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): May 11, 2023

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 **94080**
(Address of Principal Executive Offices) **(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	The Nasdaq Stock Market LLC

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 2.02 Results of Operations and Financial Condition.

On May 11, 2023, Harpoon Therapeutics, Inc. ("Harpoon") issued a press release announcing its financial results for the first quarter ended March 31, 2023. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Item 2.02 of this Form 8-K and the Exhibit 99.1 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section, or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release dated May 11, 2023.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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.

Date: May 11, 2023

By: /s/ Julie Eastland
Julie Eastland
President and Chief Executive Officer

Exhibit 99.1

FOR IMMEDIATE RELEASE

Harpoon Therapeutics Reports First Quarter 2023 Financial Results and Provides Corporate Update

Enrollment for HPN217 (BCMA) and HPN328 (DLL3) remain on track, with data updates and selection of recommended Phase 2 doses for both ongoing clinical programs planned in 2023

Five preclinical posters presented at AACR 2023 in April on HPN217, HPN328 and ProTriTAC™ development candidates

Following $25 million financing in March, cash and equivalents of $61.4 million expected to fund current operations into second half of 2024

SOUTH SAN FRANCISCO, Calif., May 11, 2023 - Harpoon Therapeutics, Inc. (Nasdaq: HARP), a clinical-stage immuno-oncology company developing novel T cell engagers, today reported financial results for the first quarter ended March 31, 2023 and provided a corporate update.

“Harpoon is executing its business plan in 2023 with a strengthened balance sheet, advancing multiple programs based on the TriTAC® platform, and ProTriTAC™ IND candidates ready for further development,” said Julie Eastland, President and Chief Executive Officer of Harpoon Therapeutics. “Following the $25 million preferred equity financing in March 2023, we have the financial strength to fund current operations into the second half of 2024. Additionally, we expect to see a positive impact on our cash burn over the course of the year from the restructuring implemented in the fourth quarter of last year. We also anticipate completion of enrollment for two of our Phase 1 clinical programs, HPN217 and HPN328, and achievement of key data milestones this year. Our clinical and leadership teams remain focused on advancing a rich pipeline of next-generation T cell engagers to address a broad patient population with unmet needs in both solid tumor and blood cancer indications.”

Corporate Update / Recent and Upcoming Highlights

Tri-specific T cell Activating Construct (TriTAC®) Platform

HPN217 (BCMA) Phase 1 trial for relapsed, refractory multiple myeloma

- Interim results reported at the 64th American Society of Hematology (ASH) Annual Meeting (cut-off of October 17, 2022) demonstrated continued evidence of clinical activity with 77% (10/13) ORR observed in the two highest target dose levels (12 and 24 mg).
- Overall low incidence of cytokine release syndrome (CRS) across the patient population studied to date.
- Completion of Phase 1 dose exploration is expected in the first half of 2023, with identification of a recommended Phase 2 dose(s) expected by the end of 2023.
- Data presentation anticipated in the second half of 2023.

HPN328 (DLL3) Phase 1/2 trial in small cell lung cancer (SCLC) and neuroendocrine cancers

- Observations in the monotherapy cohorts, as of February 2023, included early signs of anti-tumor activity, with two confirmed partial responses per RECIST in patients with SCLC.

- Phase 1/2 dose and schedule optimization trial ongoing with monotherapy cohorts enrolling at the 24 mg target dose.
- Enrollment in combination therapy of HPN328 with atezolizumab (Tecentriq®) in patients with SCLC, as part of the Phase 1/2 dose escalation trial, is anticipated to begin in the second half of 2023.
- Phase 1 dose exploration is expected to complete in the second half of 2023, including the identification of a recommended Phase 2 dose(s) in the monotherapy setting by the end of 2023.
- Data presentation anticipated in the second half of 2023.

ProTriTAC™

HPN601 (EpCAM)

- HPN601 is Harpoon's first conditionally active T cell engager based on the ProTriTAC™ platform. EpCAM is expressed in a broad range of solid tumors, potentially enabling HPN601 to address multiple indications with high unmet medical need.
- IND filing timeline to enable a Phase 1 dose exploration study dependent on resource allocation.

Two additional candidates

- Two new candidates for potential IND-enabling studies from the ProTriTAC platform have been identified against the targets trophoblast cell surface antigen 2 (TROP2) and Integrin-ß6 (ITGB6).

TriTAC-XR®

The proprietary TriTAC-XR extended-release T cell engager platform is designed to minimize on-target CRS, a characteristic of many T cell engagers that can lead to dose limiting toxicities and can reduce the efficacy of these potent anti-tumor drugs.

AACR 2023 – Five Preclinical Posters Presented

- HPN217: Poster presented on April 18, 2023:
  - *"Anti-tumor activity of HPN217, a BCMA-targeting tri-specific T cell engager, is enhanced by y-secretase inhibitors in preclinical models"*
    - In preclinical mouse models, y-secretase inhibitors increased the potency of HPN217 in vitro in multiple cell lines.
    - Combination therapy with 1mg/kg LY-3039478 and a subtherapeutic dose of 4ug/kg HPN217 led to decreased tumor burden and increased survival in a disseminated MOLP8 xenograft compared to either monotherapy alone.
- HPN328: Two posters presented on April 18, 2023:
  - *"Long-term anti-tumor immunity induced by HPN328, a DLL3-targeting tri-specific, half-life extended T cell engager, in a preclinical immunocompetent mouse model"*
    - These results suggest that HPN328 can induce epitope spreading and prolonged anti-tumor immunity, with an increase in memory T cells, suggesting a novel mechanism for its activity and efficacy in vivo.
    - These findings suggest that long-term anti-tumor immunity induced by HPN328 can potentially lead to more durable anti-tumor responses in cancer patients
  - *"Anti-tumor activity of HPN328, a DLL3-targeting tri-specific, half-life extended T cell engager, is enhanced by combining with an anti-PD-L1 antibody in an immunocompetent mouse model"*
    - These results demonstrate the utility of combining anti-PD-L1 antibodies to enhance the anti-tumor activity of HPN328 and further supports investigation of this combination approach in patients.
    - Clinical studies of HPN328 in combination with atezolizumab are planned.

- ProTriTAC™: Two posters presented on April 17, 2023 introducing new candidates for IND-enabling studies:
  - *"TROP2 ProTriTAC™, a protease-activated T cell engager prodrug targeting TROP2 for the treatment of solid tumors"*
  - *"ITGB6 ProTriTAC™, a protease-activated T cell engager prodrug targeting Integrin-ß6 for the treatment of solid tumors"*
  - Both data sets support further investigation of Harpoon's conditionally active next-generation T cell engager platform, ProTriTAC™, with demonstrated therapeutic potential in a broad range of TROP2- and ITGB6-expressing solid tumors.

Corporate Update

- $25 million preferred equity financing closed in March 2023, extending cash runway into the second half of 2024.

First Quarter 2023 Financial Results

- Harpoon ended the first quarter of 2023 with $61.4 million in cash and cash equivalents compared to $53.1 million as of December 31, 2022. Following the $25.0 million preferred equity financing and year to date ATM sales, cash and cash equivalents are expected to fund current operations into the second half of 2024.
- Revenue for the quarter ended March 31, 2023 was $8.6 million, compared to $5.9 million for the first quarter ended March 31, 2022. The increase in revenue was primarily due to revenue recognized in first quarter 2023 for research and development services performed on the fourth target under Harpoon's Restated Collaboration Agreement with AbbVie, and an increase in revenue recognized related to Harpoon's Development and Option Agreement with AbbVie for research and development services performed.
- Research and development (R&D) expense for the quarter ended March 31, 2023 was $15.2 million, reduced from $20.8 million during the first quarter ended March 31, 2022. The decrease primarily arose from lower personnel-related costs due to corporate restructuring implemented in November 2022 and lower clinical and development costs due to the wind down of the HPN424 and HPN536 programs.
- General and administrative (G&A) expense for the quarter ended March 31, 2023 decreased to $4.2 million, compared to $5.4 million for the first quarter ended March 31, 2022. The decrease was primarily attributable to lower personnel-related expenses, lower legal costs, and lower professional service fees to support Harpoon's operations.
- Net loss for the first quarter ended March 31, 2023 was $11.3 million, improved from $20.3 million for the first quarter ended March 31, 2022.

About Harpoon Therapeutics

Harpoon Therapeutics is a clinical-stage immuno-oncology 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. 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. Harpoon's third proprietary technology platform, extended release TriTAC-XR, is designed to mitigate cytokine release syndrome. 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 "anticipate," "may," "expect," "plan," "potential," "further," "will," 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 expected progress, results, and plans pertaining to Harpoon Therapeutics' clinical trials, including timing, scope, design and interim results of clinical trials and the safety and tolerability profile of product candidates, the association of interim clinical data and preclinical results with potential treatment outcomes, achievement of future milestones, cash sufficiency forecasts, including ability to extend cash runway as a result of the restructuring and financing activities, and other statements that are not historical fact. Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during clinical studies, preliminary data and trends may not be predictive of future data or results, may not demonstrate safety or efficacy or lead to regulatory approval by the FDA or other regulatory agencies, clinical trial site activation or enrollment rates that are lower than expected, changes in expected or existing competition, changes in the regulatory environment, the uncertainties and timing of the regulatory approval process, the timing and results of unexpected litigation or other disputes, and the sufficiency of Harpoon Therapeutics' cash resources, including that Harpoon Therapeutics may not achieve the expected benefits of its restructuring or may incur unexpected additional expenses in connection with such restructuring. These and 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 under "Risk Factors" in Harpoon Therapeutics' quarterly report on Form 10-Q for the quarter ended March 31, 2023, and future filings by Harpoon Therapeutics. 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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Harpoon Therapeutics, Inc.
Statement of Operations and Comprehensive Loss
(Unaudited)
(in thousands, except share and per share amounts)

	For the Three Months Ended March 31,	
	2023	**2022**
Revenue		
Collaboration and license revenue	$ 8,583	$ 5,906
Total revenue	8,583	5,906
Operating expenses		
Research and development	15,163	20,818
General and administrative	4,185	5,401
Total operating expenses	19,348	26,219
Loss from operations	(10,765)	(20,313)
Interest income, net	425	40
Interest expense	(138)	—
Other expense, net	(860)	(48)
Net loss attributable to common stockholders	(11,338)	(20,321)
Other comprehensive loss:		
Net unrealized loss on marketable securities	3	(41)
Comprehensive loss	$ (11,335)	$ (20,362)
Net loss attributable to common stockholders per share, basic and diluted	(0.31)	(0.62)
Weighted-average shares used in computing net loss per share, basic and diluted	36,968,214	32,879,188

Harpoon Therapeutics, Inc.
Selected Balance Sheet Data
(Unaudited)

	March 31, 2023	**December 31, 2022**
	(in thousands)	
Cash and cash equivalents	$ 61,385	$ 53,112
Total assets	$ 80,809	$ 73,729
Total liabilities	$ 80,094	$ 68,330
Total stockholders' equity	$ 715	$ 5,399