

Registration No. 333-276915  
Registration No. 333-269614  
Registration No. 333-262595  
Registration No. 333-252904  
Registration No. 333-237031  
Registration No. 333-230270  
Registration No. 333-223992  
Registration No. 333-220866

---

---

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

---

**POST-EFFECTIVE AMENDMENT TO  
FORM S-8 REGISTRATION STATEMENT No. 333-276915  
FORM S-8 REGISTRATION STATEMENT No. 333-269614  
FORM S-8 REGISTRATION STATEMENT No. 333-262595  
FORM S-8 REGISTRATION STATEMENT No. 333-252904  
FORM S-8 REGISTRATION STATEMENT No. 333-237031  
FORM S-8 REGISTRATION STATEMENT No. 333-230270  
FORM S-8 REGISTRATION STATEMENT No. 333-223992  
FORM S-8 REGISTRATION STATEMENT No. 333-220866**

**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 No.)

**200 Smith Street  
Waltham, MA 02451  
(781) 209-6400**  
(Address of registrant's principal executive offices)

---

**Deciphera Pharmaceuticals, LLC 2015 Equity Incentive Plan  
Deciphera Pharmaceuticals, Inc. 2017 Stock Option and Incentive Plan  
Deciphera Pharmaceuticals, Inc. 2017 Employee Stock Purchase Plan  
Deciphera Pharmaceuticals, Inc. 2022 Inducement Plan**  
(Full titles of the plans)

---

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

*Copies to:*

**Jeffrey M. Held, Esq.  
Deciphera Pharmaceuticals, Inc.  
200 Smith Street  
Waltham, MA 02451  
(781) 209-6400**

and

**Jason T. Simon**

**Tricia Branker  
Greenberg Traurig, LLP  
1750 Tysons Boulevard, Suite 1000  
McLean, VA 22102  
Telephone: (703) 749 1300**

---

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 Post-Effective Amendment relates to the following Registration Statements on Form S-8 (each a “Registration Statement” and collectively, the “Registration Statements”), filed with the Securities and Exchange Commission (the “SEC”) by Deciphera Pharmaceuticals, Inc., a Delaware corporation (“Deciphera”):

- Registration Statement No. 333-220866, registering 7,055,291 shares of Deciphera common stock, par value \$0.01 per share (“Shares”), issuable pursuant to the Deciphera Pharmaceuticals, LLC 2015 Equity Incentive Plan, Deciphera Pharmaceuticals, Inc. 2017 Stock Option and Incentive Plan (the “2017 Plan”) and Deciphera Pharmaceuticals, Inc. 2017 Employee Stock Purchase Plan (the “ESPP”), filed with the SEC on [October 6, 2017](#);
- Registration Statement No. 333-223992, registering 1,629,583 Shares issuable pursuant to the 2017 Plan and ESPP, filed with the SEC on [March 28, 2018](#);
- Registration Statement No. 333-230270, registering 1,883,837 Shares issuable pursuant to the 2017 Plan and ESPP, filed with the SEC on [March 14, 2019](#);
- Registration Statement No. 333-237031, registering 2,464,706 Shares issuable pursuant to the 2017 Plan and ESPP, filed with the SEC on [March 9, 2020](#);
- Registration Statement No. 333-252904, registering 2,703,845 Shares issuable pursuant to the 2017 Plan and ESPP, filed with the SEC on [February 9, 2021](#);
- Registration Statement No. 333-262595, registering 3,541,985 Shares issuable pursuant to the 2017 Plan, ESPP and the Deciphera Pharmaceuticals, Inc. 2022 Inducement Plan (the “2022 Inducement Plan”), filed with the SEC on [February 9, 2022](#);
- Registration Statement No. 333-269614, registering 3,375,494 Shares issuable pursuant to the 2017 Plan, ESPP and 2022 Inducement Plan, filed with the SEC on [February 7, 2023](#); and
- Registration Statement No. 333-276915, registering 3,975,734 Shares issuable pursuant to the 2017 Plan, ESPP and 2022 Inducement Plan, filed with the SEC on [February 7, 2024](#).

On April 29, 2024, Deciphera entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Ono Pharmaceutical Co., Ltd., a Japanese company (*kabushiki kaisha*) (“Ono”), and Topaz Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Ono (“Merger Sub”). Pursuant to the Merger Agreement, on June 11, 2024, Merger Sub merged with and into Deciphera with Deciphera surviving the merger as a wholly-owned subsidiary of Ono.

As a result of the consummation of the transactions contemplated by the Merger Agreement, Deciphera has terminated, as of the date hereof, any and all offerings of its securities pursuant to the Registration Statements. In accordance with the undertakings made by Deciphera in the Registration Statements to remove from registration by means of a post-effective amendment any securities that had been registered for issuance but remain unsold at the termination of the offering, Deciphera hereby removes and withdraws from registration any and all securities registered pursuant to the Registration Statements that remain unsold as of the date hereof, and the Registration Statements are hereby amended, as appropriate, to reflect the deregistration of such securities.

**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 Post-Effective Amendment to the Registration Statements on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on June 11, 2024. No other person is required to sign these Post-Effective Amendments to the Registration Statements in reliance on Rule 478 of the Securities Act of 1933, as amended.

**DECIPHERA PHARMACEUTICALS, INC.**

By: /s/ Steven L. Hoerter

Name: Steven L. Hoerter

Title: President and Chief Executive Officer