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 14, 2020

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

Delaware	**001-38584**	**26-1741721**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

215 First Street, Suite 200 **Cambridge, Massachusetts** **(Address of Principal Executive Offices)**	**02142** **(Zip Code)**

Registrant's telephone number, including area code: (617) 714-0555

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 Instruction 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, $0.0001 par value per share	**CNST**	**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 May 14, 2020, three abstracts that Constellation Pharmaceuticals, Inc. (the "Company"), submitted to the European Hematology Association ("EHA") in connection with the 2020 EHA Annual Meeting in June 2020 were published by EHA. The abstracts relate to the Company's MANIFEST trial, an ongoing open-label Phase 2 clinical trial of CPI-0610 as a monotherapy and in combination with ruxolitinib in patients with myelofibrosis, or MF.

The abstracts collectively include an analysis of data from an aggregate of 157 patients based on a data cutoff date of January 9, 2020. An upcoming presentation at EHA on June 12 will reflect an analysis of a larger patient population based on a later data cutoff. Constellation expects to present 24-week data in 25-30 first-line patients and 70-80 second-line patients and 12-week data in about 50 first-line patients at the EHA meeting.

The endpoints in the trial include the number of patients who experience at least a 35% reduction in spleen volume from baseline (SVR35), the number of patients who report at least a 50% reduction in Total Symptom Score, or TSS50, conversion to transfusion independence (TI) in transfusion-dependent (TD) patients, increases in hemoglobin, and improvements in bone marrow fibrosis.

Below is the preliminary data as of January 9, 2020, that were included in the abstracts.

Arm 3 – CPI-0610 + ruxolitinib in JAK-inhibitor-naïve patients

- 21 of 29 evaluable patients (72%) achieved SVR35 at 12 weeks
- Of 15 patients evaluable for SVR at week 24, 14 completed 24 weeks of treatment (one discontinued), with 10 patients (67%) achieving SVR35
- The median spleen volume change in those 14 patients was 54% at 24 weeks
- TSS50 responses at 12 and 24 weeks were 56% (15 of 27 evaluable patients) and 79% (11 of 14 evaluable patients), respectively
- 5 of 11 (46%) patients evaluable for bone marrow fibrosis had a ³1 grade improvement at 24 weeks

Arm 1 – CPI-0610 monotherapy in JAK-inhibitor-experienced or -ineligible patients

- 2 of 10 (20%) and 4 of 11 (36%) evaluable non-transfusion-dependent (non-TD) patients achieved SVR35 (the primary endpoint for cohort 1B) and TSS50, respectively, at 24 weeks
- 3 of 10 (30%) evaluable non-TD patients had a ³ 1 grade improvement in bone marrow fibrosis at 24 weeks
- 13 of 22 (59%) evaluable non-TD patients had ³ 1.5 g/dL increase in hemoglobin
- 2 of 6 (33%) evaluable TD patients converted to transfusion independence (the primary endpoint for cohort 1A)
- No evaluable TD patients achieved SVR35 or TSS50 at 24 weeks

Arm 2 – CPI-0610 + ruxolitinib in ruxolitinib-experienced patients

- 7 of 19 (37%) evaluable TD patients converted to TI (the primary endpoint for cohort 2A)
- 3 of 18 (17%) and 10 of 18 (56%) evaluable TD patients achieved SVR35 and TSS50, respectively, at 24 weeks
- 9 of 14 (64%) evaluable TD patients had a ³ 1 grade improvement in bone marrow fibrosis at 24 weeks
- No evaluable non-TD patients achieved SVR35 (the primary endpoint for cohort 2B) and 4 of 13 (31%) evaluable non-TD patients achieved TSS50 at 24 weeks

Safety

CPI-0610 in MANIFEST, both as monotherapy and in combination with ruxolitinib and in both JAK-inhibitor-naïve and JAK-inhibitor-experienced and -ineligible patients, was generally well tolerated.

Among the most common treatment-emergent adverse events (AEs) for CPI-0610 monotherapy in 43 safety-evaluable patients in Arm 1, those that were ³ Grade 3 were thrombocytopenia (14.0%), anemia (7.0 %), and diarrhea (4.7%). Two patients discontinued treatment because of AEs (blood creatinine increase, fatigue, and pleuritic pain). There were no Grade 5 AEs.

Among the most common treatment-emergent AEs in 61 safety-evaluable patients in Arm 2, those that were ³ Grade 3 were thrombocytopenia (21.3%), anemia (8.2%), diarrhea (4.9%), infections (4.9%), nausea (1.6%), abdominal pain (1.6%), and vomiting (1.6%). Seven patients discontinued treatment due to AEs, including three previously reported Grade 5 AEs.

Among the most common treatment-emergent AEs in 53 safety-evaluable patients in Arm 3, those that were ³ Grade 3 were anemia (15.1%), thrombocytopenia (5.7%), infections (3.8%), and dyspnea (3.8%). Two patients discontinued treatment due to AEs (infections); one of them was Grade 5 within 30 days of treatment discontinuation.

SIGNATURES

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

CONSTELLATION PHARMACEUTICALS, INC.

Date: May 14, 2020

By: /s/ Emma Reeve
Name: Emma Reeve
Title: Chief Financial Officer