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

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

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

Delaware
(State or other jurisdiction of
incorporation or organization)
11682 El Camino Real, Suite 300
San Diego, California
(Address of Principal Executive Offices)

81-1489190
(I.R.S. Employer
Identification No.)

92130
(Zip Code)

2020 Equity Incentive Plan
2020 Employee Stock Purchase Plan
(Full titles of the plans)

Richard Lowenthal, M.S., MSEL
President and Chief Executive Officer
ARS Pharmaceuticals, Inc.
11682 El Camino Real, Suite 300
San Diego, California 92130
(858) 771-9307

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

Copies to:

Kenneth J. Rollins, Esq.
Asa M. Henin, Esq.
Cooley LLP
10265 Science Center Drive
San Diego, California 92121
(858) 550-6000

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

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.

**REGISTRATION OF ADDITIONAL SHARES
PURSUANT TO GENERAL INSTRUCTION E**

This Registration Statement is being filed for the purpose of increasing the number of securities of the same class as other securities for which Registration Statements of the registrant on Form S-8 relating to the same employee benefit plans are effective.

The registrant previously registered shares of its Common Stock for issuance under the registrant's 2020 Equity Incentive Plan and 2020 Employee Stock Purchase Plan under Registration Statements on Form S-8 filed with the Securities and Exchange Commission (the "SEC") on [December 4, 2020](#) (File No. 333-251143), [March 29, 2021](#) (File No. 333-254827), [January 3, 2022](#) (File No. 333-261980), [January 17, 2023](#) (File No. 333-269262), [March 21, 2024](#) (File No. 333-278150), and [March 20, 2025](#) (File No. 333-285955). Pursuant to General Instruction E to Form S-8, this Registration Statement hereby incorporates by reference the contents of the Registration Statements referenced above.

**PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents filed by the registrant with the SEC are incorporated by reference into this registration statement (other than portions of such documents that are furnished but not filed or are otherwise not incorporated into registration statements pursuant to the applicable rules promulgated by the SEC):

(a) the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on [March 9, 2026](#); and

(b) the description of the registrant's common stock contained in its Exhibit 4.3 to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on [March 23, 2023](#) (File No. 001-39756).

All documents, reports and definitive proxy or information statements filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents; provided, however, that documents, reports and definitive proxy or information statements, or portions thereof, which are furnished and not filed or are otherwise not incorporated into registration statements in accordance with the rules of the SEC shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes that statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

ITEM 8. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
4.1	<u>Amended and Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to the registrant's Annual Report on Form 10-K, filed with the SEC on March 23, 2023).</u>
4.2	<u>Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the registrant's Current Report on Form 8-K, filed with the SEC on December 8, 2020).</u>
5.1*	<u>Opinion of Cooley LLP.</u>
23.1*	<u>Consent of Independent Registered Public Accounting Firm.</u>
23.2*	<u>Consent of Cooley LLP. Reference is made to Exhibit 5.1.</u>
24.1*	<u>Power of Attorney. Reference is made to the signature page hereto.</u>
99.1	<u>ARS Pharmaceuticals, Inc. 2020 Equity Incentive Plan, and Forms of Option Grant Notice, Option Agreement and Notice of Exercise (incorporated by reference to Exhibit 10.3 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-250009), filed with the SEC on November 30, 2020).</u>
99.2	<u>Forms of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under the ARS Pharmaceuticals, Inc. 2020 Equity Incentive Plan (incorporated by reference to Exhibit 10.15 to the registrant's Annual Report on Form 10-K, filed with the SEC on March 31, 2022).</u>
99.3	<u>ARS Pharmaceuticals, Inc. 2020 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-250009), filed with the SEC on November 30, 2020).</u>
107*	<u>Filing Fee Table.</u>

* 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 San Diego, State of California, on March 9, 2026.

ARS PHARMACEUTICALS, INC.

By: /s/ Richard Lowenthal
Richard Lowenthal, M.S., MSEL
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard Lowenthal, M.S., MSEL and Kathleen Scott, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with 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 and about the premises, 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 their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Richard Lowenthal</u> Richard Lowenthal, M.S., MSEL	President, Chief Executive Officer, and Director <i>(Principal Executive Officer)</i>	March 9, 2026
<u>/s/ Kathleen D. Scott</u> Kathleen D. Scott	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	March 9, 2026
<u>/s/ Pratik Shah</u> Pratik Shah, Ph.D.	Chairman of the Board of Directors	March 9, 2026
<u>/s/ Peter Kolchinsky</u> Peter Kolchinsky, Ph.D.	Director	March 9, 2026
<u>/s/ Rajeev Dadoo</u> Rajeev Dadoo, Ph.D.	Director	March 9, 2026
<u>/s/ Brenton L. Saunders</u> Brenton L. Saunders	Director	March 9, 2026
<u>/s/ Phillip Schneider</u> Phillip Schneider	Director	March 9, 2026
<u>/s/ Michael Kelly</u> Michael Kelly	Director	March 9, 2026
<u>/s/ Laura Shawver</u> Laura Shawver, Ph.D.	Director	March 9, 2026
<u>/s/ Peter A. Thompson</u> Peter A. Thompson, M.D.	Director	March 9, 2026
<u>/s/ Saqib Islam</u> Saqib Islam, J.D.	Director	March 9, 2026



Kenneth J. Rollins
+1 858 550 6136
krollins@cooley.com

March 9, 2026

ARS Pharmaceuticals, Inc.
11682 El Camino Real, Suite 300
San Diego, CA 92130

Ladies and Gentlemen:

We have acted as counsel to ARS Pharmaceuticals, Inc. (formerly known as Silverback Therapeutics, Inc.), a Delaware corporation (the "**Company**"), in connection with the filing by the Company 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 5,664,546 shares (the "**Shares**") of the Company's Common Stock, par value \$0.0001 per share ("**Common Stock**"), consisting of (a) 4,964,546 shares of Common Stock issuable pursuant to the Company's 2020 Equity Incentive Plan (the "**Incentive Plan**"), (b) 700,000 shares of Common Stock issuable pursuant to the Company's 2020 Employee Stock Purchase Plan, (together with the Incentive Plan, the "**Plans**").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the related prospectuses, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, (c) the Plans, and (d) such other records, documents, opinions, certificates, memoranda and 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 of all documents by all persons other than the Company. 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 Plans, the Registration Statement and the related prospectuses, 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 expressly 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 have no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.



March 9, 2026
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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.

Sincerely,

Cooley LLP

By: /s/ Kenneth J. Rollins
Kenneth J. Rollins

Cooley LLP 10265 Science Center Drive San Diego, CA 92121
t: (858) 550-6000 f: (858) 550-6420 cooley.com

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2020 Equity Incentive Plan and the 2020 Employee Stock Purchase Plan of ARS Pharmaceuticals, Inc. of our report dated March 9, 2026, with respect to the consolidated financial statements of ARS Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2025, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Diego, California
March 9, 2026

Calculation of Filing Fee Table

Form S-8

ARS Pharmaceuticals, Inc.

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
1 Equity	Common Stock, par value \$0.0001 per share to be issued pursuant to the ARS Pharmaceuticals, Inc. 2020 Equity Incentive Plan	Other	4,964,546 shares	\$8.91	\$44,234,104.86	\$0.0001381	\$6,108.73
2 Equity	Common Stock, par value \$0.0001 per share to be issued pursuant to the ARS Pharmaceuticals, Inc. 2020 Employee Stock Purchase Plan	Other	700,000 shares	\$7.58	\$5,306,000.00	\$0.0001381	\$732.76
Total Offering Amounts:					\$49,540,104.86		\$6,841.49
Total Fee Offsets:							\$0.00
Net Fee Due:							\$6,841.49

Offering Note

- Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “*Securities Act*”), this Registration Statement on Form S-8 (this “*Registration Statement*”) shall also cover any additional shares of Common Stock, par value \$0.0001 per share (“*Common Stock*”) of ARS Pharmaceuticals, Inc. (the “*Registrant*”) that become issuable under the Registrant’s 2020 Equity Incentive Plan (the “*2020 Plan*”) by reason of any stock dividend, stock split, recapitalization or other similar transaction.

The proposed maximum offering price per share estimate is made pursuant to Rules 457(c) and (h)(1) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Common Stock on March 6, 2026 (the “*Average Price*”), as reported on the Nasdaq Global Market.

The amount registered represents additional shares of Common Stock reserved for future grant under the 2020 Plan as a result of the automatic increase in shares reserved thereunder on January 1, 2026, pursuant to the terms of the 2020 Plan. The 2020 Plan provides that an additional number of shares will automatically be added annually to the shares authorized for issuance under the 2020 Plan on January 1 of each calendar year through (and including) January 1, 2030, in an amount equal to the lesser of (a) 5% of the total number of shares of capital stock of the Registrant outstanding on December 31st of the preceding calendar year; or (b) a lesser number of shares of Common Stock as the Registrant’s board of directors (the “*Board*”) may designate no later than December 31st of the immediately preceding year.

- Pursuant to Rule 416(a) under the Securities Act, this Registration Statement shall also cover any additional shares of Common Stock of the Registrant that become issuable under the 2020 Employee Stock Purchase Plan, as amended (the “*2020 ESPP*”) by reason of any stock dividend, stock split, recapitalization or other similar transaction.

The proposed maximum offering price per share estimate is made pursuant to Rules 457(c) and (h)(1) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the Average Price, multiplied by 85%. Pursuant to the 2020 ESPP, the purchase price of the shares of Common Stock will be 85% of the lesser of the fair market value of the Common Stock on the Offering Date or the Purchase Date (each as defined in the 2020 ESPP).

The amount registered represents additional shares of Common Stock reserved for issuance under the 2020 ESPP as a result of the automatic increase in shares reserved thereunder on January 1, 2026, pursuant to the terms of the 2020 ESPP. The 2020 ESPP provides that an additional number of shares will automatically be added annually to the shares authorized for issuance under the 2020 ESPP on January 1 of each calendar year through (and including) January 1, 2030. The number of shares of Common Stock added each year will be equal to the lesser of: (a) 1% of the total number of shares of capital stock outstanding on December 31st of the preceding calendar year; (b) 700,000 shares; or (c) such lesser number of shares of Common Stock as the Board may designate prior to the applicable January 1st.

