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 8, 2022

MAGENTA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-38541 (Commission File Number) 81-0724163 (I.R.S. Employer Identification No.)

100 Technology Square Cambridge, Massachusetts (Address of principal executive offices)

02139 (Zip Code)

Registrant's telephone number, including area code: (857) 242-0170

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)

Dere-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))

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered				
Title of each class	Symbol(s)	on which registered				
Common Stock, \$0.001 Par Value	MGTA	The Nasdaq Global 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 \boxtimes

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 8, 2022, Magenta Therapeutics, Inc. announced its financial results for the quarter and full year ended December 31, 2021. 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 Item 2.02 of this Current Report on 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 filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

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

99.1 Press Release dated March 8, 2022.

104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

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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 8, 2022

 By:
 /s/ Stephen Mahoney

 Stephen Mahoney

 Title:
 Chief Financial and Operating Officer



Magenta Therapeutics Reports Fourth Quarter and Full-Year 2021 Financial Results and Recent Program Highlights

- First patient dosed in MGTA-117 targeted conditioning Phase 1/2 clinical trial; clinical data is expected in 2022 -

- IND-enabling preclinical studies initiated for CD45 antibody-drug conjugate; dose-ranging toxicology results expected in the second half of 2022 -

- MGTA-145 stem cell mobilization program focused on sickle cell disease and dose and administration optimization clinical trials with data expected in second half of 2022 –

- Year-end 2021 cash and investments of \$176.9 million expected to fund current operating plan into the fourth quarter of 2023 -

Cambridge, MA – March 8, 2022 – Magenta Therapeutics (Nasdaq: MGTA), a clinical-stage biotechnology company developing novel medicines designed to bring the curative power of stem cell transplants to more patients, today reported financial results for the fourth quarter and full-year ended December 31, 2021, and recent program highlights.

"We expect 2022 will be a year of trial execution and value-creating data readouts, and we are particularly pleased to have dosed our first patient in the MGTA-117 clinical trial," said Jason Gardner, D.Phil., President and Chief Executive Officer, Magenta Therapeutics. "The first patient has completed the initial safety assessment period which allows for additional patients to be dosed in the cohort. We anticipate sharing further information on this dose-escalation trial in 2022. Earlier this year, we announced our second targeted conditioning program, a CD45 antibody-drug conjugate, and expect to provide important IND-enabling preclinical data for the program in the second half of 2022. We are also advancing our preparations for the MGTA-145 stem cell mobilization program in sickle cell disease and optimization of dosing and administration. We believe our portfolio of programs has the potential to address a broad spectrum of diseases including hematology-oncology, rare genetic diseases, and autoimmune diseases and we look forward to advancing them for improved patient outcomes."

2021 Highlights and Recent Program Progress:

MGTA-117: Targeted Conditioning

The first patient has been dosed and has completed the initial safety assessment in the Phase 1/2 clinical trial in patients with relapsed/refractory acute myeloid leukemia and myelodysplasia-excess blasts. Additional patients may now be dosed in the first cohort of this dose-escalation clinical trial, which is open for recruitment at multiple centers. The trial will evaluate the tolerability, pharmacokinetics, pharmacodynamics, and safety following a single dose of MGTA-117, which includes target engagement, drug clearance, cell depletion, and safety measurements. Data are expected this year.

2021 Data Highlights:

- 2021 American Society of Hematology (ASH) Annual Meeting: An oral presentation described a successful anti-CD-117 antibody-drug conjugate (ADC) targeted conditioning regimen contributed to a successful transplant of gene-modified stem cells in primates with durable engraftment. A poster presentation described preclinical mouse data that supports the use of a CD117-targeted ADC in combination with lymphodepletion to condition prior to allogeneic hematopoietic stem cell (HSC) transplant.
 - 2021 Transplantation and Cellular Therapy (TCT) Annual Meeting and the European Society for Blood and Marrow Transplantation (EBMT) Annual Meeting: Announced preclinical data showing MGTA-117 increased median survival in murine models of acute myeloid leukemia as compared head-to-head with a multi-day, standard-of-care regimen using cytarabine.

CD45-ADC: Second Targeted Conditioning Program

Magenta has initiated investigational new drug (IND) application-enabling studies with data from a dose-ranging toxicology study expected in the second half of 2022. Due to the expression of CD45 on stem cells and immune cells, Magenta's CD45-ADC is designed to selectively target and deplete stem cells and lymphocytes, which could allow patients with autoimmune diseases and blood cancers to avoid the use of chemotherapy prior to stem cell transplant.

2021 Data Highlights:

2021 TCT Annual Meeting: A poster presentation showed conditioning with single-agent CD45-ADC enabled complete chimerism in a full mismatch allogeneic HSC transplant murine model.

MGTA-145: Stem Cell Mobilization and Collection for Hematopoietic Stem Cell Transplantation and Gene Therapy

We are currently advancing our preparations for the MGTA-145 stem cell mobilization program in clinical trials in sickle cell disease and optimization of dosing and administration in healthy subjects with data expected in the second half of 2022.

2021 Data Highlights:

2021 ASH Annual Meeting: A poster presentation described a Phase 2 investigator-initiated clinical study with multiple myeloma patients that showed MGTA-145, in combination with plerixafor, mobilized a sufficient number of stem cells for autologous transplantation. All patients who underwent transplantation had successful engraftment and all patients followed to day 100 post-transplantation showed durable engraftment. The regimen was generally well-tolerated.

<u>Upcoming Events:</u>

- Participating in the Cell Therapy Panel Discussion at the Cowen Healthcare Conference on Wednesday, March 9, 2022, at 9:10 am. A live webcast will be available on the Investors & Media section of Magenta's website at https://investor.magentatx.com/events-and-presentations.
- Presenting at EBMT Annual Meeting on March 22, 2022, two encore posters:
 - Single Agent CD117-Targeted Antibody Drug Conjugate in Combination with Lympho-Depleting Antibodies Enables Allogenic Hematopoietic Stem Cell Transplantation in Mice without Chemotherapy or Radiation, Program code P688
 - CD117 Antibody Drug Conjugate-Based Conditioning Enables Efficient Engraftment of Gene-Modified CD34+ Cells in a Rhesus Gene Therapy Model, Program code P689
- Presenting at the TCT Meeting, April 26, 2022, an oral encore presentation entitled:
 - MGTA-145 + Plerixafor Provides GSCF-Free Rapid and Reliable Hematopoietic Stem Cell Mobilization for Autologous Stem Cell Transplant in Patients with Multiple Myeloma: A Phase 2 Study

Financial Results:

Cash Position: Cash, cash equivalents and marketable securities as of December 31, 2021, were \$176.9 million, compared to \$148.8 million as of December 31, 2020. Magenta anticipates that its cash, cash equivalents and marketable securities will be sufficient to fund its current operating plan into the fourth quarter of 2023.

Research and Development Expenses: Research and development expenses were \$13.1 million in the fourth quarter of 2021, compared to \$12.3 million in the fourth quarter of 2020. The increase was driven primarily by

increased process development activities to support future manufacturing for MGTA-145 offset by a decrease in manufacturing costs related to activities supporting our IND application that was filed in June 2021. The increase was also due to an increase in research and development headcount.

General and Administrative Expenses: General and administrative expenses were \$7.0 million for the fourth quarter of 2021, compared to \$6.8 million for the fourth quarter of 2020.

Net Loss: Net loss was \$19.3 million for the fourth quarter of 2021, compared to net loss of \$18.2 million for the fourth quarter of 2020.

About Magenta Therapeutics

Magenta Therapeutics is a clinical-stage biotechnology company developing medicines designed to bring the curative power of stem cell transplants to more patients with blood cancers, genetic diseases, and autoimmune diseases. Magenta is combining leadership in stem cell biology and biotherapeutics development with clinical and regulatory expertise to revolutionize blood and immune reset to allow more patients to take advantage of the curative potential of stem cell transplants and potentially improve eligibility for future gene therapies.

Magenta is based in Cambridge, Mass. For more information, please visit www.magentatx.com.

Follow Magenta on Twitter: @magentatx.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995, as amended. These statements include, without limitation, implied and express statements relating to: Magenta's future business expectations, plans and prospects; the potential of, and expectations for, Magenta's product candidate pipeline; the potential benefits and expected performance of Magenta's product candidates and advancement of preclinical and clinical programs; expectations regarding trial execution and value-creating data readouts; expectations, plans and timing for preclinical activities, clinical trials and related results involving Magenta's product candidates; timelines and expectations for patient dosing, dosing regimens and administration; preparations for the MGTA-145 stem cell mobilization program in sickle cell disease and the optimization of dosing and administration clinical trial; and Magenta's current anticipation regarding the ability of its cash, cash equivalents and marketable securities to fund its current operating plan into the fourth

quarter of 2023. Words such as "anticipate," "believe," "continue," "could," "designed," "endeavor," "estimate," "expect," "intend," "may," "might," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would" and similar expressions are intended 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 preclinical and clinical trials, and in the availability and timing of data from ongoing and planned clinical and preclinical trials; the ability to initiate, enroll, conduct or complete ongoing and planned preclinical and clinical trials; the delay of any current or planned preclinical or clinical trials or the development of Magenta's product candidates; whether results from preclinical or earlier clinical trials will be predictive of the results of future trials; interactions with regulatory agencies such as the U.S. Food and Drug Administration; the expected timing of submissions for regulatory approval to conduct or continue trials or to market products; Magenta's ability to successfully demonstrate the safety and efficacy of its product candidates; whether Magenta's cash resources will be sufficient to fund Magenta's foreseeable and unforeseeable operating expenses and capital expenditure requirements; and risks, uncertainties and assumptions regarding the impact of the continuing COVID-19 pandemic on Magenta's business, operations, preclinical activities, clinical trials, strategy, goals and anticipated timelines. These and other risks are described in additional detail in Magenta's Annual Report on Form 10-K for the year ended December 31, 2021, expected to be filed on or about March 8, 2022, and its other filings made with the Securities and Exchange Commission from time to time. Any forward-looking statements contained in this press release represent Magenta's views only as of today and should not be relied upon as representing its views as of any subsequent date. Magenta explicitly disclaims any obligation to update any forward-looking statements, except to the extent required by law.

Contact:

Leah Monteiro Magenta Therapeutics Vice President, Investor Relations Imonteiro@magentatx.com

Magenta Therapeutics, Inc.

STATEMENTS OF OPERATIONS

(unaudited) (In thousands, except share and per share data)

		Three Months Ended December 31,				Year Ended December 31,				
		2021		2020		2021		2020		
Operating expenses:										
Research and development	\$	13,114	\$	12,256	\$	46,766	9	50,615		
General and administrative		7,026		6,809		27,926		28,087		
Total operating expenses		20,140		19,065		74,692	_	78,702		
Loss from operations		(20,140)		(19,065)		(74,692)	_	(78,702)		
Interest and other income, net		848		897		3,556	_	3,766		
Net loss	\$	(19,292)	\$	(18,168)	\$	(71,136)	\$	(74,936)		
Net loss per share, basic and diluted	\$	(0.33)	\$	(0.38)	\$	(1.29)	\$	(1.71)		
Weighted average common shares outstanding, basic and diluted	58	8,787,112	48	3,352,508	54	4,948,808		43,920,121		

BALANCE SHEET DATA (unaudited) (In thousands)

	Decem	December 31,		
	2021	2020		
Cash, cash equivalents and marketable securities	\$176,926	\$148,835		
Working capital	169,830	140,097		
Total assets	189,934	161,619		
Stockholders' equity	172,672	143,906		