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

**FORM S-8
REGISTRATION STATEMENT**
*Under
The Securities Act of 1933*

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

Delaware
(State or other jurisdiction of
incorporation or organization)

30-1003521
(I.R.S. Employer
Identification Number)

**200 Smith Street
Waltham, MA 02451
(781) 209-6400**
(Address of Principal Executive Offices)

**Deciphera Pharmaceuticals, Inc. 2017 Stock Option and Incentive Plan
Deciphera Pharmaceuticals, Inc. 2017 Employee Stock Purchase Plan
Deciphera Pharmaceutics, Inc. 2022 Inducement Plan, as amended**
(Full title of the plans)

**Steven L. Hoerter
President & Chief Executive Officer
Deciphera Pharmaceuticals, Inc.
200 Smith Street
Waltham, MA 02451
(781) 209-6400**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Richard A. Hoffman, Esq.
Sarah Ashfaq, Esq.
Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
(617) 570-1000**

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 | <input checked="" type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |
| | | Emerging growth company | <input type="checkbox"/> |

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 registers (i) additional shares of common stock, \$0.01 par value per share (“Common Stock”), of Deciphera Pharmaceuticals, Inc. (the “Registrant”) under the Registrant’s 2017 Stock Option and Incentive Plan (the “2017 Plan”), (ii) additional shares of Common Stock under the Registrant’s 2017 Employee Stock Purchase Plan (the “ESPP”) and (iii) additional shares of Common Stock under the Registrant’s 2022 Inducement Plan, as amended (the “Inducement Plan” and together with the 2017 Plan and the ESPP, the “Plans”).

The number of shares of Common Stock reserved and available for issuance under the 2017 Plan is subject to an automatic annual increase on each January 1, beginning in 2018, by an amount equal to four percent (4%) of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31 or such lesser number of shares of Common Stock as approved by the Administrator (as defined in the 2017 Plan). Accordingly, on January 1, 2024, the number of shares of Common Stock reserved and available for issuance under the 2017 Plan increased by 3,220,133 shares. The number of shares of Common Stock reserved and available for issuance under the ESPP is subject to an automatic annual increase on each January 1, beginning in 2018, by the lesser of (i) 400,000 shares, (ii) one percent (1%) of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31 or (iii) such lesser number of shares of Common Stock as determined by the Administrator (as defined in the ESPP). Accordingly, on January 1, 2024, the number of shares of Common Stock reserved and available for issuance under the ESPP increased by 400,000 shares. On January 26, 2024, the Registrant’s board of directors approved an amendment to the Inducement Plan to increase the number of shares reserved and available for issuance under the Inducement Plan by 355,600 shares. This Registration Statement registers these additional 3,975,734 shares of Common Stock. The additional shares are of the same class as other securities relating to the Plans for which the Registrant’s Registration Statements filed on Form S-8 on [October 6, 2017](#) (Registration No. 333-220866), [March 28, 2018](#) (Registration No. 333-223992) [March 14, 2019](#) (Registration No. 333-230270) [March 9, 2020](#) (Registration No. 333-237031) [February 9, 2021](#) (Registration No. 333-252904) [February 8, 2022](#) (Registration No. 333-262595) and [February 7, 2023](#) (Registration No. 333-269614) are effective. The information contained in the Registrant’s Registration Statements on Form S-8 (Registration No. 333-220866, Registration No. 333-223992, Registration No. 333-230270, Registration No. 333-237031, Registration No. 333-252904, Registration No. 333-262595 and Registration No. 333-269614) are hereby incorporated by reference pursuant to General Instruction E.

Part II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

EXHIBIT INDEX

| <u>Exhibit No.</u> | <u>Description</u> |
|--------------------|--|
| 3.1 | <u>Amended and Restated Certificate of Incorporation of the Registrant (Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on October 5, 2017 (File No. 001-38219)).</u> |
| 3.2 | <u>Amended and Restated By-laws of the Registrant (Incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on June 12, 2020 (File No. 001-38219)).</u> |
| 4.1 | <u>Specimen Common Stock Certificate (Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-220299)).</u> |
| 4.2 | <u>Second Amended and Restated Investors' Rights Agreement among Deciphera Pharmaceuticals, LLC and certain of its shareholders, dated May 26, 2017 (Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-220299)).</u> |
| 4.3 | <u>Registration Rights Agreement by and among the Registrant and certain of its stockholders, dated October 2, 2017 (Incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 14, 2017 (File No. 001-38219)).</u> |
| 4.4 | <u>Description of Securities (Incorporated by reference to Exhibit 4.4 to the Registrant's Annual Report on Form 10-K filed on March 9, 2020 (File No. 001-38219)).</u> |
| 5.1* | <u>Opinion of Goodwin Procter LLP.</u> |
| 23.1* | <u>Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.</u> |
| 23.2* | <u>Consent of Goodwin Procter LLP (included in Exhibit 5.1).</u> |
| 24.1* | <u>Power of Attorney (included on signature page).</u> |
| 99.1 | <u>2017 Stock Option and Incentive Plan and form of award agreements thereunder (Incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-220299)).</u> |
| 99.2 | <u>Form of Incentive Stock Option Agreement under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.3 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |
| 99.3 | <u>Form of Non-Qualified Stock Option Agreement for Company Employees under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.4 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |
| 99.4 | <u>Form of Restricted Stock Unit Award Agreement for Company Employees under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.5 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |
| 99.5 | <u>Form of Non-Qualified Stock Option Agreement for Non-U.S. Optionees under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.6 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |
| 99.6 | <u>Form of Restricted Stock Unit Award Agreement for Non-U.S. Grantees under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.7 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |
| 99.7 | <u>Form of Non-Qualified Stock Option Agreement for Non-Employee Directors under 2017 Stock Option and Incentive Plan (Incorporated by reference to Exhibit 10.8 to the Registrant's Annual Report on Form 10-K filed on February 9, 2021 (File No. 001-38219)).</u> |

- 99.8 [2017 Employee Stock Purchase Plan \(Incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-220299\)\)](#).
- 99.9 [2022 Inducement Plan, as amended \(Incorporated by reference to Exhibit 10.9 to the Registrant's Annual Report on Form 10-K filed on February 7, 2024 \(File No. 001-38219\)\)](#).
- 99.10 [Form of Non-Qualified Stock Option Agreement for Company Employees under 2022 Inducement Plan \(Incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K filed on February 8, 2022 \(File No. 001-38219\)\)](#).
- 99.11 [Form of Restricted Stock Unit Award Agreement for Company Employees under 2022 Inducement Plan \(Incorporated by reference to Exhibit 10.11 to the Registrant's Annual Report on Form 10-K filed on February 8, 2022 \(File No. 001-38219\)\)](#).
- 107* [Filing Fee Table](#).

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Waltham, Commonwealth of Massachusetts, on the 7th day of February, 2024.

DECIPHERA PHARMACEUTICALS, INC.

By: /s/ Steven L. Hoerter

Steven L. Hoerter

President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Steven L. Hoerter and Thomas P. Kelly his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, 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 that all said attorneys-in-fact and agents or any of them, or his, her 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 has been signed by the following persons in the capacities and on the date indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|--|------------------|
| <u>/s/ Steven L. Hoerter</u> Steven L. Hoerter | President, Chief Executive Officer and Director (Principal Executive Officer) | February 7, 2024 |
| <u>/s/ Thomas P. Kelly</u> Thomas P. Kelly | Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer) | February 7, 2024 |
| <u>/s/ Patricia L. Allen</u> Patricia L. Allen | Director | February 7, 2024 |
| <u>/s/ Edward J. Benz, Jr., M.D.</u> Edward J. Benz, Jr., M.D. | Director | February 7, 2024 |
| <u>/s/ James A. Bristol, Ph.D.</u> James A. Bristol, Ph.D. | Director | February 7, 2024 |
| <u>/s/ Frank S. Friedman</u> Frank S. Friedman | Director | February 7, 2024 |
| <u>/s/ Susan L. Kelley, M.D.</u> Susan L. Kelley, M.D. | Director | February 7, 2024 |
| <u>/s/ John R. Martin</u> John R. Martin | Director | February 7, 2024 |
| <u>/s/ Ron Squarer</u> Ron Squarer | Director | February 7, 2024 |
| <u>/s/ Dennis L. Walsh</u> Dennis L. Walsh | Director | February 7, 2024 |

February 7, 2024

Deciphera Pharmaceuticals, Inc.
200 Smith Street
Waltham, MA 02451

Re: Securities Being Registered under Registration Statement on Form S-8

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 3,975,733 shares (the "Shares") of Common Stock, \$0.01 par value per share ("Common Stock"), of Deciphera Pharmaceuticals, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2017 Stock Option and Incentive Plan, 2017 Employee Stock Purchase Plan and 2022 Inducement Plan, as amended (collectively, the "Plans").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

For purposes of the opinion set forth below, we have assumed that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plans, will be validly issued, fully paid and nonassessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in *74 Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not 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/ Goodwin Procter LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Deciphera Pharmaceuticals, Inc. of our report dated February 7, 2024 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Deciphera Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
February 7, 2024

Calculation of Filing Fee Tables

Form S-8
(Form Type)

Deciphera Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

| Security Type | Security Class Title | Fee Calculation Rule | Amount Registered (1) | Proposed Maximum Offering Price Per Share (2) | Maximum Aggregate Offering Price (2) | Fee Rate | Amount of Registration Fee (2) |
|------------------------|---|----------------------|-----------------------|---|--------------------------------------|------------|--------------------------------|
| Equity | 2017 Stock Option and Incentive Plan Common Stock, \$0.01 par value per share | 457(h) | 3,220,133 shares (3) | \$14.515 | \$46,740,230.50 | 0.00014760 | \$6,898.86 |
| Equity | 2017 Employee Stock Purchase Plan Common Stock, \$0.01 par value per share | 457(h) | 400,000 shares (4) | \$14.515 | \$5,806,000.00 | 0.00014760 | \$856.97 |
| Equity | 2022 Inducement Plan, as amended Common Stock, \$0.01 par value per share | 457(h) | 355,600 shares (5) | \$14.515 | \$5,161,534.00 | 0.00014760 | \$761.84 |
| Total Offering Amounts | | | | | \$57,707,764.50 | | \$8,517.67 |
| Total Fee Offsets | | | | | | | \$0 |
| Net Fee Due | | | | | | | \$8,517.67 |

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock which become issuable under the above-named plans by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock. Pursuant to Rule 416(c) under the Securities Act, this Registration Statement shall also cover an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plans described herein.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) of the Securities Act, and based on \$14.515, the average of the high and low sale prices of the Registrant's common stock as reported on the Nasdaq Global Select Market on February 1, 2024.
- (3) Consists of 3,220,133 shares of Common Stock that may become issuable under the Registrant's 2017 Stock Option and Incentive Plan pursuant to its terms.
- (4) Consists of 400,000 shares of Common Stock that may become issuable under the Registrant's 2017 Employee Stock Purchase Plan pursuant to its terms.
- (5) Consists of 355,600 shares of Common Stock that may become issuable under the Registrant's 2022 Inducement Plan, as amended, pursuant to its terms.