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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ACELRX PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of Incorporation or organization)

41-2193603
(I.R.S. Employer Identification No.)

1850 Gateway Drive, Suite 175
San Mateo, CA 94404
(Address of principal executive offices) (Zip code)

Amended and Restated 2020 Equity Incentive Plan
(Full title of the plan)

Raffi Asadorian
Chief Financial Officer
AcelRx Pharmaceuticals, Inc.
1850 Gateway Drive, Suite 175
San Mateo, CA 94404
(650) 216-3500
(Name and address of agent for service) (Telephone number, including area code, of agent for service)

Copy to:
John T. McKenna
Cooley LLP
3175 Hanover Street
Palo Alto, California 94304
(650) 843-5000

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
Non-accelerated filer
Emerging growth company

Accelerated filer
Smaller reporting 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.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering 1,500,000 additional shares of the common stock of AcelRx Pharmaceuticals, Inc. (the “Registrant”) to be issued pursuant to the Registrant’s Amended and Restated 2020 Equity Incentive Plan (the “2020 Equity Incentive Plan”). The contents of the Registrant’s registration statements on Form S-8 (SEC File Nos. [333-239213](#) and [333-258896](#)) filed with the Securities and Exchange Commission (the “Commission”) on June 16, 2020 and August 18, 2021, respectively, are incorporated by reference pursuant to General Instruction E of Form S-8.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

As permitted by the rules of the Commission, this Registration Statement omits the information specified in Part I of Form S-8. The documents containing the information specified in Part I will be delivered to the participants in the 2020 Equity Incentive Plan, as applicable, as required by Rule 428(b)(1) under the Securities Act of 1933, as amended.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents have been filed by the Registrant with the Commission and are incorporated herein by reference:

- The Registrant’s Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Commission on [March 31, 2023](#); as amended by the Registrant’s Annual Report on Form 10-K/A for the year ended December 31, 2022, filed with the Commission on [May 1, 2023](#);
- The Registrant’s Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2023, June 30, 2023, and September 30, 2023, filed with the Commission on [May 10, 2023](#), [August 10, 2023](#), and [November 14, 2023](#), respectively;
- The Registrant’s Current Reports on Form 8-K filed with the Commission on [March 16, 2023](#), [March 30, 2023](#) (other than Item 2.02), [April 7, 2023](#) (other than Item 7.01), [April 28, 2023](#), [June 15, 2023](#), [July 21, 2023](#), [August 1, 2023](#), [September 22, 2023](#), [October 5, 2023](#), [October 10, 2023](#), and [October 20, 2023](#); and
- the description of our common stock in our registration statement on Form 8-A filed with the Commission on [February 1, 2011](#), as updated by Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the Commission on [March 15, 2021](#), and any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all of the shares of Common Stock offered have been sold or which deregisters all of such shares then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of the filing of such documents.

For purposes of this Registration Statement, any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

Exhibit Number	Exhibit Description	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-35068	3.1	2/18/2011
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-35068	3.1	6/25/2019
3.3	Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-35068	3.1	10/25/2022
3.5	Amended and Restated Bylaws of the Registrant.	8-K	001-35068	3.1	8/12/2022
4.1	Reference is made to Exhibits 3.1 through 3.4.				
4.2	Specimen Common Stock Certificate of the Registrant.	S-1/A	333-170594	4.2	1/31/2011
5.1	Opinion of Cooley LLP.				
23.1	Consent of WithumSmith+Brown, PC, Independent Registered Public Accounting Firm.				
23.2	Consent of Cooley LLP (included in Exhibit 5.1).				
24.1	Power of Attorney. Reference is made to the signature page of this Form S-8.				
99.1+ 107	Amended and Restated 2020 Equity Incentive Plan. Filing Fee Table	8-K	001-35068	10.1	10/10/2023

+ Indicates management contract or compensatory plan.

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 San Mateo, State of California, on November 22, 2023.

ACELRX PHARMACEUTICALS, INC.

By: /s/ Vincent J. Angotti
Vincent J. Angotti
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints **VINCENT J. ANGOTTI** and **RAFFI ASADORIAN**, and each or any one of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and 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 might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, 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
<u>/s/ Vincent J. Angotti</u> Vincent J. Angotti	Chief Executive Officer and Director (Principal Executive Officer)	November 22, 2023
<u>/s/ Raffi Asadorian</u> Raffi Asadorian	Chief Financial Officer (Principal Financial and Accounting Officer)	November 22, 2023
<u>/s/ Adrian Adams</u> Adrian Adams	Chairman	November 22, 2023
<u>/s/ Richard Afable</u> Richard Afable	Director	November 22, 2023
<u>/s/ Marina Bozilenko</u> Marina Bozilenko	Director	November 22, 2023
<u>/s/ Jill Broadfoot</u> Jill Broadfoot	Director	November 22, 2023
<u>/s/ Stephen J. Hoffman</u> Stephen J. Hoffman	Director	November 22, 2023
<u>/s/ Pamela P. Palmer</u> Pamela P. Palmer	Director	November 22, 2023
<u>/s/ Howard B. Rosen</u> Howard B. Rosen	Director	November 22, 2023
<u>/s/ Mark Wan</u> Mark Wan	Director	November 22, 2023



John T. McKenna
T: +1 650 843 5059
jmckenna@cooley.com

November 22, 2023

AcelRx Pharmaceuticals, Inc.
1850 Gateway Drive, Suite 175
San Mateo, CA 94404

Ladies and Gentlemen:

We have acted as counsel to AcelRx Pharmaceuticals, Inc., a Delaware corporation (the “*Company*”), in connection with the filing of a Registration Statement on Form S-8 (the “*Registration Statement*”) with the Securities and Exchange Commission (the “*Commission*”) covering the offering of up to 1,500,000 shares (the “*Shares*”) of the Company’s Common Stock, par value \$0.001 per share (“*Common Stock*”), issuable pursuant to the Company’s Amended and Restated 2020 Equity Incentive Plan (the “*Plan*”).

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectuses, (b) the Plan, (c) the Company’s certificate of incorporation and bylaws, each as currently in effect, and (d) such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. 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 certificates of public officials, and the due authorization, execution and delivery by all persons other than by the Company, of all documents where due authorization, execution and delivery are a prerequisite 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 in accordance with the Plan, the Registration Statement and the related prospectus, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

This opinion is limited to the matters set forth in this letter, and no opinion should be implied or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof and we undertake no obligation or responsibility to update or supplement this letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

We consent to the filing of 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 of 1933, as amended, or the rules and regulations of the Commission thereunder.

Cooley LLP 3175 Hanover Street Palo Alto, CA 94304
t: (650) 843-5000 f: (650) 849-7400 cooley.com

AcelRx Pharmaceuticals, Inc.
November 22, 2023
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Sincerely,

COOLEY LLP

By: /s/ John T. McKenna
John T. McKenna

Cooley LLP 3175 Hanover Street Palo Alto, CA 94304
t: (650) 843-5000 f: (650) 849-7400 cooley.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 31, 2023, except for the effects of the discontinued operations disclosed in Note 3, as to which the date is July 31, 2023, which includes an explanatory paragraph relating to AcelRx Pharmaceuticals, Inc.'s ability to continue as a going concern, relating to the consolidated financial statements and schedule II, which appears in the entity's Current Report on Form 8-K dated July 31, 2023.

/s/ WithumSmith+Brown, PC

San Francisco, California

November 22, 2023

Calculation of Filing Fee Table

Form S-8

AcelRx Pharmaceuticals, Inc.

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.001 par value per share, 2020 Equity Incentive Plan	Other	1,500,000	\$0.48 ⁽²⁾	\$720,000 ⁽²⁾	0.00014760	\$106.28
Total Offering Amounts					\$720,000		\$106.28
Total Fee Offsets							—
Net Fee Due							\$106.28

- (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 that become issuable under the AcelRx Pharmaceuticals, Inc. Amended and Restated 2020 Equity Incentive Plan 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 AcelRx Pharmaceuticals, Inc.’s (the “Registrant”) common stock, as applicable.
- (2) Estimated pursuant to Rules 457(c) and 457(h) under the Securities Act, solely for the purposes of calculating the registration fee and based on the average of the high and low prices of the Registrant’s common stock as reported on The Nasdaq Global Market on November 15, 2023, rounded up to the nearest cent, which date is within five business days prior to the filing of this Registration Statement.