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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 4, 2021

Harpoon Therapeutics, Inc.
(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-38800**	**47-3458693**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

131 Oyster Point Blvd, Suite 300 **South San Francisco, California** **(Address of Principal Executive Offices)**	**94080** **(Zip Code)**

(650) 443-7400
(Registrant's Telephone Number, Including Area Code)

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.0001 per share	**HARP**	**Nasdaq Global Select Market**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b–2 of the Securities Exchange Act of 1934 (§ 240.12b–2 of this chapter).

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 13(a) of the Exchange Act. ☐

Item 8.01 Other Events.

On January 4, 2021, Harpoon Therapeutics, Inc. (the "Company") issued a press release announcing that the first patient has been dosed with HPN328, a delta like ligand 3 ("DLL3")-targeting TriTAC®, in a Phase 1/2 clinical trial as an investigational treatment of small cell lung cancer and other tumors associated with DLL3 expression. A copy of the Company's press release is attached hereto as Exhibit 99.1 and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press release dated January 4, 2021.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

HARPOON THERAPEUTICS, INC.

By: /s/ Gerald McMahon, Ph.D.
Gerald McMahon, Ph.D.
President and Chief Executive Officer

Dated: January 4, 2021

FOR IMMEDIATE RELEASE

Harpoon Therapeutics Doses First Patient with HPN328, an Anti-DLL3 T Cell Engager for Treatment of Small Cell Lung Cancer and other DLL3-Associated Tumors

HPN328, Harpoon's fourth TriTAC® T cell engager, enters clinical development

SOUTH SAN FRANCISCO, Calif., January 4, 2021—Harpoon Therapeutics, Inc. (NASDAQ: HARP), a clinical-stage immunotherapy company developing a novel class of T cell engagers, today announced that the first patient has been dosed with HPN328, a delta like ligand 3- (DLL3) targeting TriTAC®, in a Phase 1/2 clinical trial as an investigational treatment of small cell lung cancer (SCLC) and other tumors associated with DLL3 expression. The company has presented preclinical data on HPN328 showing that the drug was well tolerated in cynomolgus monkeys at 1 and 10 mg/kg, and pharmacokinetic data supported the potential for once weekly dosing. When administered to mice bearing human SCLC xenografts and human T cells, HPN328 eradicated tumors.

"We are pleased with the rapid progress of our clinical programs, based on our proprietary TriTAC platform, with patient dosing now underway for our fourth product candidate, HPN328, that targets DLL3," said Natalie Sacks, M.D., Chief Medical Officer of Harpoon Therapeutics. "Treatment options for small cell lung cancer are limited, as are options for other DLL3-associated tumors such as neuroendocrine prostate cancer. Data from preclinical studies suggest that HPN328 has substantial anti-tumor activity, which provides the rationale for investigating its potential benefit in these patients."

"We are excited to participate in this trial of a promising agent that will hopefully benefit patients with small cell lung cancer and other neuroendocrine tumors," said Melissa Johnson, M.D., Program Director of Lung Cancer Research at Sarah Cannon Research Institute. The first patient was treated at Sarah Cannon Research Institute at Tennessee Oncology.

"I am excited that Harpoon's fourth TriTAC drug candidate, HPN328, has advanced into the clinic focusing on SCLC, an aggressive and deadly disease with a significant unmet need, as its initial indication," said Jerry McMahon, Ph.D., President and Chief Executive Officer of Harpoon Therapeutics. "Each of Harpoon's four TriTAC clinical programs are progressing well and we expect data to emerge from our clinical trials throughout 2021."

About the Phase 1/2 Trial for HPN328

HPN328 is a TriTAC that binds to human and non-human primate DLL3, CD3e, and albumin with similar affinities. The Phase 1/2 trial is an open-label study of HPN328 as monotherapy to assess the safety, tolerability and pharmacokinetics in patients with advanced cancers associated with expression of DLL3. The first part of the trial is designed to determine a dose for additional clinical investigations. The trial plans to enroll patients with SCLC that have relapsed following at least one line of platinum-based chemotherapy. HPN328 will be administered to patients once weekly by intravenous infusion with dose escalation until a therapeutic dose level has been achieved. The primary outcome measure will be to assess safety and tolerability, and to determine a dose for Phase 2.

Following dose escalation, Harpoon may further evaluate the safety and efficacy of HPN328 in additional parallel cohorts. The primary outcome measure will be to determine efficacy for the Phase 2 dose based on the overall response rate as determined by RECIST. For additional information about the trial, please visit clinicaltrials.gov using the identifier NCT04471727.

About Harpoon Therapeutics

Harpoon Therapeutics is a clinical-stage immunotherapy company developing a novel class of T cell engagers that harness the power of the body's immune system to treat patients suffering from cancer and other diseases. T cell engagers are engineered proteins that direct a patient's own T cells to kill target cells that express specific proteins, or antigens, carried by the target cells. Using its proprietary Tri-specific T cell Activating Construct (TriTAC®) platform, Harpoon is developing a pipeline of novel TriTACs initially focused on the treatment of solid tumors and hematologic malignancies. HPN424 targets PSMA and is in a Phase 1/2a trial for metastatic castration-resistant prostate cancer. HPN536 targets mesothelin and is in a Phase 1/2a trial for cancers expressing mesothelin, initially focused on ovarian and pancreatic cancers. HPN217 targets BCMA and is in a Phase 1/2 trial for relapsed, refractory multiple myeloma. HPN328 targets DLL3 and is in a Phase 1/2 trial for small cell lung cancer and other DLL3-associated tumors. Harpoon has also developed a proprietary ProTriTAC™ platform, which applies a prodrug concept to its TriTAC platform to create a therapeutic T cell engager that remains inactive until it reaches the tumor. For additional information about Harpoon Therapeutics, please visit www.harpoontx.com.

Cautionary Note on Forward-looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "target," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Harpoon Therapeutics' expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties that could cause Harpoon Therapeutics' clinical development programs, future results or performance to differ significantly from those expressed or implied by the forward-looking statements. Forward-looking statements contained in this press release include, but are not limited to, statements about the design, progress, timing, scope and anticipated results of clinical trials, the timing of the presentation of data, potential treatment outcomes, and the development and advancement of product candidates. Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during clinical studies, clinical trial site activation or enrollment rates that are lower than expected, unanticipated or greater than anticipated impacts or delays due to COVID-19, changes in expected or existing competition, changes in the regulatory environment, the uncertainties and timing of the regulatory approval process, and unexpected litigation or other disputes. Other factors that may cause Harpoon Therapeutics' actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Harpoon Therapeutics' filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. Except as required by law, Harpoon Therapeutics assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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