UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

Acumen Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 36-4108129 (I.R.S. Employer Identification No.)

427 Park St.
Charlottesville, VA 22902
(434) 297-1000
(Address of principal executive offices, including zip code)

Acumen Pharmaceuticals, Inc. 2021 Equity Incentive Plan Acumen Pharmaceuticals, Inc. 2021 Employee Stock Purchase Plan (Full titles of the plans)

> Daniel O'Connell Chief Executive Officer Acumen Pharmaceuticals, Inc. 427 Park St. Charlottesville, VA 22902 (434) 297-1000

(Name, address and telephone number, including area code, of agent for service)

Copies to:

Thomas J. Danielski, Esq. Ropes & Gray LLP 800 Boylston Street Boston, MA 02199 (617) 951-7000 Derek Meisner Chief Legal Officer Acumen Pharmaceuticals, Inc. 427 Park St. Charlottesville, VA 22902 (434) 297-1000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or
an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth
company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	\times
		Emerging growth company	\boxtimes

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. 0

EXPLANATORY NOTE REGISTRATION OF ADDITIONAL SHARES

Acumen Pharmaceuticals, Inc. (the "*Registrant*") is filing this Registration Statement on Form S-8 with the Securities and Exchange Commission (the "*Commission*") for the purpose of registering (i) 2,051,253 additional shares of its common stock under the 2021 Equity Incentive Plan (the "*2021 Plan*"), pursuant to the provisions of the 2021 Plan providing for an automatic increase in the number of shares of common stock reserved and available for issuance under the 2021 Plan on January 1, 2023, (ii) 20,143 additional shares of its common stock under the 2021 Plan pursuant to the provisions of the 2021 Plan providing that shares subject to outstanding stock options or other stock awards that were granted under the Registrant's 2013 Amended and Restated Stock Performance Plan (the "*Prior Plan*") that 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 become available for issuance under the 2021 Plan, and (iii) 410,250 additional shares of its common stock under the 2021 Employee Stock Purchase Plan (the "*2021 ESPP*," and together with the 2021 Plan the "*Plans*"), pursuant to the provisions of the 2021 ESPP providing for an automatic increase in the number of shares of common stock reserved and available for issuance under the 2021 ESPP on January 1, 2023. Pursuant to General Instruction E to Form S-8, the Registrant incorporates by reference, except to the extent supplemented, amended or superseded by the information set forth herein, into this Registration Statement the entire contents of its Registration Statements on Form S-8 (File No. 333-257666) filed with the Commission on March 29, 2022.

PART II

INFORMATION REQUIRED IN REGISTRATION STATEMENT

ITEM 8. EXHIBITS

		Incorporated by Reference			
Exhibit Number	Description	Schedule Form	File Number	Exhibit	Filing Date
4.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-40551	3.1	July 7, 2021
4.2	Amended and Restated Bylaws of the Registrant.	8-K	001-40551	3.2	July 7, 2021
5.1*	Opinion of Ropes & Gray LLP.				
23.1*	Consent of Ropes & Gray LLP (included in Exhibit 5.1).				
23.2*	Consent of Ernst & Young, LLP, independent registered public accounting <u>firm.</u>				
24.1*	Power of Attorney (included on the signature page of this Form S-8).				
99.1	2021 Equity Incentive Plan and Forms of Option Grant Notice and Agreement, Exercise Notice, Early Exercise Notice and Restricted Stock Award Notice.	S-1/A	333-256945	10.2	June 24, 2021
99.2	2021 Employee Stock Purchase Plan	S-1/A	333-256945	10.4	June 24, 2021
107*	Filing Fee Table				

^{*} Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and 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 March 28, 2023.

ACUMEN PHARMACEUTICALS, INC.

By: /s/ Daniel O'Connell

Daniel O'Connell Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Daniel O'Connell, William Matthew Zuga and Derek Meisner, and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place or stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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	Chief Executive Officer and Director	March 28, 2023
Daniel O'Connell	(Principal Executive Officer)	
/s/ William Matthew Zuga	Chief Financial Officer and Chief Business Officer	March 28, 2023
William Matthew Zuga	(Principal Financial and Accounting Officer)	
/s/ Kimberlee C. Drapkin	Director	March 28, 2023
Kimberlee C. Drapkin		
/s/ Nathan B. Fountain, M.D.	Director	March 28, 2023
Nathan B. Fountain, M.D.		
/s/ Jeffrey L. Ives, PhD	Director	March 28, 2023
Jeffrey L. Ives, PhD		
/s/ Derrell D. Porter, M.D.	Director	March 28, 2023
Derrell D. Porter, M.D.		
/s/ Sean Stalfort	Director	March 28, 2023
Sean Stalfort		
/s/ Laura Stoppel, PhD	Director	March 28, 2023
Laura Stoppel, PhD		

CALCULATION OF FILING FEE TABLES

Form S-8

Acumen Pharmaceuticals, Inc.

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, \$0.0001 par value per share, reserved for future issuance pursuant to the Registrant's 2021 Equity Incentive Plan	Other(4)	2,071,396(2)	\$3.92 (4)	\$8,119,872.32	.0001102	\$894.81
Equity	Common stock, \$0.0001 par value per share, reserved for future issuance pursuant to the Registrant's 2021 Employee Stock Purchase Plan	Other(5)	410,250 (3)	\$3.92 (5)	\$1,608,180	.0001102	\$177.22
Total Offering Amounts			\$9,728,052.32	_	\$1,072.03		
Total Fees Previously Paid			_	_	_		
Total Fee Offsets			_	_	_		
	Net Fe	ee Due			_	_	\$1,072.03

⁽¹⁾ Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "*Securities Act*"), this Registration Statement shall also cover any additional shares of common stock of Acumen Pharmaceuticals, Inc. (the "*Registrant*") that become issuable under the Registrant's 2021 Equity Incentive Plan (the "*2021 Plan*") and the Registrant's 2021 Employee Stock Purchase Plan (the "*2021 ESPP*") by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of the Registrant's common stock, as applicable.

- Represents (i) 2,051,253 shares of common stock that were added to the shares reserved for future issuance under the 2021 Plan on January 1, 2023, pursuant to an evergreen provision contained in the 2021 Plan and (ii) 20,143 shares of common stock that were added to the shares reserved for future issuance under the 2021 Plan as a result of forfeited options outstanding under the Registrant's 2013 Amended and Restated Stock Performance Plan (the "Prior Plan"). Pursuant to the evergreen provision contained in the 2021 Plan, the number of shares reserved for issuance under the 2021 Plan will automatically increase on January 1 of each year for a period of 10 years, beginning on January 1, 2022 and continuing through (and including) January 1, 2031, in an amount equal to 5% of the total number of shares of the Registrant's common stock outstanding on December 31 of the immediately preceding year, except that, before the date of any such increase, the Registrant's board of directors may determine that the increase for such year will be a lesser number of shares. Further, the 2021 Plan provides that shares subject to outstanding stock options or other stock awards that were granted under the Prior Plan that 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 become available for issuance under the 2021 Plan.
- (3) Represents shares of common stock that were added to the shares reserved for future issuance under the 2021 ESPP on January 1, 2023, pursuant to an evergreen provision contained in the 2021 ESPP. Pursuant to such provision, the number of shares reserved for issuance under the 2021 ESPP will automatically increase on January 1 of each year for a period of 10 years, beginning on January 1, 2022 and continuing through (and including) January 1, 2031, by the lesser of (a) 1% of the total number of shares of the Registrant's common stock outstanding on December 31 of the immediately preceding year and (b) 800,000 shares, except that, before the date of any such increase, the Registrant's board of directors may determine that the increase for such year will be less than the amount set forth in clauses (a) and (b).
- (4) Estimated in accordance with Rules 457(c) and 457(h) solely for the purpose of calculating the registration fee on the basis of \$3.92 per share, which is the average of the high and low selling prices per share of the Registrant's common stock on March 21, 2023 as reported on the Nasdaq Global Select Market.
- (5) Estimated in accordance with Rules 457(c) and 457(h) solely for the purpose of calculating the registration fee. The offering price per share and the aggregate offering price are based upon \$3.92 which is the average of the high and low selling prices per share of the Registrant's common stock on March 21, 2023 as reported on the Nasdaq Global Select Market, which is the percentage of the price per share applicable to purchases under the 2021 ESPP.



ROPES & GRAY LLP PRUDENTIAL TOWER 800 BOYLSTON STREET BOSTON, MA 02199-3600 WWW.ROPESGRAY.COM

March 28, 2023

Acumen Pharmaceuticals, Inc. 427 Park St. Charlottesville, VA 22902

Ladies and Gentlemen:

This opinion is furnished to you in connection with the registration statement on Form S-8 (the "Registration Statement") filed by Acumen Pharmaceuticals, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of 2,481,646 shares of the common stock, \$0.0001 par value per share, of the Company (the "Shares"). The Shares are issuable under the Company's 2021 Equity Incentive Plan and 2021 Employee Stock Purchase Plan (each, a "Plan," and collectively, the "Plans").

We are familiar with the actions taken by the Company in connection with the adoption of the Plans. We have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and sold in accordance with the terms of the applicable Plan, will be validly issued, fully paid and non-assessable.

We hereby consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours, /s/ Ropes & Gray LLP Ropes & Gray LLP



Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Acumen Pharmaceuticals, Inc. 2021 Equity Incentive Plan and 2021 Employee Stock Purchase Plan of our report dated March 27, 2023, with respect to the financial statements of Acumen Pharmaceuticals, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2022 filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Tysons, Virginia March 27, 2023

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