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): **November 9, 2015**

Blueprint Medicines Corporation

(Exact name of registrant as specified in its charter)

Delaware	**001-37359**	**26-3632015**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

38 Sidney Street, Suite 200 **Cambridge, Massachusetts**	**02139**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(617) 374-7580**

215 First Street, Cambridge, Massachusetts 02142
(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:

☐ 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))

Item 2.02 Results of Operations and Financial Condition.

On November 9, 2015, Blueprint Medicines Corporation (the "Company") announced its financial results for the quarter and nine-months ended June 30, 2015. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

The information in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, is intended to be furnished and 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, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

The following exhibit relating to Item 2.02 of this Current Report on Form 8-K shall be deemed to be furnished and not filed:

Exhibit No.	Description
99.1	Press release issued by Blueprint Medicines Corporation on November 9, 2015

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.

BLUEPRINT MEDICINES CORPORATION

Date: November 9, 2015

By: /s/ Jeffrey W. Albers
Jeffrey W. Albers
Chief Executive Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued by Blueprint Medicines Corporation on November 9, 2015

Blueprint Medicines Reports Third Quarter 2015 Financial Results

– Initiated Phase 1 clinical trial for BLU-285 for the treatment of unresectable, treatment-resistant gastrointestinal stromal tumors –

– Initiated Phase 1 clinical trial for BLU-554 for the treatment of advanced hepatocellular carcinoma and cholangiocarcinoma –

– Received U.S. Food and Drug Administration (FDA) authorization to proceed with Phase 1 clinical trial for BLU-285 in advanced systemic mastocytosis –

CAMBRIDGE, Mass., November 9, 2015 -- Blueprint Medicines (NASDAQ: BPMC), a leader in discovering and developing highly selective kinase medicines for patients with genomically defined diseases, today reported financial results and provided a business update for the third quarter ended September 30, 2015.

“We continued to make significant progress on our 2015 objectives in the third quarter, as we successfully initiated and began enrolling patients in two Phase 1 clinical trials and received FDA authorization to begin a third one,” said Jeffrey Albers, Chief Executive Officer of Blueprint Medicines. “In addition to our ongoing clinical programs, we are also advancing multiple early-stage efforts, including our RET program, which is entering preclinical development. These efforts continue to validate our proprietary approach to discovering and developing drug candidates targeting kinases as drivers of disease.”

Third Quarter 2015 and Recent Business Highlights

Platform and Pipeline

- **Initiated Phase 1 clinical trials for BLU-285 and BLU-554**: Blueprint Medicines is enrolling patients in dose-escalation, Phase 1 clinical trials of BLU-285 for the treatment of unresectable, treatment-resistant gastrointestinal stromal tumors (GIST) and BLU-554 for the treatment of advanced hepatocellular carcinoma (HCC) and cholangiocarcinoma.
- **Received FDA authorization to proceed with Phase 1 clinical trial for BLU-285 for the treatment of advanced systemic mastocytosis (SM)**: In September, the FDA accepted Blueprint Medicines’ Investigational New Drug application to begin a Phase 1 clinical trial of BLU-285 for the treatment of advanced SM. Blueprint Medicines is in the process of initiating clinical sites for this trial.
- **Received FDA orphan drug designation for BLU-554 for HCC:** In September, Blueprint Medicines announced that the FDA granted orphan drug designation to BLU-554 for the treatment of HCC. Orphan drug designation may provide certain benefits, including a seven-year period of market exclusivity if the drug is approved, tax credits for qualified clinical trials and an exemption from FDA application fees.

Third Quarter 2015 Financial Results

- **Cash Position**: As of September 30, 2015, cash and cash equivalents were $179.8 million, as compared to $47.2 million as of December 31, 2014. Blueprint Medicines expects that its existing cash and cash equivalents will be sufficient to enable it to fund its operating expenses and capital expenditure requirements through at least early 2017.
- **Collaboration Revenue**: Collaboration revenues were $3.4 million for the third quarter of 2015. This revenue reflected reimbursement from Alexion Pharma Holding for work conducted in the third quarter by Blueprint Medicines under the parties’ collaboration, as well as a portion of the $15.0 million upfront payment and $1.8 million milestone payment, which will be amortized over the period of the research term.
- **R&D Expenses**: Research and development expenses were $11.7 million for the third quarter of 2015, as compared to $8.4 million for the same period last year. This increase was primarily attributable to approximately $1.3 million in increased personnel expense and stock-based compensation expense, approximately $2.3 million in external clinical activities associated with advancing Blueprint Medicines’ two lead programs into clinical trials and approximately $1.0 million associated with building Blueprint Medicines’ platform and advancing its discovery pipeline forward. These increases were partially offset by $1.3 million of lower expenses associated with external IND-enabling pre-clinical and toxicology studies as well as manufacturing activities.
- **G&A Expenses**: General and administrative expenses were $4.2 million for the third quarter of 2015, as compared to $1.9 million for the same period last year. This increase was primarily attributable to approximately $0.7 million in increased personnel costs and stock-based compensation expense and approximately $1.4 million in increased professional fees.
- **Net Loss**: Net loss was $12.6 million for the third quarter of 2015, or a basic and diluted net loss per share available to common stockholders of $0.47, as compared to a net loss of $11.8 million for the same period last year, or a basic and diluted net loss per share available to common stockholders of $8.13.

About the Phase 1 Clinical Trials for BLU-285 and BLU-554

The Phase 1 clinical trial for BLU-285 for the treatment of unresectable, treatment-resistant GIST will evaluate the safety and tolerability of BLU-285 in multiple ascending doses with the goal of establishing a maximum tolerated dose (MTD) or a recommended dose if the MTD is not achieved. Blueprint Medicines expects to enroll approximately 60 patients in this clinical trial at multiple sites in the United States, European Union and Asia. All patients will be tested retrospectively for both KIT Exon 17 and PDGFRα D842V mutational status. Once the MTD is reached, or a recommended dose is established, Blueprint Medicines will open expansion cohorts for genomically selected patients. Secondary objectives include assessing response rate by Response Evaluation Criteria In Solid Tumors (RECIST) criteria commonly used to measure clinical

responses in solid tumors, the pharmacokinetics of BLU-285 and allelic burden using circulating tumor DNA.

The planned Phase 1 clinical trial for BLU-285 for the treatment of advanced SM will evaluate the safety and tolerability of BLU-285 in multiple ascending doses with the goal of establishing an MTD or a recommended dose if the MTD is not achieved. Blueprint Medicines expects to enroll approximately 60 patients in this clinical trial at multiple sites in the United States and European Union. All patients will be tested retrospectively for KIT D816V mutational status. Once the MTD is reached, or a recommended dose is established, Blueprint Medicines will open expansion cohorts for specific subtypes of SM. Secondary objectives include assessment of the pharmacokinetic profile of BLU-285, assessment of response rate by the International Working Group Myeloproliferative Neoplasms Research and Treatment criteria, changes in KIT D816V mutant allele fractions in bone marrow and circulating tumor DNA, and changes in patient reported outcomes.

The Phase 1 clinical trial for BLU-554 will evaluate the safety and tolerability of BLU-554 in multiple ascending doses in patients with HCC with the goal of establishing an MTD or a recommended dose if the MTD is not achieved. Blueprint Medicines expects to enroll up to 50 patients with advanced, unresectable HCC and up to an additional 10 patients with advanced, unresectable cholangiocarcinoma in this clinical trial at multiple sites in the United States, European Union and Asia. Cholangiocarcinoma is another cancer in which aberrantly activated FGFR4 signaling may play a role. Once the MTD is reached, or a recommended dose is established, Blueprint Medicines will open expansion cohorts with genomically selected patients. Secondary objectives include assessing overall response rate by RECIST criteria, the pharmacokinetics of BLU-554 and pharmacodynamics markers of BLU-554 activity.

Please refer to www.clinicaltrials.gov for additional details regarding these clinical trials.

About Blueprint Medicines

Blueprint Medicines is developing a new generation of highly selective and potent kinase medicines to improve the lives of patients with genomically defined diseases. The Company’s approach is rooted in a deep understanding of the genetic blueprint of cancer and other diseases driven by the abnormal activation of kinases. Blueprint Medicines is advancing three programs in clinical development for subsets of patients with gastrointestinal stromal tumors, hepatocellular carcinoma and systemic mastocytosis, as well as multiple programs in research and preclinical development. For more information, please visit www.blueprintmedicines.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements regarding the potential benefits of orphan drug designation for BLU-554 and expectations regarding Blueprint Medicines’ existing cash and cash equivalents. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to the delay of any current or planned clinical trials or the development of Blueprint Medicines' drug product candidates, including BLU-285 and BLU-554; the benefits of orphan drug designation; Blueprint Medicines’ advancement of multiple early-stage efforts, including its RET program; Blueprint Medicines' ability to successfully demonstrate the efficacy and safety of its drug product candidates; the preclinical and clinical results for Blueprint Medicines' drug product candidates, which may not support further development of such drug product candidates; and actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in Blueprint Medicines' Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015 and June 30, 2015, as filed with the Securities and Exchange Commission (SEC) on June 11, 2015 and August 10, 2015, and other filings that Blueprint Medicines may make with the SEC in the future. Any forward-looking statements contained in this press release represent Blueprint Medicines' views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Blueprint Medicines explicitly disclaims any obligation to update any forward-looking statements.

Blueprint Medicines Corporation

Selected Condensed Balance Sheet Data

(in thousands)

(*unaudited*)

	September 30, 2015	December 31, 2014
Cash and cash equivalents	$ 179,780	$ 47,240
Unbilled accounts receivable	2,470	—
Working capital (1)	169,296	41,510
Total assets	195,288	49,925
Deferred revenue	14,861	—
Term loan payable	7,871	9,042
Lease incentive obligation	4,093	—
Warrant liability	—	365
Convertible preferred stock	—	114,811
Total stockholders' equity (deficit)	158,142	(79,382)

(1) Blueprint Medicines defines working capital as current assets less current liabilities.

Blueprint Medicines Corporation

Condensed Statements of Operations Data

(in thousands, except per share data)

(*unaudited*)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2015	**2014**	**2015**	**2014**
Collaboration revenue	$ 3,426	$ —	$ 6,765	$ —
Operating expenses:				
Research and development	11,681	8,368	32,157	20,511
General and administrative	4,222	1,921	10,832	4,929
Total operating expenses	15,903	10,289	42,989	25,440
Other income (expense):				
Other income (expense), net	6	(94)	(435)	(75)
Interest expense	(171)	(120)	(535)	(302)
Total other income (expense)	(165)	(214)	(970)	(377)
Net loss	$ (12,642)	$ (10,503)	$ (37,194)	$ (25,817)
Convertible preferred stock dividends	—	(1,313)	(3,153)	(3,860)
Net loss applicable to common stockholders	$ (12,642)	$ (11,816)	$ (40,347)	$ (29,677)
Net loss per share applicable to common stockholders — basic and diluted	$ (0.47)	$ (8.13)	$ (2.64)	$ (21.65)
Weighted-average number of common shares used in net loss per share applicable to common stockholders — basic and diluted	26,835	1,453	15,298	1,371

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