rate	1.9% - 2.6%	0.4% - 0.5%
Expected term in years	5.4 - 5.8	5.3 - 6.1
Expected volatility	85%	90%
Expected dividend yield	0%	0%

The fair value of the Company's common stock underlying the stock options has historically been determined by the Board with assistance from management and, occasionally with input from an independent third-party valuation firm. For the years ended December 31, 2019 and 2020, management engaged an independent third-party valuation firm to provide an estimate of the fair value of its common stock. The fair value of common stock was determined considering a number of objective and subjective factors, including valuations of comparable companies, sales of convertible preferred stock, operating and financial performance, the lack of liquidity of the Company's common stock and the general and industry-specific economic outlook.

As of December 31, 2019 and 2020, management, with the assistance of independent third-party valuation firms, estimated the fair value of a share of common stock to be $0.84 and $0.83, respectively. The range of assumptions used in these valuations were as follows:

Risk-free interest rate	0.1% - 2.5%
Expected time to liquidity event in years	2.0 - 4.0
Expected volatility	85% -90%
Expected dividend yield	0%

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The stock options granted after December 31, 2017 vest monthly over 24 or 36 months and have a ten-year contractual term. 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 have a ten-year term. The Company lacks 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.

The weighted average grant date fair value of options granted during the year ended December 31, 2019 and the three months ended March 31, 2021 was $0.51 per share and $0.57 per share, respectively. There were no options granted during the year ended December 31, 2020.

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 December 31, 2018	168,967	$ 4.98		
Options granted	912,176	0.72		
Options exercised	(6,350)	1.16		
Options forfeited or canceled	(67,077)	4.45		
Options expired	(2,818)	8.94		
Outstanding at December 31, 2019	1,004,898	1.16		
Options expired	(3,381)	8.94		
Outstanding at December 31, 2020	1,001,517	1.13		
Options granted	2,479,661	1.19		
Outstanding at March 31, 2021	3,481,178	$ 1.17	9.1	$ 107
Vested and exercisable at March 31, 2021	797,270	$ 1.24	7.5	$ 83

The intrinsic value of stock options exercised during the year ended December 31, 2019 was $0. As of December 31, 2020 and March 31, 2021, the total unrecognized compensation costs related to unvested stock option awards granted was approximately $136,000 and $1.4 million, respectively. The Company expected to recognize this cost over a remaining weighted-average period of approximately 1.0 and 3.5 years as of December 31, 2020 and March 31, 2021, respectively.

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is unaudited)

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

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
General and administrative	$ 115	$ 103	$ 26	$ 79
Research and development	59	51	13	47
Total stock-based compensation	$ 174	$ 154	$ 39	$ 126

NOTE 7. INCOME TAXES

The Company has not recorded any tax provision or benefit for federal income taxes for the years ended December 31, 2019 and 2020 or for the three months ended March 31, 2021. The effective tax rate for the three months ended March 31, 2020 and 2021 is 0%. Current income taxes are based upon the year's income taxable for federal and state tax reporting purposes. Deferred income taxes (benefits) are provided for certain income and expenses, which are recognized in different periods for tax and financial reporting purposes. Deferred tax assets and liabilities are computed for differences between the financial statements and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the period in which the differences are expected to affect taxable income, and net operating loss ("NOL") carryforwards and research and development ("R&D") tax credit carryforwards.

A reconciliation of the expected tax computed at the U.S. statutory federal income tax rate to the total benefit for income taxes for the years ended December 31, 2019 and 2020 is as follows:

	For the Year Ended December 31,	
	2019	2020
Statutory federal income tax rate	21.0%	21.0%
State tax, net of federal benefit	4.6%	5.1%
Non-deductible expense	(0.4)%	1.7%
R&D credit	5.3%	4.1%
Change in valuation allowance	(30.5)%	(31.9)%
Income tax provision (benefit)	0.0%	0.0%

Significant components of the Company's deferred tax assets as of December 31, 2019 and 2020 were as follows (in thousands):

	December 31,	
	2019	2020
Deferred tax assets:		
Net operating loss	$ 4,358	$ 6,354
R&D credit	1,381	1,681
Stock compensation	45	85
Total deferred tax assets	5,784	8,120
Valuation allowance	(5,784)	(8,120)
Deferred tax assets, net of allowance	$ —	$ —

ACUMEN PHARMACEUTICALS, INC.
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In assessing the realizability of deferred tax assets as of December 31, 2019 and 2020, management considered whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible or the NOL carryforwards and R&D tax credit carryforwards will be used. The Company has determined that it is not more likely than not that its deferred tax assets will be realized. Accordingly, a valuation allowance for the full amount of the net deferred tax assets has been recorded as of December 31, 2019 and 2020 and March 31, 2021. The change in the valuation allowance from December 31, 2019 to December 31, 2020 is due to the pretax loss incurred for the year ended December 31, 2020.

As of December 31, 2020, the Company had approximately $22.3 million of NOL carryforwards available for federal tax purposes which begin to expire on December 31, 2028. As a result of the Tax Act of 2017, for U.S. income tax purposes, NOLs generated prior to December 31, 2017 can still be carried forward for up to 20 years, but NOLs generated after December 31, 2017 carryforward indefinitely, but are limited to 80% utilization against taxable income. Of the total federal NOL of $22.3 million, $6.4 million will begin to expire in 2028 and $15.9 million will not expire but will only offset 80% of future taxable income. The Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”), signed into law on March 27, 2020, provided that NOLs generated in a taxable year beginning in 2018, 2019, or 2020, may now be carried back five years and forward indefinitely. In addition, the 80% taxable income limitation is temporarily removed, allowing NOLs to fully offset net taxable income.

As of December 31, 2020, the Company also had approximately $31.0 million of state NOL carryforwards. The state NOLs begin to expire on December 31, 2028.

As of December 31, 2020, the Company had approximately $1.7 million of R&D credit carryforwards available for federal tax purposes, which begin to expire on December 31, 2023.

NOL carryforwards and R&D carryforwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), as well as similar state and foreign provisions. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be used annually to offset future taxable income and tax, respectively. In general, an “ownership change” as defined by Section 382 of the Code results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50% of the outstanding stock of a company by certain stockholders. The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since the Company’s formation due to the complexity and cost associated with such study, and the fact that there may be additional such ownership changes in the future.

The Company conducts intensive research and experimentation activities, generating R&D tax credits for federal and state purposes under section 41 of the Code. The Company has not performed a formal study validating these credits claimed in the tax returns. Once a study is prepared, the amount of R&D tax credits available could vary from what was originally claimed on the tax returns.

The Company is subject to U.S. federal and various state taxes. Generally, the tax years remain open for examination by the federal statute under a three-year statute of limitation; however, states generally keep their statutes open for four years. However, the Company’s tax years from 2003 and after are subject to examination by the United States and state taxing authorities due to the carry forward of unused NOLs and R&D credits.

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
(Information as of March 31, 2021 and thereafter and for the three months ended March 31, 2020 and 2021 is unaudited)

NOTE 8. 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.

Leases

The Company has been subleasing space in Indiana since March 1, 2020 under a lease that expired on December 31, 2020. The Company executed a new sublease for this space that was effective February 1, 2021. The term of the sublease is for 31 months, expiring on August 30, 2023. The Company will pay monthly rent of $12,719 and is also allowing others to sublease a portion of the space from the Company for less than a one-year period. As of March 31, 2021, the remaining aggregate minimum rent obligation over the remaining term was approximately $369,000.

At March 31, 2021, future minimum lease payments under lease agreements (including short-term leases) associated with our operations were as follows (in thousands):

Year ended December 31, 2021 (remaining 9 months)	$117
Year ended December 31, 2022	153
Year ended December 31, 2023	102
Total	$371

NOTE 9. NET LOSS PER SHARE

The Company computes loss per common share of the common stock using the two-class method required for participating securities. Basic and diluted loss per share was the same for each period presented as the inclusion of all potential common stock outstanding would have been anti-dilutive.

The table below provides potentially dilutive securities not included in the calculation of the diluted net loss per common share because to do so would be anti-dilutive:

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
Shares issuable upon conversion of Series A Preferred Stock	477,297	477,297	477,297	477,297
Shares issuable upon conversion of Series A-1 Preferred Stock	7,537,879	7,537,879	7,537,879	7,537,879
Shares issuable upon conversion of Series B Preferred Stock	—	11,862,043	—	11,862,043
Shares issuable upon exercise of stock options	1,004,898	1,001,517	1,004,898	3,481,178
Shares issuable upon exercise of common stock warrants	385,693	385,693	385,693	385,693
Shares issuable upon exercise of preferred stock warrant	447,426	447,426	447,426	447,426
Total	9,853,193	21,711,855	9,853,193	24,191,516

ACUMEN PHARMACEUTICALS, INC.
NOTES TO FINANCIAL STATEMENTS
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NOTE 10. SUBSEQUENT EVENTS

On June 17, 2021, the Milestone Closing for the Series B convertible preferred stock occurred, resulting in the sale of 7,908,027 shares of Series B convertible preferred stock at $3.80 per share for gross proceeds of $30.0 million.

On June 23, 2021, the Company's Board and stockholders approved and effected a 1-for-1.49 reverse stock split of the Company's common stock and convertible preferred stock. Common stock, convertible preferred stock, warrants to purchase common stock, warrants to purchase convertible preferred stock, options to purchase common stock, share data, per share data and related information contained in the financial statements have been retrospectively adjusted to reflect the effect of the reverse stock split.

Through and including , 2021 (the 25th day after the commencement of this offering), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

8,333,333 Shares

Common Stock

BofA Securities

Credit Suisse

Stifel

UBS Investment Bank

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq Global Market initial listing fee.

	Amount
SEC registration fee	$16,729
FINRA filing fee	23,500
Nasdaq Global Market initial listing fee	170,000
Accountants' fees and expenses	900,000
Legal fees and expenses	1,500,000
Transfer agent's fees and expenses	6,500
Printing and engraving expenses	325,000
Miscellaneous	500,000
Total expenses	$ 3,441,729

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated certificate of incorporation and bylaws to be in effect upon the closing of this offering will provide that: (i) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (ii) we may, in our discretion, indemnify our officers, employees and agents as set forth in the Delaware General Corporation Law; (iii) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors in connection with certain legal proceedings; (iv) the rights conferred in the bylaws are not exclusive; and (v) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents.

In connection with this offering, we expect to enter into indemnification agreements with each of our directors and executive officers that require us to indemnify them against expenses, judgments, fines, settlements and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director or officer of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements will also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. We intend to enter into similar indemnification agreements with our executive officers prior to the completion of this offering. At present, no litigation or proceeding is pending that involves any of our directors or officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this Registration Statement provides for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act, or otherwise. Our amended and restated investor rights agreement with certain investors also provides for cross-indemnification in connection with the registration of our common stock on behalf of such investors.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us since January 2018 through the date of the prospectus that forms a part of this registration statement. None of the following transactions involved any underwriters, underwriting discounts or commissions, or any public offering. Unless otherwise specified above, we believe these transactions were exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or under benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Issuances of Common Stock

In June 2021, four holders of warrants to purchase common stock exercised warrants to purchase a total of 128,114 shares of common stock at an exercise price of $4.47 per share.

Issuances of Convertible Notes

In May 2018, we issued and sold convertible promissory notes to two individual and institutional accredited investors, pursuant to which we issued and sold $250,000 aggregate principal amount of convertible promissory notes in exchange for $250,000 in gross proceeds.

Issuances of Warrants

In October 2018, we issued a warrant to purchase 447,426 shares of our Series A-1 preferred stock, with a per-share exercise price of $2.794 per share to an accredited institutional investor.

Issuances of Preferred Stock

In October 2018 with subsequent closings through November 2019, we issued 1,449,191 shares of our Series A convertible preferred stock and 7,537,879 shares of our Series A-1 convertible preferred stock to 49 individual and institutional accredited investors. Of these shares, we sold an aggregate of 6,442,969 shares of our Series A-1 convertible preferred stock for $2.24 per share, for aggregate consideration of $14.4 million. The remaining shares were issued as conversions of notes and shares of common stock into shares of Series A convertible preferred stock and conversions of Series A convertible preferred stock into shares of Series A-1 convertible preferred stock.

In November 2020, we issued 11,862,043 shares of our Series B convertible preferred stock to 31 individual and institutional accredited investors for $3.80 per share, for aggregate consideration of $45.1 million.

In June 2021, we issued 7,908,027 shares of our Series B convertible preferred stock to 31 individual and institutional accredited investors for $3.80 per share, for aggregate consideration of $30.0 million. Also in June 2021, an accredited institutional investor exercised a warrant to purchase 447,426 shares of our Series A-1 preferred stock at a per-share exercise price of $2.794 per share.

Issuances Pursuant to our Equity Plans

From January 1, 2018 through the date of this registration statement, we granted options under our Amended and Restated Stock Performance Plan to purchase an aggregate of 3,393,514 shares of common stock, at a weighted average exercise price of $1.06 per share, to our employees and consultants. Of these, 5,592 shares have been issued upon the exercise of options, and 5,592 options have been cancelled. We have also granted no restricted stock awards under our Amended and Restated Stock Performance Plan during the same time period. The recipients of these securities were employees, directors or bona fide consultants of the Registrant and received the securities under the Prior Plan.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits listed below are filed as part of this registration.

Exhibit Number	Description of Exhibit
1.1	Form of Underwriting Agreement
3.1#	Amended and Restated Certificate of Incorporation of the Registrant (as amended and currently in effect)
3.2#	Amended and Restated Bylaws of the Registrant (currently in effect)
3.3	Form of Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4	Form of Amended and Restated Bylaws of the Registrant (to be effective upon the closing of this offering)
3.5	Certificate of Amendment to Amended and Restated Certificate of Incorporation
4.1#	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated November 20, 2020
5.1	Opinion of Cooley LLP
10.1†	Collaboration Agreement, by and between the Registrant and Merck & Co., Inc., dated December 22, 2003, as amended and restated as of October 18, 2006

Exhibit Number	Description of Exhibit
10.2	2021 Equity Incentive Plan and Forms of Option Grant Notice and Agreement, Exercise Notice, Early Exercise Notice and Restricted Stock Award Notice
10.3	Non-Employee Director Compensation Policy
10.4	2021 Employee Stock Purchase Plan
10.5#	2013 Amended and Restated Stock Performance Plan (as amended through November 20, 2020)
10.6	Form of Indemnification Agreement with Executive Officers and Directors
10.7#	Executive Employment Agreement, by and between the Registrant and Daniel O'Connell
10.8#	Employment Agreement by and between the Registrant and Eric Siemers, M.D.
10.9#	Employment Agreement by and between the Registrant and Russell Barton
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm
23.2	Consent of Cooley LLP (included in Exhibit 5.1)
24.1#	Power of Attorney (included on signature page)
24.2	Power of Attorney of Nathan B. Fountain, M.D.

† Pursuant to Item 601(b)(10) of Regulation S-K, certain confidential portions of this exhibit have been omitted by means of marking such portions with asterisks [***] as the identified confidential portions (i) are not material and (ii) the Registrant customarily and actually treats that information as private or confidential.

Previously filed.

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Charlottesville, Commonwealth of Virginia, on this 24th day of June, 2021.

Acumen Pharmaceuticals, Inc.

By: /s/ Daniel O'Connell
Daniel O'Connell
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Daniel O'Connell Daniel O'Connell	Chief Executive Officer and Director *(Principal Executive Officer)*	June 24, 2021
/s/ William Matthew Zuga William Matthew Zuga	Chief Financial Officer and Chief Business Officer *(Principal Financial Officer and Principal Accounting Officer)*	June 24, 2021
* Jeffrey L. Ives, Ph.D.	Director	June 24, 2021
* Sean Stalfort	Director	June 24, 2021
* Laura Stoppel, Ph.D.	Director	June 24, 2021
/s/ Nathan B. Fountain Nathan B. Fountain, M.D.	Director	June 24, 2021
* Jeffrey Sevigny, M.D.	Director	June 24, 2021

*By: /s/ Daniel O'Connell
Daniel O'Connell
Attorney-in-Fact

Exhibit 1.1

ACUMEN PHARMACEUTICALS, INC.

(a Delaware corporation)

[•] Shares of Common Stock

UNDERWRITING AGREEMENT

Dated: [•], 2021

ACUMEN PHARMACEUTICALS, INC.

(a Delaware Corporation)

[•] Shares of Common Stock

UNDERWRITING AGREEMENT

[•], 2021

BofA Securities, Inc.
Credit Suisse Securities (USA) LLC
Stifel, Nicolaus & Company, Incorporated
as Representatives of the several Underwriters

c/o BofA Securities, Inc.
One Bryant Park
New York, New York 10036

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, New York 10010-3629

c/o Stifel, Nicolaus & Company, Incorporated
One Montgomery Street, Suit 3700
San Francisco, California 94104

Ladies and Gentlemen:

Acumen Pharmaceuticals, Inc., a Delaware corporation (the "Company"), confirms its agreement with BofA Securities, Inc. ("BofA"), Credit Suisse Securities (USA) LLC ("Credit Suisse") and Stifel, Nicolaus & Company, Incorporated ("Stifel") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom BofA, Credit Suisse and Stifel are acting as representatives (in such capacity, the "Representatives"), with respect to (i) the sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of Common Stock, par value $[•] per share, of the Company ("Common Stock") set forth in Schedule A hereto and (ii) the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of [•] additional shares of Common Stock. The aforesaid [•] shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the [•] shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are herein called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company and the Underwriters agree that up to 5% shares of the Initial Securities to be purchased by the Underwriters (the "Reserved Securities") shall be reserved for sale by Merrill Lynch, Pierce, Fenner & Smith Incorporated (an affiliate of BofA, hereinafter referred to as "Merrill Lynch") to certain persons designated by the Company (the "Invitees"), as part of the distribution of the Securities by the Underwriters, subject to the terms of this Agreement, the applicable rules, regulations and interpretations of the Financial Industry Regulatory Authority, Inc. ("FINRA") and all other applicable laws, rules and regulations. The Company solely determined, without any direct or indirect participation by the Underwriters or Merrill Lynch, the Invitees who will purchase Reserved Securities (including the amount to be purchased by such persons) sold by Merrill Lynch. To the extent that such Reserved Securities are not orally confirmed for purchase by Invitees by 11:59 P.M. (New York City time) on the date of this Agreement, such Reserved Securities may be offered to the public as part of the public offering contemplated hereby.

The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 (No. 333-256945), including the related preliminary prospectus or prospectuses, covering the registration of the sale of the Securities under the Securities Act of 1933, as amended (the "1933 Act"). Promptly after execution and delivery of this Agreement, the Company will prepare and file a prospectus in accordance with the provisions of Rule 430A ("Rule 430A") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and Rule 424(b) ("Rule 424(b)") of the 1933 Act Regulations. The information included in such prospectus that was omitted from such registration statement at the time it became effective but that is deemed to be part of such registration statement at the time it became effective pursuant to Rule 430A(b) is herein called the "Rule 430A Information." Such registration statement, including the amendments thereto, the exhibits thereto and any schedules thereto, at the time it became effective, and including the Rule 430A Information, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein called the "Rule 462(b) Registration Statement" and, after such filing, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "preliminary prospectus." The final prospectus, in the form first furnished to the Underwriters for use in connection with the offering of the Securities, is herein called the "Prospectus." For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system or any successor system ("EDGAR").

As used in this Agreement:

"Applicable Time" means [•] [A.M.][P.M.], New York City time, on [•], 2021 or such other time as agreed by the Company and the Representatives.

"General Disclosure Package" means any Issuer General Use Free Writing Prospectuses issued at or prior to the Applicable Time, the most recent preliminary prospectus that is distributed to investors prior to the Applicable Time and the information included on Schedule B-1 hereto, all considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Issuer General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "*bona fide* electronic road show," as defined in Rule 433 (the "Bona Fide Electronic Road Show")), as evidenced by its being specified in Schedule B-2 hereto.

"Issuer Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the 1933 Act.

"Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the 1933 Act.

SECTION 1. Representations and Warranties.

(a) *Representations and Warranties by the Company*. The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time, the Closing Time (as defined below) and any Date of Delivery (as defined below), and agrees with each Underwriter, as follows:

(i) Registration Statement and Prospectuses. Each of the Registration Statement and any amendment thereto has been declared effective by the Commission under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued by the Commission under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, the Applicable Time, the Closing Time and any Date of Delivery complied and will comply in all material respects with the applicable requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, and, in each case, at the Applicable Time, the Closing Time and any Date of Delivery complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus delivered to the Underwriters for use in connection with this offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, when considered with the Registration Statement, at its effective time, on the date hereof, at the Closing Time or at any Date of Delivery, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. At the Applicable Time and any Date of Delivery, none of (A) the General Disclosure Package, (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package and (C) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Time or at any Date of Delivery, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives expressly for use therein. For purposes of this Agreement, the only information so furnished shall be the information in the first paragraph under the heading "Underwriting–Commissions and Discounts," the information in the second, third and fourth paragraphs under the heading "Underwriting–Price Stabilization, Short Positions and Penalty Bids" and the information under the heading "Underwriting–Electronic Offer, Sale and Distribution of Shares" in each case contained in the Prospectus (collectively, the "Underwriter Information").

(iii) Issuer Free Writing Prospectuses. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified. The Company has made available a Bona Fide Electronic Road Show in compliance with Rule 433(d)(8)(ii) such that no filing of any "road show" (as defined in Rule 433(h)) is required in connection with the offering of the Securities.

(iv) Testing-the-Waters Materials. The Company (A) has not engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the 1933 Act or institutions that are accredited investors within the meaning of Rule 501 under the 1933 Act and (B) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule C hereto.

(v) Company Not Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(vi) Emerging Growth Company Status. From the time of the initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any individual or entity ("Person") authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the 1933 Act (an "Emerging Growth Company").

(vii) Independent Accountants. The accountants who certified the financial statements and supporting schedules, if any, included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants as required by the 1933 Act, the 1933 Act Regulations and the Public Company Accounting Oversight Board.

(viii) Financial Statements The financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly, in all material respects, the financial position of the Company at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved, except, in the case of unaudited interim financial statements, subject to normal year end audit adjustments and the exclusion of certain footnotes as permitted by the applicable rules of the Commission. The supporting schedules, if any, present fairly in all material respects in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations.

(ix) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company, other than those in the ordinary course of business, which are material with respect to the Company, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(x) Good Standing of the Company. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not reasonably be expected to result in a Material Adverse Effect.

(xi) Subsidiaries. The Company has no subsidiaries.

(xii) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus [in the column entitled "Actual" under the caption "Capitalization"] (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company.

(xiii) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(xiv) Authorization and Description of Securities. The Securities to be purchased by the Underwriters from the Company have been duly authorized by the Company for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company. The Common Stock conforms in all material respects to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability solely by reason of being such a holder.

(xv) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and have been waived.

(xvi) Absence of Violations, Defaults and Conflicts. The Company is not (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company is a party or by which it may be bound or to which any of the properties or assets of the Company is subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency (including, without limitation, the U.S. Food and Drug Administration of the U.S. Department of Health and Human Services (the "FDA"), the European Medicines Agency ("EMA") or the U.S. Centers for Medicare and Medicaid Services ("CMS")), or other authority, body or agency having jurisdiction over the Company or any of its properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption "Use of Proceeds") and compliance by

the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties or assets of the Company pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company.

(xvii) Absence of Labor Disputes. No labor disturbance by or dispute with the employees of the Company exists or, to the knowledge of the Company, is threatened, and the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of its principal suppliers, manufacturers, customers or contractors, which, in either case, would reasonably be expected to, individually or in the aggregate, result in a Material Adverse Effect.

(xviii) [ERISA Compliance. (A) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), for which the Company or any member of its "Controlled Group" (defined as any entity, whether or not incorporated, that is under common control with the Company within the meaning of Section 4001(a)(14) of ERISA or any entity that would be regarded as a single employer with the Company under Section 414(b),(c),(m) or (o) of the Code) would have any liability (each, a "Plan") has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code; (B) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption; (C) none of the Plans are subject to the funding rules of Section 412 of the Code or Section 302 of ERISA; (D) none of the Plans are "multiemployer plans" within the meaning of Section 4001(a)(3) of ERISA, (E) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or failure to act, which would cause the loss of such qualification; (F) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA in respect of a Plan; and (G) an increase in the aggregate amount of contributions required to be made to all Plans by the Company or its Controlled Group affiliates in the current fiscal year of the Company and its Controlled Group affiliates compared to the amount of such contributions made in the Company's and its Controlled Group affiliates' most recently completed fiscal year has not occurred and is not reasonably likely to occur, except in each case in clauses (A) through (G) hereof, as would not, individually or in the aggregate, have a Material Adverse Effect.]

(xix) Absence of Proceedings. There is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company, which would reasonably be expected to result in a Material Adverse Effect, or which would reasonably be expected to materially and adversely affect its properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder.

(xx) Accuracy of Exhibits. There are no contracts or documents which are required under the 1933 Act or 1933 Act Regulations to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described in all material respects and filed as required.

(xxi) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except (A) such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of the Nasdaq Global Market, state securities laws or the rules of the Financial Industry Regulatory Authority, Inc. ("FINRA") and (B) such as have been obtained under the laws and regulations of jurisdictions outside the United States in which the Reserved Securities were offered.

(xxii) Possession of Licenses and Permits. The Company possesses, or qualifies for an exemption from any applicable requirement to obtain, such certificates, permits, licenses, approvals, consents, exemptions, registrations, and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by it as described in the Registration Statement, the General Disclosure Package and the Prospectus, except where the failure to so possess or qualify would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company is in compliance with the terms and conditions of all Governmental Licenses, except where the failure to so comply would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except where the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company has not received any written notice of proceedings relating to the revocation or modification of, or non-compliance with, any Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Effect, and to the Company's knowledge, no such proceedings are threatened.

(xxiii) Title to Property. The Company does not own any real property; the Company has good and marketable title to all other properties owned by it, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or (B) do not, singly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and all of the leases and subleases material to the business of the Company, and under which the Company holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and the Company does not have any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxiv) Possession of Intellectual Property. The Company owns or possesses adequate patents, patent rights, licenses, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property described in the Registration

Statement, the General Disclosure Package and the Prospectus as being owned or licensed by the Company or as is necessary to carry on the business now operated and as currently contemplated to be operated by it as described in the Registration Statement, the General Disclosure Package and the Prospectus (collectively, "Intellectual Property"), and the Company has not received any notice and is otherwise unaware of any infringement of or asserted rights of others with respect to any Intellectual Property. The Intellectual Property of the Company is subsisting, free and clear of all material liens and encumbrances, and has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part and the Company is unaware of any facts which in the Company's view would form a reasonable basis for any such adjudication. To the Company's knowledge (i) there are no unreleased liens or security interests which have been filed against any of the Intellectual Property owned by the Company; (ii) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement, General Disclosure Package and Prospectus as licensed to the Company, and the Company has taken all reasonable steps necessary to secure its interests in the Intellectual Property from its employees and contractors; (iii) there is no infringement, misappropriation or violation by third parties of any Intellectual Property; (iv) the Company is not infringing, misappropriating or violating the intellectual property rights of third parties; (v) the Company is the sole owner of the Intellectual Property owned by it and has the valid right to use such Intellectual Property; and (vi) no employee of the Company is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company. To the Company's knowledge, the Company is not obligated to pay any material royalty, grant a material license or provide other material consideration to any third party in connection with the Intellectual Property or in connection with the manufacture, use or sale of any of the Company's product candidates. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company's rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that either the Company infringes or otherwise violates, or would, upon the commercialization of any product described in the Registration Statement, General Disclosure Package, and Prospectus as under development, infringe, misappropriate or violate, any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. To the knowledge of the Company, the Company has complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company, and all such agreements are in full force and effect. The Company has taken reasonable steps to protect, maintain and safeguard its Intellectual Property, including the execution of appropriate nondisclosure, confidentiality agreements and invention assignment agreements and invention assignments with its employees or contractors. To the Company's knowledge, the duty of candor and good faith as required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with; and in all foreign offices having similar requirements, to the Company's knowledge, all such requirements have been complied with. The product candidates described in the Registration Statement, the General Disclosure Package and the Prospectus as under development by the Company fall within the scope of one or more patents or pending patent applications owned by, or exclusively licensed to, the Company.

(xxv) Environmental Laws. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect, (A) the Company is not in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company has all permits, authorizations and approvals required under any applicable Environmental Laws and is in compliance with their requirements, (C) there are no pending or, to the knowledge of the Company, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company and (D) to the knowledge of the Company, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company relating to Hazardous Materials or any Environmental Laws.

(xxvi) Health Care Laws. Except where instances of failure to comply would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, the Company has been in compliance with all applicable foreign, federal, state and local healthcare laws, rules and regulations, including, without limitation, (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.); (ii) the Public Health Service Act (42 U.S.C. Section 201 et seq.); (iii) all healthcare related fraud and abuse laws, including, without limitation, the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), the civil monetary penalties law (42 U.S.C. § 1320a-7a), the exclusion law (42 U.S.C. § 1320a-7), the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), all criminal laws relating to healthcare fraud and abuse, including but not limited to 18 U.S.C. Sections 286, 287, 1035, 1347 and 1349, the healthcare fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. §§1320d et seq.), the Medicare statute (Title XVIII of the Social Security Act), and the Medicaid statute (Title XIX of the Social Security Act); (iv) the patient privacy, data security and breach notification provisions under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. §§17921 et seq.); and (vi) each as amended and the regulations promulgated pursuant to such laws (collectively, "Healthcare Laws"). The Company is not party to nor has any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement with or imposed by any Governmental Entity. Additionally, neither the Company, nor any of its officers, directors, employees or, to the Company's knowledge, its agents, is or has been excluded, suspended, debarred or is otherwise ineligible from participation in any U.S. state or federal healthcare program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company: (i) has not received any Form 483, notice of adverse finding, warning letter, untitled letter or other written correspondence from any Governmental Entity alleging or asserting material noncompliance with any Healthcare Laws

or the terms of any Governmental Licenses, except in each case as would not, individually or in the aggregate, have a Material Adverse Effect; (ii) has not received written notice of any claim, suit, litigation, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any product, operation or activity is in violation of any Healthcare Laws or Governmental Licenses and has no knowledge that any such Governmental Entity or third party is considering any such claim, suit, litigation, proceeding, hearing, enforcement, investigation, arbitration or other action, except in each case as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) (a) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Healthcare Laws or Governmental Licenses, (b) except as would not, individually or in the aggregate, have a Material Adverse Effect, all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission), and (c) to the knowledge of the Company there is no reasonable basis for any material liability with respect to such filings; and (iv) has not, and to the knowledge of the Company, its officers, employees and agents have not, made any untrue statement of a material fact or fraudulent statement to any Governmental Entity or failed to disclose a material fact required to be disclosed to any Governmental Entity.

(xxvii) Preclinical and Clinical Data and Regulatory Compliance. The preclinical tests, clinical trials and other studies (collectively, "studies") conducted by or on behalf of or sponsored by the Company that are described in, or the results of which are referred to in, the Registration Statement, the General Disclosure Package or the Prospectus were and, if still pending, are being conducted in all material respects in accordance or compliance with the protocols, procedures and controls designed and approved for such studies, standard medical and scientific research procedures, and applicable Healthcare Laws; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies, and the Company has no knowledge of any other studies the results of which are inconsistent with, or otherwise call into question, the results described or referred to in the Registration Statement, the General Disclosure Package or the Prospectus; the Company has made all such filings and obtained all such approvals as may be required by the FDA or any committee thereof, any other U.S. or foreign government drug or biological product regulatory agency, or health care facility Institutional Review Board (collectively, the "Regulatory Agencies"); the Company has not received any written notice of, or correspondence from, any Regulatory Agency requiring the termination, suspension or material modification of any clinical trials other than as described in the Registration Statement, the General Disclosure Package or the Prospectus; and the Company has operated and currently is in compliance in all material respects with all applicable rules, regulations and policies of the Regulatory Agencies.

(xxviii) Accounting Controls. Except as disclosed in the Registration Statement, the Company maintains effective internal control over financial reporting (as defined under Rule 13a-15 and 15d-15 under the rules and regulations of the Commission promulgated under the Securities Exchange Act of 1934, as amended (such act, the "1934 Act" and such rules and regulations of the Commission promulgated thereunder the "1934 Act Regulations")) and a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with

respect to any differences. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the Company's most recent audited fiscal year, there has been (1) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (2) no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(xxix) Compliance with the Sarbanes-Oxley Act. The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act") that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement, and is, or will be, taking steps to enable it to comply with other provisions of the Sarbanes-Oxley Act not currently in effect, upon the effectiveness of such provisions, or which will become applicable to the Company at all times after the effectiveness of the Registration Statement.

(xxx) Payment of Taxes. All United States federal income tax returns of the Company required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided or the amount of which would not result, individually or in the aggregate, in a Material Adverse Effect. The United States federal income tax returns of the Company through the fiscal year ended December 31, 2019 have been filed and no assessment in connection therewith has been made against the Company the amount of which would result, individually or in the aggregate, in a Material Adverse Effect. The Company has filed all other tax returns that are required to have been filed by it pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not result, individually or in the aggregate, in a Material Adverse Effect, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company or the amount of which would not result, individually or in the aggregate, in a Material Adverse Effect. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not result, individually or in the aggregate, in a Material Adverse Effect.

(xxxi) Insurance. The Company carries or is entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business and at the same or a similar stage of development, and all such insurance is in full force and effect, except as would result, individually or in the aggregate, in a Material Adverse Effect. The Company has no reason to believe that it will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to result in a Material Adverse Effect. The Company has not been denied any insurance coverage which it has sought or for which it has applied.

(xxxii) Investment Company Act. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended (the "1940 Act").

(xxxiii) Absence of Manipulation. Neither the Company nor, to the knowledge of the Company, any affiliate of the Company has taken, nor will the Company or any affiliate take, directly or indirectly, any action which is designed, or would be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the 1934 Act.

(xxxiv) Foreign Corrupt Practices Act. Neither the Company, nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the U.S. Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA.

(xxxv) Money Laundering Laws. The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes of jurisdictions in which the Company conducts business, the rules and regulations thereunder and any related or similar applicable rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xxxvi) OFAC. Neither the Company, nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or representative of the Company is a Person currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council ("UNSC"), the European Union, Her Majesty's Treasury ("HMT"), or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxvii) Sales of Reserved Securities. In connection with any offer and sale of Reserved Securities outside the United States, each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time it was filed, complied and will comply in all material respects with any applicable laws or regulations of foreign jurisdictions in which the same is distributed. The Company has not offered, or caused the Representatives or Merrill Lynch to offer,

Reserved Securities to any person with the specific intent to unlawfully influence (i) a customer or supplier of the Company or any of its affiliates to alter the customer's or supplier's level or type of business with any such entity or (ii) a trade journalist or publication to write or publish favorable information about the Company or any of its affiliates, or their respective businesses or products.

(xxxviii) Lending Relationship. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any banking or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any Underwriter.

(xxxvix) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(xxxx) Cybersecurity. (A) There has been no security breach or incident, unauthorized access or disclosure, or other compromise of or relating to the Company's information technology and computer systems, networks, hardware, software, data and databases (including the data and information of their respective customers, employees, suppliers, vendors, to the knowledge of the Company, and any third party data maintained, processed or stored by the Company, any such data processed or stored by third parties on behalf of the Company), equipment or technology (collectively, "IT Systems and Data"), except where such breaches or other compromises would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect; (B) the Company has not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or incident, unauthorized access or disclosure or other compromise to its IT Systems and Data; and (C) the Company has implemented appropriate controls, policies, procedures, and technological safeguards reasonably designed to maintain and protect the integrity, continuous operation, redundancy and security of its IT Systems and Data reasonably consistent with industry standards and practices, or as required by applicable regulatory standards, except where the failure to so implement would not, singularly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company is presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification.

(xxxxi) Data Privacy and Security Laws. The Company is, and at all prior times has been, in material compliance with all applicable state, federal, and international data privacy, security and consumer protection laws and regulations, including without limitation HIPAA as amended by the Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"); the Company has taken commercially reasonable actions to prepare to comply with, and since May 25, 2018, has been and currently is in compliance with, the European Union General Data Protection Regulation ("GDPR") (EU 2016/679); and the Company has taken or will take commercially reasonable actions to prepare to comply with the California Consumer Privacy Act of 2018 ("CCPA") (collectively, the "Privacy Laws"). To ensure compliance with the Privacy Laws, the Company has in place, complies with, and takes appropriate steps reasonably designed to ensure compliance in all material respects with its policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of

Personal Data (the "Policies"). "Personal Data" means (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) Protected Health Information as defined by HIPAA; (iv) "personal data" as defined by GDPR; and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation. The Company has at all times made all disclosures to users or customers materially required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that it: (i) has not received written notice of any actual or potential liability, including, but not limited to security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of its IT Systems and Data or Personal Data, under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is not currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; and (iii) is not a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

(xxxxii) Manufacturing and Suppliers. To the Company's knowledge, the manufacturing facilities and operations of its suppliers have been operated and are currently operated in compliance in all material respects with all applicable Regulatory Agencies, including, without limitation, the Health Care Laws.

(b) *Officer's Certificates*. Any certificate signed by any officer of the Company delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

SECTION 2. Sale and Delivery to Underwriters; Closing.

(a) *Initial Securities*. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule A, that number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof, subject, in each case, to such adjustments among the Underwriters as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(b) *Option Securities*. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Underwriters, severally and not jointly, to purchase up to an additional [•] shares of Common Stock, at the price per share set forth in Schedule A, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time from time to time upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Representatives, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time. If the option is

exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(c) *Payment*. Payment of the purchase price for, and delivery of certificates or security entitlements for, the Initial Securities shall be made at the offices of Ropes & Gray LLP, counsel for the Underwriters, at 800 Boylston Street, Boston, Massachusetts 02199, or at such other place as shall be agreed upon by the Representatives and the Company, at 9:00 A.M. (New York City time) on the second (third, if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time").

In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates or security entitlements for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representatives and the Company, on each Date of Delivery as specified in the notice from the Representatives to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representatives for the respective accounts of the Underwriters of certificates or security entitlements for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. Each of the Representatives, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) *Compliance with Securities Regulations and Commission Requests*. The Company, subject to Section 3(b), will comply with the requirements of Rule 430A, and will notify the Representatives immediately, and confirm the notice in writing (which may be by email), (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus, or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make reasonable best efforts to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof as soon as practicable.

(b) *Continued Compliance with Securities Laws*. The Company will comply with the 1933 Act and the 1933 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations ("Rule 172"), would be) required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly (A) give the Representatives notice of such event, (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the General Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representatives with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representatives or counsel for the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company will promptly give the Representatives notice of any filings made pursuant to the 1934 Act or the 1934 Act Regulations prior to the Applicable Time; the Company will give the Representatives notice of its intention to make any such filing from the Applicable Time to the Closing Time and will furnish the Representatives with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representatives or counsel for the Underwriters shall reasonably object.

(c) *Delivery of Registration Statements*. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, if requested, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and signed copies of all consents and certificates of experts, and will also deliver to the Representatives, if requested, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) *Delivery of Prospectuses*. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) *Blue Sky Qualifications*. The Company will use its reasonable best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(f) *Rule 158*. The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available (which may be satisfied by filing with the Commission pursuant to EDGAR) to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(g) *Use of Proceeds*. The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Registration Statement, the General Disclosure Package and the Prospectus under "Use of Proceeds."

(h) *Listing*. The Company will use its reasonable best efforts to effect and maintain the listing of the Common Stock (including the Securities) on the Nasdaq Global Market.

(i) *Restriction on Sale of Securities*. During a period of 180 days from the date of the Prospectus, the Company will not, without the prior written consent of BofA, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file or confidentially submit any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof and referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (C) any shares of Common Stock issued or options to purchase Common Stock or other equity awards covering Common Stock in either case, granted pursuant to employee benefit plans, including stock incentive plans or employee stock purchase plans, of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus; (D) any shares of Common Stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus; (E) any securities issued in connection with mergers, acquisitions, joint ventures, strategic alliances, commercial, lending or other collaborative or strategic transactions, or the acquisition by the Company of the business, property, technology or other assets of another individual or entity or the assumption of an employee benefit plan in connection with a merger or acquisition; (F) the filing of a registration statement on Form S-8 or any successor form thereto with respect to the registration of securities to be offered under any employee benefit or equity incentive plan of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus or any such plan assumed by the Company in connection with a transaction described in clause (E); provided that, (x) in

the case of clause (E), the aggregate number of shares issued in all such acquisitions and transactions taken together does not exceed 10% of the Company's outstanding common stock following the offering of Common Stock contemplated by this Agreement and (y) each person to whom such shares or securities are issued or granted pursuant to clauses (B), (C), (D) and (E) during the 180-day restriction period described above executes or has executed a "lock-up" agreement in the form of Exhibit A hereto.

(j) If BofA, in its sole discretion, agrees to release or waive the restrictions set forth in a lock-up agreement described in Section 5(j) hereof for an officer or director of the Company and provides the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit C hereto through a major news service at least two business days before the effective date of the release or waiver.

(k) *Reporting Requirements*. The Company, during the period when a Prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and 1934 Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Securities as may be required under Rule 463 under the 1933 Act.

(l) *Issuer Free Writing Prospectuses*. The Company agrees that, unless it obtains the prior written consent of the Representatives, it will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representatives will be deemed to have consented to the Issuer Free Writing Prospectuses listed on Schedule B-2 hereto and any "road show that is a written communication" within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representatives. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representatives as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(m) *Certification Regarding Beneficial Owners*. The Company will deliver to the Representatives, on the date of execution of this Agreement, a properly completed and executed Certification Regarding Beneficial Owners of Legal Entity Customers, together with copies of identifying documentation, and the Company undertakes to provide such additional supporting documentation as the Representatives may reasonably request in connection with the verification of the foregoing certification.

(n) *Compliance with FINRA Rules.* The Company hereby agrees that it will ensure that the Reserved Securities will be restricted as required by FINRA or the FINRA rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of this Agreement. Merrill Lynch will notify the Company as to which persons will need to be so restricted. At the request of the Underwriters or Merrill Lynch, the Company will direct the transfer agent to place a stop transfer

restriction upon such securities for such period of time. Should the Company release, or seek to release, from such restrictions any of the Reserved Securities, the Company agrees to reimburse the Underwriters and Merrill Lynch for any reasonable expenses (including, without limitation, legal expenses) they incur in connection with such release.

(o) Testing-the-Waters Materials. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(p) Emerging Growth Company Status. The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Securities within the meaning of the 1933 Act and (ii) completion of the 180-day restricted period referred to in Section 3(i).

SECTION 4. Payment of Expenses.

(a) *Expenses*. The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of copies of each preliminary prospectus, each Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and any reasonable costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (iii) the preparation, issuance and delivery of the certificates or security entitlements for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(e) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the fees and expenses of any transfer agent or registrar for the Securities, (vii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, (viii) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Underwriters in connection with, the review by FINRA of the terms of the sale of the Securities up to a maximum of $40,000, (ix) the fees and expenses incurred in connection with the listing of the Securities on the Nasdaq Global Market and (x) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Securities made by the Underwriters caused by a breach of the representation contained in the third sentence of Section 1(a)(ii) and all reasonable and documented fees and disbursements of counsel for Merrill Lynch, in connection with matters related to the Reserved Securities which are designated by the Company for sale to Invitees.

(b) *Termination of Agreement*. If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5, Section 9(a)(i) or (iii) or Section 10 hereof, the Company shall reimburse the non-defaulting Underwriters for all of their reasonable out-of-pocket expenses that were actually incurred, including the reasonable fees and disbursements of counsel for the Underwriters.

SECTION 5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) *Effectiveness of Registration Statement; Rule 430A Information*. The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and, at the Closing Time, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated; and the Company has complied with each request (if any) from the Commission for additional information. A prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) without reliance on Rule 424(b)(8) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A.

(b) *Opinion and Negative Assurance Letter of Counsel for Company*. At the Closing Time, the Representatives shall have received the opinion and negative assurance letter, each dated the Closing Time, of Cooley LLP, counsel for the Company, in form and substance reasonably satisfactory to counsel for the Underwriters previously agreed upon by the Representatives, together with signed or reproduced copies of such opinion and letter for each of the other Underwriters to the effect set forth in Exhibit A hereto.

(c) *Opinion of Intellectual Property Counsel for Company.* At the Closing Time, the Representatives shall have received the opinion, dated the Closing Time, of Wilson Sonsini Goodrich & Rosati, counsel for the Company with respect to intellectual property matters, in form and substance reasonably satisfactory to counsel for the Underwriters previously agreed upon by the Representatives and such counsel, together with signed or reproduced copies of such letter for each of the other Underwriters.

(d) *Opinion of Counsel for Underwriters*. At the Closing Time, the Representatives shall have received the opinion, dated the Closing Time, of Ropes & Gray LLP, counsel for the Underwriters, in form and substance reasonably satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters. In giving such opinion such counsel may rely, as to all matters governed by the laws of all jurisdictions other than the law of the State of New York, the General Corporation Law of the State of Delaware and the federal securities laws of the United States, upon the opinions of counsel satisfactory to the Representatives. Such counsel may also state that, insofar as such opinion involves factual matters, they have relied, to the extent they deem proper, upon certificates of officers and other representatives of the Company and certificates of public officials.

(e) *Officers' Certificate*. At the Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the Chief Executive

Officer or the President of the Company and of the chief financial or chief accounting officer of the Company, dated the Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made at and as of the Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement under the 1933 Act has been issued, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to its knowledge, contemplated.

(f) *Accountant's Comfort Letter*. At the time of the execution of this Agreement, the Representatives shall have received from Ernst & Young LLP a letter, dated such date, in form and substance satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(g) *Bring-down Comfort Letter*. At the Closing Time, the Representatives shall have received from Ernst & Young LLP a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Time.

(h) *Approval of Listing*. At the Closing Time, the Securities shall have been approved for listing on the Nasdaq Global Market, subject only to official notice of issuance.

(i) *No Objection*. FINRA has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements relating to the offering of the Securities.

(j) *Lock-up Agreements*. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit B hereto signed by the persons listed on Schedule C hereto.

(k) *No Rated Securities.* The Company does not have any debt securities or preferred stock that are rated by any "nationally recognized statistical rating agency" (as defined in Section 3(a)(62) of the 1934 Act).

(l) *Conditions to Purchase of Option Securities*. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company hereunder shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representatives shall have received:

(i) Officers' Certificate. A certificate, dated such Date of Delivery, of the Chief Executive Officer or President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(e) hereof remains true and correct as of such Date of Delivery.

(ii) Opinion and Negative Assurance Letter of Counsel for Company. If requested by the Representatives, the opinion and negative assurance letter of Cooley LLP, counsel for the Company, in form and substance reasonably satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion and negative assurance letter required by Section 5(b) hereof.

(iii) Opinion of Intellectual Property Counsel for Company. If requested by the Representatives, the opinion of Wilson Sonsini Goodrich & Rosati, counsel for the Company with respect to intellectual property matters, in form and substance reasonably satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(c) hereof.

(iv) Opinion of Counsel for Underwriters. If requested by the Representatives, the opinion of Ropes & Gray LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(d) hereof.

(v) Bring-down Comfort Letter. If requested by the Representatives, a letter from Ernst & Young LLP, in form and substance satisfactory to the Representatives and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(g) hereof, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

(m) *Additional Documents*. At the Closing Time and at each Date of Delivery (if any) counsel for the Underwriters shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters.

(n) *Termination of Agreement*. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7, 8, 14, 15, 16 and 17 shall survive any such termination and remain in full force and effect.

SECTION 6. Indemnification.

(a) *Indemnification of Underwriters*. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates (as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate")), its selling agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430A Information, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities ("Marketing Materials"), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, Prospectus or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company;

(iii) against any and all expense whatsoever, as reasonably incurred (including the fees and disbursements of counsel chosen by BofA; provided, however, that the Company shall not be liable for more than one separate counsel for all Underwriters (in addition to a single local counsel)) in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(b) *Indemnification of Company, Directors and Officers*. Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(c) *Actions against Parties; Notification*. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by the Representatives, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) *Settlement without Consent if Failure to Reimburse*. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) or settlement of any claim in connection with any violation referred to in Section 6(e) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

(e) *Indemnification for Reserved Securities.* In connection with the offer and sale of the Reserved Securities, the Company agrees to indemnify and hold harmless Merrill Lynch and each person, if any, who controls any Underwriter or Merrill Lynch within the meaning of either Section 15 of the 1933 Act or Section 20 of the 1934 Act, from and against any and all loss, liability, claim, damage and expense (including, without limitation, any legal or other expenses reasonably incurred in connection with defending, investigating or settling any such action or claim), as incurred, (i) arising out of any untrue statement or alleged untrue statement of a material fact contained in any other material prepared by or with the consent of the Company for distribution to Invitees in connection with the offering of the Reserved Securities or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) caused by the failure of any Invitee to pay for and accept delivery of Reserved Securities which have been orally confirmed for purchase by any Invitee by 11:59 P.M. (New York City time) on the first business day after the date of the Agreement or (iii) related to, or arising out of or in connection with, the offering of the Reserved Securities; provided, however, that with respect to clauses (ii) and (iii) above, the Company shall not be liable in any such case to the extent that any such loss, liability, claim, damage or expense is finally judicially determined by a court of competent jurisdiction to have resulted from the gross negligence or willful misconduct of Merrill Lynch or each person, if any, who controls Merrill Lynch within the meaning of either Section 15 of the 1933 Act or Section 20 of the 1934 Act.

SECTION 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and of the Underwriters, on the other hand, in connection with the statements or omissions, which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses) received by the Company, on the one hand, and the total underwriting discount received by the Underwriters, on the other hand, in each case as set forth on the cover of the Prospectus, bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission or any violation of the nature referred to in Section 6(e) hereof.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the underwriting commissions received by such Underwriter in connection with the Securities underwritten by it and distributed to the public.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

SECTION 8. Representations, Warranties and Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company and (ii) delivery of and payment for the Securities.

SECTION 9. Termination of Agreement.

(a) *Termination*. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (i) if there has been, in the judgment of the Representatives, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the completion of the offering or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the Nasdaq Global Market, or (iv) if trading generally on the NYSE MKT or the New York Stock Exchange or in the Nasdaq Global Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other governmental authority, or (v) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to Clearstream or Euroclear systems in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

(b) *Liabilities*. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7, 8, 14, 15, 16 and 17 shall survive such termination and remain in full force and effect.

SECTION 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at the Closing Time or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:

(i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase, and the Company to sell, the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the (i) Representatives or (ii) the Company shall have the right to postpone Closing Time or the relevant Date of Delivery, as the case may be, for a period not exceeding seven days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 10.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to BofA at One Bryant Park, New York, New York 10036, attention of Syndicate Department (facsimile: (646) 855-3073), with a copy to ECM Legal (facsimile: (212) 230-8730); notices to Credit Suisse shall be directed to Eleven Madison Avenue, New York, New York 10010, attention of IB CM&A Legal (facsimile: (212) 325-4296); notices to Stifel shall be directed to 787 Seventh Avenue, 11th Floor, New York, New York 10019, attention of Syndicate; and notices to the Company shall be directed to it at 427 Park Street, Charlottesville, VA 22902, attention of Daniel O'Connell.

SECTION 12. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the initial public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering of the Securities and the process leading thereto, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company or its stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

SECTION 13. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Section 13, a "BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). "Covered Entity" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). **"**Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. "U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

SECTION 14. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 15. Trial by Jury. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

SECTION 16. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

SECTION 17. Consent to Jurisdiction; Waiver of Immunity. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby ("Related Proceedings") shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a "Related Judgment"), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 18. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 19. Counterparts and Electronic Signatures. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. Electronic signatures complying with the New York Electronic Signatures and Records Act (N.Y. State Tech. §§ 301-309), as amended from time to time, or other applicable law will be deemed original signatures for purposes of this Agreement. Transmission by telecopy, electronic mail or other transmission method of an executed counterpart of this Agreement will constitute due and sufficient delivery of such counterpart.

SECTION 20. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with its terms.

Very truly yours,

ACUMEN PHARMACEUTICALS, INC.

By _____
Title:

CONFIRMED AND ACCEPTED,
as of the date first above written:

BOFA SECURITIES, INC.
CREDIT SUISSE SECURITIES (USA) LLC
STIFEL, NICOLAUS & COMPANY, INCORPORATED

For themselves and as Representatives of the other Underwriters named in Schedule A hereto.

By: BOFA SECURITIES, INC.

By _____
Authorized Signatory

By: CREDIT SUISSE SECURITIES (USA) LLC

By _____
Authorized Signatory

By: STIFEL, NICOLAUS & COMPANY, INCORPORATED

By _____
Authorized Signatory

SCHEDULE A

The initial public offering price per share for the Securities shall be $[•].

The purchase price per share for the Securities to be paid by the several Underwriters shall be $[•], being an amount equal to the initial public offering price set forth above less $[•] per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.

Name of Underwriter	Number of Initial Securities
BofA Securities, Inc.	
Credit Suisse Securities (USA) LLC	
Stifel, Nicolaus & Company, Incorporated	
UBS Securities LLC	
Total	[•]

SCHEDULE B-1

Pricing Terms

1. The Company is selling [•] shares of Common Stock.
2. The Company has granted an option to the Underwriters, severally and not jointly, to purchase up to an additional [•] shares of Common Stock.
3. The initial public offering price per share for the Securities shall be $[•].

SCHEDULE B-2

Free Writing Prospectuses

[•]

SCHEDULE C

Written Testing-the-Waters Communications

SCHEDULE D

List of Persons and Entities Subject to Lock-up

Exhibit A

FORM OF OPINION OF COMPANY'S COUNSEL

TO BE DELIVERED PURSUANT TO SECTION 5(b)

Exhibit A-1

Form of lock-up from directors, officers or other stockholders pursuant to Section 5(j)

, 2021

BofA Securities, Inc.
One Bryant Park
New York, New York 10036

as Representative of the several
Underwriters to be named in the
within-mentioned Underwriting Agreement

Re: Proposed Public Offering by Acumen Pharmaceuticals, Inc.

Ladies and Gentlemen:

The undersigned, a stockholder of Acumen Pharmaceuticals, Inc., a Delaware corporation (the "Company"), understands that BofA Securities, Inc. (the "Representative") proposes to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company providing for the initial public offering (the "Public Offering") of shares of the Company's common stock, par value $0.0001 per share (the "Common Stock"). In recognition of the benefit that such an offering will confer upon the undersigned as a stockholder of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and continuing through, and including, the 180th day from the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not, without the prior written consent of the Representative, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the "Lock-Up Securities"), or exercise any right with respect to the registration of any of the Lock-up Securities, or file, cause to be filed or cause to be confidentially submitted any registration statement in connection therewith, under the Securities Act of 1933, as amended, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Lock-Up Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise.

If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed Securities the undersigned may purchase in the Public Offering.

If the undersigned is an officer and/or director of the Company, (1) the Representative agrees that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of Common Stock, the Representative will notify the Company of the impending release or waiver, and (2) the Company will agree in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representative hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (i) the release or waiver is effected solely to permit a transfer not for consideration and (ii) the transferee has agreed in writing to be bound by the same terms described in this lock-up agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities without the prior written consent of the Representative,

(a) provided that (1) the Representative receives a signed lock-up agreement for the balance of the Lock-Up Period from each donee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) such transfers are not required to be reported during the Lock-Up Period with the Securities and Exchange Commission (the "SEC") on Form 4 in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers during the Lock-Up Period (other than a filing on a Form 5 or any required Schedule 13D, Schedule 13F, Schedule 13G or Schedule 13G/A, so long as such required filing includes a reasonably detailed explanation of transfer or distribution and a statement to the effect that such transferred or received Lock-Up Securities are subject to the terms of a lock-up agreement for the balance of the Lock-Up Period):

(i) as a *bona fide* gift or gifts, including, without limitation, to a charitable organization or educational institution, or for *bona fide* estate planning purposes; or

(ii) to any immediate family member of the undersigned or to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, "immediate family" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin); or

(iii) if the undersigned is a trust, to a trustor, trustee or beneficiary of such trust or to the estate of a trustor, trustee or beneficiary of such trust; or

(iv) as a distribution to partners, members, managers, equity holders or stockholders of the undersigned; or

(v) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by, controlling or managing, or under common control with, the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership).

(b) provided that (1) the Representative receives a signed lock-up agreement for the balance of the Lock-Up Period from each donee, trustee, distributee, or transferee (excluding the Company), as the case may be, (2) in the case of any transfer pursuant to (i) below, any such transfer shall not involve a disposition for value and (3) any filing under the Exchange Act required to be made during the Lock-Up Period shall clearly indicate in the footnotes thereto that the filing relates to circumstances described below, as applicable:

(i) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or any immediate family of the undersigned; or

(ii) pursuant to a court or regulatory agency order, a qualified domestic order or in connection with a divorce settlement; or

(iii) to the Company (or surrender such Lock-Up Securities to the Company) pursuant to any contractual arrangement that provides the Company with an option to repurchase such Lock-Up Securities in connection with the termination of the undersigned's employment or other service relationship with the Company, or pursuant to a right of first refusal with respect to transfers of such Lock-Up Securities or to cover taxes due upon or the consideration required in connection with the vesting, conversion or exercise of securities issued under an equity incentive plan or stock purchase plan of the Company, including through the withholding of shares by, or surrender of shares to, the Company pursuant to a "cashless" or "net exercise" settlement feature.

Notwithstanding anything herein to the contrary, nothing herein shall prevent or restrict (i) the exercise, vesting or settlement, as applicable, by the undersigned of any outstanding warrant, or any option to purchase Common Stock or other equity awards pursuant to any stock incentive plan or stock purchase plan of the Company, provided that the underlying shares shall continue to be subject to the restrictions on transfer set forth in this lock-up agreement (including in each case by "net" or "cashless" exercise), (ii) the establishment of a plan of disposition that complies with Rule 10b5-1 under the Exchange Act (a "10b5-1 Plan"), or the amendment of an existing 10b5-1 Plan, so long as such plan does not provide for sales of Lock-Up Securities during the Lock-Up Period; and provided that the establishment of a 10b5-1 Plan or the amendment of a 10b5-1 Plan, in either case, providing for sales of Lock-Up Securities shall only be permitted if (1) the establishment or amendment of such plan is not required to be reported during the Lock-Up Period in any public report or filing with the Securities and Exchange Commission, or otherwise, and (2) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment or amendment of such plan during the Lock-Up Period, (iii) the conversion of the outstanding shares of preferred stock of the Company into shares of Common Stock, provided that any such shares of Common Stock received upon such conversion shall be subject to the restrictions on transfer set forth in this lock-up agreement, or (iv) the transfer of Lock-Up Securities pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Common Stock and involving a Change of Control of the Company, provided that in the event that the tender offer, merger, consolidation or other such transaction is not complete, the Lock-Up Securities owned by the undersigned shall remain subject to the restrictions contained in this lock-up agreement (for purposes of this lock-up agreement, "Change of Control" shall mean the consummation of any bona fide third party tender offer, merger,

consolidation or other similar transaction, in one transaction or a series of related transactions, the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of the total voting power of the voting stock of the Company).

Furthermore, notwithstanding anything herein to the contrary, the foregoing restrictions shall not apply to (i) sales of Common Stock purchased by the undersigned in the Public Offering if and only if (1) such sales are not required to be reported in any public report or filing with the SEC, or otherwise and (2) the undersigned does not otherwise voluntarily effect any public filing or report regarding such sales, or (ii) sales of Common Stock purchased by the undersigned in the open market after the date of the Public Offering, provided that any filing under the Exchange Act required to be made during the Lock-Up Period with respect to such sale shall clearly indicate in the footnotes thereto that such Common Stock was purchased in the open market after the date of the Public Offering and is not subject to the terms of this lock-up agreement.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions.

This lock-up agreement shall automatically terminate and the undersigned shall be released from all obligations under this lock-up agreement upon the earliest to occur, if any, of the following: (i) either the Representative, on the one hand, or the Company, on the other hand, informs the other in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Public Offering, (ii) the Underwriting Agreement is not executed by August 12, 2021 (provided that the Company may, by written notice to the undersigned prior to August 12, 2021, extend such date for a period of up to an additional three months in the event that the Underwriting Agreement has not been executed by such date), (iii) the Company withdraws the registration statement related to the Public Offering, or (iv) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder.

This lock-up agreement shall be governed by and construed in accordance with the laws of the State of New York.

[*Signature Page Follows*]

Exhibit C

FORM OF PRESS RELEASE
TO BE ISSUED PURSUANT TO SECTION 3(j)

Acumen Pharmaceuticals, Inc.
[Date]

Acumen Pharmaceuticals, Inc. (the "Company") announced today that BofA Securities, the lead book-running manager in the Company's recent public sale of [•] shares of common stock, is [waiving][releasing] a lock-up restriction with respect to [•] shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver][release] will take effect on [•], 20[•], and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

Exhibit 3.3

ACUMEN PHARMACEUTICALS, INC.

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

Acumen Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware (the "***Company***"), does hereby certify as follows:

FIRST: That the name of this corporation is Acumen Pharmaceuticals, Inc. The original Certificate of Incorporation of the Company was filed with the Delaware Secretary of State on January 4, 1996. A Certificate of Amendment of Certificate of Incorporation was filed on May 6, 1996, a Restated Certificate of Incorporation was filed on March 8, 2004, a Certificate of Amendment of Certificate of Incorporation was filed on June 15, 2006, an Amended and Restated Certificate of Incorporation was filed on February 4, 2009, an Amended and Restated Certificate of Incorporation was filed on July 11, 2012, an Amended and Restated Certificate of Incorporation was filed on April 11, 2013, an Amended and Restated Certificate of Incorporation was filed March 11, 2014, a Certificate of Amendment of Amended and Restated Certificate of Incorporation was filed July 6, 2017, an Amended and Restated Certificate of Incorporation was filed October 19, 2018, a Certificate of Amendment to Amended and Restated Certificate of Incorporation was filed November 22, 2019, an Amended and Restated Certificate of Incorporation was filed on November 20, 2020, and a Certificate of Amendment to Amended and Restated Certificate of Incorporation was filed on June 23, 2021.

SECOND: That the Board of Directors of the Company, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware (the "***DGCL***"), duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of the Company, declaring said amendment and restatement to be advisable and in the best interests of the Company and its stockholders, and authorizing the appropriate officers of the Company to solicit the consent of the stockholders therefore, and this Amended and Restated Certificate of Incorporation was approved by the holders of the requisite number of shares of stock of the Company in accordance with Section 228 of the DGCL.

THIRD: That this Amended and Restated Certificate of Incorporation has been duly adopted and approved by the Board of Directors and the stockholders of the Company in accordance with Sections 242 and 245 of the DGCL.

FOURTH: That this Amended and Restated Certificate of Incorporation so adopted reads in full as set forth in Exhibit A attached hereto and is incorporated herein by reference in its entirety.

* * * *

IN WITNESS WHEREOF, Acumen Pharmaceuticals, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by its Chief Executive Officer on this day of 2021.

ACUMEN PHARMACEUTICALS, INC.

By:
Daniel O'Connell
Chief Executive Officer

EXHIBIT A

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ACUMEN PHARMACEUTICALS, INC.

I.

The name of this corporation is Acumen Pharmaceuticals, Inc. (the "***Company***").

II.

The address of the registered office of the Company in the State of Delaware is 251 Little Falls Drive, in the City of Wilmington, 19808, County of New Castle. The name of its registered agent at such address is Corporation Service Company.

III.

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law ("***DGCL***").

IV.

A. The Company is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of all classes of capital stock which the Company shall have authority to issue is three hundred ten million (310,000,000) shares, 300,000,000 shares shall be Common Stock (the "***Common Stock***"), each share having a par value of one-ten thousandth of one cent ($0.0001), and ten million (10,000,000) shares shall be Preferred Stock (the "***Preferred Stock***"), each share having a par value of one-ten thousandth of one cent ($0.0001).

B. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Company (the "***Board***") is hereby expressly authorized to provide for the issue of the shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board providing for the issuance of such shares and as may be permitted by the DGCL. The Board is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Company entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

C. Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Company for their vote; *provided, however,* that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon by law or pursuant to this Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock).

V.

For the management of the business and for the conduct of the affairs of the Company, and in further definition, limitation and regulation of the powers of the Company, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. MANAGEMENT OF BUSINESS. The management of the business and the conduct of the affairs of the Company shall be vested in its Board.

B. BOARD OF DIRECTORS.

1. Number. The number of directors that shall constitute the Board shall be fixed exclusively by resolutions adopted by a majority of the authorized number of directors constituting the Board.

2. Term. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, following the closing of the initial public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "***Securities Act***") covering the offer and sale of securities to the public (the "***Initial Public Offering***"), the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board is authorized to assign members of the Board already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting. Notwithstanding the foregoing provisions of this section, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal. No decrease in the number of directors constituting the Board shall shorten the term of any incumbent director.

3. Removal.

a. Subject to the rights of any series of Preferred Stock to elect additional directors under specified circumstances, following the closing of the Initial Public Offering, neither the Board nor any individual director may be removed without cause.

b. Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all then-outstanding shares of capital stock of the Company entitled to vote generally at an election of directors.

4. Vacancies. Subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board resulting from death, resignation, disqualification, removal or other causes, and any newly created directorships resulting from any increase in the number of directors, shall, unless the Board determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders, except as otherwise provided by law, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified.

C. BYLAW AMENDMENTS. The Board is expressly empowered to adopt, amend or repeal the Bylaws of the Company. Any adoption, amendment or repeal of the Bylaws of the Company by the Board shall require the approval of a majority of the authorized number of directors. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Company; *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the Company required by law or by this Amended and Restated Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class.

D. WRITTEN BALLOTS. The directors of the Company need not be elected by written ballot unless the Bylaws so provide.

E. ACTION BY STOCKHOLDERS. No action shall be taken by the stockholders of the Company except at an annual or special meeting of stockholders called in accordance with the Bylaws and no action shall be taken by the stockholders by written consent or electronic transmission.

F. ADVANCE NOTICE. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Company shall be given in the manner provided in the Bylaws of the Company.

VI.

A. The liability of the directors for monetary damages shall be eliminated to the fullest extent under applicable law. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated to the fullest extent permitted by the DGCL, as so amended.

B. Any repeal or modification of this Article VI shall be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

VII.

A. Unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if and only if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom shall be the sole and exclusive forum for the following claims or causes of action under the Delaware statutory or common law: (i) any derivative claim or cause of action brought on behalf of the Company; (ii) any claim or cause of action for breach of a fiduciary duty owed by any current or former director, officer or other employee of the Company, to the Company or the Company's stockholders; (iii) any claim or cause of action against the Company or any current or former director, officer or other employee of the Company, arising out of or pursuant to any provision of the DGCL, this Amended and Restated Certificate of Incorporation or the Bylaws of the Company (as each may be amended from time to time); (iv) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of this Amended and Restated Certificate of Incorporation or the Bylaws of the Company (as each may be amended from time to time, including any right, obligation, or remedy thereunder); (v) any claim or cause of action as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and (vi) any claim or cause of action against the Company or any current or former director, officer or other employee of the Company, governed by the internal-affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court having personal jurisdiction over the indispensable parties named as defendants. This Section A of Article VII shall not apply to claims or causes of action brought to enforce a duty or liability created by the Securities Act of 1933, as amended (the "***Securities Act***"), or the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction.

B. Unless the Company consents in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

C. Any person or entity holding, owning or otherwise acquiring any interest in any security of the Company shall be deemed to have notice of and consented to the provisions of this Amended and Restated Certificate of Incorporation.

VIII.

A. The Company reserves the right to amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in paragraph B. of this Article VIII, and all rights conferred upon the stockholders herein are granted subject to this reservation.

B. Notwithstanding any other provisions of this Amended and Restated Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of the Company required by law or by this Amended and Restated Certificate of Incorporation or any certificate of designation filed with respect to a series of Preferred Stock that may be designated from time to time, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all of the then-outstanding shares of capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class, shall be required to alter, amend or repeal Articles V, VI, VII and VIII.

* * * *

Exhibit 3.4

AMENDED AND RESTATED BYLAWS

OF

ACUMEN PHARMACEUTICALS, INC.
(A DELAWARE CORPORATION)

, 2021

ACUMEN PHARMACEUTICALS, INC.

AMENDED AND RESTATED BYLAWS

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office shall be established and maintained at the office of Corporation Service Company, 251 Little Falls Drive, in the city of Wilmington, county of New Castle, Delaware 19808 and said corporation, or other such person or entity as the Board of Directors may from time to time designate, shall be the registered agent of the corporation.

Section 2. Other Offices. The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. If adopted, the corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law (the "***DGCL***").

Section 5. Annual Meetings.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders (with respect to business other than nominations); (ii) brought specifically by or at the direction of the Board of

Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving the stockholder's notice provided for in Section 5(b) below, who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section 5. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a stockholder to make nominations and submit other business (other than matters properly included in the corporation's notice of meeting of stockholders and proxy statement under Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "***1934 Act***")) before an annual meeting of stockholders.

(b) At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under Delaware law and as shall have been properly brought before the meeting.

(1) For nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(3) and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee, (2) the principal occupation or employment of such nominee, (3) the class and number of shares of each class of capital stock of the corporation which are owned of record and beneficially by such nominee, (4) the date or dates on which such shares were acquired and the investment intent of such acquisition and (5) such other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved), or that is otherwise required to be disclosed pursuant to Section 14 of the 1934 Act and the rules and regulations promulgated thereunder (including such person's written consent to being named as a nominee and to serving as a director if elected); and (B) the information required by Section 5(b)(4). The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

(2) Other than proposals sought to be included in the corporation's proxy materials pursuant to Rule 14a-8 under the 1934 Act, for business other than nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(3), and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the corporation's capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) the information required by Section 5(b)(4).

(3) To be timely, the written notice required by Section 5(b)(1) or 5(b)(2) must be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting; *provided, however,* that, subject to the last sentence of this Section 5(b)(3), in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so received not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. In no event shall an adjournment or a postponement of an annual meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

(4) The written notice required by Section 5(b)(1) or 5(b)(2) shall also set forth, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (each, a "***Proponent***" and collectively, the "***Proponents***"): (A) the name and address of each Proponent, as they appear on the corporation's books; (B) the class, series and number of shares of the corporation that are owned beneficially and of record by each Proponent; (C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal between or among any Proponent and any of its affiliates or associates, and any others (including their names) acting in concert, or otherwise under the agreement, arrangement or understanding, with any of the foregoing; (D) a representation that the Proponents are holders of record or beneficial owners, as the case may be, of shares of the corporation entitled to vote at the meeting and intend to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 5(b)(1)) or to propose the business that is specified in the notice (with respect to a notice under Section 5(b)(2)); (E) a representation as to whether the Proponents intend to deliver a proxy statement and form of proxy to holders of a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (with respect to a notice under Section 5(b)(1)) or to carry such proposal (with respect to a notice under Section 5(b)(2)); (F) to the extent known by any Proponent, the name and address of any other stockholder supporting the proposal on the date of such stockholder's notice; and (G) a description of all Derivative Transactions (as defined below) by each Proponent during the previous twelve (12) month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic terms of, such Derivative Transactions.

For purposes of Sections 5 and 6, a "***Derivative Transaction***" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether record or beneficial:

(w) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation,

(x) which otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation,

(z) the effect or intent of which is to mitigate loss, manage risk or benefit of security value or price changes, or

(z) which provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, with respect to any securities of the corporation,

which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member.

(c) A stockholder providing written notice required by Section 5(b)(1) or (2) shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the date that is five (5) business days prior to the meeting and, in the event of any adjournment or postponement thereof, five (5) business days prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than five (5) business days after the record date for the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than two (2) business days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two (2) business days prior to such adjourned or postponed meeting.

(d) Notwithstanding anything in Section 5(b)(3) to the contrary, in the event that the number of directors in an Expiring Class (as defined below) is increased and there is no public announcement of the appointment of a director to such class, or, if no appointment was made, of the vacancy in such class, made by the corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with Section 5(b)(3), a stockholder's notice required by this Section 5 and which complies with the requirements in Section 5(b)(1), other than the timing requirements in Section 5(b)(3), shall also be considered timely, but only with respect to nominees for any new positions in such Expiring Class created by such increase, if it shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation. For purposes of this section, an "***Expiring Class***" shall mean a class of directors whose term shall expire at the next annual meeting of stockholders.

(e) A person shall not be eligible for election or re-election as a director unless the person is nominated either in accordance with clause (ii) of Section 5(a), or in accordance with clause (iii) of Section 5(a). Except as otherwise required by law, the chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or the Proponent does not act in accordance with the representations in Sections 5(b)(4)(d) and 5(b)(4)(e), to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded, notwithstanding that proxies in respect of such nominations or such business may have been solicited or received.

(f) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however,* that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Section 5(a)(iii) of these Bylaws.

(g) For purposes of Sections 5 and 6,

(1) "***public announcement***" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act; and

(2) "***affiliates***" and "***associates***" shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended (the "***1933 Act***").

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose as is a proper matter for stockholder action under Delaware law, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption).

(b) The Board of Directors shall determine the time and place, if any, of such special meeting. Upon determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. No business may be transacted at such special meeting otherwise than specified in the notice of meeting.

(c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of

the Board of Directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers written notice to the Secretary of the corporation setting forth the information required by Section 5(b)(1). In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Section 5(b)(1) of these Bylaws shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 5(c). In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

(d) Notwithstanding the foregoing provisions of this Section 6, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 6. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however,* that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to nominations for the election to the Board of Directors to be considered pursuant to Section 6(c) of these Bylaws.

Section 7. Notice of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at any such meeting. If mailed, notice is deemed given when deposited in the U.S. mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof, or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his, her or its attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the corporation's amended and restated certificate of incorporation (the "***Certificate of Incorporation***"), or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the

outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute or by applicable stock exchange rules, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or

more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one (1) votes, his or her act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting. No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent or by electronic transmission.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President, or, if the President is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairman. The Secretary, or, in his or her absence, an Assistant Secretary directed to do so by the President, shall act as secretary of the meeting.

(b) The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which

are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

Section 16. Powers. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Classes of Directors. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, immediately following the closing of the initial public offering pursuant to an effective registration statement under the 1933 Act covering the offer and sale of Common Stock to the public (the "***Initial Public Offering***"), the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this Section 17, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 18. Vacancies. Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the

Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, and not by the stockholders, *provided, however,* that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time. If no such specification is made, it shall be deemed effective at the time of delivery to the Secretary. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each Director so chosen shall hold office for the unexpired portion of the term of the Director whose place shall be vacated and until his or her successor shall have been duly elected and qualified.

Section 20. Removal.

(a) Subject to the rights of holders of any series of Preferred Stock to elect additional directors under specified circumstances, neither the Board of Directors nor any individual director may be removed without cause.

(b) Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors.

Section 21. Meetings.

(a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board of Directors.

(b) Special Meetings. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board of Directors, the Chief Executive Officer or a majority of the authorized number of directors.

(c) Meetings by Electronic Communications Equipment. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it shall be sent by first class mail, charges prepaid, at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing, or by electronic transmission, at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) Waiver of Notice. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though it had been transacted at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, and except with respect to questions related to indemnification arising under Section 43 herein for which a quorum shall be one-third of the exact number of directors fixed from time to time, a quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; *provided, however,* at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees and Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) Executive Committee. The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation.

(b) Other Committees. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) Term. The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of subsections (a) or (b) of this Section 25, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his or her death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or

disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 25 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 26. Organization. At every meeting of the directors and stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his or her absence, any Assistant Secretary or other officer or director directed to do so by the President, shall act as secretary of the meeting. The Chairman of the Board of Directors shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

ARTICLE V

OFFICERS

Section 27. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chairman of the Board of Directors (provided that notwithstanding anything to the contrary contained in these Bylaws, the Chairman of the Board of Directors shall not be deemed an officer of the corporation unless so designated by the Board of Directors), the Chief Executive Officer, the Secretary, and the Chief Financial Officer. The Board of Directors may also appoint one or more Vice Presidents, a President, a Treasurer, one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of

offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 28. Tenure and Duties of Officers.

(a) General. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) Duties of Chief Executive Officer. The Chief Executive Officer shall preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. Unless an officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in these Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(c) Duties of President. The President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors or the Chief Executive Officer has been appointed and is present. Unless another officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(d) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or, if the Chief Executive Officer has not been appointed or is absent, the President shall designate from time to time.

(e) Duties of Secretary. Unless another officer has been appointed Secretary of the corporation, the Secretary shall be the Chief Financial Officer of the corporation. The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform

all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time. The President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(f) Duties of Chief Financial Officer. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time. To the extent that a Chief Financial Officer has been appointed and no Treasurer has been appointed, all references in these Bylaws to the Treasurer shall be deemed references to the Chief Financial Officer. The President may direct the Treasurer, if any, or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(g) Duties of Treasurer. Unless another officer has been appointed Treasurer of the corporation, the Treasurer shall be the Chief Financial Officer of the corporation and shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President, and, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

Section 29. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 30. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board of Directors or to the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 31. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or by the Chief Executive Officer or other superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 32. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 33. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 34. Form and Execution of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board of Directors. Certificates for the shares of stock, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock represented by certificate in the corporation shall be entitled to have a certificate signed by or in the name of the corporation by the Chairman of the Board of Directors, or the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or

whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 35. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 36. Transfers.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 37. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however,* that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no

record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 38. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 39. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 34), may be signed by the Chairman of the Board of Directors, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided*, *however*, that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 40. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 41. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 42. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 43. Indemnification of Directors, Officers, Employees and Other Agents.

(a) Directors. The corporation shall indemnify its directors to the fullest extent not prohibited by the DGCL or any other applicable law; *provided*, *however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors; and, *provided*, *further*, that the corporation shall not be required to indemnify any director in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under Section 43(d) below.

(b) Officers, Employees and Other Agents. The corporation shall have power to indemnify its officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person to such officers or other persons as the Board of Directors shall determine.

(c) Expenses. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director of the corporation, or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director in connection with such proceeding; *provided*, *however*, that, if the DGCL requires, an advancement of expenses incurred by a director in his or her capacity as a director (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the

corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this section or otherwise.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors under this Bylaw shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director. Any right to indemnification or advances granted by this Bylaw to a director shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. To the extent permitted by law, the claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because the director has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director is not entitled to be indemnified, or to such advancement of expenses, under this section or otherwise shall be on the corporation.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this section.

(h) Amendments. Any repeal or modification of this section shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director to the full extent not prohibited by any applicable portion of this section that shall not have been invalidated, or by any other applicable law. If this section shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director to the full extent under any other applicable law.

(j) Certain Definitions. For the purposes of this Bylaw, the following definitions shall apply:

(1) The term "proceeding" shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(2) The term "expenses" shall be broadly construed and shall include, without limitation, court costs, attorneys' fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(3) The term the "corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(4) References to a "director," "executive officer," "officer," "employee," or "agent" of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(5) References to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner

such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

ARTICLE XII

NOTICES

Section 44. Notices.

(a) Notice to Stockholders. Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 herein. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by U.S. mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) Notice to Directors. Any notice required to be given to any director may be given by the method stated in subsection (a), as otherwise provided in these Bylaws, or by overnight delivery service, facsimile, telex or telegram, except that such notice other than one which is delivered personally shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) Affidavit of Mailing. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person With Whom Communication Is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within sixty (60) days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 45. Bylaw Amendments. Subject to the limitations set forth in Section 43(h) of these Bylaws or the provisions of the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the corporation. Any adoption, amendment or repeal of the Bylaws of the corporation by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

LOANS TO OFFICERS OR EMPLOYEES

Section 46. Loans to Officers or Employees. Except as otherwise prohibited by applicable law, including the Sarbanes-Oxley Act of 2002, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

* * * *

Exhibit 3.5

CERTIFICATE OF AMENDMENT TO
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION OF
ACUMEN PHARMACEUTICALS, INC.

Acumen Pharmaceuticals, Inc. (the "***Corporation***"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "***General Corporation Law***"), does hereby certify as follows:

1. The name of this corporation is Acumen Pharmaceuticals, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law of the State of Delaware on January 4, 1996 under the name Acumen Pharmaceuticals, Inc.

2. An Amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on November 20, 2020 (the "***Restated Certificate***").

3. The Restated Certificate is hereby amended as follows:

The first paragraph of Article FOURTH of the Restated Certificate is hereby amended by adding the following at the end of such paragraph:

"Effective at the time this Certificate of Amendment to this Restated Certificate is filed with and accepted by the Secretary of State of the State of Delaware (the "**Second Effective Time**"), each 1.49 shares of Common Stock issued and outstanding immediately prior to the Second Effective Time shall, automatically and without any action on the part of the Corporation or the respective holders thereof, be converted into one share of Common Stock and each 1.49 shares of Preferred Stock issued and outstanding immediately prior to the Second Effective Time shall be converted into one share of Preferred Stock, without increasing or decreasing the par value of each share of Common Stock or Preferred Stock (the "***Second Reverse Split***"), such that each holder of record of 1.49 shares of Common Stock or Preferred stock previously held by such owner, as applicable, shall hold one (1) validly issued, fully paid and non-assessable share of Common Stock or Preferred Stock, as applicable; *provided*, *however*, that the Corporation shall issue no fractional shares of Common Stock or Preferred Stock as a result of the Second Reverse Split, but shall instead pay to any stockholder who would be entitled to receive a fractional share as a result of the actions set forth herein a sum in cash equal to the fair market value of the shares constituting such fractional share as determined by the Board of Directors of the Corporation. The number of authorized shares of Common Stock and each class of Preferred Stock of the Corporation shall remain as set forth in this Restated Certificate. The Second Reverse Split shall occur whether or not the certificates representing such shares of Common Stock are surrendered to the Corporation or its transfer agent. The Second Reverse Split shall be effected on a certificate-by-certificate basis and each certificate share number will then be rounded down."

4. This Certificate of Amendment to the Restated Certificate has been duly approved by the Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law.

5. This Certificate of Amendment to the Restated Certificate was approved by the holders of the requisite number of shares of the Corporation in accordance with Section 228 of the General Corporation Law. This Certificate of Amendment to the Restated Certificate has been duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law by the stockholders of the Corporation.

Acumen Pharmaceuticals, Inc. has caused this Certificate of Amendment to Amended and Restated Certificate of Incorporation to be signed by its Chief Executive Officer on June 23, 2021.

ACUMEN PHARMACEUTICALS, INC.

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

Exhibit 5.1

Cooley

Darren K. DeStefano
T: +1 703 456 8034
ddestefano@cooley.com

June 24, 2021

Acumen Pharmaceuticals, Inc.
427 Park St.
Charlottesville, VA 22902

Ladies and Gentlemen:

We have acted as counsel to Acumen Pharmaceuticals, Inc., a Delaware corporation (the "***Company***"), in connection with the filing by the Company of a Registration Statement (No. 333-256945) on Form S-1 (the "***Registration Statement***") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "***Prospectus***"), covering an underwritten public offering of up to 9,583,332 shares of the Company's common stock, par value $0.0001 per share ("***Shares***") (including up to 1,249,999 Shares that may be sold by the Company upon exercise of an option to purchase additional shares to be granted to the underwriters).

In connection with this opinion, we have (i) examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, each as currently in effect, (c) the forms of the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, filed as Exhibits 3.3 and 3.4, to the Registration Statement, respectively, each of which is to be in effect upon the closing of the offering contemplated by the Registration Statement and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below and (ii) assumed that the Shares will be sold at a price established by the Board of Directors of the Company or a duly authorized committee thereof.

We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of the certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than by the Company where due authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefor as described in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely

Cooley LLP

By: /s/ Darren K. DeStefano
Darren K. DeStefano

Cooley LLP Reston Town Center 11951 Freedom Drive 14th Floor Reston, VA 20190-5656
t: +1 703 456 8000 f: +1 703 456 8100 cooley.com

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED COLLABORATION AGREEMENT

This AMENDED AND RESTATED COLLABORATION AGREEMENT (the "**Agreement**"), effective as of December 22, 2003, as amended and restated as of October 18, 2006 (the "**Amendment Effective Date**"), is made by and between Acumen Pharmaceuticals Inc., a Delaware corporation, having a principal place of business at 385 Oyster Point Blvd, Suite 9A, South San Francisco, CA 94080 ("**Acumen**"), and Merck & Co., Inc., a New Jersey corporation, having a principal place of business at One Merck Drive, Whitehouse Station, NJ 08889-0100 ("**Merck**"). Acumen and Merck are sometimes referred to herein, individually, as a "**Party**" and, collectively, as the "**Parties**".

BACKGROUND

A. Acumen possesses certain technology related to amyloid beta-derived diffusible ligands and the uses thereof;

B. Merck is a leader in the research and development of pharmaceutical products;

C. Acumen and Merck wish to collaborate to research, discover, and develop Products in the Therapeutic Field (as those terms are defined below); and

D. Merck wishes to acquire an exclusive license to develop and commercialize Products resulting from the collaboration, as well as certain other rights to the results of the collaboration, and Acumen wishes to grant to Merck such license, all on the terms and conditions set forth herein below.

E. Effective December 22, 2003 (the "**Effective Date**"), Acumen and Merck entered into the "Collaboration Agreement" (the "**Collaboration Agreement**") to achieve these goals; and

F. Acumen and Merck previously amended Section 6.1 of the Collaboration Agreement effective May 20, 2004, and wish to incorporate that amendment in this Agreement; and

G. Acumen and Merck desire to further amend the Collaboration Agreement to provide Merck with an exclusive license under Acumen Diagnostic IP, and to make changes to the prosecution and maintenance of the Acumen Patent Rights;

NOW, THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

ARTICLE 1
DEFINITIONS

As used herein, the following terms, whether in the singular or plural, will have the meanings set forth below when capitalized in this Agreement:

1.1 "**Act**" shall mean, as applicable, the United States Federal Food, Drug and Cosmetic Act, 21 U.S.C. §§ 301 et seq., and/or the Public Health Service Act, 42 U.S.C. §§ 262 et seq., as such may be amended from time to time.

1.2 "**Acumen Diagnostic IP**" shall mean all Acumen Diagnostic Know-How and Acumen Diagnostic Patent Rights. .

1.2.1 **"Acumen Diagnostic Know-How"** shall mean Know-How that is Controlled by Acumen or its Controlled Affiliates as of the Effective Date, or thereafter during the Research Term, and that is necessary or useful to research, discover, develop, make, have made, use, import, sell or offer to sell Diagnostic Products in the Diagnostic Field in the Territory.

1.2.2 "**Acumen Diagnostic Patent Rights"** shall mean, subject to Section 9.2.2(b), Patent Rights that are Controlled by Acumen or its Controlled Affiliates as of the Effective Date, or during the Term, and are necessary or useful to research, discover, develop, make, have made, use, import, sell or offer to sell Diagnostic Products in the Diagnostic Field in the Territory.

1.3 "**Acumen-Owned ADDL Antibodies**" shall mean ADDL Antibodies created by or on behalf of Acumen, or licensed to Acumen pursuant to the Northwestern License or the USC License.

1.4 "**Acumen Technology**" shall mean, collectively, the Acumen Patent Rights and Acumen Know-How.

1.4.1 "**Acumen Patent Rights**" shall mean, subject to Section 9.2.2(b), Patent Rights that (i) are Controlled by Acumen or its Controlled Affiliates as of the Effective Date and are necessary or useful to perform the Research Program, or to research, discover, develop, make, have made, use, import, sell and offer to sell Products within the Therapeutic Field and Territory, including but not limited to the Patent Rights licensed to Acumen pursuant to the Northwestern License and the USC License, and the Patent Rights listed in Exhibit 1.3; or (ii) claim an Invention that was invented or created by or on behalf of Acumen during the Research Term in its performance of the Research Program; or (iii) are Controlled by Acumen or its Controlled Affiliates during the Term and claim the composition or use of an ADDL Antigen or an ADDL Antibody.

1.4.2 "**Acumen Know-How**" shall mean the Know-How Controlled by Acumen or its Controlled Affiliates as of the Effective Date, or thereafter during the Research Term, that (i) was invented or created by or on behalf of Acumen in its performance of the Research Program; or (ii) is necessary or useful to perform the Research Program or to research, discover, develop, make, have made, use, offer for sale, import or sell ADDL Antibodies or Products, or (upon exercise of the Vaccine Option) ADDL Antigens, within the Therapeutic Field and Territory.

1.5 "**ADDL Antibody**" shall mean [***].

1.6 "**ADDL Antigen**" shall mean [***].

1.7 "**ADDL Surrogate**" shall mean [***].

1.8 "**ADDL**" or "**Amyloid Beta-Derived Diffusible Ligand**" shall mean [***].

1.9 "**ADDL-Related Condition**" shall mean any human medical condition, state or indication that is caused by ADDLs or for which ADDL is a contributing factor, such as without limitation, Alzheimer's disease, Down's Syndrome, and Mild Cognitive Impairment.

1.10 "**Affiliate**" shall mean (i) any corporation or business entity of which fifty percent (50%) (or the maximum ownership interest permitted by law) or more of the equity, voting stock, or of the ownership interests representing the general partnership interest, are owned, directly or indirectly, by Merck or Acumen, but only so long as such ownership exists; or (ii) any corporation or business entity which, directly or indirectly, owns fifty percent (50%) (or the maximum ownership interest permitted by law) or more of the equity, voting stock, or of the ownership interests representing, if applicable, the general partnership interest, of Merck or Acumen, but only so long as such ownership exists; or (iii) any corporation or business entity of which fifty percent (50%) (or the maximum ownership interest permitted by law) or more of equity, voting stock, or of the ownership interests representing the general partnership interest, are owned, directly or indirectly, by a corporation or business entity described in (ii), but only so long as such ownership exists. A "**Controlled Affiliate**" shall mean a corporation or business entity of which greater than fifty percent (50%) of the equity, voting stock, or of the ownership interests representing the general partnership interest, are owned, directly or indirectly, by Merck or Acumen, but only so long as such ownership exists.

1.11 "**Antibody Product**" shall mean a pharmaceutical preparation that contains one or more ADDL Antibodies for application in the Therapeutic Field and is (i) for administration to human patients in a Clinical Trial, or (ii) for sale by prescription, over the counter, or any other method. Notwithstanding the foregoing, a pharmaceutical preparation shall not be considered an Antibody Product if it is a Vaccine Product, is intended for use in the Diagnostic Field, or it contains a Small Molecule.

1.12 "**Antibody**" shall mean (i) an immunoglobulin protein or similar immune-derived, antigen-binding protein, (ii) a fragment of such immunoglobulin protein or similar immune-derived, antigen-binding protein (e.g., Fab fusion proteins), or (iii) an immune-derived antigen-binding fusion protein (e.g., Fc fusion protein) or other modified protein construct, which in each case has an antigen-binding region that has specific binding affinity for the antigen to which the same is directed. For clarity, the antigen-binding region of any such protein may be obtained by (A) conventional immunization of animals with the particular antigen of interest and/or one or more other antigens able to cross react with such particular antigen, (B) lymphocyte cultures with the particular antigen of interest and/or one or more other antigens able to cross react with such particular antigen, (C) affinity selection from libraries of variable or hypervariable domains with the particular antigen of interest and/or one or more other antigens able to cross react with such particular antigen, or (D) genetic engineering of such proteins derived pursuant to (A), (B) or (C).

1.13 "**Biological**" shall mean: (i) an Antibody; and/or (ii) any other peptide, peptide that is genetically or chemically fused to a stabilizing protein, peptide aptamer, protein, protein-construct, fusion protein, including without limitation purified protein, lipoprotein, glycoprotein, and/or nucleotide aptamer consisting of either modified or unmodified DNA or RNA sequences, including without limitation single-stranded or double-stranded or a combination of both.

1.14 "**Calendar Quarter**" shall mean the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

1.15 "**Calendar Year**" shall mean each successive period of twelve (12) months commencing on January 1 and ending on December 31.

1.16 "**Change of Control**" shall mean, with respect to a Party, any transaction or series of related transactions that constitute: (i) the sale of all or substantially all of such Party's business or assets to an acquiring entity; (ii) any merger, consolidation, share exchange, recapitalization, business combination or other transaction to which such Party is subject resulting in the exchange of the outstanding shares of such Party for securities or consideration issued, or caused to be issued, by the acquiring entity; or (iii) an acquiring entity having obtaining beneficial ownership of fifty percent (50%) or more of the outstanding voting securities of such Party; unless in any of cases (i), (ii) or (iii) the stockholders of such Party as of the date prior to the closing date of such transaction or series of related transactions hold more than fifty percent (50%) of the voting securities in the surviving entity in such transaction or its parent outstanding immediately after the closing of such transaction or series of transactions.

1.17 "**Clinical Trial**" shall mean (i) any clinical trial involving the administration of a Product to a human subject for the purpose of evaluating the safety, efficacy, performance or other characteristic of such Product, including a Phase I Trial, Phase II Trial, and/or Phase III Trial; or (ii) commencement of GLP trials directed to obtaining data sufficient for filing under Section 510(k) of the Food, Drug and Cosmetics Act for the Regulatory Authority approval for a Diagnostic Product.

1.18 "**Combination Product**" shall mean (i) an Antibody Product that contains at least one therapeutically active ingredient other than an ADDL Antibody; or (ii) a Vaccine Product that contains at least one therapeutically active ingredient and/or at least one antigen other than an ADDL Antigen.

1.19 "**Controlled**" shall mean, with respect to particular Patent Rights or Know-How, possession of the power and authority to grant or authorize a license or sublicense of, or within, the scope provided for herein with respect to such Patent Rights or Know-How, without violating the agreement or arrangement with a Third Party under which such Patent Rights or Know-How was first acquired or created by the Party granting or authorizing the license or sublicense.

1.20 "**Derivative Patents**" shall mean Patent Rights Controlled by Merck or its Controlled Affiliates that (i) claim an Invention that was invented or created by or on behalf of Merck (A) during the Research Term in researching or developing ADDL Antibodies, ADDL Antigens and/or Product or (B) otherwise at any time using Confidential Information obtained by Merck or its Controlled Affiliates from Acumen; and (ii) are reasonably necessary to develop or commercialize a product that does not contain an ADDL Antibody or ADDL Antigen and is intended for the Treatment of an ADDL-Related Condition. For purposes of this Section 1.19, a Patent Rights shall be considered "reasonably necessary" if at any time there is no reasonably practical alternative to practicing the Patent Rights under the circumstances, considering both commercial and technical factors.

1.21 "**Diagnostic Field**" shall mean the identification, diagnosis or prognosis of any ADDL-Related Condition including, without limitation, (i) quantification of ADDLs; (ii) identification of a predisposition for an ADDL-Related Condition; (iii) diagnosis, detection or confirmation of the presence or absence of an ADDL-Related Condition; (iv) therapeutic or dosage selection, prediction or monitoring of therapeutic response, effectiveness or safety (including determination of predisposition for adverse reactions to particular therapeutics or dosages), or (v) stratification or selection of individuals for treatments directed at ADDL-Related Conditions, in each case whether by determination of an individual's genetic makeup or otherwise. It is understood that no portion of the Therapeutic Field shall be considered to be included in the Diagnostic Field.

1.22 "**Diagnostic IP**" shall mean, with respect to Acumen, the Acumen Diagnostic IP and, with respect to Merck, the Merck Diagnostic IP.

1.23 "**Diagnostic Product**" shall mean any product, kit or other application for use in the Diagnostic Field and which is covered by, claimed in, or makes use of (i) the Acumen Diagnostic IP; (ii) the Joint Inventions in the Diagnostic Field; or (iii) the Merck Diagnostic IP.

1.24 "**Diagnostic Received Revenue**" shall mean revenue received by Merck or its Affiliates for Diagnostic Products other than Net Sales by Merck, its Affiliates or Sublicensees.

1.25 "**Filing**" shall mean, with respect to an MAA submitted to a Regulatory Authority, that such Regulatory Authority has accepted such MAA for substantive review.

1.26 "**First Commercial Sale**" shall mean, with respect to any Product, the first bona fide commercial sale of such Product in any country by or under authority of any of Merck, its Affiliates, or Sublicensees.

1.27 "**Full Time Equivalent**" or "**FTE**" shall mean the equivalent of a full-time scientist's work time over a twelve-month period (including normal vacations, sick days and holidays) on or directly related to the Research Program. The portion of an FTE year devoted by a scientist to the Research Program shall be determined by dividing the number of hours during any Calendar Year devoted by such scientist to the Research Program by the total number of working hours during such Calendar Year.

1.28 "**GLP**" or "**Good Laboratory Practice**" shall mean the applicable then-current standards for laboratory activities for pharmaceuticals, as set forth in the Act and regulations or guidance documents promulgated thereunder, as amended from time to time, together with similar standards of good laboratory practice as are required by any Regulatory Authority in the Territory.

1.29 "**Invention**" shall mean any process, method, composition of matter, article of manufacture, discovery, or finding, as defined pursuant to United States patent law.

1.30 "**Joint Invention**" shall mean an Invention invented or created jointly by employees and/or agents of Acumen and employees and/or agents of Merck during the Research Term.

1.31 "**Joint Patent Rights**" shall mean those Patent Rights to the extent claiming a Joint Invention.

1.32 "**Know-How**" shall mean all data, Inventions, discoveries, findings, methods, information, processes, techniques and technology (whether or not patentable), including, but not limited to, formulae, materials, including biological materials, practices, methods, knowledge, know-how, processes, experience, test data (including pharmacological, toxicological and clinical information and test data, and related reports, statistical analyses, expert opinions and the like), analytical and quality control data, marketing, which in all cases are not generally known, and the trade secret rights to the foregoing. As used herein, Know-How shall not include Patent Rights.

1.33 "**MAA**" or "**Marketing Authorization Application**" shall mean, with respect to a particular Product and jurisdiction, a marketing authorization application (including or comparable to a Biologics License Application (BLA) in the United States as defined under the Act and regulations or guidance documents promulgated thereunder) filed with the requisite Regulatory Authorities in such jurisdiction, and applying for approval to market and/or commercialize such Product in such jurisdiction for the Therapeutic Field.

1.34 "**Major Market**" shall mean any one of the following countries: [***].

1.35 "**Major Pharma Change of Control**" shall mean a Change of Control in which a Major Pharma Entity obtains control of Acumen by acquiring Acumen's assets or voting equity securities (by asset purchase, merger, consolidation, reorganization or otherwise).

1.36 "**Major Pharma Entity**" shall mean any health care company, or group of health care companies acting in concert to effect a Change of Control of Acumen, for whom the worldwide sales of pharmaceutical products (collectively in the case of such a group of companies) in the Calendar Year that preceded the Change of Control is in excess of [***], as reported by such entity or group or as reported by IMS America Ltd. of Plymouth Meeting, Pennsylvania ("**IMS**") or any successor to IMS.

1.37 "**Marketing Authorization**" shall mean all approvals, including licenses, registrations and authorizations, of all governmental agencies in a jurisdiction necessary for the development, manufacture, use or sale of a Product in the applicable jurisdiction, including any pricing or reimbursement approval necessary to sell Product in the applicable jurisdiction.

1.38 "**Merck Diagnostic IP**" shall mean all Merck Diagnostic Patent Rights and Merck Diagnostic Know-How.

1.38.1 "**Merck Diagnostic Know-How**" shall mean, Know-How that is developed by or on behalf of Merck or its Controlled Affiliates during the Research Term in its performance of the Research Program, and are reasonably necessary to research, discover, develop, make, have made, use, import, sell or offer to sell Diagnostic Products. For the purpose of this Section 1.38.1, Know-How shall be considered "reasonably necessary" if at any time there is no reasonably practical alternative to practicing the Know-How under the circumstances, considering both commercial and technical factors.

1.38.2 "**Merck Diagnostic Patent Rights"** shall mean the Patent Rights owned by, or exclusively licensed by a Third Party or an Affiliate of Merck, to Merck or its Controlled Affiliates during the Term that claim an Invention that (i) was invented or created by or on behalf of Merck or its Controlled Affiliates during the Research Term in its performance of the Research Program in the Diagnostic Field and (ii) claim the composition or use of an ADDL Antigen, an ADDL Antibody, an Antibody Product, or a Vaccine Product.

1.39 "**Merck Patent Rights**" shall mean the Patent Rights owned by, or exclusively licensed by a Third Party or an Affiliate of Merck, to Merck or its Controlled Affiliates during the Term that (i) claim an Invention that was invented or created by or on behalf of Merck during the Research Term in its performance of the Research Program and (ii) claim the composition or use of an ADDL Antigen, an ADDL Antibody, an Antibody Product, or a Vaccine Product.

1.40 "**Net Sales**" shall mean the total amount invoiced for Products sold by Merck, its Affiliate, or Sublicensee to Third Parties, less reasonable and customary deductions for the following [***]

[***]

With respect to the sales in a Calendar Quarter of Combination Products that are Antibody Products, [***]

Net Sales for Combination Products that are Vaccine Products [***]

1.41 "**Northwestern License**" shall mean the certain license agreement entered into between Northwestern University and Acumen as of March 6, 2000, as amended prior to the Amendment Effective Date; a copy of which is attached to this Agreement as Exhibit 1.40.

1.42 "**Patent Rights**" shall mean any and all rights under any of the following, whether existing now or in the future: (i) a domestic, international or foreign patent, utility model, design registration, certificate of invention, patent of addition or substitution, or other governmental grant for the protection of inventions or industrial designs anywhere in the world, including any reissue, renewal, re-examination or extension thereof; and (ii) any application for any of the foregoing, including any international, provisional, divisional, continuation, continuation-in-part, or continued prosecution application.

1.43 "**Phase I Trial**" shall mean any human clinical trial, the principal purpose of which is preliminary determination of safety in healthy individuals or patients as required under 21 CFR 312.21(a), as such regulation may be subsequently modified, or similar clinical study in a country other than the United States, and for which there are no primary endpoints relating to efficacy in the protocol.

1.44 "**Phase II Trial**" shall mean any human clinical trial which provides for clinical studies conducted on a limited number of patients for the purpose of preliminary evaluation of clinical efficacy and safety, and/or to obtain an indication of the dosage regimen required as required under 21 CFR 312.21(b), as such regulation may be subsequently modified, or similar clinical study in a country other than the United States.

1.45 "**Phase III Trial**" shall mean any human clinical trial, the principal purpose of which is to establish safety and efficacy in patients with the disease being studied as required under 21 CFR 312.21(c), as such regulation may be subsequently modified, or similar clinical study in a country other than the United States. Phase III Trial shall also include a human clinical trial that has been designated by Merck as a pivotal trial whether or not such trial is a traditional 'Phase III' clinical trial, as shown in communications with the FDA (or other Regulatory Authority) or meeting minutes of discussions with the FDA (or other Regulatory Authority) (such as a trial which Merck has designated to the FDA as a Phase II/III trial, a trial for which the protocol has been designated as a Phase II/III protocol, or a trial that Merck has otherwise indicated to the FDA (or other Regulatory Authority) it intends to use for purposes of Phase III).

1.46 "**Pre-Clinical Candidate**" shall mean a preparation containing an ADDL Antibody or ADDL Antigen for which Merck has commenced dosing of the first animal in a study under conditions meeting Good Laboratory Practices, where such study is intended to support an IND filing.

1.47 "**Principal Scientist**" shall mean [***]

1.48 "**Product**" shall mean (i) an Antibody Product, (ii) a Diagnostic Product, and (iii) upon exercise by Merck of the Vaccine Option in accordance with Section 5.3, a Vaccine Product. For purposes of this Agreement, each Antibody Product which contains a different ADDL Antibody, each Diagnostic Product which contains a different ADDL Antibody, and each Vaccine Product which contains a different ADDL Antigen, shall be deemed a different Product.

1.49 "**Regulatory Authority**" shall mean any federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the development, manufacture, use or sale (including approval of Marketing Authorizations) with respect to any Product in any jurisdiction, including the United States Food and Drug Administration, European Medicines Evaluation Agency, the Ministry of Health, Labor and Welfare in Japan.

1.50 "**Research Plan**" shall mean the written plan for the Research Program, including Acumen's budget for performing its activities under the Research Program, as may be approved, modified or amended from time to time in accordance with this Agreement.

1.51 "**Research Program**" shall mean those activities with respect to ADDL's, ADDL Antibodies and Products undertaken by the Parties pursuant to Article 3 during the Research Term and as generally described in Section 3.1.

1.52 "**Retained Antibody Field**" shall mean the conduct of research and/or development of Small Molecule Products and (upon expiration of the Option Period under Section 5.3.2) the conduct of research and/or development of Vaccine Products. For avoidance of doubt, the Retained Antibody Field shall include without limitation the right to use Acumen-Owned ADDL Antibodies in the course of conducting such research and/or development of Small Molecule Products and, if applicable, Vaccine Products, for the purposes of (i) quantification of ADDLs; or (ii) stratification or selection of individuals for clinical trials, therapeutic or dosage selection, prediction or monitoring of therapeutic response, or effectiveness or safety of Small Molecule Products and, if applicable, Vaccine Products (including determination of predisposition for adverse reactions to particular therapeutics or dosages).

1.53 "**Small Molecule**" shall mean (i) a molecule that has a molecular weight less than or equal to 1500 daltons, or (ii) a conjugation of such a molecule if such molecule having a molecular weight of 1500 daltons or less, absent such a conjugation, would be therapeutically active in the Treatment of ADDL-Related Conditions.

1.54 "**Small Molecule Products**" shall mean a pharmaceutical product in the Therapeutic Field comprising a Small Molecule.

1.55 "**Sublicensee**" shall mean, with respect to a particular Product, a Third Party to whom Merck has granted the right to make and/or sell such Product, but shall not include Third Party distributors except as set forth below. [***] For purposes of this Agreement, the grant of the foregoing rights shall be deemed a "sublicense."

1.56 "**Territory**" shall mean all of the countries of the world, and their territories and possessions.

1.57 "**Therapeutic Field**" shall mean Treatment of any and all human medical conditions or indications, including without limitation ADDL-Related Conditions. It is understood that no portion of the Diagnostic Field shall be considered to be included in the Therapeutic Field.

1.58 "**Third Party**" shall mean any person or entity other than Acumen, Merck, and their respective Affiliates.

1.59 "**Treatment**" shall mean, with respect to a particular medical condition or indication, the cure, reduction, mitigation, prevention, or slowing or halting the progress of such medical condition or indication or of the symptoms thereof.

1.60 "**USC License**" shall mean that certain license agreement entered into between the University of Southern California and Acumen effective as of December 28, 1999, as amended prior to the Amendment Effective Date; a copy of which is attached to this Agreement as Exhibit 1.57.

1.61 "**Vaccine Product**" shall mean a pharmaceutical preparation that produces a cellular and/or humoral immune response in a human using one or more ADDL Antigens and is (i) for administration to human patients in Clinical Trials, or (ii) for sale by prescription, over the counter, or any other method. Notwithstanding the above, a pharmaceutical preparation shall not be considered a Vaccine Product if it is intended for use in the Diagnostic Field or it contains a Small Molecule.

1.62 "**Valid Patent Claim**" shall mean a [***]

1.63 **Additional Definitions**. Each of the following definitions is set forth in the Section of this Agreement indicated below:

Definition	Section	Definition	Section
Active Program	8.1	Joint Research Committee or JRC	2.2.1
Acumen Diagnostic Patents	9.2.3	Late Development Milestone	6.4.2
Acumen FTE's	2.2.4	Liabilities	12.1
Acumen Indemnitees	12.1	Licensed Party	5.4.3
Antibody Patent	6.7.2	Licensing Party	5.4.3
Bankruptcy Code	15.15	Merck Diagnostic Patents	9.2.3
Confidential Information	10.1	Merck Indemnitees	12.2
Controlling Party	9.3.2	Necessary Patent	6.7.2
Cooperating Party	9.3.2	Option Period	5.3.2
Development Advisory Committee or DAC	4.2.1	Outside Date	8.2.1
Early Development Milestone	6.4.2	Period	6.7.5
Excluded Claim	14.1.6	Project Leader	2.1
Exercise Date	5.3.3	Prosecution and Maintenance	9.2.1
Existing Product	13.5.4	Providers	3.8
Extension Date	8.2.2	Research Commencement Date	3.5
First Antibody Approval	6.4.2	Research Term	3.5
First Vaccine Approval	6.4.2	Retained Products	13.5.4
Grantee	9.5.2	Reversion Stage	13.5.4
Grantor	9.5.2	Reverted Products	13.5.4
Human Materials	3.8	Term	13.1
Infringement	9.3.1	Third Party Technology	9.5.2
Infringement Action	9.3.2	Vaccine Option	5.3.1
JAMS	14.1		

ARTICLE 2
MANAGEMENT

2.1 **Project Leaders**. Merck and Acumen each shall appoint a person (a "**Project Leader**") from the JRC to coordinate its part of the Research Program. The Project Leaders shall be the primary contact between the Parties with respect to the Research Program. Each Party shall notify the other within thirty (30) days of the date of the Agreement of the name and contact information for its Project Leader and shall so notify the other Party in advance of changing its Project Leader.

2.2 **Joint Research Committee**.

2.2.1 **Responsibilities**. Merck and Acumen will establish a committee (the "**Joint Research Committee**" or "**JRC"**) to oversee, review and recommend direction of the Research Program. The responsibilities of the JRC shall consist of: (i) monitoring and reporting research progress and providing a forum for open and frequent exchange between the Parties regarding

Research Program activities; (ii) reviewing relevant data arising during the course and in the performance of the Research Program; (iii) reviewing and commenting on technical issues and Acumen's budget relating to the Research Program; (iv) considering issues of priority in performing the Research Program; (v) reviewing and approving annual Research Plans, and (vi) taking such other actions as are specifically provided for the JRC in this Agreement.

2.2.2 **Membership**. The JRC shall consist of four (4) members, with each Party selecting two (2) representatives to serve as members of the JRC by written notice to the other Party. At least one member appointed by each Party shall have appropriate technical credentials, experience and knowledge and ongoing familiarity with the Research Program. Subject to the foregoing, Acumen and Merck may each replace its JRC representatives at any time, upon written notice to the other Party. Each of Merck and Acumen shall identify a lead representative who shall be responsible for communicating the vote of such Party in decisions of the JRC. In addition, the chairperson of the JRC shall be designated by Merck, and the recording secretary shall be designated by Acumen. The chairperson shall be responsible for sending notices of meetings of the JRC, shall chair such meetings and [***] based upon the input of both Parties. The secretary shall be responsible for preparing the minutes of the meetings of the JRC.

2.2.3 **Meetings**. During the Research Term, the JRC shall meet at least quarterly in person or by videoconference (with two of such meetings per year being in person), or more frequently as agreed by the Parties, and will otherwise communicate regularly by telephone, electronic mail, facsimile and/or videoconference. The in-person meetings shall alternate between sites designated by Merck and Acumen, respectively, or such other locations as determined by the JRC. Additional representatives or consultants may from time to time, by mutual consent of the Parties, be invited to attend JRC meetings, subject to such representative's and consultant's written agreement to comply with the requirements of Article 10. Such other representatives may attend the in person meetings by telephone and/or videoconference.

2.2.4 **Decision Making**. With respect to decisions taken on matters placed by either Party before the JRC, each Party shall have one vote. Decisions of the JRC shall be made by unanimous approval of the JRC members present and voting on the matter. At least one member from each Party must be so present and voting for a decision to be reached. In the event the JRC is unable to reach consensus on a particular decision expressly provided in this Agreement to be made by the JRC, such decision will be referred to the CEO of Acumen and a [***] of [***] Merck [***] for resolution. If such representatives fail to resolve such a dispute, the final decision will be made by [***]; [***] the number of FTE's of Acumen ("**Acumen FTE's**") under the Research Plan in accordance with Section 6.1,[***]

ARTICLE 3
RESEARCH PROGRAM

3.1 **Conduct of Research Program**. Subject to the terms and conditions set forth in this Agreement, the Parties agree to conduct a research program relating to the discovery and research of Product by collaboratively and diligently performing its responsibilities during the Research Term in accordance with the then-current Research Plan. Such responsibilities will be performed in a good scientific manner and in compliance in all material respects with all requirements of applicable laws,

rules and regulations. Without limiting any other obligations in this Agreement, each Party shall allocate sufficient time, effort, equipment and facilities, and shall use personnel with sufficient skills and experience, as are required to accomplish the Research Program in accordance with the terms of this Agreement, including the Research Plan.

3.2 **Research Plan**. The Research Plan shall establish, in detail: (i) the scope of the research activities to be performed by each Party under the Research Program, using the outline set forth in Exhibit 3.2 as a starting point, provided that Exhibit 3.2 shall not supersede or modify the terms of this Agreement; (ii) the research objectives, work plan activities, and schedules of the Research Program; and (iii) the respective obligations of each Party under the Research Program. As soon as possible after the Effective Date, but no later than [***] days thereafter, and subject to Sections 2.2.4 and 6.1, the Parties shall jointly establish the first Research Plan. Thereafter, subject to Sections 2.2.4 and 6.1, the Parties shall establish annual Research Plans by no later than October 1 of each year during the Research Term. The Parties shall submit to the JRC for approval the proposed Research Plan required under this Section 3.2 for the following Calendar Year. The JRC shall promptly review and approve each such proposal or propose modifications thereto. Unless otherwise agreed by Acumen and Merck, the Research Plan shall at all times provide for at least five (5) Acumen FTE's.

3.3 **Exchange of Information**. Each Party shall keep the JRC reasonably informed on a timely basis as to the material progress, results and activities in connection with the Research Program. During the Research Term, Acumen agrees to cooperate with Merck to provide for reasonable and prompt disclosure to Merck of the Acumen Know-How. During the Research Term, Merck agrees to provide Acumen with the information reasonably necessary for Acumen to perform its obligations under the Research Plan. Notwithstanding the foregoing, the information described in Exhibit 3.3 shall be deemed to be reasonably necessary for Acumen to perform its obligations under the Research Plan.

3.4 **Access to Technical Personnel**. During the Research Term and without limiting Sections 3.1 and 3.3, Acumen agrees that it will make its technical personnel and consultants reasonably available to the Merck's employees and/or consultants to discuss the Research Program work, and the results of such work, in detail, which may include having Merck's employees and/or consultants visit its offices and laboratories, and/or those of its Third Party contractors, during normal business hours.

3.5 **Term of the Research Program**. The term of the Research Program (the "**Research Term**") shall commence upon the earlier of (i) [***] days after the Effective Date or (ii) the date of approval of the initial Research Plan by the JRC ("**Research Commencement Date**"), and shall continue thereafter for an initial period of three (3) years. The Research Term shall expire on the third anniversary of the Research Commencement Date, unless extended by mutual written agreement of the Parties or earlier terminated in accordance with this Agreement.

3.6 **Principal Scientist**. The Principal Scientist shall actively participate on Acumen's behalf in performing Acumen's responsibilities pursuant to the Research Program, and shall be one of the Acumen participants on the JRC. In the event that the Principal Scientist leaves the employ of Acumen or is otherwise unwilling or unable to actively participate on Acumen's behalf regarding the

Research Program during the Research Term: (i) Merck shall be consulted by Acumen regarding the replacement of the Principal Scientist, and shall have the right to approve or disapprove such replacement; and (ii) Acumen shall cooperate reasonably with Merck in an effort to enable Merck to cause the Principal Scientist to be made available to Merck on a consulting basis, and in the event that Merck is required to compensate the Principal Scientist in order to obtain such consulting services, such payment when made shall be credited against the amount payable thereafter to Acumen pursuant to Article 6; provided, however, that such credit [***] from Acumen at the end of the Principal Scientist's employment with Acumen.

3.7 **Compliance**. Without limiting Section 3.1, if animals are used in research or development hereunder, the Party using such animals will comply with the Animal Welfare Act or any other applicable local, state, national and international laws or regulations relating to the care and use of laboratory animals. Each Party encourages the other to use the highest standards, such as those set forth in the Guide for the Care and Use of Laboratory Animals (NRC, 1996), for the humane handling, care and treatment of such research animals. Any animals which are used in the course of the Research Program, or Products derived from those animals, such as eggs or milk, will not be used for food purposes, nor will these animals be used for commercial breeding purposes. Each Party hereby certifies that it will not and has not employed or otherwise used in any capacity the services of any person debarred under Section 21 U.S.C. 335a in performing any services hereunder.

3.8 **Use of Human Materials**. Without limiting Section 3.1, if any human cell lines, tissue, human clinical isolates or similar human-derived materials ("**Human Materials**") have been or are to be collected and/or used in the Research Program, the Party using such Human Materials represents and warrants (i) that it has complied, and shall comply, with all applicable laws, guidelines and regulations relating to the collection and/or use of the Human Materials and (ii) that it has obtained, and shall obtain, all necessary approvals and appropriate informed consents, in writing, for the collection and/or use of such Human Materials. Each Party shall provide documentation of such approvals and consents to the other Party upon such other Party's request. Each Party further represents and warrants that such Human Materials may be used as contemplated in this Agreement without any obligations to the individuals or entities ("**Providers**") who contributed the Human Materials, including, without limitation, any obligations of compensation to such Providers.

3.9 **Records; Inspection**

3.9.1 **Records**. Acumen and Merck shall maintain records of the Research Program (or cause such records to be maintained), as applicable, in sufficient detail and in a good scientific manner as will properly reflect all work done and results achieved in the performance of the Research Program.

3.9.2 **Inspection**. Merck shall have the right, during normal business hours during the Research Term and within [***] after the Research Term and upon reasonable notice to Acumen, to inspect and copy all such records of the Acumen referred to in Section 3.9.1.

ARTICLE 4
DEVELOPMENT PROGRAM

4.1 **Development**. For each Product to which Merck retains rights under this Agreement, Merck shall be responsible, at its sole expense, for conducting all pre-clinical and clinical development of such Products and all commercialization of such Products, as set forth in the other provisions of this Agreement.

4.2 **Development-Advisory Committee**.

4.2.1 **Responsibilities**. Promptly following the first occurrence of milestone number 1 under Section 6.4.1 below, Merck and Acumen will establish a committee (the "**Development-Advisory Committee**" or "**DAC**") as a forum for Acumen to provide scientific input regarding the development of the Products and for Merck to keep Acumen apprised of, and to enable the Parties to review and discuss, the progress of, and planned activities related to, development of the Products. In order to enable such discussion and review, information will be exchanged as described in Section 4.2.2 below. No approval of the DAC shall be required for any development activities, it being acknowledged that the DAC is solely for information and advisory purposes. Nonetheless, Merck shall consider in good faith the comments of the DAC with respect to the development activities related to Product; it being understood that Merck shall not be required to adopt or implement any such comments.

4.2.2 **Information Exchange**. Merck shall provide to all members of the DAC, for each Product, a description of the activities undertaken, and planned to be undertaken, by or under authority of Merck (as well as the results of such activities) related to pre-clinical or clinical testing of the Products or regulatory filings relating thereto. Such information shall be provided to Acumen in reasonable detail reasonably in advance of each DAC meeting, setting forth the nature, scope and timing of such activities, including the projected timelines to obtain Marketing Authorizations and a summary of the status and results of the communications with Regulatory Authorities.

4.2.3 **Membership**. The DAC shall consist of [***] members, with Merck selecting [***] representatives, and Acumen selecting [***] representative, each by written notice to the other Party. Members appointed by each Party shall have appropriate technical credentials, experience and knowledge and, in the case of Merck's representatives, ongoing familiarity with the development and commercialization activities described in Section 4.2.2. Subject to the foregoing, Acumen and Merck may each replace its DAC representative(s) at any time upon written notice to the other Party.

4.2.4 **Meetings**. After the Research Term and until [***], the DAC shall meet every [***] months, with at least one meeting each year being in-person. The location of the meetings shall be designated by Merck. Additional employee representatives may attend DAC meetings, by mutual consent of the Parties for additional employee representatives [***], subject to such representative's written agreement to comply with the requirements of Article 10. Such other representatives may attend the in-person meetings by telephone and/or videoconference.

ARTICLE 5
LICENSES

5.1 **Licenses**.

5.1.1 **Antibody Product License**. Subject to the terms and conditions of this Agreement, Acumen hereby grants to Merck a worldwide, royalty-bearing license under the Acumen Technology to make, have made, use, import, offer for sale, sell, and have sold Antibody Products (in finished or unfinished form) within the Therapeutic Field and Territory. Such license shall be exclusive even as to Acumen within the Therapeutic Field and Territory, except that Acumen retains the right to practice the Acumen Technology (itself and through its Affiliates and Third Parties) for the performance of the Research Program in accordance with the Research Plan.

5.1.2 **Vaccine Product License**. Upon exercise of the Vaccine Option, and subject to the terms and conditions of this Agreement, Acumen hereby grants to Merck a worldwide, royalty-bearing license under the Acumen Technology to make, have made, use, import, offer for sale, sell, and have sold Vaccine Products (in finished or unfinished form) within the Therapeutic Field and Territory. Such license shall be exclusive even as to Acumen within the Therapeutic Field and Territory, except that Acumen retains the right to practice the Acumen Technology (itself and through its Affiliates and Third Parties) for the performance of the Research Program in accordance with the Research Plan. Notwithstanding the above or Section 5.2 below, no rights or licenses under this Section 5.1.2 shall be exercised by or under authority of Merck in any manner prior to the Exercise Date and the licenses and exclusivity in this Section 5.1.2 shall terminate, and have no further force or effect, if Merck fails to exercise the Vaccine Option in accordance with Section 5.3 during the Option Period.

5.2 **Sublicenses**.

5.2.1 **Generally**. (a) Except as set forth in Section 5.2.1(c) below, Merck and its Controlled Affiliates shall remain primarily responsible for conducting the development of the Products directly in each Major Market other than [***], it being understood that, subject to the foregoing and other terms and conditions of this Agreement, Merck shall have the right to sublicense its rights under Section 5.1 above to Third Parties (i) to develop Products in [***] and countries other than [***], and (ii) for the purpose of conducting research to develop Product for and on behalf of Merck.

(b) Also subject to the terms and conditions of this Agreement, including the provisions of Section 5.2.1(a), Merck may sublicense its rights to make (but not develop), use (but not develop), sell, offer to sell and import Products under Section 5.1 (i) to its Affiliates anywhere in the Territory for any purpose; (ii) to Third Parties in [***] and any country outside of [***] for any purpose; and (iii) to Third Parties in [***] for the purpose of co-promotion and co-marketing arrangements, and with Acumen's consent not to be unreasonably withheld other similar arrangements; provided in the case of subparagraph (iii) hereof that Merck or its Affiliate itself continues to market, sell and promote the Products in such [***] at the level described in Section 8.1.

(c) Also subject to the terms and conditions of this Agreement, after Merck has achieved and paid the milestone set forth in Section 6.4.1(8), Merck may sublicense its rights to make, use, sell, offer to sell and import Products under Section 5.1 to Third Parties for any purpose, subject to Acumen's rights set forth in Section 5.2.3.

5.2.2 **Sublicense Requirements**. Each sublicense granted by or under authority of Merck, and partnering arrangement, shall be consistent with all terms and conditions of this Agreement, and subordinate thereto, and Merck shall be responsible to Acumen for the compliance by each Sublicensee with the financial and other obligations under this Agreement. Except as expressly authorized under this Section 5.2, Merck shall not sublicense its rights, or appoint a Sublicensee, with respect to any Product unless otherwise agreed by Merck and Acumen in writing.

5.2.3 **Right of First Negotiation**. In the event that Merck, at any time during the Term after achieving and payment of the milestone set forth in Section 6.4.1(8), desires to grant a sublicense to a Third Party pursuant to Section 5.2.1(c) to use, sell, offer to sell and/or import a Product in one or more countries in the Territory, Merck shall so notify Acumen in writing. Acumen shall have [***] in which to respond to such notice indicating Acumen's interest in obtaining such a license. If Acumen does not respond within such [***] period, or if Acumen notifies Merck in writing that Acumen is not interested in obtaining such a license, Merck may proceed to pursue negotiation and grant of such license to a Third Party without further obligation to offer such license to Acumen. If Acumen notifies Merck of its interest in obtaining such a license, the parties shall promptly commence good faith negotiations of such a license on commercially reasonable terms. If after [***] of good faith, diligent negotiations the parties are unable to reach a mutual agreement on commercial terms for such license, Merck may proceed to enter into discussions with a Third Party for the grant of such a license.

5.3 **Vaccine Option**.

5.3.1 **Grant**. Subject to the terms and conditions of this Agreement, Acumen hereby grants to Merck an exclusive option to obtain the worldwide, royalty-bearing license under the Acumen Technology set forth in Section 5.1.2 (the "**Vaccine Option**"). Upon the exercise of the Vaccine Option, such license shall be exclusive even as to Acumen within the Therapeutic Field and Territory, except that Acumen retains the right to practice the Acumen Technology (itself or through its Affiliates and Third Parties) for the performance of the Research Program in accordance with the Research Plan.

5.3.2 **Option Period**. Merck may exercise the Vaccine Option at any time during the Option Period. The "**Option Period**" shall mean the period beginning on the Effective Date and ending on February 15, 2007.

5.3.3 **Exercise**. Merck may exercise its Vaccine Option by providing to Acumen prior to the end of the Option Period: (i) written notice of Merck's exercise of the Vaccine Option, and (ii) within [***] days of such written notice, payment of [***]. Upon the date by which Acumen has received both written notice during the Option Period of Merck's exercise of the Vaccine Option and such payment (the "**Exercise Date**"), the definition of Products shall be deemed to include Vaccine Products.

5.4 **Diagnostic Product License.**

5.4.1 **License Grant**. Subject to the terms and conditions of this Agreement, including the provisions of Section 5.4.2, Acumen hereby grants to Merck an exclusive (even as to Acumen, except as set forth in Section 5.4.2), worldwide, sublicensable license under the Acumen Diagnostic IP to research, develop, make, have made, use, sell, offer to sell and import Diagnostic Products**.**

5.4.2 **Rights Retained by Acumen**. Without modifying Section 5.8, Acumen shall retain non-exclusive rights under Patent Rights and Know-How Controlled by Acumen (not including Merck Patent Rights or Merck Diagnostic IP) : (i) to use molecules that are not ADDL Antibodies for any and all uses (subject to the Vaccine Option set forth in Section 5.3) either by itself or with third parties; and (ii) to use Acumen-owned ADDL Antibodies solely for use in the Retained Antibody Field either by itself or with third parties performing research on behalf of Acumen; **provided, however**, that in no circumstances shall Acumen have the right to use or transfer any ADDL Antibody or Product which Merck has identified as a Pre-Clinical Candidate or regarding which Merck has otherwise notified Acumen that it is engaged in Clinical Trials. For the avoidance of doubt, commencing upon the Amendment Effective Date, Acumen shall have no right to use Merck Diagnostic Know-How (including but not limited to any ADDL Antibodies provided by Merck to Acumen), and shall have no right to commercialize a Diagnostic Product.

5.5 **Acumen's Performance of the Research Program**. Subject to the terms and conditions of this Agreement, Merck hereby grants to Acumen a non-exclusive license to the extent necessary for Acumen to perform its obligations pursuant to the Research Program in accordance with the Research Plan.

5.6 **Derivative Patent License**. Subject to the terms and conditions of this Agreement, Merck hereby grants to Acumen a worldwide, royalty-free, fully paid up, non-exclusive right and license under the Derivative Patents, with the right to grant and authorize sublicenses, (i) to perform the Research Program in accordance with the Research Plan, and (ii) to make, have made, use, sell, offer to sell, import, and otherwise exploit the subject matter of such Derivative Patents, for the making, sale, offer for sale, use, and/or importation of products containing a Small Molecule for the Treatment of ADDL-Related Conditions in the Therapeutic Field in the Territory.

5.7 **Limitation Regarding Small Molecules**. It is understood and agreed that no product or other subject matter using or comprising a Small Molecule as, or as part of, an antigen or other active ingredient is licensed to Merck under this Agreement.

5.8 **No Implied Rights**. Only the licenses granted in or pursuant to the express terms of this Agreement shall be of any legal force or effect. No other license rights shall be created by implication, estoppel or otherwise. Notwithstanding anything to the contrary, no license is granted under this Agreement with respect to any active ingredient contained in a Product, other than an ADDL Antibody or, in the event of the exercise of the Vaccine Option, an ADDL Antigen. In addition, all of Acumen's rights to Acumen Technology not specifically licensed to Merck under this Agreement shall be retained by Acumen, including, but not limited to, all products and applications other than (i) Diagnostic Products in the Diagnostic Field in the Territory, and (ii) Products in the Therapeutic Field in the Territory. Without limiting the foregoing, it is understood that Section 5.1

does not preclude Acumen, or others under authority of Acumen, from exploiting ADDL Antibodies or ADDL Antigens in connection with the research, development, or manufacture of products or other subject matter not involving the Treatment of a patient with a Product.

5.9 **Exclusive Rights under Northwestern License and USC License**. Notwithstanding the provisions of Section 2.5 of the Northwestern License and Section 3(c) of the USC License, Acumen agrees that it shall not during the Term exercise its rights under Section 2.5 of the Northwestern License or Section 3(c) of the USC License in a manner that causes any loss of exclusivity under the licenses granted to Merck in Section 5.1 of this Agreement.

ARTICLE 6
PAYMENTS

6.1 **Research Program Funding**. For each Calendar Quarter or portion thereof during the Research Term, Merck shall pay to Acumen research funding in an amount equal to the number of Acumen FTEs specified in the Research Plan for that Calendar Quarter multiplied by the rate of [***] per FTE per year. The Research Plan shall provide for no less than five (5) Acumen FTEs during each year of the Research Term (including the first and last Calendar Quarters described below), it being acknowledged that the Parties may mutually agree to increase the number of FTEs during any year through their authorized representatives. Each payment under this Section 6.1 shall be made to Acumen quarterly within the [***] days after the beginning of the Calendar Quarter to which Acumen's work under the Research Program relates, provided, however, that the first such payment shall be made within [***] days of the Research Commencement Date, and shall be pro-rated based on the number of days remaining in the then-current Calendar Quarter, and the last such payment shall be pro-rated based on the number of days of Research Term remaining in the Calendar Quarter in which the Research Term ends. [***] Acumen agrees to apply funding received under this Section 6.1 to the Research Program; provided that in the event the JRC has failed to establish a Research Plan, Acumen will apply such funding towards the discovery and/or development of Antibody Products in the Therapeutic Field as reasonably directed by Merck (or as reasonably determined by Acumen to the extent not so directed by Merck). In the event that Acumen has not succeeded in applying five (5) FTEs to performance of the Research Plan (i) in aggregate during the first four (4) Calendar Quarters, or (ii) in aggregate during any Calendar Quarter, after the first four Calendar Quarters; each during the Research Term, Merck shall be entitled to take a credit against the payment due under this Section 6.1 in the Calendar Quarter after which such shortfall is discovered by Merck, to the full extent of such shortfall.

6.2 **Technology Access Fee**.

6.2.1 Merck shall pay to Acumen [***] within [***] days of the Effective Date, and [***] on the later of [***] days of the Effective Date or [***]. Notwithstanding the foregoing, if, by the time payment is due in accordance with this Section 6.2 above, the Northwestern License has not been amended to contain a provision that allows Merck to avoid termination of its rights under the Northwestern License, as described in Section 11.2.2, then no such payment under this Section 6.2 shall be payable until the earlier of (i) such amendment of the Northwestern License described in Section 11.2.2 below, or (ii) [***]; (whichever date is earlier, the "Delayed Payment Date") in each case unless Merck has terminated the Agreement under this Section 6.2 prior to the Delayed

Payment Date. Merck shall have the right to terminate this Agreement under this Section 6.2 by providing Acumen with written notice of termination, which termination shall be effective immediately upon notice. The effects of such termination shall be as set forth in Section 13.5.2(b). If this Agreement has not been terminated by Merck in accordance with this Section 6.2 prior to the Delayed Payment Date, then Merck shall pay to Acumen the [***]) described in this Section 6.2 above upon the earlier of [***], or [***] days after the Delayed Payment Date.

6.2.2 Merck shall make a one-time upfront payment of [***] within [***] days of the Amendment Effective Date, with [***] of this amount only creditable against the Development Milestone [***] defined in Section 6.4.1(2).

6.2.3 Merck shall pay to Acumen a one-time payment of [***] within [***] days of the Amendment Effective Date in order to enable Acumen to purchase [***] with such [***] to be used pursuant to the Research Program.

6.3 **First Anniversary Fee**. In addition to the other amounts specified in this Article 6, Merck shall pay [***] to Acumen on the first (1st) anniversary of the Effective Date.

6.4 **Development Milestones Payments**.

6.4.1 **Initial Products**. Merck shall pay to Acumen the milestone payments identified in this Section 6.4.1 below, each within thirty (30) days after the first occurrence of the corresponding milestone, for the first Antibody Product and, if the Vaccine Option has been exercised, the first Vaccine Product to reach such milestone:

Development Milestones	Payment Amount
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

6.4.2 **Subsequent Products**.

(a) To the extent that a milestone payment has been made to Acumen pursuant to Section 6.4.1(1), (2) or (3) (each hereinafter an "**Early Development Milestone**") as a result of any Antibody Product achieving such Early Development Milestone, no further payment for the Early Development Milestone that has been achieved shall be due or payable to Acumen as a result of subsequent Antibody Products achieving such Early Development Milestone. Similarly, to the extent that an Early Development Milestone payment has been made to Acumen as a result of any Vaccine Product achieving such Early Development Milestone, no further payment for the Early Development Milestone that has been achieved shall be due or payable to Acumen as a result of a subsequent Vaccine Product achieving such Early Development Milestone.

(b) With respect to each of the milestones set forth in Section 6.4.1(4), (5), (6), (7) and (8) (each hereinafter a "**Late Development Milestone**"), a milestone payment in the amount set forth for such Late Development Milestone shall be made by Merck to Acumen for each Antibody Product that achieves such Late Development Milestone after it was previously achieved by one or more other Antibody Product(s), only if the following conditions have been or are thereafter met: (i) a Marketing Authorization is obtained in a Major Market for an Antibody Product (i.e. the first Antibody Product to achieve Marketing Approval in a Major Market) under this Agreement (whether before or after the Late Development Milestone is achieved) ("**First Antibody Approval**"), and (ii) at the time of the First Antibody Approval or thereafter, Merck is actively developing another Antibody Product that has achieved, or that subsequently achieves, one or more Late Development Milestone(s). Milestone payments under this Section 6.4.2(b) for Late Development Milestones achieved prior to such conditions being met shall become payable only if and at the time such conditions are thereafter met.

(c) Similarly, a milestone payment in the amount set forth for such Late Development Milestone shall be made by Merck to Acumen for each Vaccine Product that achieves such Late Development Milestone after it was previously achieved by one or more other Vaccine Product(s), only if the following conditions have been or are thereafter met: (i) a Marketing Authorization is obtained in a Major Market for a Vaccine Product (i.e. the first Vaccine Product to achieve Marketing Approval) under this Agreement (whether before or after the Late Development Milestone is achieved) ("**First Vaccine Approval**"), and (ii) at the time of the First Vaccine Approval or thereafter, Merck is actively developing another Vaccine Product that has achieved, or that subsequently achieves, one or more Late Development Milestone(s). Milestone payments under this Section 6.4.2(c) for Late Development Milestones achieved prior to such conditions being met shall become payable only if and at the time such conditions are thereafter met.

6.4.3 Merck will make a one-time payment of [***] upon receipt of notice of Regulatory Authority approval in the United States of a filing made under Section 510(k) of the Food, Drug and Cosmetics Act for the sale of a Diagnostic Product by Merck, its Affiliates or a sublicensee thereof.

6.5 **Sales Threshold Milestones**.

6.5.1 **General**. Merck shall pay to Acumen the milestone payments identified in this Section 6.5 below, each within [***] days after the first occurrence of the corresponding milestone set forth in this Section 6.5.1 for an Antibody Product and additionally within [***] days after the first occurrence of the corresponding milestone for a Vaccine Product:

Sales Threshold Milestone	**Payment Amount**
[***]	[***]
[***]	[***]

6.5.2 **Subsequent Products**. The milestone payments in this Section 6.5 shall be payable for the first Antibody Product to achieve such sales threshold milestone and, if applicable, for the first Vaccine Product to achieve such sales threshold milestone, and no such sales threshold milestone shall be payable for subsequent achievements of such sales threshold milestone by subsequent Antibody Products or Vaccine Products.

6.6 **Certain Additional Terms**.

6.6.1 **One Payment Per Product**. It is understood that once a particular milestone payment under Section 6.4 has been paid with respect to a particular Product, such milestone payment shall not be due again with respect to the same Product, and shall only be paid for subsequent Products pursuant to Section 6.4.2(b) or (c).

6.6.2 **Accrued Milestones**. If a subsequent milestone under Section 6.4 or 6.5 above is achieved for a Product before a prior milestone under Section 6.4 or 6.5 for such Product, then payment for such prior milestone(s), when applicable in accordance with Section 6.4 or 6.5, shall be due at the time of the payment for such subsequent milestone with respect to such Product. For the purposes of this Section 6.6.2, "subsequent" and "prior" milestones shall refer to the numerical order of the milestones, as indicated next to such milestone in Section 6.4 above.

6.6.3 **Reports**. Within [***] days of the occurrence of any event that would trigger a milestone payment according to Section 6.4 or 6.5, Merck shall notify Acumen of such occurrence in writing. The payment associated with such milestone shall be paid within [***] days of the achievement of such milestone, except payments under Section 6.4.2(b) or (c), which shall be paid within [***] days of the time at which they become payable pursuant to Section 6.4.2.

6.7 **Royalties**.

6.7.1 **Royalty Tiers**.

(a) **For Antibody Products and Vaccine Products.** In consideration of the rights and licenses granted to Merck in this Agreement, Merck shall pay to Acumen as royalties the following percentages of Net Sales from the sale of each Antibody Product (and Vaccine Products upon exercise by Merck of the Vaccine Option in accordance with Section 5.3) by Merck, its Affiliates, and Sublicensees during a Calendar Quarter:

Annual Net Sales by Product	Royalty Rate on Incremental Net Sales
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

(b) **For Diagnostic Products.** In consideration of the rights and licenses granted to Merck regarding Diagnostic Products in this Agreement, Merck shall pay to Acumen the following royalties:

(1) For those Diagnostic Products sold by Merck or its Affiliates to a Third Party, the royalty rate shall be as follows:

Annual Net Sales by Diagnostic Product	Royalty Rate on Incremental Net Sales
[***]	[***]
[***]	[***]
[***]	[***]

(2) For those Diagnostic Products for which Merck or its Affiliates receive Diagnostic Received Revenue from a Third Party, the royalty rate shall be as follows:

Diagnostic Received Revenue by Diagnostic Product	Royalty Rate on Diagnostic Received Revenue
[***]	[***]
[***]	[***]
[***]	[***]

6.7.2 **Third Party Royalties**.

(a) **Credit**. If Merck pays a running royalty to an unrelated Third Party for a license from the Third Party to make, have made, use, sell, or import a Product under a Necessary Patent or an Antibody Patent, then Merck shall have the right to credit such royalty against the royalty payable by Merck under Section 6.7.1 above, but only to the extent set forth in this Section 6.7.2 below. All such credits shall be applied, on a country-by-country and Product-by-Product basis, only against the royalty hereunder for the sale of the particular Product for which the Third Party royalty was paid.

(1) The amount of such credits for licenses under the Necessary Patents shall equal [***] of the running royalties actually paid by Merck for the sale of the applicable Product under such a license.

(2) The amount of such credits for licenses under the Antibody Patents shall equal [***] of the running royalties actually paid by the Merck for the sale of the applicable Product under such a license, but in no event greater than [***].

(3) Notwithstanding anything to the contrary in this Agreement, under no circumstances shall any credit under this Section 6.7.2 reduce [***]; in each case regardless of the number of Third Party licenses, Necessary Patents, Antibody Patents and running royalties paid to Third Parties with respect thereto.

(4) Notwithstanding anything to the contrary in this Agreement, under no circumstances shall any credit under this Section 6.7.2 reduce the royalty payable under Section 6.7.1(b) by more than [***] of the royalty otherwise due Acumen.

(5) For clarity, it is understood that running royalties with respect to any Necessary Patent or Antibody Patent shall not include any license issuance fees (such as up front or other lump sum payments), cost sharing or reimbursement, milestone payments, service or consulting fees, purchases, non-cash consideration, amounts paid for equity or securities, dividends, profit distributions, amounts paid for facilities or equipment, or any other payment or consideration which is not expressly identified in the written agreement between Merck and the Third Party licensor as a running royalty in respect of a license under the applicable Necessary Patent or Antibody Patent for the sale of the particular Product in the particular country. All running royalties credited pursuant to this Section 6.7.2 shall be net of all applicable taxes and other amounts credited or deducted against the royalties actually paid for the license.

(b) **Definitions**. For purposes of this Section 6.7.2, (i) "**Antibody Patent**" shall mean, with respect to a particular Product, a valid patent claim of an issued, unexpired patent in that country that would, absent a license from the unrelated Third Party under such valid patent claim, be infringed by [***]; and (ii) "**Necessary Patent**" shall mean, with respect to a particular Product sold in a country, a valid patent claim of an issued, unexpired patent in that country [***] and that would, absent a license from the unrelated Third Party under such valid patent claim, be infringed [***]. As used in this Section 6.7.2(b), (X) "infringed" [***]; and (Y) "valid patent claim" shall have the meaning set forth in Section 1.59, [***] rather than the Patent Rights identified in Section 1.59. As used herein, it is understood that if any Antibody Patents are licensed from an entity, then any Necessary Patents also licensed from such entity and its Affiliates shall be deemed to be Antibody Patents for purposes of Section 6.7.2(a) above.

6.7.3 **Know-How Royalties**. Notwithstanding the provisions of Section 6.7.1 above, if neither the use nor sale of a Product during a Calendar Quarter would infringe a Valid Patent Claim in the country in which the Product is sold, then Merck shall pay royalty rates on such Product that shall be set at [***] of the royalty rate determined according to Section 6.7.1 above, provided that under no circumstances shall the royalty rate for any Product be less than [***] as a result of this Section 6.7.3.

6.7.4 **Coordination of Sections 6.7.1, 6.7.2 and 6.7.3**. Royalty tiers pursuant to this Section 6.7 shall be calculated based on worldwide Net Sales of each Product, provided that the determination of whether the royalty shall be calculated under 6.7.1, 6.7.2 or 6.7.3 for each Product shall be determined on a country-by-country basis. Accordingly, Net Sales under Section 6.7.3 shall be included in the total annual Net Sales for purposes of determining the royalty tiers applicable to Net Sales under Section 6.7.1, and if more than one royalty rate applies under Section 6.7.1, then the Net Sales described in Section 6.7.3 shall be applied proportionally to each such annual royalty tier.

6.7.5 **Retroactive Lump-Sum Payment of Royalties**. In the event that: (i) a claim under the Acumen Patent Rights, Merck Patent Rights or Joint Patent Rights is published in a country of sale and such claim, or a substantially similar claim, subsequently becomes a Valid Patent Claim; and (ii) Merck has, prior to the issuance of such Valid Patent Claim, paid Acumen royalties on Net Sales in such country at the reduced rate set forth in Section 6.7.3; the remaining provisions of this Section 6.7.5 shall apply.

(a) Acumen shall notify Merck of the issuance of such Valid Patent Claim if it is included in Acumen Patent Rights being prosecuted by Acumen, and Merck shall notify Acumen upon the issuance of the Valid Patent Claim if it is included in a Merck Patent Right, Acumen Patent Right or Joint Patent Right being prosecuted by Merck.

(b) For royalty payments due after the date of such notice, Merck shall pay the applicable royalty payable pursuant to Section 6.7.1 or 6.7.2.

(c) Merck shall, within [***] days of such notice, retroactively pay to Acumen a lump sum equal to the difference between the royalty rate actually paid pursuant to Section 6.7.3 and the royalty rate that would have been payable pursuant to Section 6.7.1 or 6.7.2 for the Period, as such term is defined herein, had the Valid Patent Claim been issued. The "**Period**" shall commence on the latest of the following dates: (1) the date of the First Commercial Sale in such country; (2) the date of first publication in the country of sale of the claim corresponding to the Valid Patent Claim; and (3) the most recent royalty payment that was due and payable more than [***] full Calendar Quarters prior to the date of the notice under Section 6.7.5(a); and shall end with the royalty payment that is due and payable within [***] days after the Calendar Quarter in which such notice was given.

6.7.6 **Royalty Term**. The royalties payable pursuant to this Section 6.7 shall be payable on a country-by-country and Product-by-Product basis until the date which is the later of: (i) the expiration of the last to expire Valid Patent Claim covering such Product in such country, or (ii) ten (10) years following the First Commercial Sale of such Product in such country.

6.7.7 **One Royalty; Samples and Donations**. One royalty shall be payable for each unit of Product under this Agreement, and no royalties shall be due upon the sale or other transfer among Merck, its Affiliates or Sublicensees for Product resold to an independent Third Party, but in such cases the royalty shall be due and calculated upon Merck's, its Affiliate's or Sublicensee's Net Sales to the first independent Third Party. No royalties shall accrue on the disposition of Product without charge in reasonable quantities by Merck or its Affiliates or Sublicensees which are used in Clinical Trials, as samples (promotion or otherwise) or as donations (for example, to non-profit institutions or government agencies for a non-commercial purpose).

6.7.8 **Change in Sales Practices**. The Parties acknowledge that during the term of this Agreement, Merck may desire to change its sales practices for the marketing and distribution of Product to the extent to which the calculation of the payment for royalties on Net Sales may become impractical or even impossible. In such event the Parties agree to meet and discuss in good faith new ways of compensating Acumen to the extent currently contemplated under this Section 6.7 in a manner that does not disadvantage Acumen; [***]

6.7.9 **Royalties for Bulk Product**. In those cases where Merck, its Affiliate or Sublicensee sells Product to a Third Party (other than a Sublicensee) in other than finished and packaged form, the royalty obligations of this Section 6.7 shall be applicable to the Net Sales from the sale by Merck, the Affiliate, or the Sublicensee of bulk Product.

6.7.10 **Compulsory Licenses**. To the extent that Merck is required by the laws or regulations in any country in the Territory to grant a license under the Valid Patent Claims to a Third Party to make and sell Product in such country in the Territory, and to the extent that such laws and regulations require Merck to grant such license with a royalty rate that is lower than the royalty rate provided by this Section 6.7 above, then the royalty rate to be paid by Merck under this Section 6.7 on such Sublicensee's Net Sales from sales of such Product under such license in that country shall be reduced to the rate paid by the compulsory Sublicensee.

6.8 **Bundled Sales**. In the event that Merck, its Affiliate or Sublicensee sells Products to a Third Party to whom it also sells other products, the price for the Product shall not be established such that Net Sales is below fair market value with the intent of increasing market share for other products sold by Merck or its Affiliate to such Third Party or for the purpose of reducing the amount of royalty payable on the Net Sales from the sale of the Product. If the sale of the Product under such circumstances results in Net Sales below the fair market value for such Product, then the Net Sales of the Product in such transaction shall be deemed to be such fair market value for purposes of calculating payments owed to Acumen under this Agreement. In the event that the Parties hereto have been unable to agree upon such a fair market value, then upon the request of either Party such matter shall be resolved in accordance with Section 14.2 below. For purposes of this Section, "fair market value" shall be determined with relation to a particular country, market segment, indication, finished dosage form, the existence of competition, and other relevant factors, and will change over time, reflecting among other things changes in the status of the Product in its life cycle and the market(s) involved.

6.9 **Other**. Except as explicitly set forth in this Article 6, all payments under this Article 6 shall be non-refundable (except solely in the case of overpayment) and non-creditable against other amounts due or payable to Acumen under this Article 6 or otherwise under this Agreement.

ARTICLE 7
PAYMENTS, BOOKS AND RECORDS

7.1 **Royalty Reports and Payments**. After the first sale of a Product on which royalties are payable hereunder, Merck shall make quarterly written reports to Acumen within [***] days after the end of each Calendar Quarter, stating in each such report, the aggregate Net Sales, by country, of each such Product sold during the Calendar Quarter. Concurrently with the making of such reports, Merck shall pay to Acumen royalties due at the rates specified in Section 6.7.

7.2 **Payment Method**. All payments due under this Agreement shall be made by bank wire transfer in immediately available funds to a bank account designated by Acumen. All payments hereunder shall be made in U.S. Dollars. Any payments or portions thereof due hereunder which are not paid when due shall bear interest equal to the lesser of (i) the prime rate as reported by the Chase Manhattan Bank, New York, New York, on the date such payment is due, plus [***], or (ii) the maximum rate permitted by law, calculated on the number of days such payment is delinquent. This Section 7.2 shall in no way limit any other remedies available to either Party.

7.3 **Place of Royalty Payment; Currency Conversion**. All amounts set forth in this Agreement, or in any Exhibit, are in U.S. Dollars. In the case of sales invoiced in a foreign currency, the rate of exchange to be used in computing the monthly amount of currency equivalent in United States dollars due Acumen shall be made at the monthly rate of exchange utilized by Merck in its worldwide accounting system, prevailing on the third to the last business day of the month preceding the month in which such sales are recorded by Merck.

7.4 **Records; Inspection**. Merck shall keep, and shall ensure that its Affiliates and Sublicensees keep, complete, true and accurate books of account and records for the purpose of determining the amounts payable under this Agreement. Such books and records, and the un-redacted agreements for sublicenses by or under authority of Merck, shall be kept at the place of business of Merck or its Affiliate or Sublicensee where such books and records are normally kept for at least [***] years following the end of the Calendar Quarter to which they pertain. Such records shall be open for inspection by an independent certified public accounting firm to whom Merck has no reasonable objection, solely for the purpose of determining the payments to Acumen hereunder. Such inspections may be made no more than once each Calendar Year, at reasonable times and on reasonable notice; provided that if a material underpayment is identified an additional inspection may be made in that Calendar Year. The accounting firm shall disclose to Acumen only whether the royalty reports are correct or incorrect and the specific details concerning any discrepancies. No other information shall be provided to Acumen. Inspections conducted under this Section 7.4 shall be at the expense of Acumen, unless a variation or error producing an increase exceeding the greater of [***] and [***] of the amount stated for any period covered by the inspection is established in the course of any such inspection, whereupon all reasonable costs relating to the inspection and any unpaid amounts that are discovered will be paid promptly by Merck together with interest thereon, at the rate specified in Section 7.2, from the date such payments were due. Any interest paid to Acumen pursuant to this Section 7.4 shall in no way limit any other remedies available to Acumen. Acumen shall treat all financial information subject to review under this Section 7.4 or under any sublicense agreement in accordance with the confidentiality and non-use provisions of this Agreement, and shall cause its accounting firm to enter into an acceptable confidentiality agreement with Merck and/or its Affiliate or Sublicensee obligating it to retain all such information in confidence pursuant to such confidentiality agreement.

7.5 **Withholding Taxes**. If any withholding taxes become payable by reason of an assignment or other transfer of this Agreement by Merck to a foreign Affiliate, an assignment otherwise in accordance with this Agreement, or as a result of a change in the domicile of Merck or its Affiliate, any deductions by Merck for withholding taxes on payments due Acumen hereunder shall be not be made to the extent that Acumen is not able to realize any current tax reduction as a result of claiming a foreign tax credit on such withholding taxes. In such case, payment to Acumen shall not be reduced by such withholding taxes, and Merck shall be responsible for the payment of, and shall pay, all such taxes for which Acumen is not able to realize a current tax reduction as a result of claiming a foreign tax credit. Acumen shall be required to use its commercially reasonable efforts to claim any available foreign tax credits or deductions arising from the payment of withholding taxes by Merck, and thereby reduce the amount of U.S. income tax payable by Acumen, and shall refund to Merck the amount of such reduction in tax resulting from the use of such deduction or foreign tax credit within 30 days of the filing of Acumen’s federal income tax return utilizing such deduction or credit.

ARTICLE 8
DILIGENCE

8.1 **General**. Merck shall [***] Antibody Product in the Therapeutic Field in the Territory and, if Merck exercises the Vaccine Option pursuant to Section 6.3, [***] Vaccine Product in the Therapeutic Field in the Territory, [***] ("**Active Program**"). For avoidance of doubt, Merck discontinuing the development or commercialization of a particular Product due to Merck's reasonable belief that the Product is not safe for use in the Treatment of humans shall not cause Merck to be in breach of this Section 8.1; provided that Merck has otherwise met and continues to meet its obligations under this Section 8.1, [***] Product of the same type (i.e. Antibody Product or Vaccine Product) as the [***].

8.2 **Development Milestone Prepayments**.

8.2.1 **Outside Dates**. Without limiting Section 8.1 or any of Merck's other obligations under this Agreement, if Merck fails to achieve for a first Antibody Product one of the [***] milestones under Section 6.4 by the applicable outside date therefor specified in this Section 8.2.1 below (each an "**Outside Date**"), then Merck shall pay to Acumen, within [***] days after such failure, the milestone prepayment set forth in this Section 8.2.1 below for the missed milestone.

Development Milestone	Outside Date	Milestone Prepayment
Section 6.4.1(1)	[***]	[***]
Section 6.4.1(2)	[***]	[***]
Section 6.4.1(3)	[***]	[***]

8.2.2 **Additional Prepayments After Missed Milestone**. Without limiting Section 8.1 or any of Merck's other obligations under this Agreement, if a prepayment has become payable under Section 8.2.1 for a milestone for an Antibody Product based upon any of Sections 6.4.1(1), (2) or (3), and Merck fails to achieve by an extension date set forth in this Section 8.2.2 below (each an "**Extension Date**") such milestone for the first Antibody Product, then Merck shall pay to Acumen the additional prepayment set forth in this Section 8.2.2 for the particular Extension Date.

Extension Date	Required Prepayment for Failure to Achieve Milestone
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

8.2.3 **Additional Terms**. For clarity, the prepayments in this Section 8.2 shall be made for the first Antibody Product. All prepayments made pursuant to this Section 8.2 shall be non-refundable, but shall be credited only against the milestone payment that becomes payable under Section 6.4.1 upon completion of that same milestone for the first or any subsequent Antibody Product. No prepayment under this Section 8.2 for a milestone under Section 6.4.1 with respect to an Antibody Product may be credited against a milestone payment with respect to a Vaccine Product pursuant to Section 6.4.1.

8.2.4 **No Limitation**. The payments under this Section 8.2 will not alone be deemed to satisfy the requirements of Section 8.1, including the obligation to maintain [***]. Similarly, achieving a milestone by an Outside Date or an Extension Date shall not necessarily mean that Merck has otherwise met its diligence obligations under this Agreement.

8.3 **Diligence Payment with regard to Diagnostic Product.** Merck shall pay a fee of [***] payable [***] to Acumen commencing upon [***] of the Amendment Effective Date, and continuing until Merck, its Affiliate or sublicensee has [***]. The provisions of Sections 8.1 and 8.2 shall not apply to Diagnostic Products; provided, however, that upon [***], the provisions of Section 8.1 (but not Section 8.2) shall apply to such Diagnostic Product.

ARTICLE 9
INTELLECTUAL PROPERTY

9.1 **Ownership; Disclosure**.

9.1.1 **Sole Ownership**. Subject to the terms and conditions of this Agreement, Acumen shall retain all of its rights, title and interest in and to the Acumen Technology owned by Acumen as of the Effective Date, and shall solely own all right, title and interest in and to all Inventions, Patent Rights, and Know-How invented after the Effective Date solely by personnel of Acumen. Likewise, subject to the terms and conditions of this Agreement, Merck shall retain all of its rights, title and interest in and to the Merck Patent Rights and Know-How owned by Merck as of the Effective Date, and shall solely own all right, title and interest in and to all Inventions, Patent Rights, and Know-How invented after the Effective Date solely by personnel of Merck. The transfer of ownership of the applicable Inventions, Patent Rights, and Know-How to any Third Party for any purpose other than as expressly set forth in this Agreement shall be deemed an assignment of rights under this Agreement and shall be permissible only to the extent permissible pursuant to Section 15.3, and regardless of such assignment shall be subject to the rights granted to the other Party under this Agreement.

9.1.2 **Joint Ownership**. Merck and Acumen shall jointly own an equal undivided interest in all right, title and interest in and to all Joint Inventions. Except as expressly provided in this Agreement, neither Party shall have any obligation to account to the other for profits, or to obtain any consent of the other Party to license or exploit, Joint Inventions (whether or not patented), by reason of joint ownership thereof, and each Party hereby waives any right it may have under the laws of any jurisdiction to require any such consent or accounting.

9.1.3 For purposes of this Section 9.1, “invented” shall be interpreted and applied consistent with the concept of “inventorship” as defined under United States patent laws.

9.2 **Patent Prosecution and Maintenance**.

9.2.1 **Generally**. As used herein, "**Prosecution and Maintenance**" shall mean the preparation, filing, prosecution and maintenance of Patent Rights, including but not limited to any interferences, re-examinations, reissues, oppositions and the like.

9.2.2 **Patent Rights in the Therapeutic Field and Diagnostic Field**.

(a) Effective as of the Amendment Effective Date, Merck shall have the sole and exclusive right to control and perform the Prosecution and Maintenance of the Acumen Patent Rights and Joint Patent Rights, at Merck's expense, including through the use of outside counsel selected by Merck and reasonably acceptable to Acumen. In Merck's execution of its rights with respect to the Acumen Patent Rights and Joint Patent Rights, Acumen shall retain the rights reserved for the non-filing party under Section 9.2.2(b). Acumen shall execute such documents and perform such acts at Acumen's expense and in a timely manner as may be reasonably necessary to allow Merck to Prosecute and Maintain such Acumen Patent Rights and Joint Patent Rights. Merck shall have the exclusive right to control and perform Prosecution and Maintenance of Merck Patent Rights, with no obligation to Acumen regarding such Prosecution and Maintenance. Merck's right to Prosecute and Maintain Acumen Patent Rights and Joint Patent Rights shall be irrevocable, unless the Agreement is terminated pursuant to Article 13, in which case Merck and Acumen shall cooperate to promptly execute such documents and perform such acts as may be reasonably necessary to allow Acumen to Prosecute and Maintain Acumen Patent Rights.

(b) In each case relating to Acumen Patent Rights or Joint Patent Rights, the filing Party will promptly provide to the other Party, as such other Party reasonably requests, copies of correspondence with the applicable patent offices pertaining to such Prosecution and Maintenance by the filing Party. Without limiting the foregoing, the filing Party will give the non-filing Party an opportunity to review correspondence and the text of new applications before filing, shall consult with the non-filing Party with respect thereto, reasonably considering feedback, and shall supply the non-filing Party with a copy of each application as filed, together with notice of its filing date and serial number. The filing Party shall promptly give notice to the non-filing Party when the filing Party becomes aware of the grant, lapse, revocation, surrender, invalidation, or abandonment of any Acumen Patent Right or Joint Patent Right for which such Party has Prosecution and Maintenance responsibility under this Section 9.2.2 above. Similarly, the filing Party shall promptly give notice to the non-filing Party when the filing Party intends to discontinue Prosecution and Maintenance of such an Acumen Patent Right or Joint Patent Right, and in such event the Parties will cooperate reasonably to transition Prosecution and Maintenance to the non-filing Party if requested, as described above. In the event Merck discontinues Prosecution and Maintenance of Acumen Patent Right(s) on a world-wide basis and such Prosecution and Maintenance thereafter is transitioned to Acumen, such Acumen Patent Right(s) shall no longer be included within the definition of Acumen Diagnostic Patent Rights or Acumen Patent Rights. Upon request by Acumen and at Acumen's expense, Merck agrees to file, and transfer to Acumen the right for the Prosecution and Maintenance of, divisional patent applications covering claims within the Acumen Patent Rights to the extent that such claims are not Excluded Claims. "Excluded Claims" shall mean any and all claims that cover the composition of or process of making [***] or (until expiration of the Option Period for the Vaccine Option) [***] in any field, or use of such [***] in the Diagnostic Field or Therapeutic Field.

Notwithstanding the foregoing, if (i) Merck decides not to continue the Prosecution and Maintenance of any Excluded Claim contained in the Acumen Patent Rights or Joint Patent Rights, and (ii) such Excluded Claim relates to the research, development or commercialization of Small Molecule Products (or Vaccine Products, unless prior to such time Merck has exercised the Vaccine Option pursuant to Section 5.3.2), Merck shall promptly notify Acumen of such decision, and upon Acumen's request, file, and transfer to Acumen the right for the Prosecution and Maintenance of, divisional patent applications covering such Excluded Claim.

(c) Without limiting Section 9.2.2(b), each Party shall, within [***] days of learning of such event, inform the other Party of any request for, or filing or declaration of, any interference, opposition, reissue, or reexamination relating to a Joint Patent Right or Acumen Patent Right. The Parties shall thereafter consult and cooperate fully to determine a course of action with respect to any such proceeding. Merck shall control such proceedings for Acumen Patent Rights and Joint Patent Rights, provided that Acumen shall have the right to review and comment on any submission to be made in connection with such proceeding and Merck will reasonably consider such comments. In connection with any interference, opposition, reissue, or reexamination proceeding relating to any such Patent Right, the Parties will cooperate fully and will provide each other with information or assistance that either may reasonably request. Each Party shall keep the other Party informed of developments in any such action or proceeding.

(d) With respect to all costs of Prosecution and Maintenance hereunder, Merck shall be responsible for payment of all of its own costs and expenses related to such Prosecution and Maintenance and all out-of-pocket costs incurred by Merck and (upon prior written approval by Merck) all reasonable out of pocket expenses incurred by Acumen related to such Prosecution and Maintenance. Merck shall consult with Acumen as described in Section 9.2.2(b) and 9.2.2(e).

(e) Each Party agrees to cooperate fully with the other Party, to provide the filing Party with such information and assistance as it reasonably requests, and to facilitate its Prosecution and Maintenance in accordance with the foregoing, including, without limitation, executing and filing applications, registrations, powers of attorney, oaths and other appropriate documents, providing appropriate consents and/or authorizations, and joining in any administrative or judicial action relating to the prosecution or maintenance of any applications, for Patents Rights.

9.2.3 **Diagnostic Patents Rights**. Prosecution and Maintenance of the Patent Rights included in the Acumen Diagnostic IP ("**Acumen Diagnostic Patents**"), and the Patent Rights included in the Merck Diagnostic IP ("**Merck Diagnostic Patents**"), shall be controlled and performed in the same manner described in Section 9.2.2 above.

9.2.4 **Cooperation**. Each Party agrees to reasonably cooperate with the other Party in its performance of the activities under this Section 9.2 and in order to effect and perfect any assignment in accordance with the foregoing.

9.3 **Enforcement**.

9.3.1 **Notice and Enforcement Rights**. Each Party shall promptly notify the other if it becomes aware of any potential infringement of the Acumen Patent Rights or Joint Patent Rights by the manufacture, use, sale, or import of product by a Third Party in the Therapeutic Field or the Diagnostic Field in the Territory which is within the definition of a Product hereunder in the Therapeutic Field or the Diagnostic Field in the Territory (each, an "**Infringement**").

(a) [***] shall have the initial right, but not the obligation, to take reasonable legal action to enforce the Acumen Patent Rights against any Infringement by a Third Party, or defend any Acumen Patent Right against a declaratory judgment action or any other claim of invalidity (including without limitation any and all defenses, petitions, appeals, protests, conflict proceedings, nullity actions, invalidation proceedings, patent revocations, inventorship challenges, ownership challenges, invalidity actions and the like), at its sole expense. If, within [***] months after receiving a request from [***] that [***] commence litigation in an effort to terminate a commercially significant Infringement, [***] fails or elects not to initiate such litigation to abate such Infringement, then [***] shall have the right, upon [***] written approval (not to be unreasonably withheld) and at [***] sole expense, to initiate such legal action. If, within a reasonable period of time after receiving notice of such declaratory judgment action, [***] elects not to take action to defend such action, then [***] shall have the right, upon [***] written approval (not to be unreasonably withheld) and at [***] sole expense, to defend such legal action. For clarity, [***] right to enforce Acumen Patent Rights under this Section 9.3 shall only apply to Infringements involving [***] or (until expiration of the Option Period under the Vaccine Option) [***] in the Therapeutic Field or Diagnostic Field. [***] shall retain the exclusive right to enforce the Acumen Patent Rights as to all other infringement, at [***] sole expense and [***].

(b) [***] shall have the initial right, but not the obligation, to take reasonable legal action to enforce the Joint Patent Rights against any Infringement by a Third Party, or defend any Joint Patent Right against a declaratory judgment action or any other claim of invalidity, at its sole expense. If, within [***] months after receiving a request from [***] that [***] commence litigation in an effort to terminate a commercially significant Infringement, [***] fails or elects not to initiate such litigation to abate such Infringement, then [***] shall have the right, upon [***] written approval (not to be unreasonably withheld) and at [***] sole expense, to initiate such legal action. [***] shall have the exclusive right to take or not take legal action to enforce Merck Patent Rights, with [***].

9.3.2 **Cooperation; Costs and Recoveries**.

(a) **Cooperation**. If a Party (the "**Controlling Party**") brings an infringement action in the applicable forum with respect to an Infringement in accordance with Section 9.3.1 above, or defends against a declaratory judgment action with respect to an asserted Infringement, (each an "**Infringement Action**"), then the other Party (the "**Cooperating Party**") shall cooperate as reasonably requested, at such Controlling Party's expense, in the pursuit of such Infringement Action, including if necessary by joining as a nominal Party to the Infringement Action or taking such other actions as are necessary for standing or for the Controlling Party to otherwise maintain or pursue the Infringement Action; provided that the Controlling Party shall indemnify the Cooperating Party against any liability therefrom. The Controlling Party shall have the right to use counsel of its choice in such action, provided that the Cooperating Party shall have the right, even if not required to be joined, to participate in such Infringement Action with its own counsel at its own expense. The Controlling Party shall keep the Cooperating Party reasonably informed with respect to the progress or disposition of any Infringement Action hereunder, including reasonable consultation and approval regarding any settlements.

(b) **Costs and Recoveries**. The costs and expenses of the Infringement Action shall be the responsibility of the Controlling Party, and any damages or other monetary rewards or settlement payments received by the Controlling Party shall first be applied to reimburse the Controlling Party's costs and expenses attributed to the Infringement Action, and the remainder shall be shared as follows: [***].

9.4 **Patent Term Extension**. The Parties shall cooperate in obtaining patent term extensions or supplemental protection certificates or their equivalents in any country in the Territory where applicable to Acumen Patent Rights. If elections with respect to obtaining such patent term extensions are to be made, Merck shall have the right to make the election to seek patent term extension or supplemental protection.

9.5 **Third Party Technology**.

9.5.1 **Existing Agreements**. Notwithstanding anything to the contrary, the Parties acknowledge that all rights granted, and obligations incurred, by Acumen under this Agreement shall be subject to and limited by the terms and conditions of the Northwestern License and the USC License. Without limiting the foregoing or any other obligations, Merck shall cooperate reasonably with Acumen to provide the information otherwise required to be provided under this Agreement for the purpose of enabling Acumen to disclose in a timely manner, under the Northwestern License and the USC License, information regarding the development and commercialization activities by or under authority of Merck under this Agreement as reasonably necessary to meet Acumen's reporting obligations under the Northwestern License or the USC License with respect to such activities. Additionally, each of the obligations that the Northwestern License or the USC License requires be made applicable to Merck, such as without limitation indemnity obligations and obligations to maintain insurance, are here by made applicable to Merck, and Merck shall comply with such obligations.

9.5.2 **Additional Agreements**. Acumen shall endeavor in good faith, during the Research Term and so long as meetings of the DAC (including Acumen's representative) are held pursuant to Section 4.2.4, to cooperate with Merck in determining which, if either, Party should obtain an exclusive license for Third Party rights to any Patent Rights, or Know-How, directed to ADDL Antigens and/or ADDL Antibodies in the Therapeutic Field, but shall have no obligation to cooperate with Merck to the extent of obtaining a license for applications other than ADDL Antibodies, ADDL Antigens or Products, each in the Therapeutic Field. If the Party granting a license, sublicense or other right under this Agreement (the "**Grantor**") licenses or acquires from a Third Party rights to any Patent Rights or Know-How after the Effective Date that is subject to royalty or other payment obligations to the Third Party ("**Third Party Technology**"), then the grant of such rights to the other Party hereunder (the "**Grantee**") shall be subject to the Grantee agreeing in writing to pay the Grantor (i) any and all royalties payable to the Third Party with respect to such Third Party Technology that become payable by reason of Grantee's exercise of such rights hereunder and (ii) that portion of any upfront license fees, milestone payments and other similar

(non-royalty) amounts reasonably allocated to the rights granted to the Grantee hereunder (taking into consideration the benefits of such rights under such Third Party Technology to each Party). Upon request of the Grantee, the Grantor shall disclose to the Grantee a true, complete and correct written description of such payment obligations. In the event that the Parties are unable to agree upon an allocation under this Section 9.5.2, then the matter shall be settled in accordance with Section 14.2.

ARTICLE 10
CONFIDENTIALITY

10.1 **Confidential Information**. Except as otherwise expressly provided herein, the Parties agree that the receiving Party shall not, except as expressly provided in this Article 10, disclose to any Third Party or use for any purpose any information furnished to it by the other Party pursuant to this Agreement that is (i) of the type generally deemed to be proprietary within the pharmaceutical industry or (ii) that if disclosed in tangible form is marked "Confidential" or with other similar designation to indicate its confidential or proprietary nature or if disclosed orally is indicated to be confidential or proprietary by the Party disclosing such information at the time of initial disclosure and is confirmed in writing as confidential or proprietary by the disclosing Party within a reasonable time after such disclosure (collectively, "**Confidential Information**"), except to the extent that it can be established by the receiving Party by competent proof that such information:

10.1.1 was already known to the receiving Party at the time of disclosure;

10.1.2 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

10.1.3 became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement;

10.1.4 was independently developed by the receiving Party as demonstrated by documented evidence prepared contemporaneously with such independent development; or

10.1.5 was disclosed to the receiving Party, by a Third Party who had no obligation to the disclosing Party not to disclose such information to others.

10.2 **Permitted Use and Disclosures**. Each Party hereto may use or disclose Confidential Information disclosed to it by the other Party to the extent such use or disclosure is reasonably necessary (a) in the exercise of the rights granted to it hereunder, or (b) in prosecuting or defending litigation, enforcing this Agreement or the rights hereunder, complying with applicable laws, regulations (including securities laws and regulations) or court order or otherwise submitting information to tax or other governmental authorities, including any required financial disclosures as reasonably required by its independent auditors; or (c) as deemed necessary by Merck to be disclosed to its Affiliates and Sublicensees, agents, consultants, and/or other Third Parties for any and all purposes Merck and its Affiliates deem necessary or advisable for the research and development, manufacturing and/or marketing of Product(s) (or for such entities to determine their interest in performing such activities) in accordance with this Agreement; or (d) as deemed

necessary by Acumen to be disclosed to potential licensees other than for Products in the Therapeutic Field and Diagnostic Field (provided that such disclosures by Acumen shall be limited to the relevant provisions of Article 5 hereof); in all cases on the condition that any Third Parties to whom Confidential Information is disclosed agree to be bound by the confidentiality and non-use obligations contained this Agreement and provided the term of confidentiality for such Third Parties shall be no less than [***] years; and provided further that if a Party is required by law to make any such disclosure, other than pursuant to a confidentiality agreement, it will give reasonable advance notice to the other Party of such disclosure and, save to the extent inappropriate in the case of patent applications or the like, will use its reasonable efforts to secure confidential treatment of such information in consultation with the other Party prior to its disclosure (whether through protective orders or otherwise) and disclose only the minimum necessary to comply with such requirements.

10.3 **Nondisclosure of Terms**.

10.3.1 Each of the Parties hereto agrees not to disclose the [***] of this Agreement to any Third Party without the prior written consent of the other Party hereto, which consent shall not be unreasonably withheld or delayed, except as permitted pursuant to Section 10.2, and [***] that such [***] of this Agreement may be disclosed to [***], and (with the consent of Merck not to be unreasonably withheld) others on a need to know basis, or in connection with a merger, acquisition of stock or assets, proposed merger or acquisition, as a part of such entities' due diligence investigations, or the like, provided that such entities to whom confidential information is disclosed agree in writing to abide by confidentiality and non-use provisions substantially equivalent to those contained in this Article 10 (other than Section 10.4 below) and provided the term of confidentiality for such Third Parties shall be no less than [***] years; and such [***] of this Agreement may additionally be disclosed as reasonably advised by a Party's legal advisors or accountants to comply with any law, regulation or order, or any requirement of a government body.

10.3.2 Notwithstanding the foregoing, Acumen or Merck may issue for public disclosure the press release attached hereto as Exhibit 10.3; thereafter, Acumen and Merck may each disclose to Third Parties the information contained in such press release without the need for further approval by the other. The Parties will consider in good faith any request by the other Party for a public disclosure not otherwise permitted pursuant to this Section 10.3, but shall not be obligated to consent to such public disclosure. In the event of any termination of this Agreement under Article 13, the Parties shall agree on an announcement of such termination provided that the Parties shall use reasonable efforts to fashion such announcement so as to minimize any negative impact on either Party as a result of such announcement.

10.4 **Publication**. Any manuscript by Acumen or Merck describing scientific results pertaining to studies of any Product to be published or publicly disclosed, shall be subject to the prior review of the other Party at least [***] days prior to submission. If such scientific results contain the information of the other Party that is subject to use and nondisclosure restrictions under this Article 10, the publishing Party agrees to remove such information from the proposed publication or disclosure. Further, if the non-publishing Party believes the publication of such results would be unfairly damaging to the Product or such Party, and has a reasonable basis for not publishing such results, then upon request within such [***] day period the results shall not be so published until the matter is resolved. If the matter cannot be resolved between the Parties by mutual agreement, it shall be resolved in accordance with Article 14 below.

10.5 **Residuals**. Notwithstanding anything to the contrary in this Article 10, the Parties agree that [***] shall not be considered a breach of this Agreement. This Section 10.5 shall not be deemed to extend to any Patent Rights in such concepts.

ARTICLE 11
REPRESENTATIONS AND WARRANTIES

11.1 **Warranty**. Each Party represents and warrants on its own behalf and on behalf of its Affiliates that as of the Effective Date and again as of the Amendment Effective Date: (i) it has the legal power and authority to enter into this Agreement and to perform all of its obligations hereunder; (ii) it has and will have the right and authority to grant the rights and licenses granted by it hereunder; (iii) this Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms; (iv) it has not previously granted, and during the Term of this Agreement will not knowingly make any commitment or grant, any rights which are in conflict in any material way with the rights and licenses granted herein; and (v) as of the Effective Date it is not controlled by any other entity.

11.2 **Additional Warranty of Acumen**.

In addition, Acumen represents and warrants that, to the best of its knowledge as of the Effective Date and again as of the Amendment Effective Date, (i) Acumen is the only party authorized to grant licenses under the Acumen Technology and Acumen Diagnostic IP except as otherwise provided in this Agreement; (ii) prosecution of the Acumen Patent Rights by Acumen has been in good faith; (iii) Acumen Technology and Acumen Diagnostic IP is not subject to any lien or encumbrance; (iv) there have been no claims, judgments, or settlements against or owed by Acumen and there are no pending or threatened claims or litigation relating to the Acumen Technology or Acumen Diagnostic IP; (v) to the best of Acumen's knowledge as of the Effective Date, Acumen's contemplated activities pursuant to the Research Plan do not infringe valid patents issued to Third Parties; and (vi) the Northwestern License and the USC License have not been breached by Acumen and are to the best of Acumen's knowledge as of the Effective Date are in force and effect. Acumen shall notify Merck in writing immediately upon receiving any notice (i) from Northwestern University regarding any allegation of a breach of the Northwestern License, or (ii) from the University of Southern California regarding any allegation of a breach of the USC License.

11.3 **Disclaimer**. MERCK AND ACUMEN SPECIFICALLY DISCLAIM ANY GUARANTEE THAT THE RESEARCH PROGRAM WILL BE SUCCESSFUL, IN WHOLE OR IN PART. THE PARTIES ACKNOWLEDGE THAT THERE IS NO GUARANTEE THAT THEY WILL BE ABLE TO DEVELOP SUCCESSFULLY PRE-CLINICAL CANDIDATES, ADDL ANTIBODIES, ADDL ANTIGENS OR PRODUCTS. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, ACUMEN AND MERCK MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE ACUMEN TECHNOLOGY, LICENSED INGREDIENTS, PRODUCTS OR INFORMATION DISCLOSED HEREUNDER, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF ANY ACUMEN TECHNOLOGY, PATENTED OR UNPATENTED, OR NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

ARTICLE 12
INDEMNIFICATION

12.1 **Merck**. Merck agrees to indemnify, defend and hold Acumen and its respective directors, officers, employees, agents and their respective successors, heirs and assigns (the "**Acumen Indemnitees**") harmless from and against any and all losses, costs, claims, damages, liabilities or expense (including reasonable attorneys' and professional fees and other expenses of litigation) (collectively, "**Liabilities**") arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, relating to (i) any Products or Diagnostic Products developed, manufactured, used, sold or otherwise distributed by or on behalf of Merck, its Affiliates or Sublicensees or other designees or sublicensees (including, without limitation, product liability and patent infringement claims other than claims concerning Diagnostic Products sold by Acumen or its Affiliates or Sublicensees), or (ii) any breach by Merck of the representations and warranties made in this Agreement, except, in each case, to the extent such Liabilities result from a material breach of this Agreement, negligence or intentional misconduct by Acumen.

12.2 **Acumen**. Acumen agrees to indemnify, defend and hold Merck and its respective directors, officers, employees, agents and their respective successors, heirs and assigns (the "**Merck Indemnitees**") harmless from and against any Liabilities arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, relating to (i) any Diagnostic Products developed, manufactured, used, sold or otherwise distributed by or on behalf of Acumen, its Affiliates or Sublicensees or other designees or sublicensees (including, without limitation, product liability and patent infringement claims related thereto other than claims relating to Diagnostic Products sold by Merck or its Affiliates or sublicensees); or (ii) any breach by Acumen of its representations and warranties made in this Agreement, except, in each case, to the extent such Liabilities result from a material breach of this Agreement, negligence or intentional misconduct by Merck.

12.3 **Procedure**. In the event that any Indemnitee (either a Merck Indemnitee or a Acumen Indemnitee) intends to claim indemnification under this Article 12 it shall promptly notify the other Party in writing of such alleged Liability. The indemnifying Party shall have the right to control the defense thereof with counsel of its choice as long as such counsel is reasonably acceptable to Indemnitee; provided, however, that any Indemnitee shall have the right to retain its own counsel at its own expense, for any reason, including if representation of any Indemnitee by the counsel retained by the indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party reasonably represented by such counsel in such proceeding. The affected Indemnitee shall cooperate with the indemnifying Party and its legal representatives in the investigation of any action, claim or liability covered by this Article 12. The Indemnitee shall not, except at its own cost, voluntarily make any payment or incur any expense with respect to any claim or suit without the prior written consent of the indemnifying Party, which such Party shall not be required to give.

ARTICLE 13
TERM AND TERMINATION

13.1 **Term**. The term of this Agreement shall commence on the Effective Date, and shall continue in full force and effect on a country-by-country and Product-by-Product basis until Merck has no remaining royalty payment obligations in such country with respect to such Products, unless terminated earlier as provided in this Article 13 (the "**Term**").

13.2 **Termination for Breach**. Either Party to this Agreement may terminate this Agreement in the event the other Party hereto shall have materially breached or defaulted in the performance of any of its material obligations hereunder, and such default shall have continued for [***] days after written notice thereof was provided to the breaching Party by the non-breaching Party. Any termination shall become effective at the end of such [***] day period unless the breaching Party has cured any such breach or default prior to the expiration of the [***] day period. Notwithstanding the foregoing, (i) in the event of a failure to pay any amount due hereunder, such default may be the basis of termination [***] days following the date that notice of such default was provided to the breaching Party if such default is not cured within such [***] day period; and (ii) in the event of a dispute between the Parties as to whether a breach has occurred, [***]

13.3 **Permissive Termination by Merck**. At any time after [***] months after the Effective Date, Merck shall have the right to terminate this Agreement, without cause, upon [***] days prior written notice.

13.4 **Termination For Bankruptcy**. Either Party hereto shall have the right to terminate this Agreement forthwith by written notice to the other Party (i) if the other Party is declared insolvent or bankrupt by a court of competent jurisdiction, (ii) if a voluntary or involuntary petition in bankruptcy is filed in any court of competent jurisdiction against the other Party and such petition is not dismissed within [***] days after filing, (iii) if the other Party shall make or execute an assignment of substantially all of its assets for the benefit of creditors, or (iv) substantially all of the assets of such other Party are seized or attached and not released within [***] days thereafter.

13.5 **Effect of Expiration or Termination**.

13.5.1 **Accrued Rights and Obligations**. Termination of this Agreement for any reason shall not release either Party hereto from any liability which, at the time of such termination, has already accrued to the other Party or which is attributable to a period prior to such termination nor preclude either Party from pursuing any rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement.

13.5.2 **Survival**.

(a) In the event of expiration or termination of this Agreement for any reason, other than termination under [***], the following shall survive: [***].

Any responsibility of Merck [***] shall survive. The Research Program shall terminate upon any termination or expiration of this Agreement. In addition, terms and conditions shall survive as further described in this Section 13.5 below. Except as otherwise expressly provided in this Article 13, the licenses, terms and conditions of this Agreement shall terminate.

(b) Notwithstanding anything to the contrary, in the event of termination of this Agreement under [***] but other than this Section 13.5.2(b) shall be considered [***] in the same manner as if this Agreement had [***] by the Parties hereto. For clarity, but without limitation, other than this Section 13.5.2(b), [***].

13.5.3 **Effects of Expiration**. Following expiration of the term of this Agreement with respect to a Product in a country pursuant to Section 13.1, Merck's license under Section 5.1.1, and if Merck exercised the Vaccine Option 5.1.2, shall become perpetual and fully-paid with respect to such Product in such country. In the event of expiration of the Term [***], Merck's licenses under Section 5.1.1 and 5.1.2 (if Merck exercised the Vaccine Option) shall become perpetual and fully-paid with respect to all Products. In addition, the provisions of Sections 5.4 and 5.6 shall survive.

13.5.4 **Effects of Certain Terminations.**

(a) Termination by Acumen for Cause or Merck's Bankruptcy. In the event of termination of this Agreement (i) by Acumen pursuant to Section 13.2 for Merck's material breach or default; or (ii) by Acumen pursuant to Section 13.4; then the terms and conditions in this Section 13.5.4(a) shall apply.

(1) Termination of Licenses and Option. [***].

(2) Retained Products.

(A) If the Agreement is terminated as a result of Merck's material breach, and on the date that Acumen provides Merck with written notice of a material breach, Merck is conducting clinical development or commercial sales of an Antibody Product, Diagnostic Product or Vaccine Product (an "**Existing Product**") and Merck can reasonably demonstrate that its material breach does not substantially diminish the value of Acumen's rights or interests under this Agreement with respect to Existing Product that are not the subject of the material breach, then (1) solely with respect to such Existing Products not the subject of the breach ("**Retained Products**"), (x) Merck shall retain the rights and obligations to continue the development and commercialization of such Retained Product, in accordance with the terms and conditions of this Agreement (including the payment of any milestones and royalties and Articles 4

and 8) in effect prior to termination; and (y) Acumen shall not be entitled to develop or commercialize such Retained Product, and the provisions of Section 13.5.4(a)(1) shall not apply to such Retained Product; and [***]. For clarity, but without limitation, it is understood that, subject to any tolling of the cure period pursuant to Section 13.2, [***].

(B) If Merck has [***] for any Retained Product in any country in the Territory, before Acumen provides written notice of a material breach and such breach does not relate to Merck's development or commercialization of such Retained Product in such country, then Merck shall retain its rights to develop and commercialize such Retained Product in such country in accordance with the terms and conditions of this Agreement (including the payment of any milestones and royalties and Articles 4 and 8) in effect prior to termination.

(3) Use of Joint Inventions and of Products Other than Retained Products.

(A) [***]

(B) [***]

(C) [***].

(4) Other Rights and Obligations.

(A) Upon termination pursuant to this Section 13.5.4(a), [***] ("**Reverted Products**"), in each case to [***]

(B) [***]

(C) If termination occurs after submission of an MAA for a Product, the Parties shall negotiate in good faith the terms upon which Merck [***]

(D) [***]

(E) [***]

(F) [***]

(G) Confidential Information. Merck, and its Affiliates and Sublicensees shall, within [***] days after termination, return or cause to be returned to Acumen all Acumen Confidential Information in tangible form, and all substances, compositions, and other material in any medium, delivered or provided by Acumen; as well as all copies thereof.

(H) Survival. Notwithstanding Section 13.5.2 or any other terms of this Agreement, after any termination of the type described in Section 13.5.4(a) above, (i) [***] shall additionally survive; (ii) [***] shall additionally survive, (iii) [***]; (v) the remainder of recoveries, after reimbursement of costs and expenses, shall be allocated [***] to Acumen and [***] to Merck under Section 9.3.2(b); (vi) Acumen's right under [***] to licensees for Product in the Therapeutic Field and Diagnostic Field; and (vii) [***].

(5) Safety Concerns. Notwithstanding anything in this Section 13.5.4(a), under no circumstances will Acumen be permitted in any country to further develop in humans, or market for human consumption, a particular ADDL Antibody, a particular ADDL Antigen or a particular Product that has been discontinued by Merck if Merck reasonably believes such Product is not safe for use in the Treatment of humans, and the provisions of Sections 13.5.4(a)(3) and (4) shall not apply to such ADDL Antibody, ADDL Antigen, or Product.

(6) Vaccine Products. If the Vaccine Option was exercised, then the effects of termination with respect to Vaccine Products shall be the same as set forth with respect to Antibody Products in Section 13.5.4(a)(2) and (5), [***] and the rights described in Section 13.5.4(a)(3) and (4) shall be deemed to extend to Vaccine Products [***].

(7) Diagnostic Products. The effects of termination with respect to Diagnostic Products shall be the same as set forth with respect to Antibody Products in Section 13.5.4(a)(2) and (5), [***] and the rights described in Section 13.5.4(a)(3) and (4) shall be deemed to extend to Diagnostic Products [***].

(b) Termination by Merck Pursuant to Section 13.3. In the event of termination of this Agreement by Merck pursuant to [***] the terms and conditions in Section 13.5.4(a) shall apply (including without limitation Section 13.5.4(a)(4)(A)), provided, however, that the provisions of Section 13.5.4(a)(2) relating to Retained Products shall not apply, and in addition, the provisions of Section 13.5.4(b)(1) and (2) below shall apply. In the event of termination of this Agreement by [***], then the provisions of Section 13.5.4(a)(2)-(6) shall not apply, and the provisions of Section 13.5.4(b)(1), (2) and (3) shall apply.

(1) [***]

(2) Royalties. In consideration of the rights and licenses in this Section 13.5.4(b), Acumen shall pay to Merck a royalty on the Net Sales from sales of the Reverted Products by Acumen, or its Affiliate or Sublicensee, at a rate determined by the following schedule based upon the development that must be completed or reinitiated by Acumen in order to further develop and commercialize the Reverted Product (determined on a Product by Product basis) except that the royalty applicable to Diagnostic Products shall be as set forth in Section 13.5.4(b)(5):

Reversion Stage	**Maximum Royalty**
[***]	[***]
[***]	[***]
[***]	[***]

Acumen shall have the right to offset against the royalties payable under this Section 13.5.4(b)(2) [***] of the royalties that Acumen pays to third parties for the making, use, sale, offer for sale, or import of the Reverted Products; provided that such royalties shall not be reduced by more than [***]. For purposes of the royalties payable under this Section 13.5.4(b)(2), Sections 6.7.7, 6.7.9, 6.8, and 6.9 shall apply for the benefit of Acumen in the same manner as the applied for the benefit of Merck. Royalties under this Section 13.5.4(b)(2) shall apply only for so long as the Reverted Product would infringe a Valid Patent Claim in the country of sale. It is understood that for purposes of determining the applicable royalty, the "**Reversion Stage**" shall be based on the earlier of [***].

(3) Termination of Development and Commercialization of Product. If the termination is by Merck under Section 13.3, then Merck and its Affiliates, and Sublicensees (including distributors) shall discontinue all development and sales of Antibody Product immediately upon termination, shall not thereafter develop or sell Antibody Products, and shall additionally discontinue at such time making any representation with respect to any and all Antibody

Products that they are a licensee of or distributor for Acumen or are authorized to market or sell Antibody Products; and development and commercialization after providing notice of termination under Section 13.3 shall be limited to transitioning Antibody Products to Acumen or its designee in accordance with this Section 13.5.4(a) above.

(4) Vaccine Products. If the termination is by Merck under Section 13.3, then the effects of termination with respect to Vaccine Products shall be the same as set forth with respect to Antibody Products in Section 13.5.4(b), including (1), (2), and (3).

(5) Diagnostic Products. If the termination is by Merck under Section 13.3, then the effects of termination with respect to Diagnostic Products shall be the same as set forth with respect to Antibody Products in Section 13.5.4(b), including (1), (2) and (3), provided that the maximum royalty shall not exceeded [***] the royalties in Section 6.7.1(b).

(c) Termination by Merck for Cause or Acumen's Bankruptcy. In the event of termination of this Agreement by Merck pursuant to Section 13.2 for Acumen's material breach or default or pursuant to Section 13.4 for Acumen's bankruptcy; then the terms and conditions in this Section 13.5.4(c) shall apply.

(1) Licenses. [***] provided, however, such licenses and the Vaccine Option shall continue to be subject to Merck's payment obligations pursuant to Section 6.3 (license fee) Sections 5.3 (payments related to Vaccine Option), 6.4 and 6.5 (milestone payment) and 6.7 (royalties).

(2) [***]

(3) Survival. In addition to the survival set forth in Section 13.5.2, the following provisions shall survive: [***]. [***]. With respect to damages caused by Acumen's breach which have been awarded to Merck by an arbitrator under Section 14.1, Merck shall be entitled to offset such damages against the amounts payable by Merck to Acumen under this Agreement.

(4) Use of Joint Inventions, ADDL Antibodies and ADDL Antigens.

(A) [***]

(B) [***]

(C) [***]

(5) Other Rights and Obligations. In addition to the other provisions set forth in Section 13.5.4(c):

(A) Acumen will disclose to Merck all Acumen Know-How in Acumen's possession that Acumen can rightfully disclose without violating any existing rights of any Third Party, generated by Acumen in the course of performing the Research Program, and that was not previously disclosed to Merck;

(B) Acumen will cooperate with reasonable requests by Merck, and use reasonable efforts, to achieve a smooth transition of any and all Research Program-related responsibilities to Merck.

(C) Confidential Information. Acumen shall, within [***] days after termination, return or cause to be returned to Merck all Merck Confidential Information in tangible form, and all substances, compositions, and other material in any medium, delivered or provided by Merck; as well as all copies thereof.

ARTICLE 14
DISPUTE RESOLUTION

14.1 **General**.

14.1.1 The Parties shall negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim as to the interpretation, effect, breach, termination of, or performance under, this Agreement, including, if necessary, a meeting between the Chief Executive Officer of Acumen and [***]. If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim that is not an Excluded Claim shall be finally resolved by binding arbitration in accordance with the Comprehensive Arbitration Rules and Procedures of the Judicial Arbitration and Mediation Services ("**JAMS**"), and judgment on the arbitration award may be entered in any court having jurisdiction thereof.

14.1.2 The arbitration shall be conducted by a panel of three persons experienced in the bio-pharmaceutical business: within [***] days after initiation of arbitration, each Party shall select one person to act as arbitrator and the two Party-selected arbitrators shall select a third arbitrator within [***] days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be appointed by JAMS. The place of arbitration shall be [***] and all proceedings and communications shall be in English.

14.1.3 Either Party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Party also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending the arbitration award. Each Party shall bear its own costs and expenses and attorneys' fees and an equal share of the arbitrators' and any administrative fees of arbitration.

14.1.4 Except to the extent necessary to confirm an award or as may be required by law, and subject to the exceptions for disclosure of Confidential Information under Sections 10.1, 10.2 and 10.3, neither a Party nor an arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties. In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable Illinois statute of limitations.

14.1.5 The parties further agree that any payments made pursuant to this Agreement pending resolution of the dispute shall be refunded if an arbitrator or court determines that such payments are not due.

14.1.6 As used in this Section 14.1, the term "**Excluded Claim**" shall mean a dispute, controversy or claim that concerns [***]

14.2 **Expedited Arbitration of Certain Disputes**. In the event that the Parties are unable to reach agreement regarding: [***], and the Parties have not resolved such dispute through good faith negotiations, such dispute will be resolved by binding arbitration in the manner described in Section 14.1 above, except modified as follows. Notwithstanding Section 14.1 or the rules described in Section 14.1 above, the following provisions shall apply:

14.2.1 [***]

14.2.2 [***]

14.3 **Injunctive Relief**. Nothing in this Article 14 shall be construed to prohibit either Party from seeking preliminary or permanent injunctive relief, restraining order or degree of specific performance in any court of competent jurisdiction at any time, to the extent not prohibited by this Agreement. For avoidance of doubt, any such equitable remedies provided under this Article 14 shall be cumulative and not exclusive and are in addition to any other remedies, which either Party may have under this Agreement or applicable law.

ARTICLE 15
MISCELLANEOUS

15.1 **Governing Laws**. This Agreement and any dispute arising from the construction, performance or breach hereof shall be governed by and construed, and enforced in accordance with, the laws of the state of [***] and the patent laws of the United States, without reference to conflicts of laws principles. The UN Convention on the International Sale of Goods or any another similar conventions or treaties shall not apply to this Agreement or activities in connection with this Agreement.

15.2 **Waiver**. It is agreed that no waiver by either Party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

15.3 **Assignment**. This Agreement shall not be assignable by either Party, including through a Change of Control, without the prior written consent of the other Party hereto, except as set forth in this Section 15.3, and any attempted assignment in violation of this Section 15.3 shall be void.

15.3.1 [***]

15.3.2 [***]

15.3.3 [***]

15.3.4 Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement.

15.4 **Independent Contractors**. The relationship of the Parties hereto is that of independent contractors. The Parties hereto are not deemed to be agents, partners or joint venturers of the others for any purpose as a result of this Agreement or the transactions contemplated thereby.

15.5 **Compliance with Laws**. In exercising their rights and performing their obligations under this Agreement, the Parties shall fully comply in all material respects with the requirements of any and all applicable laws, regulations, rules and orders of any governmental body having jurisdiction over the exercise of such rights or performance of such obligations including, without limitation, those applicable to the discovery, development, manufacture, distribution, import and export and sale of Products pursuant to this Agreement.

15.6 **Patent Marking**. Merck agrees to mark, and to ensure that its Affiliates and Sublicensees mark, all Products sold pursuant to this Agreement in accordance with the applicable statute or regulations relating to patent marking in the country or countries of manufacture, use, import or sale thereof.

15.7 **Notices**. All notices, requests and other communications hereunder shall be in writing and shall be personally delivered, by registered or certified mail, return receipt requested, postage prepaid, or by a recognized overnight courier, or by facsimile with written confirmation by one of the other methods set forth above, in each case to the respective address specified below, or such other address as may be specified in writing to the other Party hereto and shall be deemed to have been given upon receipt:

Acumen:	Acumen Pharmaceuticals, Inc. 385 Oyster Point Blvd., Suite 9A South San Francisco, CA 94080 Attn: Chief Executive Officer Fax: (415) 777-4363
With a copy to:	Cooley Godward, LLP 5 Palo Alto Square 3000 El Camino Real Palo Alto, CA 94306 Attn: Robert L. Jones, Esq. Fax: (650) 849-7400
Merck:	[***] [***]
With a copy to:	[***] [***]

15.8 **Severability**. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect to the fullest extent permitted by law without said provision, and the Parties shall amend the Agreement to the extent feasible to lawfully include the substance of the excluded term to as fully as possible realize the intent of the Parties and their commercial

bargain. If a Party seeks to avoid a provision of this Agreement by asserting that such provision is invalid, illegal or otherwise unenforceable, the other Party shall have the right to terminate this Agreement upon sixty (60) days' prior written notice to the asserting Party, unless such assertion is eliminated and cured within such sixty (60) day period. If Merck has sought to so avoid a provision of this Agreement, such termination shall be deemed a termination by Acumen for breach by Merck under Section 13.2 above, and if Acumen has sought such an avoidance, such termination shall be deemed a termination by Merck for breach by Acumen under Section 13.2 above, in each case not subject to mediation as described therein or in Section 14.3.

15.9 **Advice of Counsel**. Acumen and Merck have each consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one Party or another and will be construed accordingly.

15.10 **Performance Warranty**. Each Party hereby warrants and guarantees the performance of any and all rights and obligations of this Agreement by its Affiliates and Sublicensees.

15.11 **Force Majeure**. Neither Party shall lose any rights hereunder or be liable to the other Party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting Party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence, intentional conduct or misconduct of the non-performing Party and such Party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a Party be required to settle any labor dispute or disturbance.

15.12 **Complete Agreement**. This Agreement with its Exhibits, constitutes the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and all prior and contemporaneous agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect. Any confidential disclosures made prior to the Effective Date pursuant to a non-disclosure agreement shall be deemed to be Confidential Information disclosed pursuant to the confidentiality and non-use provisions of this Agreement. No amendment or change hereof or addition hereto shall be effective or binding on either of the Parties hereto unless reduced to writing and executed by the respective duly authorized representatives of Acumen and Merck.

15.13 **Headings**. The captions to the several Sections hereof are not a part of this Agreement, but are included merely for convenience of reference and shall not affect its meaning or interpretation.

15.14 **Counterparts**. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same agreement.

15.15 **Bankruptcy**. All rights and licenses granted under or pursuant to this Agreement by each Party as a licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11, U.S. Code (the "**Bankruptcy Code**"), licenses of rights to "intellectual property" as

defined under section 101(35A) of the Bankruptcy Code. The Parties agree that each licensee of such rights under this Agreement, shall retain and may fully exercise all rights and elections it would have in the case of a licensor bankruptcy under the Bankruptcy Code. Each Party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other Party.

[*Remainder of page intentionally left blank*]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed by their authorized representatives and delivered in duplicate originals as of the Effective Date.

MERCK & CO., INC.	ACUMEN PHARMACEUTICALS, INC.
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

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Exhibit 1.3

ACUMEN PATENT RIGHTS

Patent Application No. Patent No.	Filing Date	Country	Title
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
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[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
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[***]	[***]	[***]	[***]
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Exhibit 1.7

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Exhibit 1.40

NORTHWESTERN LICENSE

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Exhibit 1.57

USC LICENSE

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EXHIBIT 3.2

RESEARCH PLAN OUTLINE

[***]

[***]

1) [***]
2) [***]
3) [***]
4) [***]
5) [***]
6) [***]
7) [***]
8) [***]

[***]

1) [***]
2) [***]
3) [***]
4) [***]
5) [***]

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1) [***]
2) [***]

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1) [***]
2) [***]
3) [***]
4) [***]
5) [***]

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EXHIBIT 3.3

MERCK RESEARCH DATA PACKAGE

[***]

[***]
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[***]

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Exhibit 10.3

PRESS RELEASE

Acumen and Merck enter into Alzheimer's Collaboration

Acumen Pharmaceuticals announced today it has entered into a research collaboration and license agreement with Merck & Co., Inc. (NYSE: MRK) to research and develop disease-modifying therapeutic drugs for Alzheimer's disease and other memory related disorders. Merck has acquired the worldwide exclusive rights to Acumen's ADDL technology for monoclonal antibodies and vaccines.

Under the terms of the agreement, Acumen will receive an upfront payment and annual research funding, and will be eligible to receive $48 million in research, development and approval milestones for the first antibody product that is commercialized. Acumen will also be eligible to receive equivalent milestone payments for the research, development and approval of vaccine products. Merck will fund research and development and will have exclusive responsibility for commercializing collaboration products. Merck will pay to Acumen royalties on the sale of products from the collaboration and milestones payments for the attainment of certain sales levels.

ADDLs (amyloid-derived diffusible ligands) are soluble oligomeric assemblies of amyloid beta 1-42 protein. They are increasingly implicated as the molecular structures that cause Alzheimer's disease and trigger early memory-related disorders. ADDLs are a validated target, and antibodies targeting ADDLs have prevented and even reversed memory deficits in animal models. Acumen's founders at Northwestern University and the University of Southern California discovered ADDLs, and they have worked for the past seven years to elucidate the ADDL mechanism and the direct involvement of ADDLs in Alzheimer's disease.

"This is a significant day in the battle against Alzheimer's," said David Summa, President & CEO of Acumen. "It marks the shift from research on ADDLs and how they operate in Alzheimer's disease, to the development of effective therapeutic and preventative drugs. This collaboration will target the development and commercialization of drugs that stop and prevent Alzheimer's disease, and even reverse lost memory function, extending far beyond today's drugs that only provide modest symptomatic relief," he added.

"Acumen is extraordinarily pleased to partner with the scientific team at Merck. They are the hallmark of scientific excellence in pharmaceutical R & D, and we have come to know Merck as a highly professional organization. They respect their partners and they know how to create a win for patients, a win for their shareholders and a win for their partners," said Dr. Grant Krafft, Chairman and Chief Science Officer of Acumen, and company co-founder.

"Merck recognizes Acumen's leadership in the field of ADDL research, and we are pleased to enter into this collaboration to discover and develop breakthrough medicines for what is a significant unmet medical need, said Mervyn Turner, Ph.D., Senior Vice President Worldwide Licensing and External Research for Merck."

About Acumen

Acumen Pharmaceuticals Inc. www.acumenpharm.com is a privately held, pre-clinical biotech company with operations in San Francisco and Chicago. The company is focused on developing the first effective therapeutics and diagnostics for Alzheimer's disease and other memory-related disorders. Founded in 1996, Acumen owns or has licensed the critical patents underlying the ADDL mechanism now widely believed to cause Alzheimer's disease. In addition to an ELISA-based diagnostic, Acumen has several therapeutic approaches to stop ADDL-related diseases.

Acumen Contact:
David W. Summa
Chief Executive Officer
Tel: 415-281-1392
info@acumenpharm.com

ACUMEN PHARMACEUTICALS, INC.
2021 EQUITY INCENTIVE PLAN

Adopted by the Board of Directors: June 22, 2021
Approved by the Stockholders: June 22, 2021

TABLE OF CONTENTS

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the Effective Date, (i) no additional awards may be granted under the Prior Plan; (ii) the Prior Plan's Available Reserve plus any Returning Shares will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding awards granted under the Prior Plan will remain subject to the terms of the Prior Plan (except to the extent such outstanding awards result in Returning Shares that become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.

(b) Plan Purpose. The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) Adoption Date; Effective Date. The Plan will come into existence on the Adoption Date, but no Award may be granted prior to the Effective Date.

2. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to adjustment in accordance with Section 2(c) and any adjustments as necessary to implement any Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed the sum of: (i) 3,550,000 new shares, plus (ii) the Prior Plan's Available Reserve; plus, (iii) the number of Returning Shares, if any, as such shares become available from time to time. In addition, subject to any adjustments as necessary to implement any Capitalization Adjustments, such aggregate number of shares of Common Stock will automatically increase on January 1 of each year for a period of ten years commencing on January 1, 2022 and ending on (and including) January 1, 2031, in an amount equal to five percent (5%) of the total number of shares of Common Stock outstanding on December 31 of the preceding year; provided, however that the Board may act prior to January 1st of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock.

(b) Aggregate Incentive Stock Option Limit. Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustments as necessary to implement any Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 12,000,000 shares.

(c) Share Reserve Operation.

(i) Limit Applies to Common Stock Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued

pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(ii) Actions that Do Not Constitute Issuance of Common Stock and Do Not Reduce Share Reserve. The following actions do not result in an issuance of shares under the Plan and accordingly do not reduce the number of shares subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued; (2) the settlement of any portion of an Award in cash (*i.e.*, the Participant receives cash rather than Common Stock); (3) the withholding of shares that would otherwise be issued by the Company to satisfy the exercise, strike or purchase price of an Award; or (4) the withholding of shares that would otherwise be issued by the Company to satisfy a tax withholding obligation in connection with an Award.

(iii) Reversion of Previously Issued Shares of Common Stock to Share Reserve. The following shares of Common Stock previously issued pursuant to an Award and accordingly initially deducted from the Share Reserve will be added back to the Share Reserve and again become available for issuance under the Plan: (1) any shares that are forfeited back to or repurchased by the Company because of a failure to meet a contingency or condition required for the vesting of such shares; (2) any shares that are reacquired by the Company to satisfy the exercise, strike or purchase price of an Award; and (3) any shares that are reacquired by the Company to satisfy a tax withholding obligation in connection with an Award.

3. ELIGIBILITY AND LIMITATIONS.

(a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.

(b) Specific Award Limitations.

(i) Limitations on Incentive Stock Option Recipients. Incentive Stock Options may be granted only to Employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and (f) of the Code).

(ii) Incentive Stock Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds $100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (i) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (ii) the Option is not exercisable after the expiration of five years from the date of grant of such Option.

(iv) Limitations on Nonstatutory Stock Options and SARs. Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company (as such term is defined in Rule 405) unless the stock underlying such Awards is treated as "service recipient stock" under Section 409A because the Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Awards otherwise comply with the distribution requirements of Section 409A.

(c) Aggregate Incentive Stock Option Limit. The aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is the number of shares specified in Section 2(b).

(d) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any period commencing on the date of the Company's Annual Meeting of Stockholders for a particular year and ending on the day immediately prior to the date of the Company's Annual Meeting of Stockholders for the next subsequent year (the "***Annual Period***"), including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed (i) $750,000 in total value or (ii) in the event such Non-Employee Director is first appointed or elected to the Board during such Annual Period, $1,000,000 in total value, in each case calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes. The limitations in this Section 3(d) shall apply commencing with the Annual Period that begins on the Company's first Annual Meeting of Stockholders following the Effective Date.

4. OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; provided, however, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; provided, however, that each Option Agreement and SAR Agreement will conform (through incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) Term. Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) Exercise or Strike Price. Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.

(c) Exercise Procedure and Payment of Exercise Price for Options. In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a "cashless exercise" program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) at the time of exercise the Common Stock is publicly traded, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) Exercise Procedure and Payment of Appreciation Distribution for SARs. In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) Transferability. Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided*, *further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; provided, however, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant's request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) Vesting. The Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

(g) Termination of Continuous Service for Cause. Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion

(including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than Cause. Subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period (generally without limitation as to the maximum permitted number of extensions); provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(j) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Corporate Transaction in which such Award is not assumed, continued or substituted, (iii) a Change in Control, or (iv) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares. Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. AWARDS OTHER THAN OPTIONS AND STOCK APPRECIATION RIGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board; provided, however, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

(1) RSAs: To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) RSUs: An RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of an RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Award Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) Consideration.

(1) RSA: A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of consideration (including future services) as the Board may determine and permissible under Applicable Law.

(2) RSU: Unless otherwise determined by the Board at the time of grant, an RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.

(iii) Vesting. The Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iv) Termination of Continuous Service. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (i) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and (ii) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(v) Dividends and Dividend Equivalents. Dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to a Restricted Stock Award or RSU Award, as determined by the Board and specified in the Award Agreement.

(vi) Settlement of RSU Awards. An RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) Performance Awards. With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board.

(c) Other Awards. Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value at the time of grant) may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan and the maximum number of shares by which the Share Reserve may annually increase pursuant to Section 2(a); (ii) the class(es) and maximum number of shares that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(b); and (iii) the class(es) and number of securities and exercise price, strike price or purchase price of Common Stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock shall be created in order to implement any Capitalization Adjustment. The Board shall determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that might be created by the adjustments referred to in the preceding provisions of this Section.

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service, provided, however, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of an Award.

(i) Awards May Be Assumed. In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar award for only a portion of an Award, or may choose to assume or continue the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) Awards Held by Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the "***Current Participants***"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Corporate Transaction (contingent upon the effectiveness of the Corporate Transaction) as the Board determines (or, if the Board does not determine such a date, to the date that is five (5) days prior to the effective time of the Corporate Transaction), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Corporate Transaction). With respect to the vesting of Performance Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and that have multiple vesting levels depending on the level of performance, unless otherwise provided in the Award Agreement or unless otherwise provided by the Board, the vesting of such Performance Awards will accelerate at 100% of the target level upon the occurrence of the Corporate Transaction in which the Awards are not assumed in accordance with Section 6(c)(i). With respect to the vesting of Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Corporate Transaction or such later date as required by Section 409A of the Code.

(iii) Awards Held by Persons other than Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, such Awards will terminate if not exercised (if applicable) prior to the occurrence of the Corporate Transaction; provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(iv) Payment for Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event an Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (2) any exercise price payable by such holder in connection with such exercise.

(d) Appointment of Stockholder Representative. As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.

(e) No Restriction on Right to Undertake Transactions. The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in subsection (c) below.

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; (6) the Fair Market Value applicable to an Award; and (7) the terms of any Performance Award that is not valued in whole or in part by reference to, or otherwise based on, the Common Stock, including the amount of cash payment or other property that may be earned and the timing of payment.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Corporate Transaction, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vii) To amend the Plan in any respect the Board deems necessary or advisable; provided, however, that stockholder approval will be required for any amendment to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be Materially Impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that, a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant foreign jurisdiction).

(xii) To effect, at any time and from time to time, subject to the consent of any Participant whose Award is Materially Impaired by such action, (1) the reduction of the exercise price (or strike price) of any outstanding Option or SAR; (2) the cancellation of any outstanding Option or SAR and the grant in substitution therefor of (A) a new Option, SAR, Restricted Stock Award, RSU Award or Other Award, under the Plan or another equity plan of the Company, covering the same or a different number of shares of Common Stock, (B) cash and/or (C) other valuable consideration (as determined by the Board); or (3) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revest in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Delegation to an Officer. The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law, other types of Awards) and, to the extent permitted by Applicable Law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; provided, however, that the resolutions or charter adopted by the Board or any Committee evidencing such delegation will specify the total number of shares of Common Stock

that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the applicable form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

8. TAX WITHHOLDING

(a) Withholding Authorization. As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate provision for (including), any sums required to satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.

(b) Satisfaction of Withholding Obligation. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local and/or foreign tax or social insurance withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a “cashless exercise” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board; or (vi) by such other method as may be set forth in the Award Agreement.

(c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law the Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other

impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise price or strike price is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

(d) Withholding Indemnification. As a condition to accepting an Award under the Plan, in the event that the amount of the Company's and/or its Affiliate's withholding obligation in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount.

9. MISCELLANEOUS.

(a) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(b) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(c) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(d) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(e) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of

such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(f) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(g) Execution of Additional Documents. As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(h) Electronic Delivery and Participation. Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award, the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(i) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law and any clawback policy that the Company otherwise adopts, to the extent applicable and permissible under Applicable Law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or

property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntary terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(j) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(k) Transfer or Assignment of Awards; Issued Shares. Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock Awards and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(l) Effect on Other Employee Benefit Plans. The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(m) Deferrals. To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals by will be made in accordance with the requirements of Section 409A.

(n) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date

that is six months and one day following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(o) CHOICE OF LAW. This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

10. COVENANTS OF THE COMPANY.

(a) Compliance with Law. The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. ADDITIONAL RULES FOR AWARDS SUBJECT TO SECTION 409A.

(a) Application. Unless the provisions of this Section of the Plan are expressly superseded by the provisions in the form of Award Agreement, the provisions of this Section shall apply and shall supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) Non-Exempt Awards Subject to Non-Exempt Severance Arrangements. To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of this subsection (b) apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant's Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date, or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant's Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt

Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant's Separation from Service in accordance with the terms of the Non-Exempt Severance Arrangement, but in no event later than the 60th day that follows the date of the Participant's Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of such Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant's Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award shall not accelerate the issuance date of the shares, but the shares shall instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant's Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under Treasury Regulations Section 1.409A-3(a)(4).

(c) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Employees and Consultants. The provisions of this subsection (c) shall apply and shall supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Corporate Transaction if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) Vested Non-Exempt Awards. The following provisions shall apply to any Vested Non-Exempt Award in connection with a Corporate Transaction:

(1) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change in Control the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control.

(2) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Corporate Transaction.

(ii) Unvested Non-Exempt Awards. The following provisions shall apply to any Unvested Non-Exempt Award unless otherwise determined by the Board pursuant to subsection (e) of this Section.

(1) In the event of a Corporate Transaction, the Acquiring Entity shall assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of any Unvested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Corporate Transaction.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Corporate Transaction, then such Award shall automatically terminate and be forfeited upon the Corporate Transaction with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Corporate Transaction, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in subsection 11(e) below. In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award shall be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Corporate Transaction.

(3) The foregoing treatment shall apply with respect to all Unvested Non-Exempt Awards upon any Corporate Transaction, and regardless of whether or not such Corporate Transaction is also a Section 409A Change in Control.

(d) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Non-Employee Directors. The following provisions of this subsection (d) shall apply and shall supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Corporate Transaction.

(i) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change in Control the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may

provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control pursuant to the preceding provision.

(ii) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of the Non-Exempt Director Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Corporate Transaction.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 11(e) shall apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award shall not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Change in Control or Corporate Transaction, to the extent it is required for compliance with the requirements of Section 409A, the Change in Control or Corporate Transaction event triggering settlement must also constitute a Section 409A Change in Control. To the extent the terms of a Non-Exempt Award provides that it will be settled upon a termination of employment or termination of Continuous Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also constitute a Separation from Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a Separation from Service such Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of the Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iv) The provisions in this subsection (e) for delivery of the shares in respect of the settlement of an RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

12. SEVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. TERMINATION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the date the Plan is approved by the Company's stockholders. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

14. DEFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

(a) "***Acquiring Entity***" means the surviving or acquiring corporation (or its parent company) in connection with a Corporate Transaction.

(b) "***Adoption Date***" means the date the Plan is first approved by the Board or Compensation Committee.

(c) "***Affiliate***" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(d) "***Applicable Law***" means shall mean any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).

(e) "***Award***" means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, an RSU Award, a SAR, a Performance Award or any Other Award).

(f) "***Award Agreement***" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided to a Participant along with the Grant Notice.

(g) "***Board***" means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.

(h) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(i) "***Cause***" has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (ii) such Participant's intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iii) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (iv) such Participant's gross misconduct. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are executive officers of the Company and by the Company's Chief Executive Officer with respect to Participants who are not executive officers of the Company. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(j) "***Change in Control***" or "***Change of Control***" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events; provided, however, to the extent necessary to avoid adverse personal income tax consequences to the Participant in connection with an Award, also constitutes a Section 409A Change in Control:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the "*Subject Person*") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing

more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(iv) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "***Incumbent Board***") cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply.

(k) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(l) "***Committee***" means the Compensation Committee and any other committee of Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.

(m) "***Common Stock***" means the common stock of the Company.

(n) "***Company***" means Acumen Pharmaceuticals, Inc., a Delaware corporation.

(o) "***Compensation Committee***" means the Compensation Committee of the Board.

(p) "***Consultant***" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

(q) "***Continuous Service***" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of Separation from Service.

(r) "***Corporate Transaction***" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Corporate Transaction shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Corporate Transaction

(or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Corporate Transaction or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply, and (C) with respect to any nonqualified deferred compensation that becomes payable on account of the Corporate Transaction, the transaction or event described in clause (i), (ii), (iii) or (iv) also constitute a Section 409A Change in Control if required in order for the payment non to violate Section 409A of the Code.

(s) "***determine***" or "***determined***" means as determined by the Board or the Committee (or its designee) in its sole discretion.

(t) "***Director***" means a member of the Board.

(u) "***Disability***" means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(v) "***Effective Date***" means immediately prior to the IPO Date, provided this Plan is approved by the Company's stockholders prior to the IPO Date.

(w) "***Employee***" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(x) "***Entity***" means a corporation, partnership, limited liability company or other entity.

(y) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(z) "***Exchange Act Person***" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.

(aa) "***Fair Market Value***" means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(bb) "***Governmental Body***" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).

(cc) "***Grant Notice***" means the notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(dd) "***Incentive Stock Option***" means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

(ee) "***IPO Date***" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(ff) "***Materially Impair***" means any amendment to the terms of the Award that materially adversely affects the Participant's rights under the Award. A Participant's rights under an Award will not be deemed to have been Materially Impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights. For example, the following types of amendments to the terms of an Award do not Materially Impair the Participant's rights under the Award: (i) imposition of

reasonable restrictions on the minimum number of shares subject to an Option that may be exercised; (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) to change the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.

(gg) "***Non-Employee Director***" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("***Regulation S-K***")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(hh) "***Non-Exempt Award***" means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, (ii) the terms of any Non-Exempt Severance Arrangement.

(ii) "***Non-Exempt Director Award***" means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(jj) "***Non-Exempt Severance Arrangement***" means a severance arrangement or other agreement between the Participant and the Company that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant's termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder)) ("***Separation from Service***") and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(kk) "***Nonstatutory Stock Option***" means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.

(ll) "***Officer***" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(mm) "***Option***" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(nn) "***Option Agreement***" means a written agreement between the Company and the Optionholder evidencing the terms and conditions of the Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.

(oo) "***Optionholder***" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(pp) "***Other Award***" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).

(qq) "***Other Award Agreement***" means a written agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(rr) "***Own,***" "***Owned,***" "***Owner,***" "***Ownership***" means that a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(ss) "***Participant***" means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(tt) "***Performance Award***" means an Award that may vest or may be exercised or a cash award that may vest or become earned and paid contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b) pursuant to such terms as are approved by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. Performance Awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the Common Stock.

(uu) "***Performance Criteria***" means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: earnings (including earnings per share and net earnings); earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; total stockholder return; return on equity or average stockholder's equity; return on assets, investment, or capital employed; stock price; margin (including gross margin); income (before or after taxes); operating income; operating income after taxes; pre-tax profit; operating cash flow; sales or revenue targets; increases in revenue or product revenue; expenses and cost reduction goals; improvement in or attainment of working capital levels; economic value added (or an equivalent metric); market share; cash flow; cash flow per share; share price performance; debt reduction; customer satisfaction; stockholders' equity; capital expenditures; debt levels; operating profit or net operating profit; workforce diversity; growth of net income or operating income; billings; financing; regulatory milestones; stockholder liquidity; corporate governance and compliance; intellectual property; personnel matters; progress of internal research; progress of partnered programs; partner satisfaction; budget management;

partner or collaborator achievements; internal controls, including those related to the Sarbanes-Oxley Act of 2002; investor relations, analysts and communication; implementation or completion of projects or processes; employee retention; number of users, including unique users; strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); establishing relationships with respect to the marketing, distribution and sale of the Company's products; supply chain achievements; co-development, co-marketing, profit sharing, joint venture or other similar arrangements; individual performance goals; corporate development and planning goals; and other measures of performance selected by the Board or Committee whether or not listed herein.

(vv) "***Performance Goals***" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of Common Stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to expense under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement or the written terms of a Performance Award.

(ww) "***Performance Period***" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(xx) "***Plan***" means this Acumen Pharmaceuticals, Inc. 2021 Equity Incentive Plan, as amended from time to time.

(yy) "***Plan Administrator***" means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company's other equity incentive programs.

(zz) "***Post-Termination Exercise Period***" means the period following termination of a Participant's Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(h).

(aaa) "***Prior Plan***" means the Acumen Pharmaceuticals, Inc. Amended and Restated Stock Performance Plan.

(bbb) "***Prior Plan's Available Reserve***" means the number of shares available for the grant of new awards under the Prior Plan as of the Effective Date.

(ccc) "***Prospectus***" means the document containing the Plan information specified in Section 10(a) of the Securities Act.

(ddd) "***Restricted Stock Award***" or "***RSA***" means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(eee) "***Restricted Stock Award Agreement***" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(fff) "***Returning Shares***" means shares subject to outstanding stock awards granted under the Prior Plan and that following the Effective Date: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares; (D) are withheld or reacquired to satisfy the exercise, strike or purchase price; or (E) are withheld or reacquired to satisfy a tax withholding obligation.

(ggg) "***RSU Award***" or "***RSU***" means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(hhh) "***RSU Award Agreement***" means a written agreement between the Company and a holder of an RSU Award evidencing the terms and conditions of an RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(iii) "***Rule 16b-3***" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(jjj) "***Rule 405***" means Rule 405 promulgated under the Securities Act.

(kkk) "***Section 409A***" means Section 409A of the Code and the regulations and other guidance thereunder.

(lll) "***Section 409A Change in Control***" means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company's assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(mmm) "***Securities Act***" means the Securities Act of 1933, as amended.

(nnn) "***Share Reserve***" means the number of shares available for issuance under the Plan as set forth in Section 2(a).

(ooo) "***Stock Appreciation Right***" or "***SAR***" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.

(ppp) "***SAR Agreement***" means a written agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided to a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan.

(qqq) "***Subsidiary***" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(rrr) "***Ten Percent Stockholder***" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(sss) "***Trading Policy***" means the Company's policy permitting certain individuals to sell Company shares only during certain "window" periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(ttt) "***Unvested Non-Exempt Award***" means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Corporate Transaction.

(uuu) "***Vested Non-Exempt Award***" means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Corporate Transaction.

ACUMEN PHARMACEUTICALS, INC.
STOCK OPTION GRANT NOTICE
(2021 EQUITY INCENTIVE PLAN)

Acumen Pharmaceuticals, Inc. (the "***Company***"), pursuant to its 2021 Equity Incentive Plan (the "***Plan***"), has granted to you ("***Optionholder***") an option to purchase the number of shares of the Common Stock set forth below (the "***Option***"). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares of Common Stock Subject to Option:	_____
Exercise Price (Per Share):	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: [Incentive Stock Option] OR [Nonstatutory Stock Option]

Exercise and Vesting Schedule: Subject to the Optionholder's Continuous Service through each applicable vesting date, the Option will vest as follows:

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the "***Option Agreement***") may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- [If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first exercisable for more than $100,000 in value (measured by exercise price) in any calendar year. Any excess over $100,000 is a Nonstatutory Stock Option.]
- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.

- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

ACUMEN PHARMACEUTICALS, INC.	**OPTIONHOLDER:**
By: _____	By: _____
Signature	Signature
Title: _____	Date: _____
Date: _____	

ATTACHMENTS: Stock Option Agreement, 2021 Equity Incentive Plan, Notice of Exercise

ATTACHMENT I

STOCK OPTION AGREEMENT

ACUMEN PHARMACEUTICALS, INC.
2021 STOCK EQUITY PLAN

STOCK OPTION AGREEMENT

As reflected by your Stock Option Grant Notice ("***Grant Notice***"), Acumen Pharmaceuticals, Inc. (the "***Company***") has granted you an option under its 2021 Equity Incentive Plan (the "***Plan***") to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the "***Option***"). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company's retained rights to terminate your Continuous Service notwithstanding the grant of the Option; and

(c) Section 8 regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(a)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a "cashless exercise" program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan; or

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement as further described in Section 4(c)(iv) of the Plan.

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 2(c). The underwriters of the Company's stock are intended third party beneficiaries of this Section 2(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

3. **TERM**. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

(c) 12 months after the termination of your Continuous Service due to your Disability;

(d) 18 months after your death if you die during your Continuous Service;

(e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,

(f) the Expiration Date indicated in your Grant Notice; or

(g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 3(b) or 3(c) above, the term of your Option shall not expire until the earlier of (i) 18 months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

4. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

5. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

6. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

7. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

8. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the "fair market value" of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

9. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

10. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

11. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2021 EQUITY INCENTIVE PLAN

ATTACHMENT III

NOTICE OF EXERCISE

ACUMEN PHARMACEUTICALS, INC.

(2021 EQUITY INCENTIVE PLAN)

ACUMEN PHARMACEUTICALS, INC.
427 PARK ST.

CHARLOTTESVILLE, VA 22902 Date of Exercise: _____

This constitutes notice to Acumen Pharmaceuticals, Inc. (the "***Company***") that I elect to purchase the below number of shares of Common Stock of the Company (the "***Shares***") by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Grant Notice, Option Agreement or 2021 Equity Incentive Plan (the "***Plan***") shall have the meanings set forth in the Grant Notice, Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Option Agreement and the Plan.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Date of Grant:		
Number of Shares as to which Option is exercised:		
Certificates to be issued in name of:		
Total exercise price:	$ _____	
Cash, check, bank draft or money order delivered herewith:	$ _____	
Value of _____ Shares delivered herewith:	$ _____	
Regulation T Program (cashless exercise)	$ _____	
Value of _____ Shares pursuant to net exercise:	$ _____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Option Agreement, and (iii) if this exercise relates to

an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2241 or any successor or similar rule or regulation) (the "***Lock-Up Period***"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

_____

ACUMEN PHARMACEUTICALS, INC.
STOCK OPTION GRANT NOTICE
(2021 EQUITY INCENTIVE PLAN)

Acumen Pharmaceuticals, Inc. (the "***Company***"), pursuant to its 2021 Equity Incentive Plan (the "***Plan***"), has granted to you ("***Optionholder***") an option to purchase the number of shares of the Common Stock set forth below (the "***Option***"). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Number of Shares of Common Stock Subject to Option:	_____
Exercise Price (Per Share):	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: Nonstatutory Stock Option

Exercise and Vesting Schedule: Subject to the Optionholder's Continuous Service through each applicable vesting date, the Option will vest as follows, subject to the potential vesting acceleration described in Section 2 of the Stock Option Agreement:

[*Initial Grant*][The shares subject to the Option shall vest and become exercisable in a series of [.]successive equal monthly installments measured from the Date of Grant.]

[*Annual Grant*][The shares subject to the Option shall vest and become exercisable at the earlier of (i) the one-year anniversary of the Date of Grant and (ii) the date of the next annual meeting of the stockholders of the Company.]

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the "***Option Agreement***") may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.

- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

ACUMEN PHARMACEUTICALS, INC.

By: _____
Signature

Title: _____

Date: _____

OPTIONHOLDER:

By: _____
Signature

Date: _____

ATTACHMENTS: Stock Option Agreement, 2021 Equity Incentive Plan, Notice of Exercise

ATTACHMENT I

STOCK OPTION AGREEMENT

ACUMEN PHARMACEUTICALS, INC.
2021 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

As reflected by your Stock Option Grant Notice ("***Grant Notice***"), Acumen Pharmaceuticals, Inc. (the "***Company***") has granted you an option under its 2021 Equity Incentive Plan (the "***Plan***") to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the "***Option***"). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company's retained rights to terminate your Continuous Service notwithstanding the grant of the Option; and

(c) Section 8(c) regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING.

(a) Your Option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon the termination of your Continuous Service. Notwithstanding the foregoing, if a Change in Control occurs and your Continuous Service has not terminated as of immediately prior to such Change in Control, then the vesting and exercisability of your Option will be accelerated in full upon such Change in Control.

(b) If any payment or benefit you would receive from the Company or otherwise in connection with a Change in Control or other similar transaction (a "***280G Payment***") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then any such 280G Payment (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 your 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 you. 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***").

Notwithstanding the foregoing, 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 of the Code that would not otherwise be subject to taxes pursuant to Section 409A of the Code, 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 of the Code as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you 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 of the Code shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A of the Code.

Unless you and the Company agree on an alternative accounting 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 of control transaction triggering the Payment 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 of control transaction, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section 2(b) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section 2(b)) 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) in the first paragraph of this Section 2(b), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(a)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a "cashless exercise" program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan; or

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement as further described in Section 4(c)(iv) of the Plan.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

(c) 12 months after the termination of your Continuous Service due to your Disability;

(d) 18 months after your death if you die during your Continuous Service;

(e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,

(f) the Expiration Date indicated in your Grant Notice; or

(g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) eighteen months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

7. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

8. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the "fair market value" of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the "fair market value" of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

9. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

10. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

11. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2021 EQUITY INCENTIVE PLAN

ATTACHMENT III

NOTICE OF EXERCISE

ACUMEN PHARMACEUTICALS, INC.

(2021 EQUITY INCENTIVE PLAN)

NOTICE OF EXERCISE

ACUMEN PHARMACEUTICALS, INC.
427 PARK ST.
CHARLOTTESVILLE, VA 22902

Date of Exercise: _____

This constitutes notice to Acumen Pharmaceuticals, Inc. (the "***Company***") that I elect to purchase the below number of shares of Common Stock of the Company (the "***Shares***") by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Grant Notice, Option Agreement or 2021 Equity Incentive Plan (the "***Plan***") shall have the meanings set forth in the Grant Notice, Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Option Agreement and the Plan.

Type of option:		Nonstatutory
Date of Grant:		
Number of Shares as to which Option is exercised:		
Certificates to be issued in name of:		
Total exercise price:	$	_____
Cash, check, bank draft or money order delivered herewith:	$	_____
Value of _____ Shares delivered herewith:	$	_____
Regulation T Program (cashless exercise)	$	_____
Value of _____ Shares pursuant to net exercise:	$	_____

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan and (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Option Agreement.

Very truly yours,

_____

ACUMEN PHARMACEUTICALS, INC.
RSU AWARD GRANT NOTICE
(2021 EQUITY INCENTIVE PLAN)

Acumen Pharmaceuticals, Inc. (the "***Company***"), has awarded to you (the "***Participant***") the number of restricted stock units specified and on the terms set forth below in consideration of your services (the "***RSU Award***"). Your RSU Award is subject to all of the terms and conditions as set forth herein and in the Company's 2021 Equity Incentive Plan (the "***Plan***") and the Award Agreement (the "***Agreement***"), which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Agreement shall have the meanings set forth in the Plan or the Agreement.

Participant: _____
Date of Grant: _____
Vesting Commencement Date: _____
Number of Restricted Stock Units: _____

Vesting Schedule: [_____].
Notwithstanding the foregoing, vesting shall terminate upon the Participant's termination of Continuous Service.

Issuance Schedule: One share of Common Stock will be issued for each restricted stock unit which vests at the time set forth in Section 5 of the Agreement.

Participant Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The RSU Award is governed by this RSU Award Grant Notice (the "***Grant Notice***"), and the provisions of the Plan and the Agreement, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Agreement (together, the "***RSU Award Agreement***") may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- You have read and are familiar with the provisions of the Plan, the RSU Award Agreement and the Prospectus. In the event of any conflict between the provisions in the RSU Award Agreement, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The RSU Award Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of (i) other equity awards previously granted to you, and (ii) any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this RSU Award.

ACUMEN PHARMACEUTICALS, INC.

By: _____
Signature

Title: _____

Date: _____

PARTICIPANT:

By: _____
Signature

Date: _____

ATTACHMENTS: RSU Award Agreement, 2021 Equity Incentive Plan

ACUMEN PHARMACEUTICALS, INC.
2021 EQUITY INCENTIVE PLAN

AWARD AGREEMENT (RSU AWARD)

As reflected by your Restricted Stock Unit Grant Notice ("***Grant Notice***"), Acumen Pharmaceuticals, Inc. (the "***Company***") has granted you a RSU Award under its 2021 Equity Incentive Plan (the "***Plan***") for the number of restricted stock units as indicated in your Grant Notice (the "***RSU Award***"). The terms of your RSU Award as specified in this Award Agreement for your RSU Award (the "***Agreement***") and the Grant Notice constitute your "***RSU Award Agreement***". Defined terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the same definitions as in the Grant Notice or Plan, as applicable.

The general terms applicable to your RSU Award are as follows:

1. GOVERNING PLAN DOCUMENT. Your RSU Award is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 of the Plan regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your RSU Award;

(b) Section 9(e) of the Plan regarding the Company's retained rights to terminate your Continuous Service notwithstanding the grant of the RSU Award; and

(c) Section 8 of the Plan regarding the tax consequences of your RSU Award.

Your RSU Award is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the RSU Award Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. GRANT OF THE RSU AWARD. This RSU Award represents your right to be issued on a future date the number of shares of the Company's Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice as modified to reflect any Capitalization Adjustment and subject to your satisfaction of the vesting conditions set forth therein (the "***Restricted Stock Units***"). Any additional Restricted Stock Units that become subject to the RSU Award pursuant to Capitalization Adjustments as set forth in the Plan and the provisions of Section 3 below, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units covered by your RSU Award.

3. DIVIDENDS. You shall receive no benefit or adjustment to your RSU Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment as provided in the Plan; provided, however, that this sentence shall not apply with respect to any shares of Common Stock that are delivered to you in connection with your RSU Award after such shares have been delivered to you.

4. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with your RSU Award (the "***Withholding Obligation***") in accordance with the withholding procedures established by the Company. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock in respect of the RSU Award. In the event the Withholding Obligation of the Company arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

5. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation, if any, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an "***Original Issuance Date***."

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:

(i) the Original Issuance Date does not occur (1) during an "open window period" applicable to you, as determined by the Company in accordance with the Company's then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company's policies (a "***10b5-1 Arrangement***")), *and*

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a "same day sale" commitment with a broker-dealer (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

(iii) then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with

Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) To the extent the RSU Award is a Non-Exempt Award, the provisions of Section 11 of the Plan shall apply.

(d) In addition and notwithstanding the foregoing, no shares of Common Stock issuable to you under this Section 5 as a result of the vesting of one or more RSUs will be delivered to you until any filings that may be required pursuant to the Hart-Scott-Rodino ("***HSR***") Act in connection with the issuance of such shares have been filed and any required waiting period under the HSR Act has expired or been terminated (any such filings and/or waiting period required pursuant to HSR, the "***HSR Requirements***"). If the HSR Requirements apply to the issuance of any shares of Common Stock issuable to you under this Section 5 upon vesting of one or more RSUs, such shares will not be issued on the Original Issuance Date and will instead be issued on the first business day on or following the date when all such HSR Requirements are satisfied and when you are permitted to sell shares of Common Stock on an established stock exchange or stock market, as determined by the Company in accordance with the Company's then-effective policy on trading in Company securities. Notwithstanding the foregoing, the issuance date for any shares of Common Stock delayed under this Section 5(d) shall in no event be later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), unless a later issuance date is permitted without incurring adverse tax consequences under Section 409A or other Applicable Laws.

6. **TRANSFERABILITY**. Except as otherwise provided in the Plan, your RSU Award is not transferable, except by will or by the applicable laws of descent and distribution.

7. **CORPORATE TRANSACTION**. Your RSU Award is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

8. **NO LIABILITY FOR TAXES**. As a condition to accepting the RSU Award, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the RSU Award or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the RSU Award and have either done so or knowingly and voluntarily declined to do so.

9. **SEVERABILITY**. If any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

10. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

11. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your RSU Award, including a summary of the applicable federal income tax consequences please see the Prospectus.

ACUMEN PHARMACEUTICALS, INC.

NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

Each member of the Board of Directors (the "***Board***") who is not also serving as an employee of or consultant to Acumen Pharmaceuticals, Inc. (the "***Company***") or any of its subsidiaries (each such member, an "***Eligible Director***") will receive the compensation described in this Non-Employee Director Compensation Policy for his or her Board service upon and following the date of the underwriting agreement between the Company and the underwriters managing the initial public offering of the Company's common stock (the "***Common Stock***"), pursuant to which the Common Stock is priced in such initial public offering (the "***Effective Date***"). An Eligible Director may decline all or any portion of his or her compensation by giving notice to the Company prior to the date cash may be paid or equity awards are to be granted, as the case may be. This policy is effective as of the Effective Date and may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

Annual Cash Compensation

The annual cash compensation amount set forth below is payable to Eligible Directors in equal quarterly installments, payable in arrears on the last day of each fiscal quarter in which the service occurred. If an Eligible Director joins the Board or a committee of the Board at a time other than effective as of the first day of a fiscal quarter, each annual retainer set forth below will be pro-rated based on days served in the applicable fiscal quarter, with the pro-rated amount paid on the last day of the first fiscal quarter in which the Eligible Director provides the service and regular full quarterly payments thereafter. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:
    a. All Eligible Directors: $35,000
    b. Non-Executive Chairman: $30,000
    c. Lead Independent Director: $30,000

2. Annual Committee Chair Service Retainer:
    a. Chair of the Audit Committee: $15,000
    b. Chair of the Compensation Committee: $10,000
    c. Chair of the Nominating and Corporate Governance Committee: $8,000

3. Annual Committee Member Service Retainer (not applicable to Committee Chairs):
    a. Member of the Audit Committee: $7,500
    b. Member of the Compensation Committee: $5,000
    c. Member of the Nominating and Corporate Governance Committee: $4,000

Equity Compensation

The equity compensation set forth below will be granted under the Company's 2021 Equity Incentive Plan (the "***Plan***"), subject to the approval of the Plan by the Company's stockholders. All stock options granted under this policy will be nonstatutory stock options, with an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of the underlying Common Stock on the date of grant, and a term of ten years from the date of grant (subject to earlier termination in connection with a termination of service as provided in the Plan).

1. Initial Grant: For each Eligible Director who is serving on the Board on the Effective Date, or in the case of an Eligible Director who is first elected or appointed to the Board following the Effective Date, on the Effective Date (or upon such Eligible Director's initial election or appointment to the Board, as applicable) or, if such date is not a market trading day, the first market trading day thereafter, the Eligible Director will be automatically, and without further action by the Board or the Compensation Committee of the Board, granted a stock option to purchase 34,000 shares of Common Stock (the "***Initial Grant***"). The shares subject to each Initial Grant will vest in equal monthly installments over a three year period such that the option is fully vested on the third anniversary of the date of grant, subject to the Eligible Director's Continuous Service (as defined in the Plan) through each such vesting date and will vest in full upon a Change in Control (as defined in the Plan).

Annual Grant: On the date of each annual stockholder meeting of the Company held after the Effective Date, each Eligible Director who continues to serve as a non-employee member of the Board following such stockholder meeting will be automatically, and without further action by the Board or the Compensation Committee of the Board, granted a stock option to purchase 17,000 shares of Common Stock (the "***Annual Grant***"). The shares subject to the Annual Grant will vest in full on the earlier of the first anniversary of the date of grant or the next annual stockholder meeting, subject to the Eligible Director's Continuous Service (as defined in the Plan) through such vesting date; provided, further, that the Annual Grant will vest in full upon a Change in Control (as defined in the Plan).

Non-Employee Director Compensation Limit

As provided in the Plan and notwithstanding the foregoing, the aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director (as defined in the Plan) with respect to any period commencing on the date of the Company's annual meeting of stockholders for a particular year and ending on the day immediately prior to the date of the Company's annual meeting of stockholders for the next subsequent year (the "***Annual Period***"), including awards granted under the Plan and cash fees paid by the Company to such Non-Employee Director, will not exceed (1) $750,000 in total value or (2) in the event such Non-Employee Director is first appointed or elected to the Board during such Annual Period, $1,000,000 in total value, in each case calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes. As provided in the Plan, this limitation will apply commencing with the Annual Period that begins on the Company's first Annual Meeting of Stockholders following the effective date of the Plan.

Exhibit 10.4

ACUMEN PHARMACEUTICALS, INC.

2021 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: JUNE 22, 2021
APPROVED BY THE STOCKHOLDERS: JUNE 22, 2021

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan. In addition, the Plan permits the Company to grant a series of Purchase Rights to Eligible Employees that do not meet the requirements of an Employee Stock Purchase Plan.

(b) The Plan includes two components: a 423 Component and a Non-423 Component. The Company intends (but makes no undertaking or representation to maintain) the 423 Component to qualify as an Employee Stock Purchase Plan. The provisions of the 423 Component, accordingly, will be construed in a manner that is consistent with the requirements of Section 423 of the Code. Except as otherwise provided in the Plan or determined by the Board, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

(c) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board or the Committee will administer the Plan. References herein to the Board shall be deemed to refer to the Committee except where context dictates otherwise.

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time (A) which Related Corporations of the Company will be eligible to participate in the Plan, (B) whether such Related Corporations will participate in the 423 Component or the Non-423 Component, and (C) to the extent that the Company makes separate Offerings under the 423 Component, in which Offering the Related Corporations in the 423 Component will participate.

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan with respect to the 423 Component.

(viii) To adopt such rules, procedures and sub-plans as are necessary or appropriate to permit or facilitate participation in the Plan by Employees who are foreign nationals or employed or located outside the United States. Without limiting the generality of, and consistent with, the foregoing, the Board specifically is authorized to adopt rules, procedures, and sub-plans regarding, without limitation, eligibility to participate in the Plan, the definition of eligible "earnings," handling and making of Contributions, establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of share issuances, any of which may vary according to applicable requirements, and which, if applicable to a Related Corporation designated for participation in the Non-423 Component, do not have to comply with the requirements of Section 423 of the Code.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references to the Board in this Plan and in any applicable Offering Document will thereafter be to the Committee or subcommittee, as applicable, except where context dictates otherwise), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 375,000 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on January 1, 2022 and ending on (and including) January 1, 2031, in an amount equal to the lesser of (i) one percent (1%) of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year, and (ii) 800,000 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For the avoidance of doubt, up to the maximum number of shares of Common Stock reserved under this Section 3(a) may be used to satisfy purchases of Common Stock under the 423 Component and any remaining portion of such maximum number of shares may be used to satisfy purchases of Common Stock under the Non-423 Component.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and, with respect to the 423 Component will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b) or as required by Applicable Law, an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code with respect to the 423 Component. The Board may also exclude from participation in the Plan or any Offering Employees who are "highly compensated employees" (within the meaning of Section 423(b)(4)(D) of the Code) of the Company or a Related Corporation or a subset of such highly compensated employees.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "***Offering Date***" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which, when aggregated, exceeds US $25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may (unless prohibited by law) provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

(f) Notwithstanding anything in this Section 5 to the contrary, in the case of an Offering under the Non-423 Component, an Eligible Employee (or group of Eligible Employees) may be excluded from participation in the Plan or an Offering if the Board has determined, in its sole discretion, that participation of such Eligible Employee(s) is not advisable or practical for any reason.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock (rounded down to the nearest whole share) available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:

(i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or

(ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to participate in an Offering and authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where Applicable Law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first practicable payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If required under Applicable Law or if specifically provided in the Offering, in addition to or instead of making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash, check or wire transfer prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute as soon as practicable to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Unless otherwise required by Applicable Law, Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute to such individual as soon as practicable all of his or her accumulated but unused Contributions.

(d) Unless otherwise determined by the Board, a Participant whose employment transfers or whose employment terminates with an immediate rehire (with no break in service) by or between the Company and a Related Corporation that has been designated for participation in the Plan will not be treated as having terminated employment for purposes of participating in the Plan or an Offering; however, if a Participant transfers from an Offering under the 423 Component to an Offering under the Non-423 Component, the exercise of the Participant's Purchase Right will be qualified under the 423 Component only to the extent such exercise complies with Section 423 of the Code. If a Participant transfers from an Offering under the Non-423 Component to an Offering under the 423 Component, the exercise of the Purchase Right will remain non-qualified under the Non-423 Component. The Board may establish different and additional rules governing transfers between separate Offerings within the 423 Component and between Offerings under the 423 Component and Offerings under the Non-423 Component.

(e) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(f) Unless otherwise specified in the Offering or required by Applicable Law, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) Unless otherwise provided in the Offering, if any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such next Offering, in which case such amount will be distributed to such Participant after the final Purchase Date without interest (unless the payment of interest is otherwise required by Applicable Law). If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one (1) whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be distributed in full to such Participant after the final Purchase Date of such Offering without interest (unless the payment of interest is otherwise required by Applicable Law).

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable U.S. federal and state, foreign and other securities, exchange control and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock

are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 27 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, as determined by the Company in its sole discretion, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest (unless the payment of interest is otherwise required by Applicable Law).

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each U.S. federal or state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder unless the Company determines, in its sole discretion, that doing so would cause the Company to incur costs that are unreasonable. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions without interest (unless the payment of interest is otherwise required by Applicable Law) to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or

(ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock (rounded down to the nearest whole share) within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by Applicable Law.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code with respect to the 423 Component or with respect to other Applicable Laws.

Notwithstanding anything in the Plan or any Offering Document to the contrary, the Board will be entitled to: (i) establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars; (ii) permit Contributions in excess of the amount designated by a Participant in order to adjust for mistakes in the Company's processing of properly completed Contribution elections; (iii) establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts withheld from the Participant's Contributions; (iv) amend any outstanding Purchase Rights or clarify any ambiguities regarding the terms of any Offering to enable the Purchase Rights to qualify under and/or comply with Section 423 of the Code with respect to the 423 Component; and (v) establish other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan. The actions of the Board pursuant to this paragraph will not be considered to alter or impair any Purchase Rights granted under an Offering as they are part of the initial terms of each Offering and the Purchase Rights granted under each Offering.

13. TAX QUALIFICATION; TAX WITHHOLDING.

(a) Although the Company may endeavor to (i) qualify a Purchase Right for special tax treatment under the laws of the United States or jurisdictions outside of the United States or (ii) avoid adverse tax treatment, the Company makes no representation to that effect and expressly disavows any covenant to maintain special or to avoid unfavorable tax treatment, notwithstanding anything to the contrary in this Plan. The Company will be unconstrained in its corporate activities without regard to the potential negative tax impact on Participants.

(b) Each Participant will make arrangements, satisfactory to the Company and any applicable Related Corporation, to enable the Company or the Related Corporation to fulfill any withholding obligation for Tax-Related Items. Without limitation to the foregoing, in the Company's sole discretion and subject to Applicable Law, such withholding obligation may be satisfied in whole or in part by (i) withholding from the Participant's salary or any other cash payment due to the Participant from the Company or a Related Corporation; (ii) withholding from the proceeds of the sale of shares of Common Stock acquired under the Plan, either through a voluntary sale or a mandatory sale arranged by the Company; or (iii) any other method deemed acceptable by the Board.

14. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

15. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment, if applicable, or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflicts of laws rules.

(e) If any particular provision of the Plan is found to be invalid or otherwise unenforceable, such provision will not affect the other provisions of the Plan, but the Plan will be construed in all respects as if such invalid provision were omitted.

(f) If any provision of the Plan does not comply with Applicable Law, such provision shall be construed in such a manner as to comply with Applicable Law.

16. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "***423 Component***" means the part of the Plan, which excludes the Non-423 Component, pursuant to which Purchase Rights that satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(b) "***Applicable Law***" means shall mean any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (or under the authority of the NASDAQ Stock Market or the Financial Industry Regulatory Authority).

(c) "***Board***" means the Board of Directors of the Company.

(d) "***Capital Stock***" means each and every class of common stock of the Company, regardless of the number of votes per share.

(e) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(f) "***Code***" means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) "***Committee***" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) "***Common Stock***" means, as of the IPO Date, the common stock of the Company.

(i) "***Company***" means Acumen Pharmaceuticals, Inc., a Delaware corporation.

(j) "***Contributions***" means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(k) "***Corporate Transaction***" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its subsidiaries;

(ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(l) "***Director***" means a member of the Board.

(m) "***Eligible Employee***" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(n) "***Employee***" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(o) "***Employee Stock Purchase Plan***" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.

(p) "***Exchange Act***" means the U.S. Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(q) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with Applicable Laws and in a manner that complies with Section 409A of the Code.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

(r) "***Governmental Body***" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the NASDAQ Stock Market and the Financial Industry Regulatory Authority).

(s) "***IPO Date***" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(t) "***Non-423 Component***" means the part of the Plan, which excludes the 423 Component, pursuant to which Purchase Rights that are not intended to satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(u) "***Offering***" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "***Offering Document***" approved by the Board for that Offering.

(v) "***Offering Date***" means a date selected by the Board for an Offering to commence.

(w) "***Officer***" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(x) "***Participant***" means an Eligible Employee who holds an outstanding Purchase Right.

(y) "***Plan***" means this Acumen Pharmaceuticals, Inc. 2021 Employee Stock Purchase Plan, as amended from time to time, including both the 423 Component and the Non-423 Component.

(z) "***Purchase Date***" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(aa) "***Purchase Period***" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(bb) "***Purchase Right***" means an option to purchase shares of Common Stock granted pursuant to the Plan.

(cc) "***Related Corporation***" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(dd) "***Securities Act***" means the U.S. Securities Act of 1933, as amended.

(ee) "***Tax-Related Items***" means any income tax, social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items arising out of or in relation to a Participant's participation in the Plan, including, but not limited to, the exercise of a Purchase Right and the receipt of shares of Common Stock or the sale or other disposition of shares of Common Stock acquired under the Plan.

(ff) "***Trading Day***" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

Exhibit 10.6

ACUMEN PHARMACEUTICALS, INC.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "***Agreement***") is dated as of _____, and is between Acumen Pharmaceuticals, Inc., a Delaware corporation (the "***Company***"), and _____ ("***Indemnitee***").

RECITALS

A. Indemnitee's service to the Company substantially benefits the Company.

B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.

D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.

E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. Definitions.

(a) A "***Change in Control***" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) is or becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Company's board of directors, and any new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(a)(i), 1(a)(iii) or 1(a)(iv)) whose election by the board of directors or nomination for election by the Company's stockholders was approved

by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Company's board of directors;

(iii) *Corporate Transactions.* The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity;

(iv) *Liquidation.* The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) *Other Events.* Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Securities Exchange Act of 1934, as amended, whether or not the Company is then subject to such reporting requirement.

For purposes of this Section 1(a), the following terms shall have the following meanings:

(1) "***Person***" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Person***" shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(2) "***Beneficial Owner***" shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Beneficial Owner***" shall exclude any Person otherwise becoming a Beneficial Owner by reason of (i) the stockholders of the Company approving a merger of the Company with another entity or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(b) "***Corporate Status***" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(c) "***DGCL***" means the General Corporation Law of the State of Delaware.

(d) "***Disinterested Director***" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) "***Enterprise***" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(f) "***Expenses***" include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedes bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(g) "***Independent Counsel***" means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "***Independent Counsel***" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(h) "***Proceeding***" means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a nonparty witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(i) Reference to "***other enterprises***" shall include employee benefit plans; references to "***fines***" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "***serving at the request of the Company***" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or

involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "***not opposed to the best interests of the Company***" as referred to in this Agreement.

2. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

3. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent permitted by applicable law, if Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, in defense of one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with (a) each successfully resolved claim, issue or matter and (b) any claim, issue or matter related to any such successfully resolved claim, issue or matter. For purposes of this section, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. Indemnification for Expenses of a Witness. To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. Additional Indemnification.

(a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.

(b) For purposes of Section 6(a), the meaning of the phrase "***to the fullest extent permitted by applicable law***" shall include, but not be limited to:

(i) the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

7. Exclusions. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "***Sarbanes-Oxley Act***"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(d) or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8. Advances of Expenses. The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 60 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. Procedures for Notification and Defense of Claim.

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights, except to the extent that such failure or delay materially prejudices the Company.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially-reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, upon the delivery to Indemnitee of written notice of its election to do so. After delivery

of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's counsel to the extent (i) the employment of counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the fees and expenses are non-duplicative and reasonably incurred in connection with Indemnitee's role in the Proceeding despite the Company's assumption of the defense, (iv) the Company is not financially or legally able to perform its indemnification obligations or (v) the Company shall not have retained, or shall not continue to retain, such counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) without the Company's prior written consent, which shall not be unreasonably withheld.

(f) The Company shall not settle any Proceeding (or any part thereof) without Indemnitee's prior written consent, which shall not be unreasonably withheld.

10. Procedures upon Application for Indemnification.

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. The Company shall, as soon as reasonably practicable after receipt of such a request for indemnification, advise the board of directors that Indemnitee has requested indemnification. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case (i) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (ii) if a Change in Control shall not have occurred, (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (B) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by

Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Company's board of directors, by the stockholders of the Company. If it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(b), the Independent Counsel shall be selected as provided in this Section 10(c). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; *provided*, *however*, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 10(a) hereof and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(b) hereof. Upon the due commencement of any judicial proceeding pursuant to Section 12(a) of this Agreement, the Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(d) The Company agrees to pay the reasonable fees and expenses of any Independent Counsel and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

11. Presumptions and Effect of Certain Proceedings.

(a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 10(a) of this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption in connection with the making by such person, persons or entity of any determination contrary to that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 11(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(d) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. Remedies of Indemnitee.

(a) Subject to Section 12(e), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 12(d) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 12(d) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. The Company shall not oppose Indemnitee’s right to seek any such adjudication in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 12 shall be conducted in all respects as a *de novo* trial, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 60 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

13. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the

relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

14. Non-exclusivity. The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's certificate of incorporation or bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. Primary Responsibility. The Company acknowledges that to the extent Indemnitee is serving as a director on the Company's board of directors at the request or direction of a venture capital fund or other entity and/or certain of its affiliates (collectively, the "Secondary Indemnitors"), Indemnitee may have certain rights to indemnification and advancement of expenses provided by such Secondary Indemnitors. The Company agrees that, as between the Company and the Secondary Indemnitors, the Company is primarily responsible for amounts required to be indemnified or advanced under the Company's certificate of incorporation or bylaws or this Agreement and any obligation of the Secondary Indemnitors to provide indemnification or advancement for the same amounts is secondary to those Company obligations. To the extent not in contravention of any insurance policy or policies providing liability or other insurance for the Company or any director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, the Company waives any right of contribution or subrogation against the Secondary Indemnitors with respect to the liabilities for which the Company is primarily responsible under this Section 15. In the event of any payment by the Secondary Indemnitors of amounts otherwise required to be indemnified or advanced by the Company under the Company's certificate of incorporation or bylaws or this Agreement, the Secondary Indemnitors shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee for indemnification or advancement of expenses under the Company's certificate of incorporation or bylaws or this Agreement or, to the extent such subrogation is unavailable and contribution is found to be the applicable remedy, shall have a right of contribution with respect to the amounts paid. The Secondary Indemnitors are express third-party beneficiaries of the terms of this Section 15.

16. No Duplication of Payments. The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

17. Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

18. Subrogation. In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

19. Services to the Company. Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders his or her resignation or is removed from such position. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

20. Duration. This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.

21. Successors. This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators.

22. Severability. Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including

without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

23. Enforcement. The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

24. Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided*, *however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

25. Modification and Waiver. No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

26. Notices. All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address set forth below Indemnitee signature hereto; or

(b) if to the Company, to the attention of the President and Chief Executive Officer of the Company at Acumen Pharmaceuticals, Inc., 427 Park St, Charlottesville, VA 22902, or at such other current address as the Company shall have furnished to Indemnitee, with a copy (which shall not constitute notice) to Darren DeStefano, Cooley LLP, 11951 Freedom Dr # 1500, Reston, VA 20190.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), or (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a

regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid , or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

27. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, Capitol Services, Inc., Dover, Delaware as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

28. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

29. Captions. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(*signature page follows*)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

ACUMEN PHARMACEUTICALS, INC.

_____

(*Signature*)

_____

(*Print name*)

_____

(*Title*)

[*INSERT INDEMNITEE NAME*]

_____

(*Signature*)

_____

(*Print name*)

_____

(*Street address*)

_____

(*City, State and ZIP*)

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated April 9, 2021 (except Note 10 as to which the date is June 23, 2021), in Amendment No. 1 to the Registration Statement (No. 333-256945) and related Prospectus of Acumen Pharmaceuticals, Inc. for the registration of its common stock.

/s/ Ernst & Young LLP

Tysons, Virginia
June 23, 2021

Exhibit 24.2

Acumen Pharmaceuticals, Inc.

Power of Attorney

I hereby appoint Daniel O'Connell and William Matthew Zuga, and each of them, as my true and lawful agents, proxies and attorneys-in-fact, with full power of substitution and resubstitution, to act in my name, place and stead, in any and all capacities, to (i) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of June 24, 2021.

By: /s/ Nathan B. Fountain
Nathan B. Fountain, M.D.