### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-8 REGISTRATION STATEMENT

Under The Securities Act of 1933

# SOLENO THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

**Delaware** (State or other jurisdiction of incorporation or organization) 77-0523891 (I.R.S. Employer Identification Number)

203 Redwood Shores Pkwy, Suite 500
Redwood City, CA 94065
(Address of principal executive offices, including zip code)

Amended and Restated 2014 Equity Incentive Plan 2020 Inducement Equity Incentive Plan (Full title of the plan)

Anish Bhatnagar
Chief Executive Officer
Soleno Therapeutics, Inc.
203 Redwood Shores Pkwy, Suite 500
Redwood City, CA 94065
(Name and address of agent for service)

(650) 213-8444 (Telephone number, including area code, of agent for service)

Copies to:

Elton Satusky
Jesse Schumaker
Wilson Sonsini Goodrich & Rosati
Professional Corporation
650 Page Mill Road
Palo Alto, California 94304
(650) 493-9300

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		Smaller reporting company	×
		Emerging growth company	
0 00	mpany, indicate by check mark if the registrant has elected not to use the extended transic counting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. $\Box$	ion period for complying with any	ŗ

#### CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(4)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share, reserved for issuance				
pursuant to the 2014 Equity Incentive Plan	3,184,627(2)	\$2.21	\$7,038,025.67	\$767.85

Common Stock, \$0.001 par value per share, reserved for issuance				
pursuant to the 2020 Inducement Equity Incentive Plan	1,500,000(3)	\$2.21	\$3,315,000.00	\$361.67
Total	4,684,627		\$10,353,025.67	\$1,129.52

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Amended and Restated 2014 Equity Incentive Plan (the "2014 Plan") or 2020 Inducement Equity Incentive Plan (the "2020 Inducement Plan") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.
- (2) Represents an automatic annual increase of 3,184,627 shares on January 1, 2021 to the number of shares of the Registrant's common stock reserved for issuance under, and which annual increase is provided for in, the 2014 Plan.
- (3) Represents 1,500,000 shares of the Registrant's common stock reserved for issuance under the 2020 Inducement Plan.
- (4) Estimated in accordance with Rules 457(c) and 457(h) under the Securities Act, solely for the purpose of calculating the registration fee on the basis of \$2.21 per share, which represents the average of the high and low prices of the common stock as reported in The Nasdaq Capital Market on January 8, 2021.

#### SOLENO THERAPEUTICS, INC.

#### REGISTRATION OF ADDITIONAL SECURITIES

#### PURSUANT TO GENERAL INSTRUCTION E

This Registration Statement registers additional shares of the Registrant's common stock to be issued pursuant to its 2014 Plan and 2020 Inducement Plan. Accordingly, the contents of the previous Registration Statement on Form S-8 filed by the Registrant with the Securities and Exchange Commission (the "Commission") on November 13, 2014 (File No. 333-200175) (the "Previous Form S-8"), including periodic reports filed after the Previous Form S-8 to maintain current information about the Registrant, are incorporated by reference into this Registration Statement pursuant to General Instruction E of Form S-8.

#### Item 3. Incorporation of Documents by Reference.

Soleno Therapeutics, Inc. (the "**Registrant**") hereby incorporates by reference into this Registration Statement the following documents previously filed with the Securities and Exchange Commission (the "**Commission**"):

- (1) The Registrant's Annual Report on <u>Form 10-K</u> for the year ended December 31, 2019 (the "**Annual Report**"), as filed with the Commission on March 4, 2020 pursuant to Sections 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**");
- (2) All other reports filed with the Commission pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Annual Report; and
- (3) The description of the Registrant's common stock contained in the Registration Statement on Form 8-A filed with the Commission on August 8, 2014, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents; *provided*, *however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into 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 for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also 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.

Under no circumstances will any information furnished under current items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

#### Item 8. Exhibits.

			Incorporated by Reference		
Exhibit Number	<u>Description</u>	<u>Form</u>	File No.	Exhibit	Filing Date
4.1	Form of the Registrant's common stock certificate	S-1/A	333-196635	4.1	08/05/2014
4.2	Amended and Restated 2014 Equity Incentive Plan and forms of agreement thereunder	S-8	333-239496	4.2	06/26/2020
4.3	2020 Inducement Equity Incentive Plan and form of option agreement thereunder	8-K	001-36593	10.1	10/02/2020
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation				
23.1	Consent of Marcum LLP, Independent Registered Public Accounting Firm				
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (contained in Exhibit 5.1 hereto)				
24.1	Power of Attorney (contained on signature page hereto)				

#### **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 Redwood City, California, on the 11th day of January, 2021.

#### SOLENO THERAPEUTICS, INC.

By: /s/ Anish Bhatnagar
Anish Bhatnagar
Chief Executive Officer

#### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Anish Bhatnagar as his true and lawful attorney-in-fact and agent with full power of substitution, for him in any and all capacities, to sign any and all amendments to this registration statement on Form S-8 (including post-effective amendments), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact, proxy and agent 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 for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his 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 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>
/s/ Anish Bhatnagar	President, Chief Executive Officer and Director	January 11, 2021
Anish Bhatnagar	(Principal Executive Officer)	
/s/ James Mackaness	Chief Financial Officer	January 11, 2021
James Mackaness	(Principal Financial and Accounting Officer)	
/s/ Ernest Mario	Chairman	January 11, 2021
Ernest Mario		
/s/ William G. Harris	Director	January 11, 2021
William G. Harris		
/s/ Gwen Melincoff	Director	January 11, 2021
Gwen Melincoff		
/s/ Andrew Sinclair	Director	January 11, 2021
Andrew Sinclair		
/s/ Birgitte Volck	Director	January 11, 2021
Birgitte Volck		



Wilson Sonsini Goodrich & Rosati Professional Corporation 650 Page Mill Road Palo Alto, California 94304-1050

> O: 650.493.9300 F: 650.493.6811

January 11, 2021

Soleno Therapeutics, Inc. 203 Redwood Shores Pkwy, Suite 500 Redwood City, CA 94065

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 (the "Registration Statement") to be filed by Soleno Therapeutics, Inc., a Delaware corporation, with the Securities and Exchange Commission on or about the date hereof, in connection with the registration under the Securities Act of 1933, as amended, of 3,184,627 shares of Common Stock reserved for issuance pursuant to the Soleno Therapeutics, Inc. 2014 Equity Incentive Plan (the "2014 Plan") and 1,500,000 shares of Common Stock reserved for issuance pursuant to the Soleno Therapeutics, Inc. 2020 Inducement Equity Incentive Plan (the "2020 Inducement Plan") and which shares of Common Stock are referred to herein as the "Shares". As your legal counsel, we have examined the proceedings taken and proposed to be taken in connection with the issuance, sale and payment of consideration for the Shares to be issued under the Plan.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when issued and sold in the manner referred to in the Plan and pursuant to the agreements that accompany the Plan, will be legally and validly issued, fully paid, and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto.

Very truly yours,

/s/ Wilson Sonsini Goodrich & Rosati

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

#### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Soleno Therapeutics, Inc. on Form S-8 of our report, which includes an explanatory paragraph as to the Company's ability to continue as going concern, dated March 4, 2020, with respect to our audits of the consolidated financial statements of Soleno Therapeutics, Inc. as of December 31, 2019 and 2018 and for the each of the two years in the period ended December 31, 2019 appearing in the Annual Report on Form 10-K of Soleno Therapeutics, Inc. for the year ended December 31, 2019.

/s/ Marcum LLP

Marcum LLP San Francisco January 11, 2021