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 Act of 1934

Date of Report (Date of earliest event reported): March 19, 2019

MAGENTA THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38541**	**81-0724163**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification Number)**

100 Technology Square
Cambridge, Massachusetts 02139
(857) 242-0170
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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 240.13d-4(c))

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 March 19, 2019, Magenta Therapeutics, Inc. announced its financial results for the quarter and full year ended December 31, 2018. 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.

The information in this Form 8-K (including Exhibit 99.1) 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 a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

The following exhibit relating to Item 2.02 shall be deemed furnished, and not filed:

99.1 Press Release dated March 19, 2019.

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.

MAGENTA THERAPEUTICS, INC.

Date: March 19, 2019
By: /s/ Jason Gardner
Title: President and Chief Executive Officer

Magenta Therapeutics Reports Fourth Quarter and Full Year 2018 Financial Results and Recent Business Highlights

— Declared development candidate in first targeted conditioning program —

— Phase 1 study for first-line stem cell mobilization program to begin 1H19 —

— Presented updated clinical data for MGTA-456 cell therapy showing signs of early benefit in patients with inherited metabolic disorders (IMDs) —

— Ended 2018 with $142.6M in cash, cash equivalents and marketable securities —

Cambridge, MA – March 19, 2019 – Magenta Therapeutics (NASDAQ: MGTA), a clinical-stage biotechnology company developing novel medicines to bring the curative power of stem cell transplant to more patients, today reported financial results and business highlights for the fourth quarter and full year ended December 31, 2018.

“2018 was a transformative year for Magenta, as we progressed our first-in-class programs and achieved multiple clinical and preclinical milestones,” said Jason Gardner, D.Phil., Chief Executive Officer and President, Magenta Therapeutics. “As we begin 2019, Magenta is the only company addressing the major barriers to stem cell transplant and gene therapy, with the goal of changing the lives of patients with autoimmune diseases, blood cancers and genetic diseases through curative therapies. We are looking forward to building on this progress as we advance our conditioning, mobilization and cell therapy programs.”

Upcoming Anticipated Milestones:

The Company plans to achieve the following key milestones in 2019:

- Present preclinical data on C100 anti-CD45 targeted conditioning program in autoimmune diseases and declare development candidate
- Present preclinical data on C200 anti-CD117 targeted conditioning in gene therapy, and advance development candidate
- Begin Phase 1 study of MGTA-145 first-line mobilization agent in healthy volunteers in the first half of 2019, and present clinical data in the second half of 2019
- Present additional clinical data from the Phase 2 study of MGTA-456 in IMDs

Recent Business Highlights:

Updated preclinical data for C100 conditioning program showed potent depletion of hematopoietic stem cells and immune cells: At the Transplant and Cellular Therapy (TCT) meeting in February 2019, Magenta presented data from its C100 targeted conditioning program, showing potent stem and immune cell depletion with an anti-CD45 amanitin antibody-drug conjugate (ADC) that was well tolerated at efficacious doses in non-human primates. The Company expects to declare a development candidate for this program in 2019 and intends to develop C100 in both autoimmune diseases and blood cancers.

Declared development candidate in C200 targeted conditioning program and presented preclinical data: At the end of 2018, Magenta declared a development candidate in its C200 targeted conditioning program, which is designed to deplete stem cells in the bone marrow. The Company presented data at the TCT meeting in February 2019 on the development candidate, an anti-CD117 amanitin ADC, showing that it potently and selectively depleted hematopoietic stem cells in non-human primates while preserving the immune system. The ADC was well tolerated at the efficacious doses. Magenta has begun investigational new drug (IND)-enabling studies with this ADC and plans to develop it as a conditioning agent for stem cell gene therapy, in patients with genetic disorders such as sickle cell disease, where current conditioning regimens are toxic.

Updated preclinical data for MGTA-145 first-line mobilization therapy showed differentiated efficacy from standard of care: In data presented at the TCT meeting in February 2019, Magenta showed that a single dose of MGTA-145 plus plerixafor mobilized two to three times more stem cells in non-human primates than a multi-day regimen of current standard of care, G-CSF. The cells mobilized with MGTA-145 plus plerixafor rapidly engrafted in non-human primates following autologous transplant. A subset of the MGTA-145-mobilized cells from non-human primates was also shown to suppress graft-vs.-host-disease and extend survival in preclinical models. The company expects to initiate a Phase 1 study of MGTA-145 in the first half of 2019 and share clinical results in the second half of 2019.

Updated clinical data for MGTA-456 cell therapy showed early signs of clinical benefit in IMDs: Magenta presented updated data from the Phase 2 clinical study of MGTA-456 in patients with IMDs at the TCT meeting in February 2019. Patients with cerebral adrenoleukodystrophy (cALD) treated with MGTA-456 in the study showed persistent resolution of brain inflammation and stable disease scores. Patients with Hurler syndrome treated with MGTA-456 showed correction of enzyme deficiency and decrease in toxic metabolites. These early clinical benefits are associated with improved long-term disease outcomes in patients undergoing stem cell transplant for IMDs. The Company will next present data from this study at the American Academy of Neurology (AAN) annual meeting in May. A Phase 2 investigator-initiated study of MGTA-456 in blood cancers began in December 2018. After careful review of comprehensive transplant outcomes data in sickle cell disease, the Company will evaluate development of MGTA-456 in sickle cell disease as less toxic conditioning becomes available.

Fourth Quarter Financial Results:

Cash Position: Cash, cash equivalents and marketable securities as of December 31, 2018, were $142.6 million compared to $51.4 million on December 31, 2017. The increase is primarily driven by net proceeds from the $52.2 million Series C preferred stock financing completed in April 2018, and net proceeds of $89.9 million from Magenta's IPO completed in June 2018, offset by $57.6 million in net loss during 2018. Magenta anticipates that its cash, cash equivalents and marketable securities will be sufficient to fund operations and capital expenditures through 2020 on the Company's current business plan.

Research and Development Expenses: Research and development (R&D) expenses were $12.4 million in the fourth quarter of 2018, compared to $5.6 million for the same period in 2017. The increase was primarily due to increased costs related to drug discovery efforts in our conditioning programs, preclinical costs, toxicology studies and manufacturing to support our mobilization program, the advancement of the MGTA-456 Phase 2 clinical trial, continued progression of the Company's pipeline and increased costs associated with the growth of the Company.

General and Administrative Expenses: General and administrative (G&A) expenses were $5.5 million for the fourth quarter of 2018, compared to $2.6 million for the same period in 2017. The increase was primarily due to increased G&A personnel and facility costs associated with the growth of the Company.

Net Loss: Net loss was $16.7 million for the fourth quarter of 2018, compared to net loss of $8.0 million for the same period in 2017.

About Magenta Therapeutics

Headquartered in Cambridge, Mass., Magenta Therapeutics is a clinical-stage biotechnology company developing novel medicines for patients with autoimmune diseases, blood cancers and genetic diseases. By creating a platform focused on critical areas of unmet need, Magenta Therapeutics is pioneering an integrated approach to allow more patients to receive one-time, curative therapies by making the process more effective, safer and easier.

Forward-Looking Statement

This press release contains forward-looking statements and information within the meaning of The Private Securities Litigation Reform Act of 1995 and other federal securities laws. The use of words such as "may," "will," "could", "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "seeks," "endeavor," "potential," "continue" or the negative of such words or other similar expressions can be used to identify forward-looking statements.

The express or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: uncertainties inherent

in clinical studies and in the availability and timing of data from ongoing clinical studies; whether interim results from a clinical trial will be predictive of the final results of the trial; whether results from preclinical studies or earlier clinical studies will be predictive of the results of future trials; the expected timing of submissions for regulatory approval or review by governmental authorities, including review under accelerated approval processes; orphan drug designation eligibility; regulatory approvals to conduct trials or to market products; whether Magenta's cash resources will be sufficient to fund Magenta's foreseeable and unforeseeable operating expenses and capital expenditure requirements; and other risks set forth under the caption "Risk Factors" in Magenta's Registration Statement on Form S-1, as updated by Magenta's most recent Quarterly Report on Form 10-Q and its other filings with the Securities and Exchange Commission. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this press release may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although Magenta believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur.

Moreover, except as required by law, neither Magenta nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements included in this press release. Any forward-looking statement included in this press release speaks only as of the date on which it was made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.

Contact

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Magenta Therapeutics, Inc.

STATEMENTS OF OPERATIONS
(unaudited)
(In thousands, except share and per share data)

	Three Months Ended December 31,		Year Ended December 31,	
	2018	2017	2018	2017
Revenue	$ —	$ —	$ —	$ —
Operating expenses:				
Research and development	12,390	5,551	41,340	27,899
General and administrative	5,540	2,619	18,623	7,828
Total operating expenses	17,930	8,170	59,963	35,727
Loss from operations	(17,930)	(8,170)	(59,963)	(35,727)
Interest and other income, net	1,251	134	2,448	236
Net loss	(16,679)	(8,036)	(57,515)	(35,491)
Accretion of redeemable convertible preferred stock to redemption value	—	—	(88)	(213)
Cumulative dividends on redeemable convertible preferred stock	—	—	—	(437)
Reversal of cumulative dividends on redeemable convertible preferred stock	—	—	—	634
Net loss attributable to common stockholders	$ (16,679)	$ (8,036)	$ (57,603)	$ (35,507)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.50)	$ (3.59)	$ (3.13)	$ (19.12)
Weighted average common shares outstanding, basic and diluted	33,204,929	2,240,421	18,389,576	1,856,907

BALANCE SHEET DATA

	December 31,	
	2018	2017
Cash, cash equivalents and marketable securities	$142,570	$ 51,402
Working capital	134,902	48,361
Total assets	157,313	54,463
Stockholders' equity (deficit)	145,648	(42,118)